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Learning From Experience? An Empirical Evaluation of the 2000-2004 Municipal Mergers in New South Wales

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ABSTRACT

While the bulk of the empirical evidence shows that municipal mergers do not improve the performance of local authorities, Australian policymakers nonetheless continue to impose council amalgamation, as illustrated by the current New South Wales *Fit for the Future* local government reform process. This paper first critically examines the empirical evidence employed by the Independent Local Government Review Panel on the impact of the 2004 council mergers. We argue that this evidence is flawed. We then provide an empirical assessment of the municipal mergers, which occurred over 2000-2004 with our sample drawn from Group 4 councils in the New South Wales variant of the Australian Local Government Classification System. Group 4 councils represent a group of significant regional cities and town councils with similar operational activities. We demonstrate that merged councils have not performed any better than their unmerged peers over the period 2004 to 2014. The paper concludes with some brief policy implications for local government reform in New South Wales and elsewhere.

Key words: comparative performance, council amalgamations, *Fit for the Future*, local government reform

1. INTRODUCTION

Although the efficacy of municipal mergers as an instrument of local government reform remains mired in controversy, with little support in the empirical literature (see, for instance, Lago-Penas & Martinez-Vazquez, 2013; *Journal of Public Finance and Management*, Special Editions, 13(2) and 13(3), 2013; Faulk & Hicks, 2011), Australian local government policymakers continue to use forced amalgamation as a major engine of reform. Indeed, over

the past two decades, compulsory council consolidation programs have been conducted in every Australian state and territory, with the sole exception of Western Australia where the Barnett Government recently (and unsuccessfully) attempted to force mergers on reluctant Perth councils (Dollery, et al., 2013). The amalgamation drive by the New South Wales Government under its *Fit for the Future* process thus follows a well-trodden path.

The NSW Government's *Fit for the Future* reform process had its genesis in the 'Destination 2036 Workshop' held in Dubbo on 19th August 2011. Introduced by (then) Minister for Local Government, Don Page, Destination 2036 witnessed the appointment of the Independent Local Government Review Panel (ILGRP) as well as the Local Government Acts Taskforce. ILGRP (2013a: 48) recommended sweeping compulsory council consolidation across NSW, concentrating largely in the Greater Sydney metropolitan region. With respect to Greater Sydney, ILGRP (2013a: 5) observed that it sought to 'reduce the number of councils in the Sydney basin to around 15, and create major new cities of Sydney, Parramatta and Liverpool, each with populations of 600-800,000'. Despite repeated assurances that it would adhere strictly to 'evidence-based' policy prescription, the interim ILGRP Report (2013a) nevertheless offered no empirical evidence in support of the proposed mergers.

The forced merger program advocated by ILGRP (2013a) was greeted with dismay by NSW local government. It was attacked on numerous counts, not only because of the absence of any empirical basis for its merger recommendations, but also the quality of its commissioned research, particularly Jeff Tate Consulting (2013). As we shall see, instead of assessing the success of the 2004 forced amalgamations in NSW by comparing the subsequent performance of merged and unmerged councils against OLG (2013) data, or the TCorp (2013) financial ratios, half of which were later adopted as *Fit for the Future* criteria, Jeff Tate Consulting (2013) simply conferred (in qualitative terms only) with some representatives of five of the amalgamated councils.

After public consultation with local government and other interested parties across NSW, in October 2013 the ILGRP submitted its final report ILGRP (2013b) to the NSW Government. The chief difference between the interim ILGRP Report (2013a) and the final ILGRP Report (2013b) lay in a shift away from outright compulsory council consolidation to the establishment of a 'strengthened' Boundaries Commission to deliberate on proposals for

council amalgamation and make binding recommendations concerning mergers, with or without the consent of affected councils (ILGRP, 2013b).

However, in common with interim ILGRP Report (2013a), the final ILGRP Report (2013b), continued to insist that municipal mergers were vital to improving NSW local government. In its overall assessment of local government financial sustainability in NSW, ILGRP (2013a: 6) had argued that ‘it is also clear that the financial base of the sector is in urgent need of repair’, adding that ‘put simply, there are too many councils chasing too few resources’. This theme was reiterated in final ILGRP Report (2013b: 72) which noted that ‘NSW simply cannot sustain 152 councils’. In common with the interim ILGRP report (2013a), the final ILGRP report (2013b), offered no empirical evidence in support of its proposed council mergers. This further alienated the NSW local government community, especially those councils targeted for consolidation.

The NSW Cabinet publicly released the final ILGRP Report (2013b) in January 2014. In April 2014, after the resignation of Premier O’Farrell, incoming Premier Baird reshuffled the NSW Cabinet, replacing *inter alia* Minister for Local Government Don Page with Paul Toole. These events may account for the fact that the NSW Government only formally responded to the recommendations in final ILGRP Report (2013b) in September 2014 in the form of a *Fit for the Future* policy package (OLG, 2014).

