Rate Capping in South Australia: Implications, Desirable Amendments, and Preparedness

Centre for Local Government
University of Technology Sydney

Citing this report

Drew, Joseph (2018). Rate Capping in South Australia: Implications, Desirable Amendments, and Preparedness. University of Technology Sydney Centre for Local Government, Ultimo, NSW.

Table of Contents

Executive Summary **1**
Background 1
Purpose 1
Methodology 1
Review of academic literature 1
Review of policy documents 2
Data analysis and modelling 2
Findings 2
Current rate revenues in South Australia are already relatively low, though dependence on rating revenue is relatively high 2
Rate capping based on index factors may result in lower and more volatile revenues, with many possible applications for rating variations 2
Rate capping could result in undue influences on ratepayers over time 3
An undue emphasis on implementing a ‘cheap’ index overlooks many relevant considerations for index construction 3
A range of additional considerations should be addressed to maximise effectiveness of rate capping regimes 3
Unclear how political accountability and procedural independence are to be implemented**Error! Bookmark not defi**
Recommendations 4
Structure of report 5

1. Introduction to Rate Capping and the Local Government (Rate Oversight) Amendment Bill 2018 **6**
1.1 Benefits, costs, and unexpected consequences of rate capping 6
1.1.1 Benefits of rate capping 6
1.1.2 Costs of rate capping 7
1.1.3 Unexpected consequences of rate capping 7
1.2 Some Solutions to Problems Associated with Rate Capping 9
1.3 The Objectives of South Australia’s Rate Cap Policy and Legislation 14
1.3.1 Pre-Election Policy Materials 14
1.3.2 Proposed Bill 16
1.3.3 General Comments on the Rate Cap Policy 18

2. Fiscal Implications for Local Government in South Australia **20**
2.1 Comparing Local Government Revenue 20
2.2 Modelling of Fiscal Implications for South Australian Local Governments 24
2.2.1 Uncertainties impacting on modelling 24
2.2.2 Methodological approach 24
2.3 Modelling results 25
2.3.1 Approximate index increases 25
2.3.2 Potential losses in taxation revenue 25
2.3.3 Potential councils requiring rate variations 27
2.4 Implications of Proposed Methodology for Councils Experiencing High Growth or Lumpy Growth 29

2.5 Modelling of Spread in Inter-jurisdictional Equity Over Time 30
2.4.1 Inter-jurisdictional equity and rate capping 30
2.4.2 Problems associated with inter-jurisdictional inequity 31

3. Implications for Residents and Business in South Australia 32

3.1 Likely consequences of rate capping for ratepayers 32
3.1.1 Possible initial period of reduced quantity and quality of goods 32
3.1.2 Possible rate shock 33
3.2 Additional considerations 33
3.2.1 Misconceptions for individual rating assessments 33
3.2.2 No guarantee to reduce growth in imposts 33
3.2.3 Promotion of fiscal illusion 34
3.2.4 Disproportionately high impact on vulnerable resident populations 34

4. A Critique of the Proposed Methodology 35

4.1 Index factor considerations 35
4.1.1 Undue emphasis on minimising index cost 35
4.1.2 Desirable characteristics of an index 35
4.1.3 Appropriateness of index construction 36
4.2 Other Methodological Matters 38
4.2.1 Accommodate high growth councils 38
4.2.2 Addressing drift in interjurisdictional equity 38
4.2.3 Facilitating responsiveness to local economic shocks and careful consideration for rate determination 39
4.2.4 Independent and transparent process 40

5. Desirable Amendments to the Bill 42

6. Preparing for a Rate Cap Regime 47

7. Conclusion and Major Recommendations 49

References 52

Appendices 54

Figures

Figure 1. Total Taxation Revenue (per assessment; in dollars) 20
Figure 2. Taxation Revenue Annual Growth Rates, per assessment (percentage change) 21
Figure 3. Total Revenue Annual Growth Rates less Grants and Subsidies, per assessment (percentage change) 22
Figure 4. Proportion of Revenue from Rates (per cent), 2016-17 23
Figure 5. Proportion of Revenue from Rates (per cent) 23
Figure 6. Potential Compounded Loss Under Different Rate Cap Indexes ($m), Entire State 26

Figure 7. Potential Compounded Loss, Regional Councils 26
Figure 8. Potential Compounded Loss, Metropolitan Councils 27
A1. Proportion of Revenue from Sale of Goods and Services (per cent), 2016-17 54
A2. Proportion of Revenue from Sale of Goods and Services (per cent) 54
A3. Proportion of Revenue from Other Revenue (per cent), 2016-17 55
A4. Proportion of Revenue from Other Revenue (per cent) 55
A5. Proportion of Revenue from Grants and Subsidies (per cent), 2016-17 56
A6. Proportion of Revenue from Grants and Subsidies (per cent) 56
A7. Total Revenue Annual Growth Rates (per cent) Including Grants and Subsidies , per Assessment 57

Tables

Table 1. Problems Associated with Rate Capping and Potential Solutions 9
Table 2. Comparison of Policy to Proposed Bill 17
Table 3. Approximate Percentage Increase (exact indices used in model) 25
Table 4. Reduction in Taxation Revenue Under a Cap – Compounded Effect (number of councils which would have experienced a reduction in taxation revenue in parentheses). 28
Table 5. Potential Revenue Foregone, By Council Type. 29
Table 6. Suggested Changes to the Proposed Rate Cap Bill 42

Executive Summary

Background

The South Australian Government, elected in March 2018, has maintained its commitment to implement a rate capping regime for South Australian local government. The statutory framework for putting this commitment into effect is the proposed amendment to the *Local Government Act 1999* – namely, the proposed *Local Government (Rate Oversight) Amendment Bill 2018* – henceforth referred to as the Bill. The Bill establishes, among other things, a **rate cap**, mechanisms for councils to make **rate variation applications**, and provisions for **monitoring and reporting**.

In addition, the South Australian Government has appointed the independent regulator – Essential Services Commission of South Australia (ESCOSA) – to be responsible for management of the scheme, including the formulation of guidance material for its implementation. At the time of writing, ESCOSA was yet to finalise arrangements for: rate cap determination methodologies; assessment process for rate variation applications; or monitoring and reporting arrangements.

Purpose

In July 2018 the University of Technology Sydney Centre for Local Government was commissioned to provide the Local Government Association of South Australia with recommendations for the Association and its membership to assist in their efforts to engage with the Marshall government on the implementation of a rate cap regime.

In particular, the objectives set out included:

- Offering a review of objectives and outcomes of rate capping based on academic literature.
- Assess the fiscal implications of the rate caps for local governments in South Australia, including the associated implications for ratepayers.
- Review the contents of the proposed Bill and suggest amendments that could address and clarify relevant matters
- Discuss actions that councils should begin to implement in anticipation of rate capping.

Methodology

Review of academic literature

The academic literature pertaining to taxation limitations for local government (or what we shall refer to as rate capping) has been consulted in this review. This is largely based from the United States context, but also, where applicable, the literature in Australia has been investigated. This includes important contributions on empirical assessments of long-run effects of rate capping in the New South Wales context. The literature consulted covers scholars that have recognised both positive and negative effects arising from rate capping.

Review of policy documents

All policy documentation available at the time of engagement has been reviewed (25th July, 2018). This includes: '*South Australia Local Government (Rate Oversight) Amendment Bill 2018*' and '*Explanatory Paper Local Government (Rate Oversight) Amendment Bill 2018*', and the content of addresses by the Hon Minister Knoll and Mr Adam Wilson at the Local Government Association Special Meeting which took place on the 13th July, 2018.

Data analysis and modelling

Modelling was conducted to explore how the implementation of a rate cap regime in South Australia might be expected to affect revenue – assuming that the Bill is passed in its current form, with special consideration of effects on high growth councils and inter-jurisdictional equity. Data on the quantum of general rates and the number of properties in each council area was provided by the Local Government Association of South Australia. In addition, data was collected based on several indexes – namely: the Adelaide Consumer Price Index, South Australian Local Government Price Index, and the Wage Price Index (WPI).

Findings

Current imposts in South Australia are already relatively low, though dependence on rate revenue is relatively high

- On the whole, increases to total local government imposts are *higher* in NSW than for South Australia – certainly for the last 5 years.
    - Indeed, growth in total impost over the last ten years have generally been much lower for business and households in South Australia than for the other two states.
- South Australian local governments have far more reliance on rates for revenue than do their peers in NSW, and Victoria.

Rate capping based on index factors may result in lower and more volatile revenues, with the likelihood of many applications for rate variation determinations

- Comparable indexes indicate that a rate cap is likely to be subject to high volatility – with potential implications for spending volatility and also financial sustainability considerations.
- In 2016/17 rate capping could have resulted in potential taxation revenues foregone ranging from $117 million through to $133 million.
    - This includes material effects on total revenue for individual councils, ranging from a reduction of 4.53 per cent through to a reduction of 9.00 per cent.
    - This would have resulted in the far majority of councils requiring application for a variation determination in order to avoid significant reductions to revenue.

- On the whole, the impact of an efficiency dividend has a relatively small effect on potential revenue foregone (when compared to the effect of the volatility in indices or the compounding effect of successive caps).

Rate capping could result in undesirable outcomes for ratepayers over time

- Councils may well be forced to reduce the quantity and quality of goods and services if the cap does not keep up with changes to the cost of provision.
- What this generally means for residents and businesses is:
    - an initial period of reduced quantity and quality of goods whilst council first seeks to absorb the shortfall (for example poorer road maintenance over this period), followed by
    - a rate shock, whereby the compounded value of the rate shortfall, accrued over a number of years, is applied to local government ratepayers all at once.

An undue emphasis on implementing a 'cheap' index overlooks many relevant considerations for index construction

- An undue focus on a cheap methodology (including a cheap index) is not reflective of the large sums of money involved in a rate cap regime and the large expense associated with using an inappropriate index and methodology
- Summative indexes can be distortionary, with a need for, at the very least, tailored indexes (such as designed for urban, rural, regional councils and fringe/growth classes of local governments).

A range of additional considerations should be addressed to maximise effectiveness of rate capping regimes

- Special conditions should apply for high growth councils;
- A reasonable level of interjurisdictional equity should be preserved and due regard given to capacity to pay;
- Ensure that councils have the flexibility to tailor imposts to local economic conditions;
- Discourage councils from applying the maximum cap as a default option;
- Ensure transparency independence and political accountability in the rate cap setting process; and
- Ensure that any efficiency dividend imposed actually reflects gains in efficiency rather than cuts to service levels or service quality.

Recommendations

Rec 1. A contemporary, robust and evidence-based inquiry is important to ensure no deleterious and unanticipated interaction effects arise.

Rec 2. A comprehensive and ongoing suite of performance measures are required to support implementation, council response to implementation (including requests for rate cap variation determinations), and to allow for an evidence-based review of the legislation by a truly independent party in due course.

Rec 3. Changes should be made to the proposed methodology and draft Bill to ensure that it does not disproportionally disadvantage councils in high growth areas, or councils where growth is 'lumpy'.

Rec 4. Changes should be made to the proposed methodology and draft Bill to ensure that it does not widen the gap in inter-jurisdictional inequity over time.

Rec 5. Changes should be made to the proposed methodology and draft Bill to ensure that it specifically takes account of capacity to pay (which was an objective of the policy).

Rec 6. Current levels of rating need to be interrogated to ensure that the underlying assumption essential for the Bill to attain its objectives – that initial rating positions reflect both need and willingness to pay – are indeed valid.

Rec 7. The proposed rate cap regime must respond to demographic shifts.

Rec 8. The rate cap Bill and methodology must include a catch-up provision.

Rec 9. The rate cap should be tailored to specific classes of councils.

Rec 10. To ensure both independence *and* political accountability the rate cap should be set according to a two-stage process. First, independence is achieved by having ESCOSA make its public recommendations for the various classes of councils (fully detailing the basis for same). Second, political accountability is introduced by having the Minister declare the rate caps that will be applied (detailing the basis for his declaration if it differs to the ESCOSA recommendation).

Rec 11. The inflationary factor used to guide rate cap determinations should meet the following desirable characteristics: accepted by stakeholders, resistant to manipulation, transparent, representative of actual unit costs and the contribution that they make to typical local government expenditure, empirically robust and reliable.

Rec 12. Individual councils and the Local Government Association should consider collecting comprehensive data on unit costs for local government expenditures, which will guide recommendations, requests for rate cap variation determinations, and review of the Bill.

Rec 13. The review of the Bill must not be completed by the parties responsible for implementation of the rate cap regime (ESCOSA or the Minister's Office) to avoid clear moral hazard.

Structure of report

The structure of this report is as follows:

- In the first section we briefly **review the literature on rate capping** with a particular emphasis on **proposing solutions to minimise known negative side-effects** of rate capping. We also briefly consider the disparity between early policy documents and the proposed Bill, noting shifts away from some initial policy commitments.
- In Section 2 we consider the **potential fiscal implications** arising from the introduction of a rate cap regime – specifically we produce evidence which suggests that **claims regarding the comparative outcomes from rate capping in the Eastern States may have been somewhat misleading**.
- In Section 3 we provide detail of the **likely effects that a rate capping regime may have on residents and businesses** in South Australia. In particular, we draw attention to the potential for a poorly administered rate cap regime to give rise to **significant levels of rate shock** and also hamper local government's **flexibility to respond to local economic shocks**.
- In Section 4, we **review the proposed indexes and methodology** that we have been able to glean from the very scant detail in the public domain. We note that none of the proposed indexes are fit for purpose and detail possible consequences which may arise from inadequate methodology.
- In Section 5 we detail, section by section, important **changes that should be made to the Bill** to minimise the likelihood of unanticipated deleterious outcomes.
- Section 6 provides a brief review of the enormous number of **tasks to which councils must apply themselves to in order to be prepared** for the introduction of a rate cap regime. We conclude our report with an enumeration of our key recommendations.

1. Introduction to Rate Capping and the Local Government (Rate Oversight) Amendment Bill 2018

There is a relatively large literature on taxation limitations for local government (or what we shall refer to as rate capping) based mainly on the United States context – where the practice has been relatively widespread as a result of the 'taxpayer revolt' and associated referenda. However, the literature in Australia is somewhat nascent – notwithstanding some important contributions on empirical assessments of long run effects of rate capping arising from the four decade experiment in New South Wales (see, Drew and Dollery, 2015; Drew and Dollery, 2016; Grant and Drew, 2017). Generally, scholars have recognised both positive and negative effects arising from rate capping and it is important for us to briefly outline the arguments because they suggest ways in which the Bill might be altered with a view to ensuring that maximum benefits are captured, and deleterious consequences are avoided or minimised.

1.1 Benefits, costs, and unexpected consequences of rate capping

1.1.1 Benefits of rate capping

The main benefit proposed in relation to rate capping is that it acts to **constrain monopoly powers**. In economics the favoured position is competition as it is generally accepted that competition will exert downward pressure on prices and increase economic efficiency. By way of contrast, monopolies are generally frowned upon because the existence of only a single provider means that prices may be set inappropriately high. Indeed, because local government has coercive powers afforded to it under enabling legislation (*Local Government Act 1999*) – particularly with respect to local government's ability to recover outstanding payments – the problems generally associated with monopolistic providers may well be more pronounced than in other sectors[1]. Rate capping probably does offer a constraint against monopoly powers, although it is by no means the only way of introducing constraints (other options are to reduce powers in legislation, introduce competition by making more services contestable, or set up functionally overlapping competing jurisdictions as a basis for producing some local government goods and services – see, Boadway and Shah, 2009).

A second benefit of rate capping is that it, not surprisingly, **reduces gross taxation imposts on local government ratepayers**. Drew and Dollery (2016) empirically demonstrated that imposts were relatively lower for New South Wales ratepayers than they were for peers in Victoria and attributed the lower imposts to the existence of a rate cap regime. Other cited benefits to rate capping are more controversial and may not be supported by empirical evidence. These benefits include: **enhanced governance** (although others have argued that a rate cap provides a default option and hence has a negative effect on governance); **limiting the provision of non-core**

[1] For instance, Australia Post has a monopoly on mail delivery but they do not have the power to compel people to buy postage stamps.

services (which may also have significant equity implications for the most vulnerable in our society); and **improvement to technical efficiency** (defined as the conversion of inputs into outputs, which is not supported by the empirical evidence – see Drew and Dollery 2016).

1.1.2 Costs of rate capping

There are also a number of problems that have been associated with rate capping – and, once again, some of the claims are supported by evidence but others are somewhat controversial. The obvious 'problem' with rate capping is that it **limits revenue streams** for local governments and this can have implications for local government capacity to provide services in response to community need, ability to adequately maintain infrastructure, and capacity to build new infrastructure. **Infrastructure backlogs** are a particularly pressing problem in jurisdictions where rate cap regimes operate and there is empirical evidence to support the contention that this is an unwanted side-effect of rate capping (Drew and Dollery, 2016). It has also been demonstrated empirically that rate capping gives rise to **higher levels of municipal debt** (Drew and Dollery 2016), which has clear implications for financial sustainability and intergenerational equity (it is difficult to morally defend running up debt for services consumed that future generations of local government taxpayers will be required to foot the bill for – however, some have argued that some debt is desirable for long-lived infrastructure assets as these will also be consumed by future generations[2]).

1.1.3 Unexpected consequences of rate capping

1.1.3.1 Political side-effects

There are also a number of political side-effects associated with rate capping. One argument is that it runs **contrary to democratic principles** – that is, that the elected representatives who are held to account, in part, for the responsiveness of council to community need are hampered by an inability to raise revenues to pay for the perceived needs (although where jurisdictions allow for rate cap variation determinations then this argument is not quite as strong). It has also been noted that the operation and announcement of a rate cap each year can be easily **confused by the public as a message that all councils can be sustainably operated** by simply increasing taxation revenues by the capped amount (when in fact the particular circumstances of a given council may require significantly higher imposts). Related to this is the **political risk associated with applying for a rate cap variation determination** (which explains why just 13 out of the 128 councils in NSW applied for a special rate variation in 2018-19 despite the fact that the Fit For the Future programme assessed around 60 percent of councils as being unsustainable[3]). Another less known, and rather perverse consequence of rate capping, is that it tends to result in **councils increasing rates by the maximum cap each year** (partly as a result of a fear of missing out on compounded revenue if they fail to increase rates by the

---

[2] There are a number of problems with this argument. First it conveniently neglects the fact that the current generation of ratepayers were the beneficiaries of infrastructure paid for in full by their predecessors. Second, local government spending is quite fungible – that is, debt can be taken on ostensibly to pay for long-lived assets and the funds which had been reserved for such assets can then be re-directed to services that are consumed in the short-run. Third, no jurisdiction currently assesses debt capacity in a robust and empirically defensible manner – which is akin to encouraging one to take on a mortgage without checking their payslips. Grant and Drew (2017) look at this problem in some depth and expose some of the flaws in the local government debt argument.

[3] Interestingly IPART (the very same authority responsible for setting the rate cap in NSW) was one of the parties (in conjunction with Ernst & Young) who came up with the determination that 60 percent of the councils in NSW were not financially fit for the future.

maximum amount) and putting relatively less effort into consulting with the community (because the independent regulator has already endorsed increases up to the cap there is less need to justify increases within the cap envelope to the community).

Another political consequence of rate capping is that it **allows local governments to shift blame to others** (either the state government – if the Minister must set the cap – or to a politically unaccountable bureaucracy) for their financial condition rather than taking proactive steps to address sustainability challenges (ILGRP, 2013). Associated with this is the concept of learned helplessness, whereby elected representatives and executives as a result of unsuccessful rate variation determinations and low rate caps slowly lose the motivation to help themselves out of various predicaments (even situations where revenue is not the cause of the problem – Grant and Drew, 2017).

1.1.3.2 Unexpected financial consequences

Scholars have also identified **rate gaming** to be a consequence of rate capping, whereby local governments increase fees and introduce new levies (such as the now ubiquitous environmental levy in NSW) in order to sidestep the cap (Drew and Dollery, 2015). In addition, it has been claimed that rate capping results in 'millions of dollars [which] are spent each year by councils and State agencies on preparing, reviewing and determining applications' (ILGRP 2013, p. 43) – and that this represents an unacceptable pecuniary cost to taxpayers (especially in conditions of fiscal austerity).

Rate capping can also result in reduced flexibility with respect to **tailoring imposts to local economic conditions**. This is a particular problem in rural areas where many local governments try to time additional imposts to coincide with profitable agricultural conditions and reduce imposts when agricultural conditions are difficult (for instance during droughts).

1.1.3.3 Inter-jurisdictional equity considerations

Rate capping also invariably results in inter-jurisdictional inequity and a breaking of the nexus between rates levied and capacity to pay. Inter-jurisdictional inequity refers to the situation whereby the rate of local government taxation is vastly different in various council areas. For example, in 2012 Ku-ring-gai NSW (which had a median the average wage of $51,937) the average residential rates were $780.15, but in Wollongong (where the median wage for the same period was $44,970) the average residential rate was $1,011.95.

Variations in inter-jurisdictional equity are **objectionable on moral grounds** but they also have significant implications for wider economic efficiency because **inequities can distort spending decisions** (for instance where one might choose to locate a factory or office).

Breaking of the nexus between the amount of rates levied and the capacity of residents to pay the rates is an even weightier problem. Because of the compounding effects of rate-capping, combined with demographic shifts over time, any rate cap regime will almost certainly destroy the association between median wage of residents in the area and the rates levied by local governments (Drew and Dollery, 2015). This is a big problem given that rate capping is generally motivated in the first place by concerns regarding taxpayer capacity. Drew and Dollery (2015) provided robust econometric evidence to show a negative association between revenue effort and average wage for NSW local government, at the highest level of statistical significance.

What this means is that rate capping in NSW has largely resulted in **areas with the lowest average wages being asked to carry the highest relative burden of taxation**, which is clearly undesirable. Perhaps an equally damning criticism of rate capping is that it **may not lead to individual rates assessments being constrained to the value of the cap at all**. This failure to cap at the level of the rate assessment can cause great consternation among local government taxpayers and occurs due to changes in relative valuation of properties, rezoning of land, or variation to rate cap determinations.

1.2 Some Solutions to Problems Associated with Rate Capping

The long list of problems that have been associated with rate capping makes for sobering reading. However, careful crafting of legislation and methodologies can mitigate *some* of these deleterious effects and is consistent with our brief to identify what changes can be made to proposed legislation and methodologies if a political decision is made to implement rate capping in South Australia. Table 1 lists the various problems and briefly outlines potential solutions (which may only partially address the problem as some problems cannot be eliminated entirely). Readers should note that at this point in the Report we are only trying to provide a brief overview of potential solutions and that the remainder of the report will deal with the solutions in greater detail (we also reiterate the main changes that should be sought to the proposed rate capping legislation in our list of recommendations at the end of this report).

Table 1. Problems Associated with Rate Capping and Potential Solutions

Problem	Possible Solutions
Rate capping constrains revenue	1. The process for rate variation determinations must be relatively straightforward and accessible to councils. 2. Rates, if they are to be constrained, should only be used to fund public goods and services, and the subsidy component of merit goods and goods with positive externalities[4]. All other goods and services should be funded through fees which recover the entire cost of provision. This is good taxation practice at any time (and is the most economically and ethically appropriate way of delivering services), but is essential at times when taxation revenues are capped.

[4] Merit goods are local government outputs that are considered to be virtuous – such as libraries (which encourage people to read). Goods with positive externalities are outputs for which consumption by one person bestows benefits onto others – an example is rubbish collection, which has benefits for the householder but also for the householder's neighbours who might otherwise be exposed to unsightly and smelly waste. In this later case economic theory states that the service should be subsidised by the amount of the benefit conferred onto others.

Rate capping is associated with higher levels of debt and lower financial sustainability.	It is critical that debt is only taken on for *bona fide* expenditure on long-lived assets. There needs to be close monitoring of debt levels and an automatic trigger in place to require councils to apply for a rate variation determination in the event that debt rises above appropriate levels. Indeed a full suite of robust performance monitoring metrics must be in place so that: (i) an assessment can be made of how rate capping has affected sustainability, (ii) to guide decision making by councils, and (iii) to be used as a trigger for rate variation applications and to guide the actual determination process (and hence reduce costs associated with the process)
Rate capping can run counter to democratic principles	Making the process for a rate variation determination accessible will partly address this problem. In addition, it is critical that the wording of announcements is clear that the rate cap simply conveys the maximum rate increase that should apply to a 'typical' council that is not facing unmet community need, financial sustainability concerns or infrastructure backlogs. The statement should also clearly convey that it is prudent for councils that require additional revenues to apply for a rate cap variation determination. Finally, there must be some political accountability built into the process – if not at the local government level then it must occur at the level of the Minister for Local Government (by requiring the Minister to set the cap after receiving an independent recommendation from an appropriately qualified body – more on this below).

Rate cap announcements can confuse the public regarding the appropriate level of rate increases for a specific local government	It is critical that the rate cap announcement is crafted carefully so that residents are clear on two points: (i) that the cap does not reflect the specific circumstances of their council and that it may be prudent for the council to seek a variation to the cap, and (ii) that the cap does not represent a cap on increases to individual assessments and that individual imposts may therefore rise by an amount greater than the cap
Applying for a rate cap variation entails significant political risk	Political risk can be mitigated in two ways: 1. First, as we have already noted, it is imperative that the announcement is worded carefully to convey the fact that the cap is not specific to any particular council and that it may be prudent for councils to pursue a rate cap variation. 2. Second, there must be automatic triggers in place, whereby a council must apply for a variation determination if certain metrics are not met – this will ensure that citizens understand that the impetus for applying for a variation is the circumstances that the council finds itself in.
Rate capping tends to result in councils applying the maximum cap each year (even if situations may not warrant such increases)	This occurs because councils rightly perceive that failing to increase by the maximum cap will have compounded effects on future revenue or will result in the need to pursue what might be a time consuming and expensive (in both pecuniary and political terms) rate cap variation determination. A simple solution to this problem is to legislate and allow for councils to be able to ‘catch-up’ – that is, should a council not increase the general rate by the maximum cap amount, in a given year then in future years the council will have the opportunity to make additional increases that would capture the compounded effects of revenue foregone in earlier periods, without the need to apply for a variation.

Rate capping may erode political accountability	There must be some transparency in the process of setting any type of taxation. • If accountability is eroded at the local government level then it must be accommodated at the state government level – that is, the Minister must make the declaration (in response to the independent recommendation) so that citizens have some avenue to hold some level of political representation to account for the consequences of any given increase in taxation. • Moreover, to ensure full accountability and an appropriate level of rigour in the decision the Minister must be required to make a full disclosure regarding the reasons for the Minister's decision if it does not accord with the independent recommendation. In so doing, the rate cap regime would capture both desirable attributes – independence *and* political accountability.
Rate capping can result in gaming of the cap	Anti-gaming provisions must be included in the legislation and appropriate oversight must occur to ensure that the provisions are complied with.
Rate capping entails very large administration costs	As much as possible the rate cap variation process must use existing plans and community consultations. In addition, if the rate cap regime is supported by a sufficiently robust suite of performance monitoring metrics then costs will be further tempered.
Rate capping reduces council flexibility to set revenue to reflect prevailing community conditions	This offers further impetus for the legislation to include an appropriate catch-up provision.

Rate capping gives rise to inter-jurisdiction inequity (which has both ethical and economic side-effects)	It is critical that initial rating positions reflect an acceptable level of inter-jurisdictional equity. To ensure this occurs, 1. Revenue effort metrics (total imposts levied by a local government as a percentage of the median income of ratepayers in the local government area) must be calculated for all local governments and the introduction of the rate cap regime should be delayed for an entire cycle to allow councils to alter their level of imposts to equalise positions if community consultation is supportive of increases. 2. Moreover, the revenue effort metric should be considered an essential element of a rigorous performance monitoring system and should be monitored. 3. Finally, the independent regulator and the Minister should be directed in the legislation to give reasonable regard to inter-jurisdictional equity in setting the cap and assessing rate cap variations.
Rate capping can result in a breaking of the nexus between taxation imposts and capacity to pay	1. The above recommendations regarding revenue effort metrics will partly address this problem. 2. There is also a strong case to review financial assistance grant allocations with respect to need and capacity to pay. 3. Failure to adequately pay due regard to revenue effort metrics will result in the erosion of the nexus over time as the demographics (make-up of rate payers) shift through internal migration or the establishment of new industries and the like.

Individual rates assessments may still exceed the rate cap by large margins	1. It is not possible to apply the cap to individual assessments as this would erode intra-jurisdictional equity. 2. Therefore it is critical that ratepayers are educated appropriately by the government introducing the regime so that misconceptions are addressed. 3. It is also important to ensure that the wording of the rate cap announcement accurately conveys what the cap applies to.

1.3 The Objectives of South Australia's Rate Cap Policy and Legislation

Our critique of the proposed Bill and methodology are based on the most up-to-date materials as at engagement (25th July, 2018). These include '*South Australia Local Government (Rate Oversight) Amendment Bill 2018*' and '*Explanatory Paper Local Government (Rate Oversight) Amendment Bill 2018*', and the content of addresses by the Hon Minister Knoll and Mr Adam Wilson at the Local Government Association Special Meeting which took place on the 13th July, 2018.

1.3.1 Pre-Election Policy Materials

In the publication *Capping Your Council Rates* issued before the election a number of commitments were made regarding particulars of the rate capping policy. Specifically voters were advised that:

- 'The scheme will be administered by an independent regulator' (Marshall, 2018, p. 3). There needs to be independence worked into the process of setting a rate cap, so this part of the policy was sound. However, there also needs to be some political accountability in democratic institutions (thus leading to our recommendation above that the Minister should declare the rate cap either by confirming the Minister's acceptance of the recommendation of the independent regulator, or fully detailing his reasons for declaring a cap contrary to the recommendation of the independent regulator should this occur).
- 'The regulator will determine a rate cap on a region by region basis, recognising that council costs can vary between regions' (Marshall, 2018, p. 3). This was very sound policy and reflects the findings of a host of empirical studies over the years that demonstrate that expenditure need and unit cost vary substantially by region and that differences between urban, rural, regional and growth areas are particularly acute. Indeed TCorp (The NSW Treasury Corporation; 2013, p. 29), which was charged with reviewing financial sustainability of NSW councils where a rate cap applies noted that 'there are distinct variances in cost structure between Urban and Rural councils [and that] Rural Councils tend to have a lower component of cost from employees and a larger component from construction work.' Thus a single statewide index would not adequately reflect unit costs for all local governments (because of the different mix of components). Moreover, there are less opportunities to

outsource provision of services to commercial operators in rural areas which means that councils have less avenues for pursuing efficiency measures. Indeed, given the vast distances involved it is generally also less viable to pursue shared service arrangements in rural areas. Therefore the Marshall commitment was sound policy that reflected the situation on the ground.

- ‘The regulator will apply the Local Government Price Index (LGPI) as the basis for determining a rate cap’ (Marshall, 2018, p. 3). The LGPI may not be the most appropriate index to apply as this was not the purpose for which it was designed (see below for a discussion of the ideal attributes of any rate cap index). It is certainly not appropriate to use a state-wide LGPI (especially one that uses capital city CPI as a major input) for determining region by region caps. In addition there are a number of other factors that we have already noted must be considered in formulating a recommendation for a cap.
- ‘Individual councils will be able to apply to the independent regulator for a rate increase above the cap when able to demonstrate support of ratepayers’ (Marshall, 2018, p. 3). This policy position adds significant community consultation costs to the process of applying for a rate cap variation. It also increases the political cost of doing so.
- ‘Councils will also be able to seek recognition as a ‘Growth Area’ for a maximum of up to five years to support an application for an above rate cap’ (Marshall, 2018, p. 3). It is certainly the case that high growth councils are likely to feel the impact of rate capping more so than other councils – so in this sense the policy was sound. However, to reduce both pecuniary and political costs (and ensure that councils which need the special dispensation do indeed receive it) the determination of whether a council represents a ‘Growth Area’ should be made by the independent regulator according to reasonable and transparent criteria – that is, it should not be up to councils to make an application.
- ‘Five years after its introduction, a Liberal Government will review the Rate Capping Scheme in consultation with local government’ (Marshall, 2018, p. 3). This statement is a little peculiar because it implicitly assumes that a Liberal government will be in power after the next election. It is critical for both political accountability and for the objective of a thorough review that the Parliament associated with the introduction of the policy is also the Parliament that appraises the policy (because the current parliamentarians will have a better knowledge of the contents of the debates relating to the Bill). Moreover, it must be noted at the outset that policies are rarely reversed. Indeed the economic luminary Milton Friedman (1993) contended that policies were rarely reversed because even if they prove to be completely ineffective or even counterproductive there will be entities that have a vested interest in ensuring the policy continues (usually so that power and budgets associated with the policy are maintained). This is why it is imperative that the entity that is appointed as the independent regulator has no part in the appraisal of the policy when it is reviewed.
- ‘A Liberal government will not continue Labor’s cost-shifting to local councils’ (Marshall, 2018, p.3). It is sound policy to eschew cost-shifting and it will be critical for the financial sustainability of councils under a rate cap regime to reject cost-shifting. However, given that the policy document acknowledges

past cost-shifting it will also seem critical for the government to actively roll back extant cost-shifting devices.

- ‘Why we’re doing it…the rising cost of living is putting undue pressure on South Australian households and businesses’ (Marshall, 2018, p. 4). As we have noted earlier the evidence suggests that rate capping *may* not indeed reduce cost of living pressures (particularly in view of the fact that the rate cap generally becomes the default option for councils). This is why measures such as catch-up provisions, appropriately worded statements accompanying the rate cap declaration, directions that the cap must be set with due regard to revenue effort metrics and the like (detailed in Table 1) are critical to ensure the legislation achieves the policy objective.
- Various justifications are given for introducing a rate cap: ‘Council rates are one of the biggest taxes home owners pay on an annual basis’ (Marshall,2018, p. 4) – this is clearly misleading for most employed persons and businesses. ‘In recent years council rates have increased well above inflation’ – this will be tested below. Claims are also made about the superior outcomes in New South Wales where a rate cap has operated for over 40 years. We have already provided a brief review of the robust and peer-reviewed empirical evidence regarding rate cap outcomes in NSW which tends to paint a dismal picture of the rate regime operating in that state.