Fit for the Future adopted the final recommendations of the ILGRP for all its proposed council mergers, without adding any supporting empirical evidence. This was despite the fact that the ILGRP Chair had stated that it was never intended for the ILGRP’s ‘preferred options’ to be considered as binding recommendations (Sansom, 2015). *Fit for the Future* advanced a process for council ‘self-assessment’ against performance indicators, each with stipulated criteria, in which individual local authorities must submit ‘merge’, ‘stand-alone’, or ‘rural council’ proposals to the NSW Office of Local Government (OLG) by 30 June 2015. These proposals were assessed by the Independent Pricing and Regulatory Tribunal (IPART) which then forwarded its recommendations to the Minister in late October 2015.

In this paper we address the failure of the ILGRP and the architects of the *Fit for the Future* to assess the outcomes of the 2000-2004 council mergers in terms of their subsequent performance. In order to rectify this omission, we empirically assess the performance of

municipalities merged in NSW over the period 2000-2004 in an effort to determine quantitatively, using official data, the relative impact of amalgamation on council performance. Our analysis demonstrates that, despite the significant costs involved in these municipal mergers, together with substantial disruption and community division, amalgamated councils performed no better than their unmerged peers. Had our evidence been available to the ILGRP or the OLG, it would have surely at the very least have induced caution on the controversial question of amalgamation.

The paper is divided into six main parts. Section 2 provides a synoptic review of the empirical literature on the impact of municipal mergers on municipal performance. Section 3 considers the current NSW amalgamation process in terms of an archetypal ‘model’ of Australian merger programs. Section 4 provides a critical account of the analysis of the 2004 NSW local government merger program conducted by Jeff Tate Consulting Pty Ltd (2013) for the ILGRP, which focused on an unrepresentative sample of only five amalgamated entities and involved no quantitative assessment of post-merger performance. Section 5 sets out the characteristics of NSW Group 4 councils and the rationale for sample selection. Section 6 considers our empirical analysis of the 2000-2004 NSW council mergers over the period 2004 to 2014. The paper ends in section 7 by drawing some brief policy lessons for the current *Fit for the Future* process in NSW from this earlier amalgamation episode.

2. EMPIRICAL ANALYSIS OF THE IMPACT OF MUNICIPAL MERGERS

The bulk of empirical work on the impact of mergers has focused on American local government; Leland and Thurmaier (2006; 2010), Faulk and Hicks (2011) and Faulk and Grassmueck (2012) provide recent reviews of this work. In general, American researchers have established that council consolidation has not met expectations of efficiency gains, cost savings and other purported benefits. Thus Feiock (2004) demonstrated that mergers led to increased expenditures, Martin and Schiff (2011) found little evidence of enhanced performance, and Leland and Thurmaier (2010) examined nine case studies of merged and comparable unmerged local authorities, concluding that efficiency gains are not a predictable consequence of amalgamation.

These general conclusions have been echoed in empirical work on municipal mergers elsewhere. For instance, in the Canadian milieu, Reese (2004) established that remuneration levels increased post-merger, with a net rise in overall council expenditure and Vojnovic (2000) found that aggregate costs increased in three of the five local council mergers examined. Similarly, contributors to Dollery and Robotti (2008) considered council mergers in France, Germany, Italy and Spain, all concluding that amalgamation had not achieved its intended effects. Moreover, in a Special Edition of *Local Government Studies* on European amalgamation, contributors drew similar conclusions on mergers in Eastern Europe, Denmark, Germany, Greece, Macedonia, Belgium and the Netherlands.

An embryonic Australian empirical literature has investigated the impact of municipal mergers on council performance (see Dollery *et al.*, (2012) for a detailed review). With some exceptions, such as Soul's (2000) empirical analysis of council size and per capita service costs in NSW, the Australian literature is uniformly pessimistic of municipal mergers as a means of improving local government performance. In contrast to the previous concentration on the descriptive analysis of case studies, a new strand of the Australian literature has employed the econometric analysis of state-wide datasets to determine the effect of mergers on council performance (see, for example, Drew and Dollery (2013; 2014a; 2014b); Drew *et al.*, (2012; 2013; 2014; 2015); Marques *et al.*, (2014). The present paper seeks to contribute to this literature by empirically investigating the outcomes of the 2000-2004 NSW council amalgamation program by comparing merged and unmerged peer councils.