1.3.2 Proposed Bill

At this point we are mainly interested in looking at the objectives as stated in the Bill and comparing key details articulated in the policy document of the Marshall government (which contained many sound recommendations) with the amendment Bill actually introduced.

The objectives of the Bill are outlined in Part 1A, section 187C to ensure:

a) That the financial contribution of ratepayers to the provision of services and infrastructure by local government to meet the present and future needs of local communities is subject to appropriate oversight

b) That a council has the financial capacity to perform its duties and functions and exercise its powers

Curiously the main rationale as articulated in the policy promotional materials – to reduce undue cost of living pressures for residents and business – is not explicitly articulated in s187C. There is a strong risk that the Bill may not achieve this policy objective unless several changes are made to its contents and the proposed methodology (see Sections 4 and 5). We urge that consideration be given to including the policy objective clearly in s187C to guide implementation.

We also note that reference is made to the ‘present and future needs of local communities’ and adequate ‘financial capacity’ – these are both financial sustainability concepts and could be captured by this single term. Indeed, given the risk to financial sustainability that accompanies rate cap regimes it would be prudent to mention this specifically as an objective to guide implementation and to introduce the recommendations that we detail in this Report to ensure that sustainability is not allowed to deteriorate.

In Table 2 below we detail whether the particulars contained in the policy document also appear in the proposed Bill:

Table 2. Comparison of Policy to Proposed Bill

Policy Document	Proposed Bill
Scheme will be administered by an independent regulator	ESCOSA is nominated as the independent regulator
Rate cap will be determined on a region by region basis	The proposed Bill allows for the cap to be applied to: (a) councils generally; or (b) a class of councils; or (c) a particular council. This section is inconsistent with the pre-election policy document as it does not require ESCOSA to determine a cap on a region by region basis (it is also inconsistent with best practice and the extant evidence). The inconsistency could quickly be rectified by deleting (a).
The LGPI will be employed	S187E(3)(a) only requires the basis for the primary rate cap to be 'a relevant price or cost index'. It therefore appears that the Bill has backed away from the commitment made in the policy documentation. As we will detail later, no existing index meets minimum requirements for an effective and sustainable rate cap regime targeted to the varied circumstances of councils operating in different regions.
Individual councils will be able to apply for a rate increase above the cap	S187G outlines the process for applying for a rate cap variation determination
Councils will be able to seek recognition as a 'Growth Area'	S187G does not prevent an application for a variation on the basis of a council being in a 'growth area', but neither does it specifically accommodate the commitment made in policy documents. As detailed earlier the designation as a 'growth area' should be made by ESCOSA based on reasonable and transparent criteria and not require the council to apply for same (although councils should not be prevented from applying to be designated a growth area if they feel that it is appropriate).

Five years after implementation the scheme will be reviewed	'9-Review', details that a review and report should be completed by 31 December 2023. This seems to presume that the legislation will be passed before the end of the year. As noted earlier it is more efficient and accords better with principles of political accountability for the Parliament that passes the legislation to be responsible for its review. It is critical that parties with an apprehension of bias (for instance ESCOSA) are not included in the review process – ideally a completely independent institution from another state which has demonstrated expertise in this field (including peer-reviewed scholarly expertise) should be nominated as the party producing the report on the effectiveness and sustainability of the scheme.

1.3.3 General Comments on the Rate Cap Policy

1.3.3.1 Wider policy package

Generally, it is considered risky to tinker with one narrow aspect of policy relating to a public institution, because it can easily give rise to unanticipated deleterious interaction effects (social scientists refer to sequential narrow policy prescriptions as the synergistic fallacy and there is a very large literature demonstrating bad side-effects as a result of tinkering – see Hirschman 1991). It is particularly problematic in this case because attention is only being paid to one side of the accounting ledger (revenue) and it is very difficult to see how the policy can be sustainable without a prescription (rather than a simple hope for vaguely defined efficiencies) for measures to reduce expenditure. Ideally, rate capping would only be introduced in the context of a wide ranging contemporary inquiry into local government finances and would be but one of a raft of measures (including expenditure measures). The Hon Minister Knoll stated at the Special Meeting that this was the first of a plan for a number of reforms, however, there can be no certainty that the future unspecified reforms will indeed come to pass. We would urge the South Australian government to defer this policy implementation until all the policy prescriptions have been worked out, communicated to the public and are ready for implementation.

1.3.3.2 Public communication to avoid misconceptions

We are also concerned that many people may misconceive what the implementation of a rate cap would mean for their personal local government taxation assessments. We encourage the government and various local government peak bodies to actively go about educating the public regarding the fact that rate capping may not necessarily be directly reflected in a cap on one's personal rates (for all of the reasons we raised above). In addition, as we have already noted, it is essential that the rate cap is carefully communicated to ratepayers so that its full implications are accurately conveyed – including the fact that the rate cap does not reflect the specific circumstances of any particular council and that it may still be prudent for the council to apply for and receive a rate variation determination.

1.3.3.3 Alternative means to achieve oversight and financial capacity objectives

We also note that the current objectives as stated in the proposed Bill – oversight and financial capacity – do not require the introduction of a rate cap regime. For instance, oversight could be conducted through a body charged with monitoring rate increases and investigating any council which *prima facie* appeared to be introducing undue pressures onto household and business budgets. An oversight body thus conceived, could be made accessible to members of the public who could register their concerns which might be used as an impetus for investigation. Indeed, if a comprehensive performance monitoring framework was implemented it would be easier for residents to monitor matters and draw attention to them and exert political pressure if they thought it was warranted. An oversight scheme of this nature would be less costly to administer and operate on the assumption that most councils are doing the right thing (rather than the implicit assumption of rate cap regimes which is that most councils are placing unreasonable imposts on ratepayers) – it would also transfer much of the burden from councils to an appropriately resourced regulator who could harness economies of scale and in-house expertise to produce the desired oversight at a much reduced cost. Drew and Dollery (2016) discuss a number of alternative measures to rate capping in some detail.

1.3.3.4 Summary

On the evidence presented above one can conclude that the Bill strays some way from the original intent of the public policy and moreover that the Bill in its current form is likely to lead to a number of unanticipated deleterious consequences. In the next section we empirically investigate some of the claims made by opposing parties regarding the costs and benefits of rate capping.

2. Fiscal Implications for Local Government in South Australia

In this section we take a brief overview of revenue for South Australian local government relative to its peers in New South Wales and Victoria. We then conduct some modelling to explore how the implementation of a rate cap regime in South Australia might be expected to affect revenue – assuming that the Bill is passed in its current form. Following this we briefly consider the effect of a rate cap regime on high growth councils and inter-jurisdictional equity.

2.1 Comparing Local Government Revenue

Below we depict various aspects of local government revenue. Comparisons are made with the two jurisdictions which currently operate rate cap regimes, which is consistent with the focus of rate cap debates thus far. The data is derived from the Australian Bureau of Statistics (ABS, 2018), *Local Government Finance Statistics* reports (for each state and for Australia) and augmented with number of assessment data.

A lot of the debate regarding the potential introduction of rate capping to South Australia has drawn attention to the relatively low levels of local government taxation that occur in New South Wales. Figure 1 confirms that local government rates per assessment are considerably lower in New South Wales than in either South Australia or Victoria and it is thus not unreasonable to claim that the forty year rate cap regime has been successful in reducing the impost via *taxation*. However, if one is concerned about relative cost of living pressures in the various jurisdictions then it is also important to examine two other key statistics – annual growth rates in taxation, and annual growth rate in total own-source revenue.

Figure 1. Total Taxation Revenue (per assessment; in dollars)

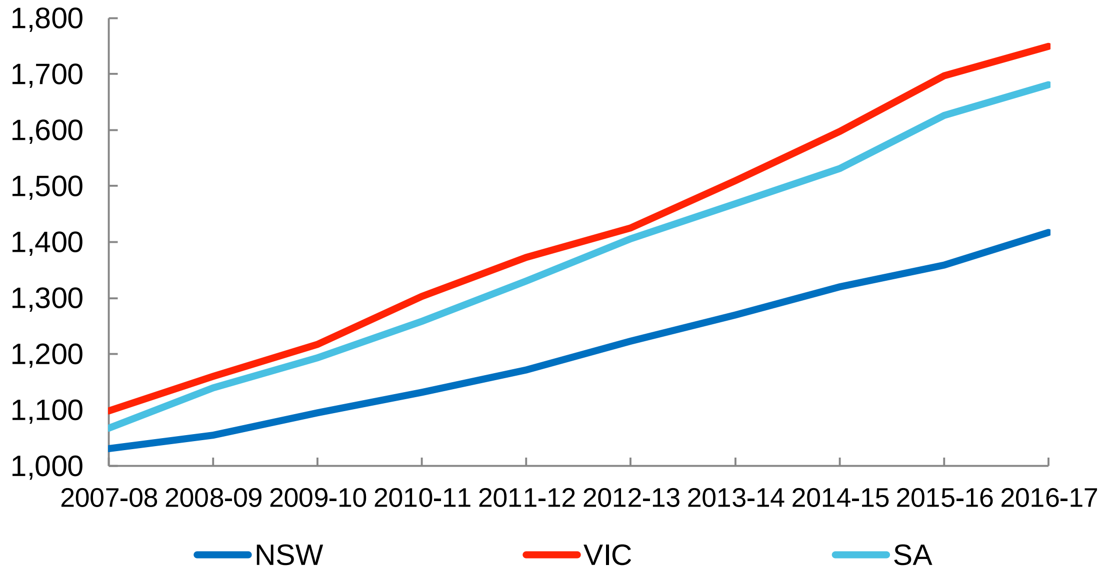
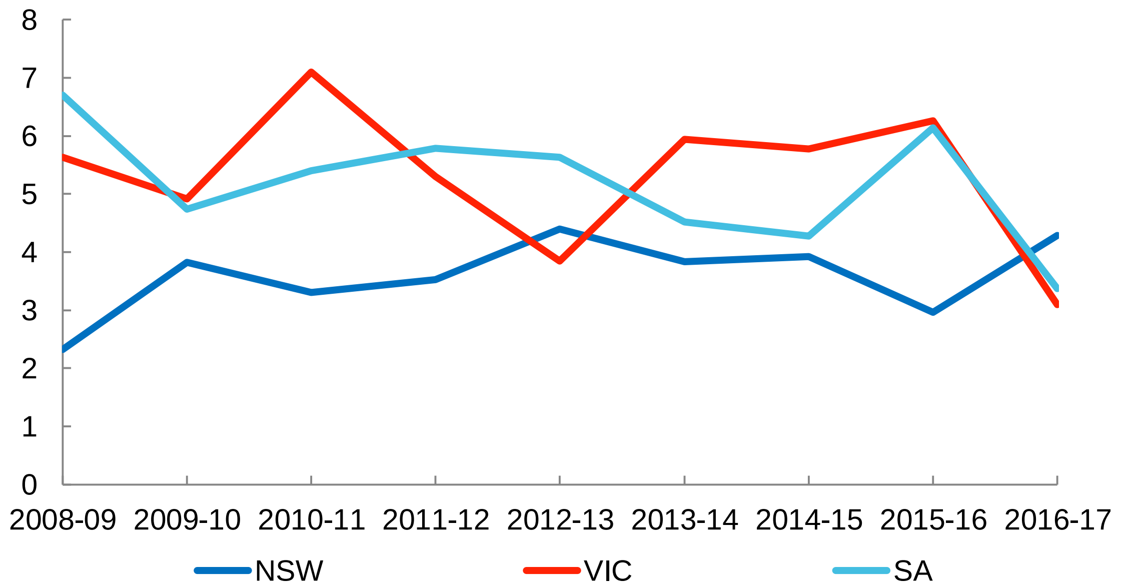


Figure 2 presents comparative data on the annual growth rate in taxation (expressed on a per assessment basis). Like all graphs and statistics, the picture one takes away is determined in part by the time horizon that one views the data through. We present the data derived from ten years of statistics, consistent with what is provided in the most recent ABS reports, however one could argue that what has occurred in the last five years or so is more relevant for contemporary decision making. If we compare growth rates over this period then it is reasonable to assert that growth rates in South Australian local government taxation have generally been above NSW, but slightly below average increases in Victoria.

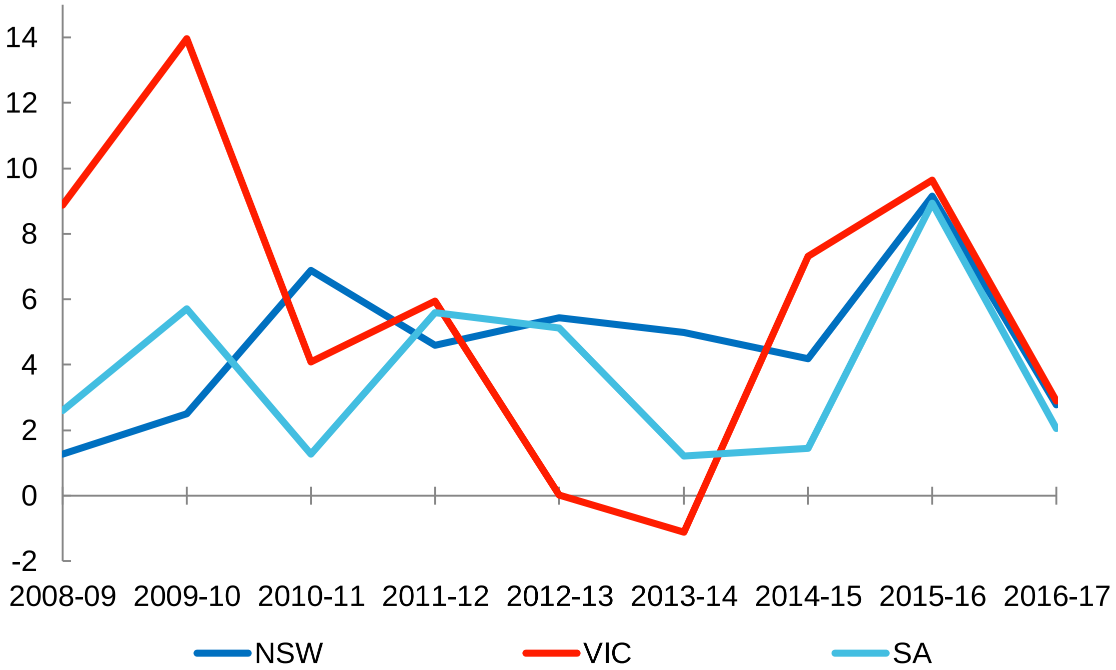
Figure 2. Taxation Revenue Annual Growth Rates, per assessment (percentage change)



However, given the evidence that rate caps are often ‘gamed’ by councils and the fact that the motivation for introducing rate capping is to contain cost of living pressures (which are affected by both local government taxation *and* fees), it is critical to also examine average annual growth rates per assessment for total own-source revenues (we have excluded grants and subsidies in the graph below given that councils do not directly collect these revenues – see the appendix for the relevant graph without grants and subsidies excluded).

Figure 3 presents this data for the three local government jurisdictions and the graph suggests a very different picture of growth in total imposts to what has characterised debates thus far. Specifically, the data derived from official Australian Bureau of Statistics reports, suggests that, on the whole, **increases to total local government imposts are *higher* in NSW than for South Australia** – certainly for the last 5 years. Indeed, it seems that **growth in total impost over the last ten years have generally been much lower for business and households in South Australia** than for the other two states. This evidence does run counter to some of the arguments used by proponents of rate capping in the debates in South Australia.

Figure 3. Total Revenue Annual Growth Rates less Grants and Subsidies, per assessment (percentage change)



In order to get a sense of how a rate cap regime might affect South Australian local governments, it is important to first understand how much of the revenue flows to councils in the state are derived from rates. As detailed in Figure 4 below, **South Australian local governments have far more reliance on rates for revenue than do their peers in NSW, and Victoria**. What this means is that the deleterious consequences associated with rate cap regimes are likely to be felt more keenly by councils in South Australia than their peers on the East Coast – simply because South Australian councils have greater reliance on rates to fund the goods and services which they provide. Thus, it is critical to mitigate as many of the problems associated with rate capping as possible through careful design of the Bill and methodology (which we detail in succeeding pages of this report).

Notably, Figure 5 suggests that South Australian reliance on rate revenue has been relatively stable over the last four years (the slight volatility in recent years is probably largely due to changes to the financial assistance grants). In the appendices we provide graphs for other elements of revenue over the same period.

Figure 4. Proportion of Revenue from Rates (per cent), 2016-17

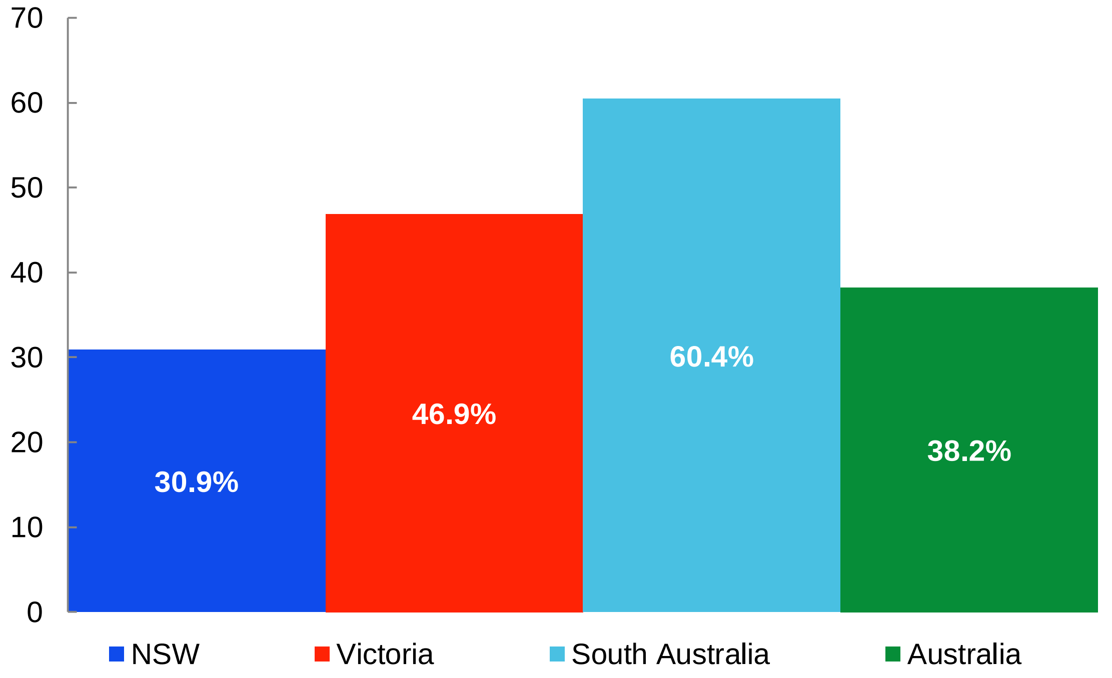
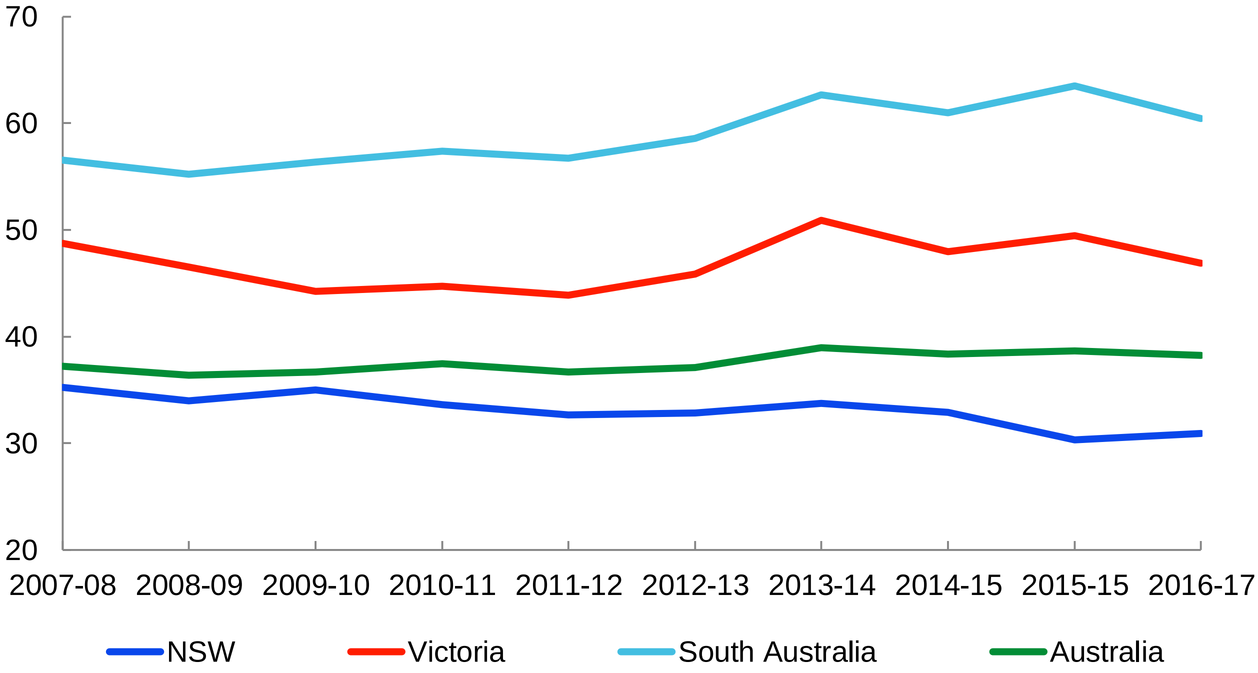


Figure 5. Proportion of Revenue from Rates (per cent)



2.2 Modelling of Fiscal Implications for South Australian Local Governments

2.2.1 Uncertainties impacting on modelling

It is no easy matter to model the potential implications arising from the introduction of a rate capping regime to South Australian local government because of (i) continued uncertainty regarding precisely how the cap would be calculated, (ii) difficulties accessing required data, and (iii) the potential for individual councils to apply for and receive a rate variation determination.

2.2.1.1 Index calculation uncertainty

In terms of methodological uncertainty ESCOSA's address at the recent Special General Meeting on Rate Capping has left the door wide open regarding the index to be used and the potential for an efficiency dividend to be included into the 'inflation factor' – likely indexes seem to be the Adelaide Consumer Price Index (CPI) and the South Australian Local Government Price Index (LGPI), although neither fit the ideal attributes of a rate cap index (see Section 4).

2.2.1.2 Data uncertainty

There are also a number of changes that we strongly recommend, which if implemented would have a significant impact on the rate cap and our modelling. Data limitations mainly revolve around getting access to end of financial year number of assessments, and beginning of financial year number of properties (although if our recommendations are taken on board then this will not be the data actually used to calculated the cap – once again, see Section 4).

2.2.1.3 Rate variation determination uncertainty

In addition, there is significant uncertainty regarding the rate cap variation determination process, which councils might seek to gain a variation under the process, and the likelihood of requested variations being approved. In theory, no loss in potential rate revenue need occur at all if councils successfully apply for variations. However, in practice, councils tend not to apply for variation determinations due to the cost (both pecuniary and political) of doing so.

2.2.2 Methodological approach

The approach we have taken to get a feel for the potential pecuniary impact of a rate cap regime is to take the last three full financial years of data (the 2015, 2016, and 2017 financial years) and compare actual general rate revenue to what would have been allowed under caps determined by various indexes. We conducted three separate modelling exercises, each model employing either the Adelaide CPI, South Australian LGPI, or a composite index (40% from the South Australian Wage Price Index (WPI) and 60% from the Adelaide CPI) which is the equivalent of the index currently used in Victoria. Notably rate caps in Victoria were originally derived from the Melbourne CPI, and rate caps in NSW employ the Local Government Cost Index which is broadly consistent with the LGPI.

The models which we have generated reflect the compounding effect over the three years – what this means is that we assumed that councils in 2014/15 kept to the cap, which then formed the basis for the average rate revenue data for successive years. A compounding model is more representative of how rate caps will evolve (potential lost revenue in one year is compounded into the next year's cap) and provides a better feel for how the effects of rate capping are generally amplified over time. However, we do note that rate cap variation determinations may partially or completely mitigate 'losses' for a given council for one or more years.

2.3 Modelling results

2.3.1 Approximate index increases

Table 3 provides details of the approximate increases yielded under each potential index for the three financial years of data that we modelled (in the actual modelling we used the precise index numbers which is an important thing to do to avoid material effects of rounding error given the large sums of money involved). As can be seen, there was a large reduction in the indices in 2015/16 and this alerts us to the fact that **a rate cap based on any of these index inputs is subject to high volatility**. Highly volatile revenue is a problem for local economies if it leads to high volatility in spending – however, if volatile revenues are not matched by spending volatility then this also presents a grave problem (reduced financial sustainability; Sacchi and Salotti, 2017; Tran et al. 2018).

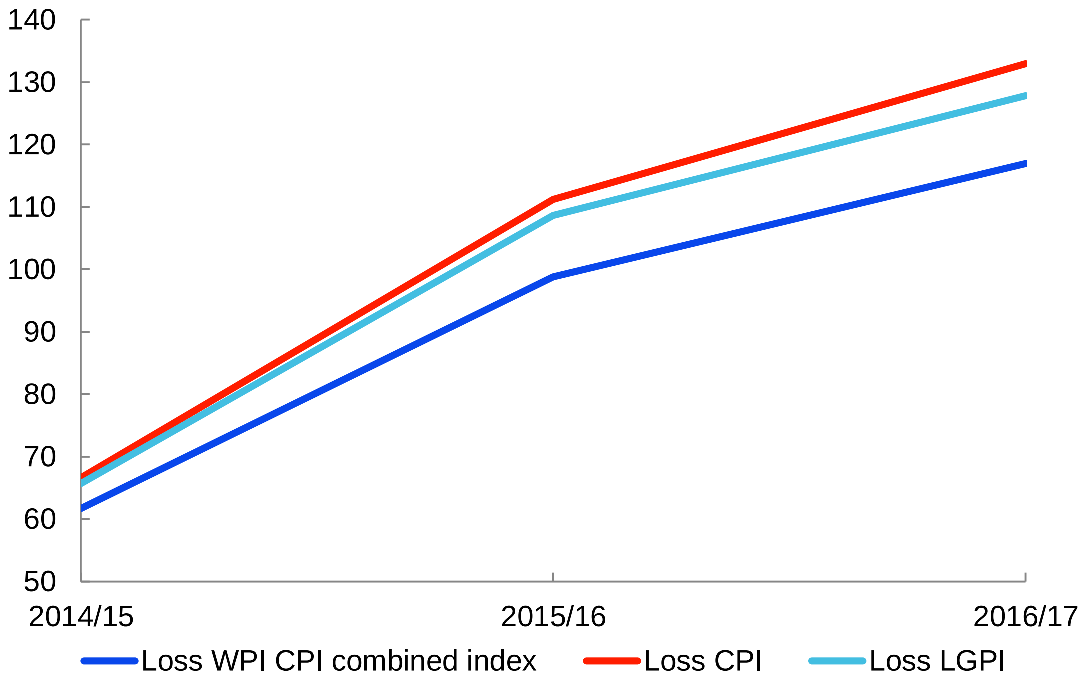
Table 3. Approximate Percentage Increase (exact indices used in model)

	Year 1 2014/15	Year 2 2015/16	Year 3 2016/17
LGPI	1.67%	0.95%	1.75%
CPI	1.60%	0.82%	1.56%
Composite (40% WPI, 60% CPI)	1.98%	1.39%	1.81%

2.3.2 Potential losses in taxation revenue

Volatile indices when compounded result in an uneven magnitude of potential losses in taxation revenue over time. Figure 6 depicts the magnitude in potential revenue foregone for each of the three years that we modelled, for the entire state. Revenue potentially foregone for 2014/15 ranged from $62 million through to $67 million depending on the index used (the CPI index resulted in greatest potential loss, and the composite CPI WPI index on the least loss). In 2015/16 where indexes were at their lowest level (and where the effects of caps were compounded over one period) revenue foregone ranged from $99 million through to $111 million. In 2016/17 the compounded effects of two periods of caps, when combined with the indexes resulted in **potential taxation revenues foregone ranging from $117 million through to $133 million**.

Figure 6. Potential Compounded Loss Under Different Rate Cap Indexes ($m), Entire State



In Figures 7 and 8 we depict the split in potential compounded losses for regional and metropolitan councils (according to SAROC/GAROC classifications).

Figure 7. Potential Compounded Loss, Regional Councils

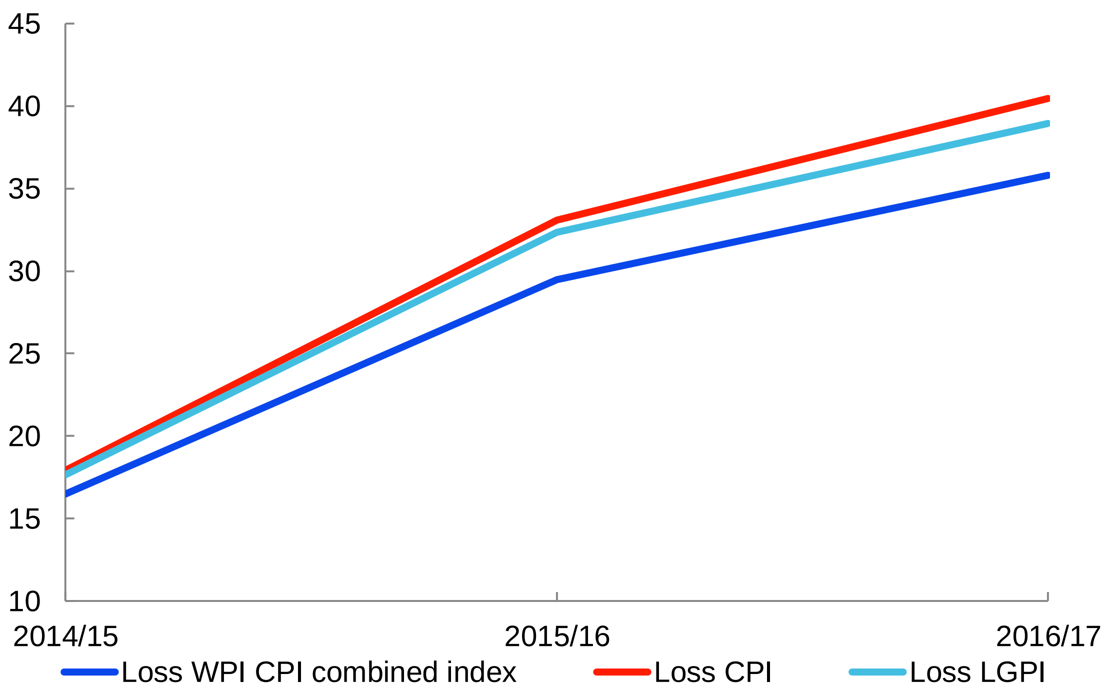
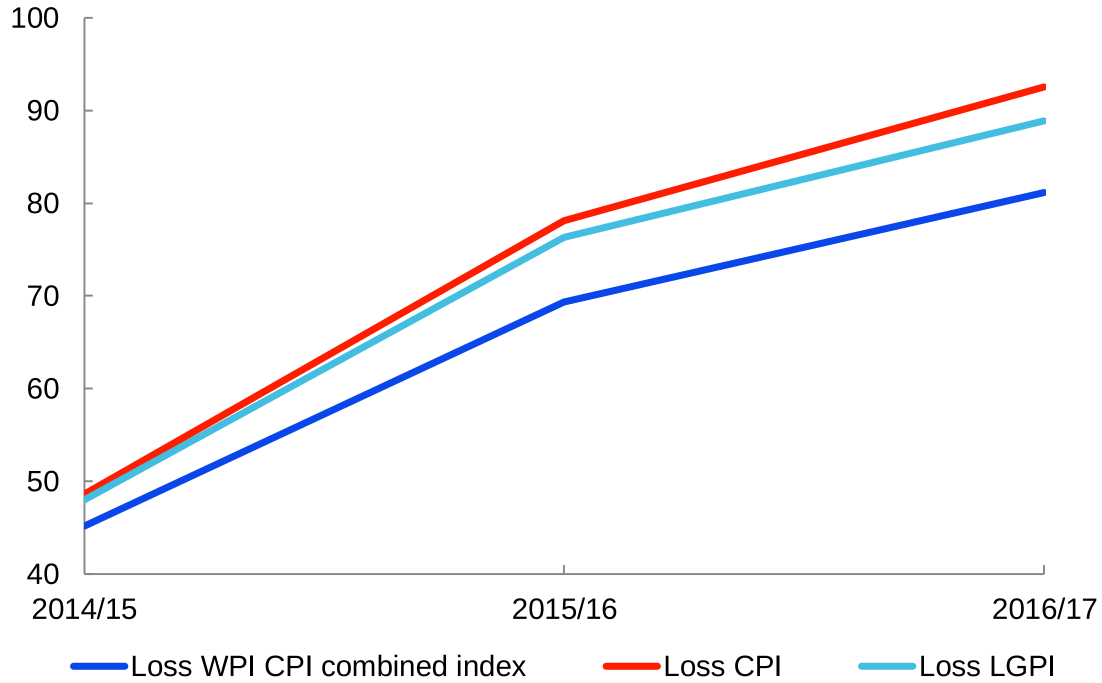


Figure 8. Potential Compounded Loss, Metropolitan Councils



To provide a sense of what rate capping might mean for typical local government budgets we also expressed the compound potential revenue foregone as a proportion of total revenues accruing to councils over the three financial years (see Table 4). It is important to note that foregone revenue is dependent not only on the size of the index used for the cap, but also on the size of the increases to actual rate revenue for the three periods.

As can be seen in the first part of Table 4 **a rate cap would have material effects on total revenue for South Australian councils ranging from a reduction of 4.53 per cent (combined index in 2014/15) through to a reduction of 9.00 per cent** (CPI in 2016/17).

2.3.3 Potential councils requiring rate variations

As we have noted previously this potential revenue foregone need not be realised if councils were to successfully apply for a rate cap variation determination. Therefore, to provide a sense of how many councils would need to successfully apply for a rate cap variation determination in each period we made a count of councils which had a material decrease to revenue under the putative caps in each period (see figures in parentheses in each cell of Table 4). As can be seen, **the far majority of councils would have needed to successfully apply for a variation determination in order to avoid significant reductions to revenue**. Architects of the proposed rate cap clearly need to consider the capacity of councils and ESCOSA to prepare and process the large number of potential rate cap variation determinations suggested by our modelling.

In the second part of Table 4 we re-present the data after applying an 'efficiency dividend'. The proposed Bill allows for a reduction in the rate cap to account for a putative efficiency saving (although it is hard to imagine how the architects propose that true efficiencies – rather than vague notions of cost reductions – are supposed to be realised). In Victoria, ‘efficiency dividends’ of 0.05% have been employed in the last two recommendations (no efficiency dividend was imposed in the first recommendation) and we use this rate to model the effect of same were it to be applied in South Australia. On the whole, **an efficiency dividend has a relatively small effect on potential revenue foregone** (when compared to the effect of the volatility in indices or the compounding effect of successive caps).

Table 4. Reduction in Taxation Revenue Under a Cap – Compounded Effect (number of councils which would have experienced a reduction in taxation revenue in parentheses).

State - Average Reduction in Taxation Revenue Under Rate Cap			
Year	2014/15	2015/16	2016/17
WPI CPI combined index	-4.53% (65)	-6.93% (66)	-7.91% (66)
CPI	-4.88% (65)	-7.80% (67)	-9.00% (66)
LGPI	-4.82% (65)	-7.62% (66)	-8.65% (66)
State with 'Efficiency Dividend' - Average Reduction in Taxation Revenue Under Rate Cap			
Year	2014/15	2015/16	2016/17
WPI CPI combined index	-4.57% (65)	-7.00% (66)	-7.95% (66)
CPI	-4.93% (65)	-7.84% (67)	-9.04% (66)
LGPI	-4.87% (65)	-7.67% (67)	-8.69% (66)

In Table 5 we split the potential revenue foregone by council type and thus demonstrate that the likely effect of a rate cap will be experienced differently by regional and metropolitan local governments respectively. In the next sub-section we briefly examine the implications of growth on capped general rates revenue.

Table 5. Potential Revenue Foregone, By Council Type.

Regional - Average Reduction in Taxation Revenue Under Rate Cap			
Year	2014/15	2015/16	2016/17
WPI CPI combined index	-4.16%	-7.09%	-8.31%
CPI	-4.52%	-7.96%	-9.39%
LGPI	-4.46%	-7.78%	-9.05%
Metropolitan - Average Reduction in Taxation Revenue Under Rate Cap			
Year	2014/15	2015/16	2016/17
WPI CPI combined index	-4.67%	-6.86%	-7.74%
CPI	-5.03%	-7.73%	-8.83%
LGPI	-4.96%	-7.55%	-8.48%

2.4 Implications of Proposed Methodology for Councils Experiencing High Growth or Lumpy Growth

In the Rate Cap Forum, Adam Wilson from ESCOSA provided further details on the methodology proposed to calculate the rate cap. The key elements of the algorithm are:

$$\frac{\textbf{Total Revenue}}{\textbf{Number of Properties at the end of the year}} \textbf{*Index factor=Inflated rate figure}$$

Inflated rate figure* No. of properties at the start of the year=Total Revenue Outcome

Based on details available to date (including S187D of the proposed Bill), two key algorithm inputs are:

i. the number of *properties* at the end of the year ('30 June in the base year' in the Bill) and

ii. the number of *properties* at the beginning of the year ('1 July in the capped year' in the Bill).

One can't but help question the wisdom of using number of *properties* data which is separated by just one day – it is hard to see what material benefit arises relative to the cost of collecting the data. Moreover, use of number of *properties* as at these specific dates results in **high growth councils receiving a relatively lower rate cap** (total revenue outcome) than might be warranted.

Adam Wilson (2018; emphasis added) specifically states in his address to the Rate Cap Forum that councils need to 'look at the end of the year, how many properties you had, *assume they were there for all the year*….'. The problem for growth councils, in particular, comes about because of the assumption that properties at the end of the year were rated at each of the four periods. This assumption will over-estimate the number of properties that received an assessment for the whole year. Because this figure is the denominator in the first part of the algorithm detailed above, the result is that the **average rate per property is consequently under-estimated**. This in turn results in an under-estimate of the inflated rate figure which is then multiplied by the number of properties at the start of the year, to yield a total revenue outcome (that will also be an under-estimated as a result of the initial assumption).

Clearly the more a council grows during a particular financial year, the more it will be disadvantaged, relative to lower growth peers, as a result of the (rather unreasonable) assumption that the number of properties at the end of the year were 'there for all the year'. In addition, the timing of the growth is critical – that is, the disadvantage to growth councils will be felt most keenly when growth occurs towards the end of the year.

There is no need to 'model' this problem for growth councils because it is a simple consequence of arithmetic operations. The solution is also relatively straight-forward – to use as the denominator the number of assessments issued throughout the year divided by four (to yield **a weighted average number of properties**).

2.5 Modelling of Spread in Inter-jurisdictional Equity Over Time

Earlier we noted that rate capping is known to give rise to reduced inter-jurisdictional equity over time. In 2015 Drew and Dollery calculated the revenue effort of all of the NSW local governments which can provide us with a good feel for the likely result of a long-term policy of rate capping. In simple terms, revenue effort is the quantum of local government imposts divided by the total incomes accruing to residents living in the local government area – it thus represents the typical proportional impost faced by ratepayers in a given local government area. Rates are calculated according to property values (a portion of stocks of wealth of individuals) but are paid out of flows of income irrespective of the method used for calculating the taxation (Ladd and Yinger, 1989; Drew and Dollery, 2015).

2.4.1 Inter-jurisdictional equity and rate capping

A rate cap regime is designed to contain the imposts placed on flows of income, and this was the motivation cited by the Marshall government in its policy documents. However, a rate cap regime also tends to result in the emergence of great disparities in the revenue effort (and hence inter-jurisdictional equity) over time. For instance, in NSW Drew and Dollery (2015) reported revenue efforts that ranged from 0.209 per cent through to 2.497 per cent - over a ten-fold difference in the comparative proportion of income levied from residents in these two local government areas. Moreover, evidence of statistically significant differences in revenue effort was provided for the broad categories of agricultural, fringe, metropolitan, regional and remote local government areas – which suggests that the problem is associated with council type.

There are a number of reasons why inter-jurisdictional inequity is a near certain consequence of rate capping. First, the cap is applied to the initial levels of rates that existed in the base year when the cap was implemented. This suggests that for inter-jurisdictional equity to exist after the introduction of a state-wide cap (at least in the absence of sequent variation determinations), it is important to ensure that revenue efforts of the initial base year were more or less similar. Second, changes in the economy and demographics of a local government area over time give rise to relative changes to revenue effort. For instance, if a relatively deprived area attracts external or internal migration from high income individuals this will change the denominator of the algorithm and hence result in an effective decrease in revenue effort. Otherwise stated if an area is 'gentrified', then the relative proportion of the income that recently arrived ratepayers pay towards local government imposts will become smaller. This can happen in reverse of course – an area can have a dramatic reduction in incomes as a result of a closure of a manufacturing plant, for example, and this will result in a relative increase to revenue effort. It might be noted that differences in capacity to pay should be addressed in the financial assistance grant allocations – but rarely are, due to problems with the federal legislation and methodologies (see Drew and Campbell, 2016). Third, there is the compounding effect of a rate cap. Any time that the rate cap differs from the real value of money (inflation which is often measured by CPI), then the real value of the spread between imposts levied by different councils must vary. When this is compounded over many years the difference in imposts can be quite substantial. Moreover, because indexes typically exceed CPI (except if CPI is used of course) then the real value of the gap will widen each year (in the absence of variation determinations).

2.4.2 Problems associated with inter-jurisdictional inequity

Erosion of inter-jurisdictional equity is a problem because it is morally undesirable (it hardly seems fair that some residents in NSW pay more than ten times their proportion of income than do other residents in NSW largely as a result of their location decisions), and results in inefficient migration of capital and labour (Oates, 1999; Grant and Drew, 2017). Location and investment decisions should not be influenced by the occurrence of wildly inequitable taxation imposts.

The solution to this problem comes in three-parts. First, it is important to provide councils with sufficient time and evidence (calculated revenue efforts for instance) to adjust taxation levels in consultation with their communities. This would require a delay of the Bill for at least one full rating cycle and is particularly important for rural councils which often adjust rates to suit agricultural conditions in any given year. Second, the Bill should require ESCOSA and the Minister to give due regard to revenue effort when recommending and declaring the cap, or when assessing applications for rate cap variation determinations (see Section 5). Third, a revenue effort metric should be included as part of a comprehensive performance monitoring suite required to support the introduction of rate capping.

We now turn to a consideration of the implications arising from rate capping that might reasonably be expected by residents and businesses in South Australia.

3. Implications for Residents and Business in South Australia

If a rate cap is set to reflect the actual increase in costs faced by specific classes of councils then deleterious side-effects for local government residents and businesses will be minimised (although side-effects may still be significant). Local government in South Australia has been working hard on sustainability over recent years and there is thus little scope to generate additional true efficiencies (see Section 4). Therefore, in a carefully constructed rate cap regime, which uses tailored indexes that reflect actual increases to costs faced by councils, the most likely consequences for residents and businesses will be one or more of the following:

(i) inability of council to respond effectively to changes in community need (no capacity to increase goods and services or the quality of existing goods and services provided),

(ii) limited capacity of council to respond to changes in community need funded through additional debt or a reduction in other goods or services (or subsidies for vulnerable community members),

(iii) some council ability to respond to changes in community need funded through delays in provision of infrastructure or reduced maintenance of infrastructure, or

(iv) council ability to respond to changes in community need funded through rate cap variation determinations.

3.1 Likely consequences of rate capping for ratepayers

The extant scholarly evidence suggests that the second and third consequences of a rate cap regime are the most likely to occur (see Drew and Dollery 2015; 2016). Both options effectively **transfer the cost of goods and services consumed in the present to future generations of local government taxpayers**. This is clearly undesirable on moral grounds, but also presents a significant risk to long term financial sustainability. If the forty year experiment in NSW has taught us anything it is that the most deleterious consequences from rate capping tend to take time to manifest fully, but inevitably do so (see also the compounded effect of rate capping modelled in Section 2).

3.1.1 Possible initial period of reduced quantity and quality of goods

However, if the rate cap is set for the entire state and employs an unsuitable index which does not capture the actual changes in costs faced by different classes of councils then the consequences for residents and businesses will be considerably more severe. Councils may well be forced to **reduce the quantity and quality of goods and services if the cap does not keep up with changes to the cost of provision (even in the absence of changes to community need)**. Infrastructure backlogs may grow and maintenance will be reduced. Additional debt may be taken on and financial sustainability must ultimately falter (in the absence of successful rate cap variation determinations or rather unlikely gains in efficiency). Side-effects will be relatively more pronounced and become significant much earlier – unless there are frequent successful rate cap variation determination applications by most councils. Moreover, councils outside of the Greater Capital City area will feel the effects much more keenly than their city peers, because of relatively fewer opportunities to generate own-source revenue, few options for outsourcing, and more discordance between the geographical association of most indexes (that is, many indexes such as CPI are produced solely from capital city data and other indexes produced on a state-wide or national basis are heavily biased towards measurements taken in capital cities).

3.1.2 Possible rate shock

Indeed, it is important to note that rate cap variations, whilst having the potential to address revenue shortages for councils, also have the **potential to create rate shock** for residents and businesses. This is because rate cap variation determinations tend to be done infrequently (as a consequence of high political and pecuniary costs) and thus represent an attempt to catch-up on insufficient revenue suffered over many years in relatively short periods (of up to five years). For example, if a given council experienced a need to generate an additional 0.1% per annum in revenue over a number of years it is unlikely that the council would apply for, and be granted, a rate variation determination in each and every year. What is far more likely is that the council would initially absorb the cost (through debt, reduced reserves, or reduced infrastructure spending) for five years or more and then apply for an increase for the compounded value of the rate revenue shortfall. That has been the experience in NSW – councils typically go a decade or more before applying for a special rate variation to address shortfalls.

What this generally means for residents and businesses is:

(i) an **initial period of reduced quantity and quality of goods** whilst council first seeks to absorb the shortfall (for example poorer road maintenance over this period), followed by

(ii) a **rate shock**, whereby the compounded value of the rate shortfall, accrued over a number of years, is applied to local government ratepayers all at once.

3.2 Additional considerations

3.2.1 Misconceptions for individual rating assessments

Moreover, this is not the only rate shock that may befall ratepayers operating under a rate cap regime. A commonly cited problem with rate capping is that it **does not necessarily lead to caps on individual assessments**. For instance, changes to zoning, or relative changes in property valuations can result in individual assessments increasing by more than the cap, even in a council where no rate cap variation is in place. Therefore, it is critical that ratepayers are educated about what a rate cap means for individual assessments, and moreover, that rate cap declarations are worded carefully so as to avoid misconceptions that may give rise to ratepayer angst.

3.2.2 No guarantee to reduce growth in imposts

It is also the case that rate capping can give rise to **annual increases that exceed those that might have occurred in the absence of a rate cap regime** in some cases. For instance, if our recommendation to amend the Bill to provide for a catch-up provision is not taken on board then councils would be unlikely to increase rates by anything less than the cap because doing so would effectively forego future compounded revenue. A rate cap regime that does not have a catch-up provision will also significantly reduce the likelihood that councils might reduce imposts in response to local economic shocks, because doing so would have significant repercussions for future taxation take. Reduced flexibility of this kind will cause local government taxpayers to experience relatively greater financial stress at times when the local economy has experienced a shock.

Indeed, as our analysis of total own-source revenue growth (Figure 3 in Section 2) demonstrates there is every chance that a rate cap regime **may not reduce growth in imposts** at all for many residents and businesses in South Australia.

3.2.3 Promotion of fiscal illusion

One of the biggest and most neglected problems for ratepayers operating under a rate cap regime is that it tends to **promote fiscal illusion**. Fiscal illusion, in this context, refers to the situation whereby ratepayers find it difficult to accurately ascribe value to public goods and services because there is a disconnect between the quality and quantity provided, on the one hand, and the taxes paid to fund the goods and services, on the other. It results in inefficient levels of demand which clearly erodes financial sustainability, but also has an ultimate effect on ratepayer's wallets when the inevitable reckoning arrives (generally a rate cap variation determination that will cause some rate shock). At this time of reckoning residents may feel aggrieved that fiscal illusion caused them to arrive at their predicament – essentially at this point residents will be asked to pay a bill for goods and services consumed, that they might have incorrectly assumed had been paid for in full already.

3.2.4 Disproportionately high impact on vulnerable resident populations

A rate cap regime may also have significant implications for the most vulnerable residents in a local government area. Specifically, if the rate cap index does not faithfully represent actual increases in costs faced by specific classes of councils, or an efficiency dividend is imposed which does not actually represent the potential for true efficiencies, then so-called discretionary services and subsidies may be reduced by councils facing financial pressures. For instance, subsidies for merit goods (things like swimming pool admissions) may be frozen and thus decrease in real value. Community projects – including those delivered in part through grants provided by individual local governments to community groups – to support vulnerable persons (for example support for the homeless) might not be able to be renewed. These potential outcomes need not necessarily come about (for instance the council could successfully apply for a rate cap variation determination), however it is not unreasonable to suggest that some **vulnerable people in some local government areas are likely to bear some of the ill side-effects** of a poorly designed or executed rate cap regime (which is why it is so important to adopt our recommended amendments to the Bill and methodology).

4. A Critique of the Proposed Methodology

Unfortunately, and perhaps somewhat surprisingly, full detail of the **methodology had still not been articulated by ESCOSA** or included in the draft Bill at the time that we were commissioned to work on this Report. The following critique of the methodology is based on the available information as at the 9th August and largely draws on the proposed Bill and the address by Adam Wilson from ESCOSA at the Local Government Association Special General Meeting on Rate Capping.

Ideally, the methodology and index to be used should be clearly specified in the Bill or associated Regulations. **Failure to specify the methodology makes it very difficult for the sector to fully engage in the debate and contribute to the consultation process**. It also effectively requires political **decision makers to make judgements based on incomplete knowledge**. In addition, failure to specify methodology in the legislation allows the independent and politically **unaccountable ESCOSA extraordinary discretionary powers** to shape a policy that will have very significant effects on the local government sector.

4.1 Index factor considerations

4.1.1 Undue emphasis on minimising index cost

The thing that stands out more than any other matter in relation to the details on the methodology for setting a rate cap in South Australia, that we have gleaned thus far, is the **emphasis on ensuring that costs are minimised** – particularly for ESCOSA. Indeed, at the recent Forum on Rate Capping, Adam Wilson from ESCOSA outlined the focus of 'keeping it simple, keeping it cost effective' and noted that **a desirable index 'should not be costly to produce and administer'**.

It is hard to reconcile the strong focus on a cheap methodology (including a cheap index) with the large sums of money involved in a rate cap regime (see Section 2 that outlines a potential revenue foregone of up to $133 million per annum), and the large expense associated with using an inappropriate index and methodology (the expense of preparing and assessing high numbers of rate cap variation determinations, or the expense of a council becoming insolvent – see, Drew and Campbell, 2015). Indeed, 'to buy cheap methodology is to buy dear in the longer term' (Bird et al. 2005).

Using appropriate indexes and methodology that respond to the different circumstances of the various classes of councils, will result in less confusion from the public (see Section 1), will reduce the number of rate cap variation determination applications, and will ensure that the sector remains sustainable in the long term. The only reason for not using appropriate indexes and methodology is a reticence to spend the time and money required to produce same.

4.1.2 Desirable characteristics of an index

In the Special General Meeting address Adam Wilson from ESCOSA nominated the following as being desirable characteristics for an index factor:

- Understood and accepted by all stakeholders
- Reliable and independent
- Transparent
- Simple
- Not costly to produce and administer.

4.1.2.1 Accepted, Understandable, Reliable

It is unlikely that all stakeholders will ever agree to accept a given index factor. Whether or not the stakeholders understand the index factors is largely dependent on how much information is conveyed to stakeholders (very little so far). We agree that the index must be reliable and not subject to undue manipulation and would argue that it is important for all parties to understand what exactly ‘reliability’ means. Indeed, we consider that **a reliable index is one that minimises the need for rate cap variation determinations and minimises the risk of local government financial failure**.

4.1.2.2 Transparency

We also agree that the indexes should be **transparent**. However, we disagree with the contention that a reliable and appropriate index could ever be simple and believe that there is a large trade-off between simplicity and reliability which could put the sector at considerable risk if a quest for simplicity was allowed to displace more important desirable characteristics. We also disagree with the objective of having a cheap index and methodology – if this focus continues to be given primacy then it is very likely that it will prove extremely expensive in the long run.

4.1.3 Appropriateness of index construction

4.1.3.1 State-wide index

ESCOSA has stated a preference for a state-wide index. This would certainly be cheaper and simpler for ESCOSA. However, there is a host of econometric evidence in the Australia corpus of scholarly literature that demonstrates distinct classes of local governments that have distinct expenditure profiles and revenue need (see, for example, Drew et al. 2016; Drew and Dollery, 2014). Indeed, the federal government Department of Infrastructure, Regional Development and Cities uses a 22 category system to classify local government. Moreover, the empirical methodology for establishing an accurate classification of local governments has been demonstrated in the scholarly literature (see, Drew and Dollery, 2016b). There is simply **no reasonable justification for advocating for a state-wide cap**.

4.1.3.2 Tailored indexes

At the very least, tailored indexes should be designed for urban, rural, regional (large towns outside of the capital city that act as a hub for outlying smaller rural centres), and fringe/growth classes of local governments. These classes have different expenditure mixes (for instance urban councils spend relatively more on materials and contracts and less on staff than do their rural peers), different opportunities to contain costs (it is rarely possible to outsource to private contractors in rural areas, and due in part to distance constraints most shared service arrangements may not yield efficiencies in rural areas), and different expenditure needs (for instance, growth councils often have great demands placed on them to build infrastructure and expand capacity). So **at least four indexes would seem to be required**.

4.1.3.3 Alternative indexes

This still leaves the question open as to what would be an appropriate basis for an index. A number of ready-made alternatives have been proposed including the South Australian Local Government Price Index, and the Adelaide Consumer Price Index.

In Victoria a composite index (40% of the Victorian Wage Price Index and 60% of the Melbourne Consumer Price Index) is employed. None of these ready-made solutions will provide a reliable and appropriately tailored index. A key policy question that must be asked (and defined in the objectives of the proposed Bill) is – what is the main purpose of the rate cap? If the purpose is to ensure that ratepayers are not exposed to *undue* cost of living pressures with the requirement that the local government sector remains sustainable (as we suggest in Section 5), then an appropriate index would be one that measured the change in the cost of a basket of actual local government inputs (materials and labour) for each broad class of council from one year to another. This requires that a sample of costs is taken each year for each class of council.

The LGPI is fit for the purpose for which it was designed, but is not fit for the purpose of being used as an index for rate cap purposes. It appears to apply a single index to all South Australian councils rather than specific classes of councils (this could be changed though). It also uses existing ready-made indexes as key inputs – specifically, 'select ABS price indexes (i.e. select Consumer Price Indexes and Producer Price Indexes [PPI] for *Adelaide* and *Australia*' (emphasis added; South Australian Centre for Economic Studies, 2018). Moreover, the South Australian Centre for Economic Studies (2018) rightly cautions that 'it is important to note that the ABS price indexes used in the model are estimates, based on a sample of goods and services from a sample of retailers, wholesalers and employing organisations….therefore the Local Government Price Indexes which are calculated using ABS price indexes are also estimates'.

We would add the additional caution that the CPI is far from transparent and has been criticised in relation to this flaw many times in the scholarly literature – nor are the items in the basket of goods likely to be sufficiently representative of the items that local government purchase, because the CPI is designed to reflect household spending. In addition, the CPI is disaggregated only to the level of capital cities and therefore may bear little resemblance to increases in household expenditure in rural, regional or fringe areas.

In sum, because the LGPI employs a capital city CPI and a national PPI it is hard to see how it has much relevance to the required task of measuring the increase to costs faced by classes of local government in South Australia. However, if actual measurements were taken on a basket of goods that all stakeholders agreed local government does purchase (which must include employee wages), *and* the measurements were taken for each of the different classes of councils, *and* the price rise in this basket of goods consumed by local government was to replace ready-made CPI and PPI indexes then the LGPI would become fit for the purpose of recommending a rate cap.

Of course assembling tailored and reliable indexes would cost money and take time (which is why ESCOSA doesn't currently propose to do so), however the alternative is that the rate cap won't reflect the costs faced by most councils (certainly councils outside of the capital city), will therefore cause confusion among the public about what represents an 'undue cost of living increase', will result in more rate cap variation determination applications (most notably from non-capital city local governments), and could ultimately result in one or more local governments becoming insolvent. Truly, to buy cheap now would seem to be to buy very dear in the long-run.

We have already explained why the CPI is unsuitable (although we might add that another problem with potentially using the CPI as the index is that the RBA has recently reduced its forecast, yet again, for inflation to just 1.75% – a rate well below it's target band – which reflects the RBA's apparent inability to address sluggish growth in inflation; ABC, 2018). The Victorian alternative is to use a composite index of 40% Victorian Wage Price Index and 60% of the Melbourne CPI). This is certainly better than CPI alone, but still contains this unsuitable index as the main input. Moreover, the state Wage Price Index reflects both private and all public sector wages, and hence does not reflect local government wage price increases (it would seem relatively easy to simply use the South Australian Municipal Salaried Officers Award instead of a, mostly irrelevant, Wage Price Index).

4.2 Other Methodological Matters

There are a number of other methodological issues that should ideally be addressed prior to the establishment of a rate cap regime. In particular, changes need to be made to:

- accommodate high growth councils;
- preserve a reasonable level of interjurisdictional equity and pay due regard to capacity to pay;
- ensure that councils have the flexibility to tailor imposts to local economic conditions;
- discourage councils from applying the maximum cap as a default option;
- ensure transparency independence and political accountability in the rate cap setting process; and
- ensure that any efficiency dividend imposed actually reflects gains in efficiency rather than cuts to service levels or service quality.

4.2.1 Accommodate high growth councils

We have already briefly outlined why it is problematic for the methodology to assume that the number of properties at the end of the year have been the subject of rates assessments for the entire year. It is a simple outcome of the mathematical operations involved in calculating the capped revenue that this assumption will result in **councils with high growth (and especially councils which experience 'lumpy' growth orientated towards the end of the year) being relatively disadvantaged**. The solution is also relatively straight-forward – to use the actual number of assessments issued, divided by four which yields an average weighted number of properties.

4.2.2 Address potential drift in interjurisdictional equity

Similarly the inevitable drift in interjurisdictional equity over time is also a problem which has a ready solution, although in this case the solution is a three part remedy.

First, councils must be given **sufficient time and support to establish rates of taxation that reflect inter-jurisdictional equity in consultation** with communities.

Time must be allowed for local governments to negotiate with their communities the quantity and quality of services that they are willing to pay for. This is particularly important for councils which might have deferred increases to imposts in recent years owing to local economic shocks (such as poor agricultural or manufacturing conditions).

Second, the Bill should require ESCOSA to **pay regard to inter-jurisdictional equity when formulating its recommendation** and for the Minister to **pay due regard to inter-jurisdictional equity when declaring the rate cap** (see below for a full explanation regarding why ESCOSA's role should be restricted to recommendations to a politically accountable Minister). The Bill should also direct ESCOSA and the Minister to **pay reasonable regard to revenue effort** (and the related concepts of interjurisdictional equity and capacity to pay) when assessing rate cap variation determination applications.

Third, a **revenue effort metric** (and ideally also a number of demographic metrics) should be included as essential elements of a performance monitoring suite which must be developed to support the rate cap regime. A carefully designed performance monitoring suite will also provide councils with the evidence and support they need to monitor their sustainability, will provide ESCOSA and councils with an evidence base to support rate cap variation determinations, will allow the ESCOSA and the Minister to monitor the effect of the rate cap on local government sustainability and equity, and will increase transparency and educate members of the public about the challenges facing local government (which is particularly important to mitigate the political costs associated with a council pursuing a rate cap variation). Indeed, a suitable performance monitoring regime would perform a critical early warning function and should automatically trigger a rate cap variation application if certain metrics deteriorate (which would further reduce political costs).

4.2.3 Facilitate responsiveness to local economic shocks and conditions

It is critical that councils maintain some **flexibility under a rate cap regime to allow them to respond to local economic shocks** and **reduce the incentive to view the rate cap as a default option**. As we have noted many councils respond to local economic shocks by deferring increases to imposts or even reducing imposts. Moreover, a common unanticipated and deleterious outcome associated with rate cap regimes is that councils tend to increase rates by the maximum cap each period – even if circumstances do not strictly warrant doing so – for fear of missing out on future compounded revenues (or having to spend considerable time and money pursuing an expensive rate cap variation determination).

The simple solution to both of these problems is to **legislate for a catch-up provision** (see Drew and Dollery, 2015). That is, should a council not increase the general rate by the maximum cap amount (or indeed if a council chooses to reduce taxation imposts in response to a local economic shock), in a given year then in future years the council will have the opportunity to make additional increases that would capture the compounded effects of revenue foregone in earlier periods, without the need to apply for a variation.

4.2.4 Independent and transparent process

4.2.4.1 Independent recommendations can mitigate political influences

It is also important that the rate cap process is completely transparent and has an element of political accountability designed into it. Councillor Linda Scott, from Local Government New South Wales, who spoke at the Special General Meeting on Rate Capping stated that local government in NSW had campaigned hard to have rate capping removed from the Minister and handed over to an independent regulator. Presumably prior to rate capping being regulated solely by the Independent Pricing and Regulatory Authority (IPART) political considerations had been perceived to unduly influence decision making and lead to cap declarations that were lower than desired.

4.2.4.2 Independent regulators suffer from accountability deficiency

However, having an independent regulator with no political accountability also presents some serious problems. For instance, there is a very large literature on regulatory capture which describes the situation whereby a regulator, over time, tends to pursue the interests of the party that they are charged with regulating rather than the public interest. In addition, if the independent regulator sets inappropriate caps then there is little that can be done to redress an unsatisfactory situation. Indeed, there have been some very strident criticisms of IPART over a number of years (for instance, see TCorp, 2013).

Moreover, it is hard to reconcile the fact that the very body that has been setting the rate caps in NSW for many years (IPART) was the major body involved with assessing that 60 per cent of councils weren't fit for the future – this seems to suggest that the rate cap has not been set in a fashion which preserves financial sustainability and implicitly poses questions from IPART (as an assessor of financial sustainability) regarding IPART's performance as a rate cap regulator. However, the main problem is that there is no political accountability – which undermines the whole purpose of having democratically elected representatives (Hood, 2011).

4.2.4.3 Achieving independent and accountable determinations

We believe that a rate cap regime can have the best of both worlds – an independent evidence-based recommendation *and* political accountability. It is not an 'either or' proposition.

ESCOSA **should be charged in the Bill with providing an evidence-based recommendation and fully detailing how it arrived at the recommendation** for the purposes of transparency and confidence in the regime by stakeholders. Political accountability would come into play by requiring in the Bill, that the **Minister must declare the rate cap with reference to the recommendation** and fully **detail the Minister's reasoning** should the Minister make a declaration which is not consistent with the ESCOSA recommendation.

Otherwise stated, if the Minister concurred with ESCOSA then the Minister would simply need to state that the declaration was in line with the recommendation. However, if the Minister declared a rate cap inconsistent with the recommendation then the Minister should be required by the Bill to fully specify the Minister's reasons and evidence for doing so. Under this arrangement it would be critical for ESCOSA to provide a single recommendation for each of the classes of local government, rather than a range of recommendations, to ensure that the Minister was fully accountable.

4.2.5 Appropriateness of an efficiency dividend provision

Related to transparency and accountability for recommending and declaring a rate cap is the need to be transparent, accountable and clear about the reasons for factoring in an efficiency dividend, if this course of action is chosen. Indeed, the proposed Bill does not define efficiency and this oversight must be addressed to avoid reductions in service quantity or quality being imposed onto residents. It is completely contrary to the democratic tradition for a council to have the service quantity and quality that they have negotiated with the community reduced by an efficiency dividend that is unrealistic and therefore not reflective of efficiency at all.

The economic definition of input orientated technical efficiency is the potential reduction of inputs that could be realised whilst holding the quantity and quality of outputs constant (see Drew et al., 2015). Only a reduction in the required inputs will result in 'efficiency dividends' that are in fact genuine artefacts of efficiency rather than cost cutting exercises imposed by higher tiers of government, or indeed a politically unaccountable independent regulator. Indeed, wage and material prices are largely outside of the control of local governments and efficiency is therefore hard to realise in practise.

One way to capture efficiencies is to increase productivity, but this is a little unrealistic in view of national trends. Another is to outsource functions to private enterprises but this may not be possible in many rural areas, and even when it is possible it often exposes local governments to high levels of future price risk (Brown and Potoski, 2003). Another option is shared services, but these arrangements must be very carefully executed to ensure that efficiency (rather than inefficiency) results and this becomes a very difficult task in rural areas where local governments are separated by vast distances.

In sum, the potential for true efficiencies to be generated in local government is very remote and is certainly determined by the environment (for example, rural or urban) that a council operates in. It is critical that the Bill **defines efficiency carefully** and requires ESCOSA and the Minister to **produce evidence to support their reasoning** should an efficiency dividend be sought. Failure to do otherwise will undermine the democratic process and result in communities forcibly having their service levels reduced below their negotiated positions.

5. Desirable Amendments to the Bill

Our discussion of rate capping, and the specific rate cap policy proposed for South Australia has led us to the point where we can now make some specific recommendations for changes to the proposed Bill that will serve to maximise benefits arising from a rate cap regime and minimise the likely deleterious consequences of same. It might be noted that one of the **key recommendations from our critique is for the independent regulator to make a recommendation that must be considered by the Minister in declaring a rate cap** – this is important to ensure continued political accountability for the outcomes of setting local government taxation.

The following recommendations for changes to the Bill (see Table 6) assume that this key recommendation will be adopted.

Table 6. Suggested Changes to the Proposed Rate Cap Bill

Section	Proposed Change	Reason
187C	To ensure: a) That ratepayers are not exposed to undue cost of living pressures with respect to local government taxation b) That council financial sustainability is maintained	Suggestion for (a) responds to the motivation of the rate cap policy. Sub-section (b) ensures that due consideration is given to the financial sustainability of councils.
S187D(2)	'N' needs to be defined as number of quarterly assessments issued divided by four	This will yield a weighted average number of properties. The previous definition assumes all properties at the end of the year paid rates for all four quarters. This underestimates the average rate per property, with is then inflated and used to produce the cap. Thus, unless the change is made high growth councils will be penalised (especially if growth is lumpy and occurs towards the end of the financial year).

S187 (4)	An additional clause needs to be inserted: ‘should a council not increase the general rate by the maximum amount, CSR, in a given year then in future years the council will have the opportunity to make additional increases (above the cap determined for the year) that will capture the compounded effects of revenue foregone in earlier periods, without the need to apply for a variation determination’	Without a catch-up provision the evidence is clear that most councils will increase their rates by the maximum cap. This may produce outcomes contrary to the Bill’s intent. In addition, a catch-up provision is essential to allow councils to have the flexibility to time increases to imposts to the local economic conditions (especially important for rural councils).
S187E(2)	Delete ‘(a) councils generally’. There is no empirical or theoretical justification for a single state-wide cap.	A single state-wide cap is more likely to result in erosion to financial sustainability and will certainly increase the need for rate cap variation determination applications (and hence additional expense for both councils and ESCOSA). In addition, rate caps tailored to classes of councils are far less likely to contribute to misconceptions by ratepayers.
S187E(3)(a)	The index that forms the basis for the cap should be specified here. If this is not possible then the characteristics of an appropriate index should be listed to ensure that inappropriate indexes are not employed. That is, any index employed must be transparent, and respond to the objectives of the Bill. ESCOSA must be directed to produce a report that details precisely how the index was produced for each class of council.	Cost and simplicity have been outlined by ESCOSA as their main consideration. This focus risks the financial sustainability of councils and the sustainability of the rate cap regime. If the objective of the Bill is to reduce undue cost of living pressures, whilst maintaining a financially sustainable system then any index must reflect the unit costs actually faced by classes of councils. The LGPI is not suitable for this purpose.

S187(3)(b)	The term ‘efficiency’ must be defined carefully to ensure that there is no confusion with respect to the various kinds of efficiency recognised by economists (allocative, technical and dynamic), and that it is not used in a vague cost-reduction sense (which will result in a reduction in the quantity and quality of services). The accepted definition of input-orientated technical efficiency is the reduction in the inputs used to provide a given quantity and quality of outputs.	There is far too much latitude in the current Bill for a non-politically accountable body (ESCOSA) to recommend a reduction in the quantity and quality of local government goods (which may well have its greatest effect on the most vulnerable in the community). Careful definition of input-orientated technical efficiency will reduce the likelihood of forced changes to local government goods and service which would represent a risk to the democratic foundations of local government.
S187E(3)	Clauses should be added to direct ESCOSA to pay reasonable regard to four critical considerations to a sustainable rate cap: i. How the rate cap responds to changes in revenue capacity ii. How the rate cap responds to changes in local government financial sustainability iii. How the rate cap responds to changes in inter-jurisdictional equity iv. How the rate cap responds to service sufficiency	It is well documented that rate capping tends to break the nexus with capacity to pay, erodes financial sustainability and reduces inter-jurisdictional equity. Requiring the ESCOSA to specifically consider these aspects when formulating its recommendation to the Minister will reduce the likelihood of these deleterious side-effects.
S387E(3)	Needs to include a clause ‘give councils, local government peak bodies, and local government regulatory bodies the opportunity to make public submissions on the size of the cap, and the appropriateness of an efficiency dividend to which ESCOSA must pay reasonable regard to in the formulation of its rate cap recommendation’.	For a transparent, effective and sustainable rate capping regime it is critical that key stakeholders be provided with the opportunity to make public submissions to ESCOSA, and that due regard is paid to same.

S187E (new)	Add at an appropriate place: 'The Minister must publish the Ministerial rate cap determination and in doing so make specific reference to the ESCOSA recommendation and detail reasons for differing to same, should the determination not accord with the recommendation.'	This clause is essential to ensure that a move to rate capping in South Australia does not result in political accountability being eschewed entirely. Notably the alteration would require the Minister to make specific reference to the recommendation and detail reasons for differing to the recommendation should this be the case. The recommended clause ensures both independence *and* political accountability.
S187E(6)	'or negative' must be deleted	A decrease to local government unit cost is extremely unlikely and therefore does not need to be accommodated in the Bill. Indeed, allowing for a negative rate cap represents a large risk that reductions in service quantity and quality will be forced onto councils.
S187F(2)	Must include the same considerations as outlined for ESCOSA's rate cap recommendation: i. How the rate cap responds to changes in revenue capacity ii. How the rate cap responds to changes in local government financial sustainability iii. How the rate cap responds to changes in inter-jurisdictional equity iv. How the rate cap responds to service sufficiency	To minimise the chances of deleterious outcomes arising from rate capping.

S187F(4)	'or negative' should be struck	For the same reasons articulated earlier. Moreover, it is hardly likely that a council would apply for a negative rate cap variation determination, so leaving this clause in might suggest that councils could be 'punished' for making an application for an increase to the cap (with a decrease being declared instead)
S187K(1)(c)	ESCOSA should be directed to have specific regard to: • Effects on revenue capacity • Effects on service sufficiency • Effects on inter-jurisdictional equity	These matters were noted to be critical inclusions for earlier sections of the Bill (financial sustainability was already included in 187K(1)(b)).
9-Review	The review should be due by the 31 December 2021. The Bill should require that the report be prepared by an independent entity with appropriate qualifications (not by ESCOSA) to ensure no apprehension of bias.	This will ensure that the Parliament which is responsible for the legislation is given the opportunity to review it. This is important for both political accountability and for the thoroughness of the review. It is critical that the report is prepared by an entity which all stakeholders recognise to be appropriately qualified and completely independent.

Consideration should also be given to setting out in the Bill the matters which must be detailed in any public release of rate cap recommendations or rate cap determinations. At a minimum this should include statements to the effect that **the rate cap is a guide to 'the maximum increase to general rates that should be made by typical councils which do not face acute financial sustainability challenges, significant infrastructure backlogs, or significant unmet community need**'.

It should also be clearly stated that '**individual assessments might increase at a rate above the cap owing to relative changes in valuations, zoning or rate cap variation determinations**'. It also should be stated that '**prudent financial management requires councils with acute sustainability challenges, significant infrastructure backlogs, or significant unmet community need, to consult with their communities and apply for a special rate variation**'.

6. Preparing for a Rate Cap Regime

There is a lot of preparation work to be done by councils prior to the implementation of a rate cap regime – which is why we strongly recommend **delaying the commencement of any regime for at least a full rating cycle**. The decision to implement a rate cap regime is ultimately a political judgement, which lies somewhat outside of the control of local government representatives. Therefore, councils would be prudent to start preparing now as a hedge against the risk that a regime will be implemented – most of the work will have considerable value for long-term financial sustainability even if the proposed Bill is not passed.

The most urgent and critical task – as we have noted a few times – is to ensure that existing rating practices:

- meet the sustainability needs of council;
- reflect service level agreements negotiated with the community; and
- reflect willingness to pay.

Existing community consultation practices and long-term financial plans should ideally be re-visited with a view to seeing how they would stand up to the constraints of a rate cap regime were it to be implemented. Otherwise stated, were constraints to be introduced to rate revenue (that may not completely reflect increases to costs actually faced by Council):

- how would the community like Council to react?
- Is the community prepared to accept cost-cutting responses – less services, lower quality services, less frequent maintenance of infrastructure?
- Or would the community be prepared to countenance a rate cap variation determination at the earliest opportunity (and what would they expect for the additional impost)?
- Perhaps the community would be prepared to accrue debt?

Moreover, it is important to discover whether the community would still consider it appropriate to pursue new planned services or infrastructure projects were a rate cap introduced. Part of the process of preparing for the introduction of a rate cap regime will also involve a **careful re-assessment of asset maintenance and depreciation schedules**, that responds to guidance which the community provides to Council on how it wishes to respond to a rate cap regime. In short, a rate cap is an entirely new paradigm that probably wasn't given great weight during earlier community consultations, and therefore requires a complete re-appraisal of matters.

One important ingredient to successfully navigating the advent of a rate cap regime is community education. It is important for every council to **communicate clearly with the community about where their local government taxation goes, the size of the subsidies provided by council (and justification for same), the purpose of reserves (which is often misconceived by residents), and how future needs are being planned for**. Our experience with local government, over many years, have uncovered some excellent examples of communication with residents.

One particularly good technique is to provide the information in graphical form with rates assessment notices – this is the point at which the taxpayer is cognitively engaged on the matter and thus an ideal opportunity to convey important information. Other councils regularly conduct small random samples of their ratepayers (it is important that different classes of ratepayers – residential, business and farms – are stratified appropriately), these surveys need not be prohibitively expensive and can be pivotal to a local government communication strategy with residents (reporting survey results can allow ratepayers to understand how their preferences compare to those of other ratepayers).

It is also essential to ensure that **accurate price signals are sent to all residents** – getting the pricing right from a supply side approach ensures that demand is tempered by willingness to pay (Grant and Drew, 2017). We note that enabling legislation prescribes a supply-side approach that includes the costs associated with the establishment, operation, maintenance, improvement and replacement of services and service infrastructure (see the Local Government Act (1999) s155(5), s188(2)). Estimating long-run marginal cost is tricky, but in a rate cap environment absolutely critical for long-term financial sustainability. Moreover, communicating the value of subsidies and ensuring that they accurately target those in need of support ensures that residents and businesses appropriately value local government goods and services.

The introduction of a rate cap regime also highlights the **importance of ensuring that financial assistance grants (FAGs) are distributed according to the objectives of the enabling legislation** (horizontal fiscal equalisation which is the principle that all local governments should be able, through reasonable effort, provide an equitable level of services to citizens – see s3(2)(b) of the Local Government (Financial Assistance) Act CTH 1995). For various reasons the HFE objective of the Act has never been achieved and the impending imposition of a rate cap regime provides new impetus to lobby for this failure to be addressed as a matter of urgency (see, Grant and Drew, 2017)

7. Conclusion and Major Recommendations

Ultimately, the decision regarding whether to introduce a rate cap regime is a matter for state politicians. What seems to be especially important at this juncture in time is for the local government sector to put forward evidence-based recommendations for amendments to the proposed Bill and methodology in order that the negative side-effects of a rate cap regime, if implemented, are minimised. This Report provides the robust and evidence-based foundation necessary for implementation which minimises deleterious effects and maximises asserted benefits.

It will take time to put in place the measures that are necessary to deal with a rate cap environment effectively, and it will take considerable time to construct appropriate indexes for the various classes of council. The fact that even at this late stage in the debate detail is so sketchy suggests that none of the affected parties (including the state government) can truly make a sober and fully informed evaluation of the proposal. Thus our major recommendation to the state government, ESCOSA and the local government sector is to defer the introduction of the proposed Bill for at least one full rating cycle so that all of the critical preparation work can be done. Little will be achieved in the long-run by rushing through a Bill and regulatory structure that is not fit-for-purpose, or imposing a rate cap regime on a local government sector and its ratepayers that are not ready for it.

The following list of 13 recommendations should be implemented in order to ensure that any rate cap regime ultimately implemented is fit-for-purpose and sustainable:

1. Ideally rate capping should be considered only as a potential component of a suite of measures designed to enhance the efficiency, effectiveness and sustainability of local government. In particular **a contemporary, robust and evidence based inquiry is important to ensure no deleterious and unanticipated interaction effects arise.**
2. A comprehensive and **ongoing suite of performance measures are required** to support implementation, council response to implementation (including requests for rate cap variation determinations), and to allow for an evidence-based review of the legislation by a truly independent party in due course. Indeed, a suitable performance monitoring regime would also perform a critical early warning function and should automatically trigger a rate cap variation application if certain metrics deteriorate (which would further reduce political costs).
3. Changes should be made to the proposed methodology and draft Bill to ensure that it does not **disproportionally disadvantage councils in high growth areas, or councils where growth is 'lumpy'**. The solution to this problem is to use actual number of assessments issued divided by 4 (which yields a weighted number of properties).
4. Changes should be made to the proposed methodology and draft Bill to ensure that it does not **widen the gap in inter-jurisdictional inequity over time**. The solution to this problem is to (i) seek, as much as practical, to equalise revenue effort prior to the commencement of the regime, (ii)

instruct ESCOSA to pay regard to revenue effort when arriving at rate cap recommendations (which implies the need for different classes of caps), and when assessing rate cap variation determinations, and (iii) ensure that local government financial assistance grants are being allocated on a horizontal fiscal equalisation basis (as stipulated in the enabling legislation).

5. Changes should be made to the proposed methodology and draft Bill to ensure that it specifically **takes account of capacity to pay** (which was an objective of the policy). The solution is to direct ESCOSA to have due regard to revenue effort when recommending the cap, and when assessing rate cap variation determinations. The effect on revenue effort should be one of the criteria for the review of the legislation.

6. Current levels of rating need to be interrogated to ensure that the underlying assumption essential for the Bill to attain its objectives - **that initial rating positions reflect both need and willingness to pay – are indeed valid**. To ensure that this assumption is valid initial positions should be empirically interrogated (with respect to need and revenue effort), and willingness to pay should be gauged through consultations conducted proximate to the introduction of rate capping. The Bill should be delayed for one complete rate cycle to provide councils with the opportunity to ensure that initial rating positions are consistent with the implied assumptions of any rate cap regime.

7. The **proposed rate cap regime must respond to demographic shifts**. Once again, this suggests the need for revenue effort to be calculated and used when recommending the cap and assessing rate cap variation determinations.

8. The **rate cap Bill and methodology must include a catch-up provision**. Without a catch up provision, councils will be incentivised to increase general rates by the maximum cap in each period, which will likely result in outcomes contrary to the Bill's intent. Adding a catch-up provision to the legislation is a relatively simple remedy to the problem identified and also provides councils with the flexibility to respond to local economic shocks.

9. **The rate cap should be tailored to specific classes of councils.** Given the extensive empirical evidence on local government expenditure functions in Australia, it is clear that at least four caps should be proposed each year (one for urban, regional, rural and growth councils respectively). Failure to employ appropriate and tailored indexes will result in rate caps that don't reflect the costs faced by most councils (certainly councils outside of the capital city), rate caps that cause confusion among the public about what represents an 'undue cost of living increase', relatively more rate cap variation determination applications (most notably from non-capital city local governments), and increased risk of council insolvency. To buy cheap methodology is to buy dear in the long-term.

10. To ensure **both independence *and* political accountability** the rate cap should be set according to **a two-stage process**. In the first stage, independence is achieved by having ESCOSA make its public recommendations for the various classes of councils (fully detailing the basis for same). In the second stage, political accountability is introduced by having the Minister declare the rate caps that will be applied (detailing the basis for his declaration if it differs to the ESCOSA recommendation). Rate

cap announcements must be crafted carefully so that it is clear that the rate cap simply conveys the maximum rate increase that should apply to a 'typical' council that is not facing unmet community need, financial sustainability concerns or infrastructure backlogs. The statement should also clearly convey that it is prudent for councils that require additional revenues to apply for a rate cap variation determination.

11. **The inflationary factor used to guide rate cap determinations** should meet the following desirable characteristics: **accepted by stakeholders, resistant to manipulation, transparent, representative of actual unit costs and the contribution that they make to typical local government expenditure, empirically robust and reliable.** The likely cost of assembling an appropriate robust and reliable indicator should not be allowed to undermine the objectives of the Bill. Indeed, constructing an appropriate index will reduce the need for rate cap variation determinations, and hence is a sound investment.

12. Individual councils and the Local Government Association should consider **collecting comprehensive data on unit costs for local government expenditures**, which will guide recommendations, requests for rate cap variation determinations, and review of the Bill. This will become particularly important if Recommendation 11 is not taken up.

13. The review of the Bill must not be completed by the parties responsible for implementation of the rate cap regime (ESCOSA or the Minister's Office) to avoid clear moral hazard. Moreover, the review should be considered by the Parliament that passes the Bill to ensure an efficient and politically accountable process.

References

Australian Broadcasting Corporation (ABC) (2018). *Reserve Bank Downgrades Inflation Outlook, With No Rate Hike in Sight*.

Australian Bureau of Statistics. (2018). *Local Government Finance Statistics, Australia 2016-17*.

Australian Bureau of Statistics. (2018). *Local Government Finance Statistics, New South Wales 2016-17*.

Australian Bureau of Statistics. (2018). *Local Government Finance Statistics, South Australia 2016-17*.

Australian Bureau of Statistics. (2018). *Local Government Finance Statistics, Victoria 2016-17*.

Boadway, R. and Shah, A. (2009). *Fiscal Federalism: Principles and Practice of Multiorder Governance*. Cambridge University Press: Cambridge.

Brown, T. and Potoski, M. (2003). Transaction Costs and Institutional Explanations for Government Service Production Decisions. *Journal of Public Administration Research and Theory*, 13(4): 441-468.

Drew, J. and Campbell, N. (2016). Autopsy of Municipal Failure: The Case of Central Darling Shire. *Australasian Journal of Regional Science*, 22(1): 81-104.

Drew, J. and Dollery, B (2015). A Fair Go? A Response to the Independent Local Government Review Panel's Assessment of Municipal Taxation in New South Wales. *Australian Tax Forum*, 30(3): 471-489.

Drew, J. and Dollery B. (2016) Careful What You Wish For: Rate-Capping in Victorian Local Government. *Journal of Australian Taxation*, 17(1): 139-167.

Friedman, M. (1993). *Why Government is the Problem*. Hoover Institution: Stanford.

Grant, B. and Drew, J. (2017). *Local Government in Australia: History, Theory and Public Policy*. Springer Palgrave: Singapore.

Hirschman, A. (1991). *The Rhetoric of Reaction: Perversity, Futility, Jeoparh*, The Belknap Press of Harvard University Press: Cambridge.

Independent Local Government Review Panel (ILGRP) (2013), *Revitalising local government – Final report of the NSW Independent Local Government Review Panel*, Sydney: ILGRP

Ladd, H. and J. Yinger (1989). *America's Ailing Cities – Fiscal Health and the Design of Urban Policy*. John Hopkins University Press: Marylands.

Marshall, S. (2018). *Capping Your Council Rates*. Liberal South Australia: Adelaide.

Oates, W. (1999). An Essay on Fiscal Federalism. *Journal of Economic Literature*, XXXVii: 1120-1149.

Sacchi, A. and Salotti, S. (2017), The Influence of Decentralized Taxes and Intergovernmental Grants on Local Spending Volatility, *Regional Studies*, **51**(4): 507-522.

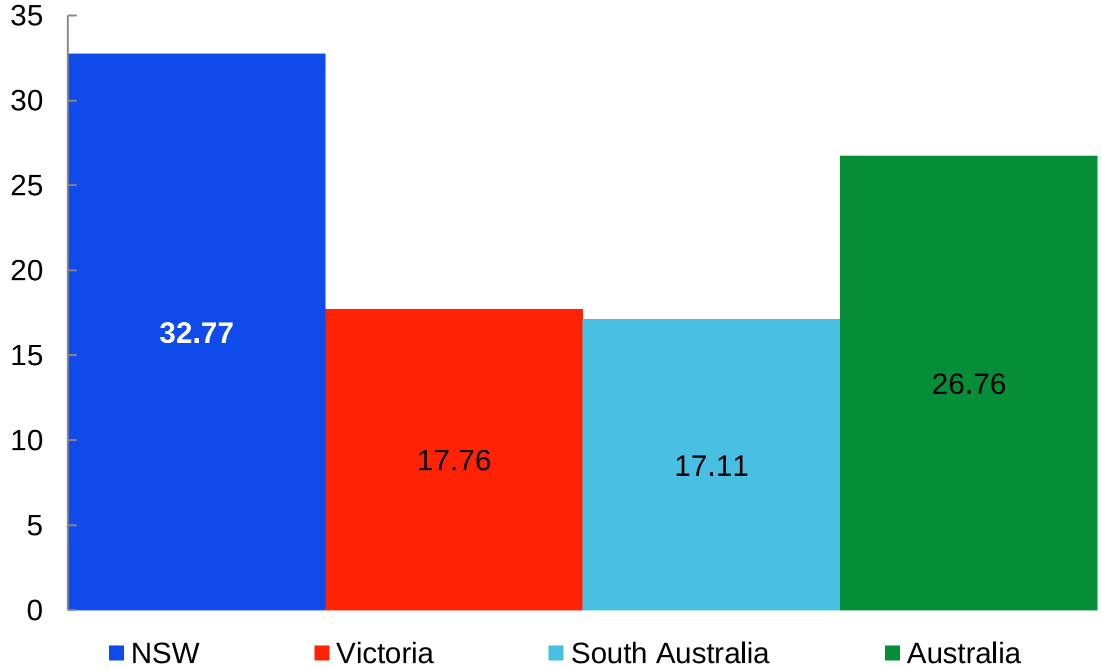
South Australian Centre for Economic Studies. (2018). *Local Government Price Index*. Adelaide, University of Adelaide.

TCorp (2013), *Financial Sustainability of the New South Wales Local Government Sector.* TCorp: Sydney.

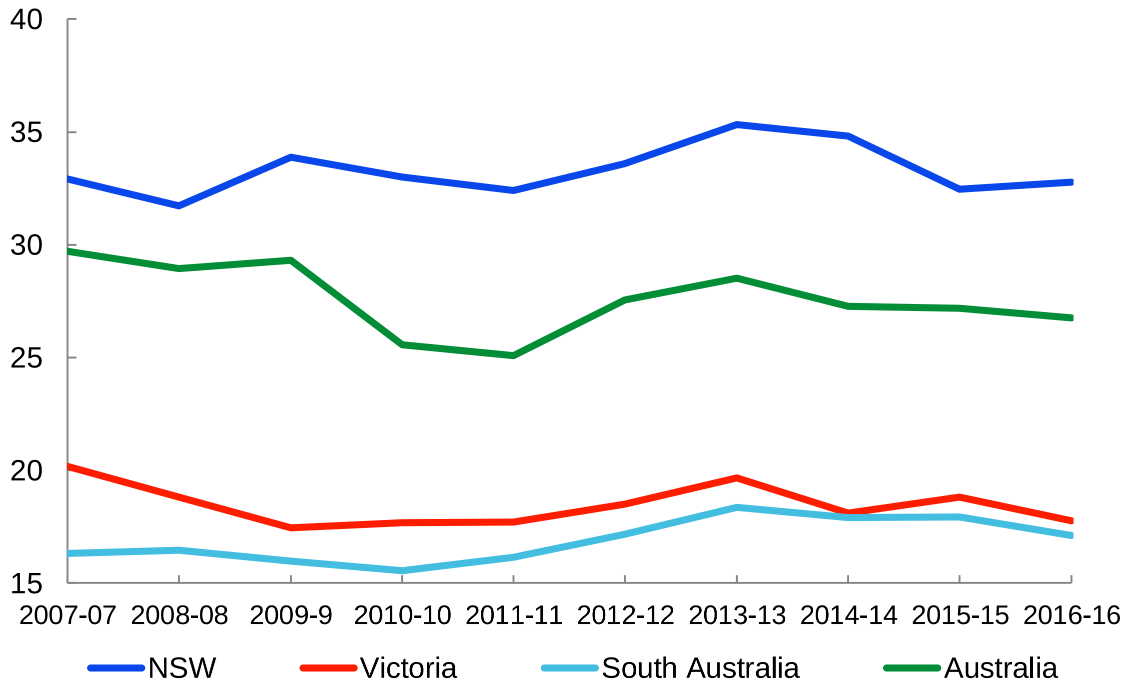
Tran, V., Drew, J. and M. Noguchi. (2018). The Role of Revenue Volatility in Local Government Expenditure: A Comparison of Tokyo Metropolitan Local Governments. *Economic Papers*, In Print (2/8/18).

Appendices

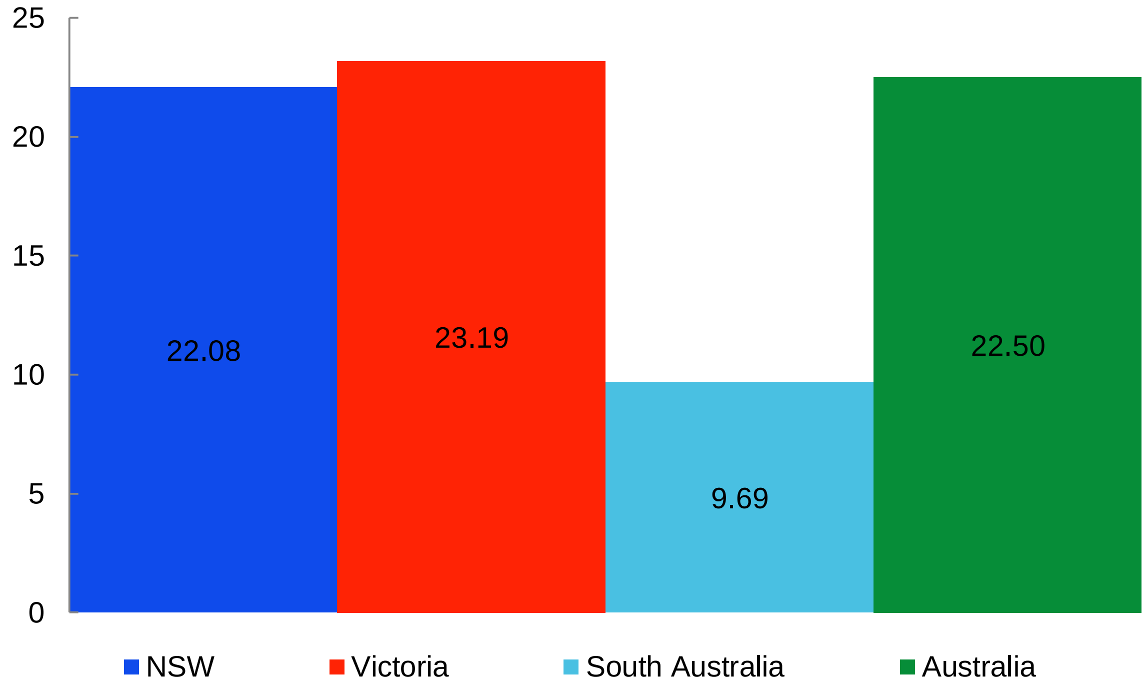
A1. Proportion of Revenue from Sale of Goods and Services (per cent), 2016-17



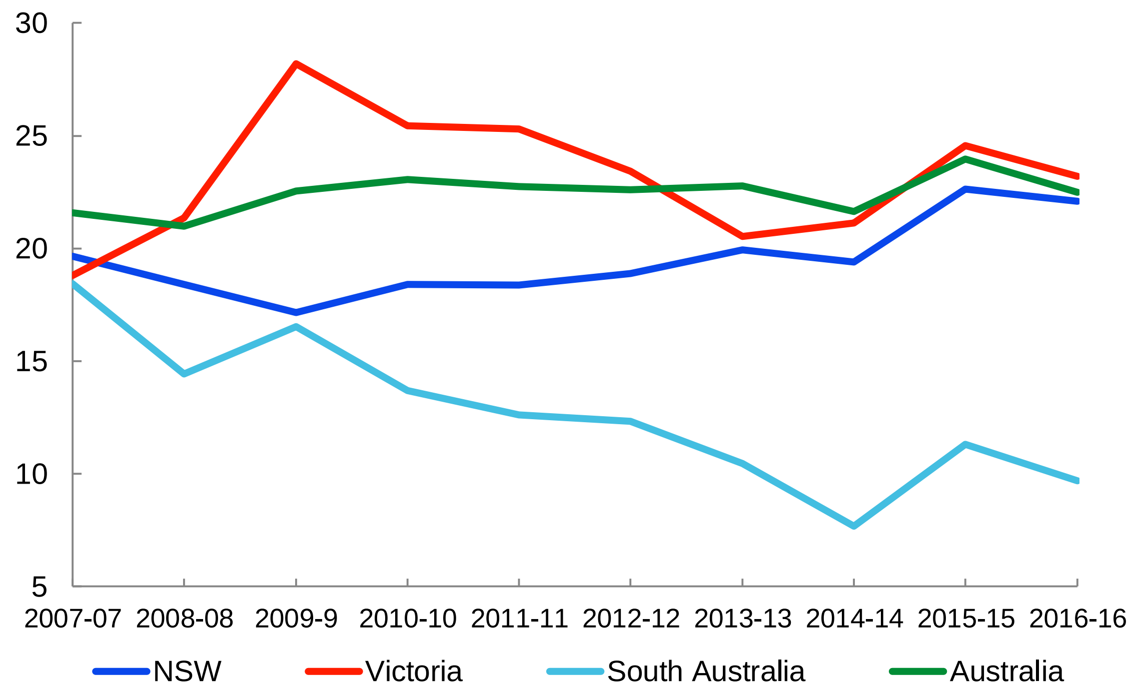
A2. Proportion of Revenue from Sale of Goods and Services (per cent)



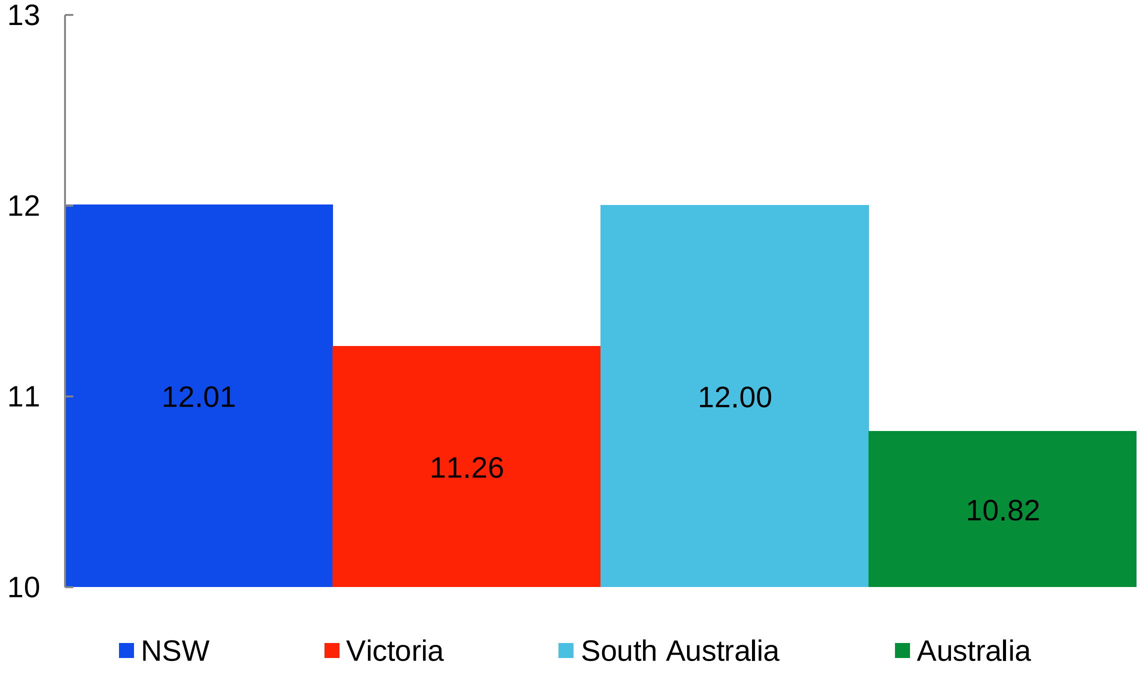
A3. Proportion of Revenue from Other Revenue (per cent), 2016-17



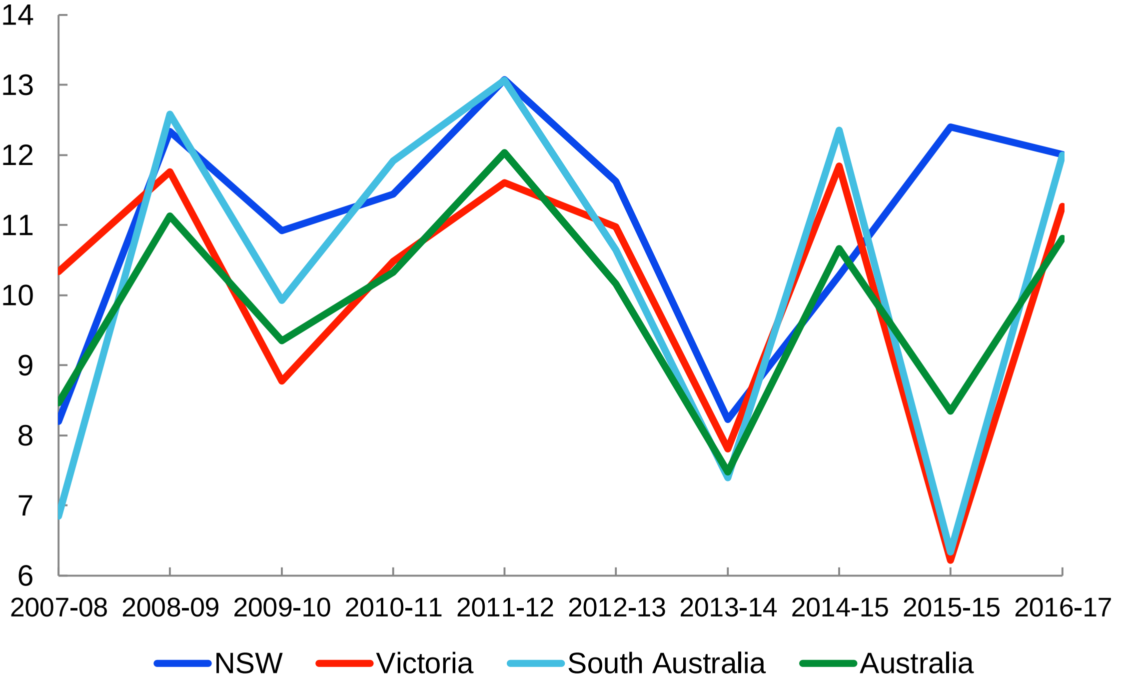
A4. Proportion of Revenue from Other Revenue (per cent)



A5. Proportion of Revenue from Grants and Subsidies (per cent), 2016-17



A6. Proportion of Revenue from Grants and Subsidies (per cent)



A7. Total Revenue Annual Growth Rates (per cent) Including Grants and Subsidies , per Assessment