3. MUNICIPAL MERGERS IN AUSTRALIA

Australian forced amalgamation programs follow a common pattern (Dollery *et al.*, 2012). In the first instance, a newly-elected state government typically grumbles publically of general municipal inefficiency and a concomitant lack of fiscal viability and then launches an 'independent' inquiry to examine methods of improving local government. After a period of deliberation, the inquiry usually publishes a discussion paper(s), followed by an interim report and then a final report, which almost invariably recommend forced mergers. After a perfunctory period of 'public consultation', the proposed mergers proceed, despite widespread public opposition.

Once forced amalgamation has taken place, a common pattern is also evident (Dollery *et al.*, 2012). Ongoing public discontent with council mergers characteristically continues, often for years, which occasionally results in de-amalgamation, as in Queensland see, for example, De Souza *et al.* (2014). Furthermore, no public reporting of the costs of mergers to affected councils or their local communities occurs, state governments never undertake assessments of merger outcomes, and no improvement in the operational efficiency or financial viability of merged local authorities is observed. After a period of years, the cycle begins again.

The current NSW local government process closely approximates this pattern. As we have seen, the NSW Government initiated an inquiry into NSW local government led by the ILGRP immediately after its Destination 2036 Workshop in August 2011. Since the Destination 2036 Workshop, ministers and the media had made pointed negative comments about the parlous state of NSW local government and the need to improve its prospects (Daily Telegraph, 2015; Hansard, 2015; Sydney Morning Herald, 2015a, 2015b; LG Focus, 2011).

After its establishment, the ILGRP published a discussion paper LGRP (2012). This was followed by an interim report ILGRP (2013a), which recommended far-reaching council mergers. In its final report ILGRP (2013b) dated October 2013, but only made public early in 2014, the ILGRP continued to insist amalgamation represented a key to improving NSW local government.

As we have seen, ILGRP (2013b) softened the hardline stance on forced mergers in the interim ILGRP Report (2013a) by recommending a strengthened Boundaries Commission consider its proposed council amalgamations on a 'case-by-case' basis and make binding recommendations. The NSW Government's *Fit for the Future* program subsequently adopted the ILGRP's merger recommendations with alacrity and the process is now underway.

A significant problem with both the recommendations of the ILGRP and the subsequent embrace of its merger proposals in *Fit for the Future* resides in the absence of supporting empirical evidence for council amalgamation in NSW. Indeed, as we noted earlier, the weight of the empirical literature on local government runs strongly against the efficacy of municipal mergers as an instrument of local government reform.

The ILGRP certainly paid ‘lip service’ to the need to take into account empirical evidence. For instance, in its final report ILGRP (2013b: 12) assured readers that it had been an ‘evidence-based inquiry’, which had ‘referenced a large number of research papers and reports of previous inquiries’, commissioned ‘supplementary research in several key areas’, together with ‘new surveys and opinion polling’, taken submissions from ‘councils and others’ and considered ‘reviews and studies of various aspects of local government under way in other states, particularly Western Australia, South Australia and Victoria’.

At a more detailed level, ILGRP (2013b: 12) went on to specify those reports which it had held to be ‘of particular importance’. These were:

...[Reports] on the *Financial Sustainability of the New South Wales Local Government Sector* released by the NSW Treasury Corporation (TCorp) in April 2013; and the Local Government Infrastructure Audit completed by the Division of Local Government (DLG) in May. Reports of several other recent inquiries were also most valuable, notably the ‘Allan’ inquiry commissioned by the Local Government and Shires Associations (2006); and studies of the local government revenue base by the Productivity Commission (2008) and IPART (2009).

However, ILGRP (2013b) does not make clear the fact that none of the reports prescribed amalgamation and only the Independent Local Government Inquiry (LGI) Allan (2006) actually considered municipal mergers. Moreover, the Allan Inquiry concluded that shared services represented a far superior method of securing the benefits attendant on scale compared with forced amalgamation.

Despite repeated assurances by the ILGRP that it would adhere to ‘evidence-based’ policymaking, such as its claim in its interim report ILGRP (2013b: 7) that its approach to municipal mergers had been ‘evidence-based and pragmatic, not ideological’, the ILGRP barely bothered to assess the outcomes of the 2004 NSW forced amalgamation program conducted by the (then) Carr Government, despite opposition by the local government sector. In fact, with respect to the outcomes of the 2004 amalgamation program, all the ILGRP actually did was engage the South Australian commercial consultants Jeff Tate Consulting Pty Ltd to conduct an assessment of five merged councils, without even calling for a comparative

study of merged and unmerged councils using published official data. As we have observed, it is thus not at all surprising that the ILGRP proceeded to recommend council mergers with little knowledge of the effects of amalgamation on councils merged in 2004.

4. JEFF TATE CONSULTING PTY LTD ANALYSIS OF 2004 MERGERS

The ILGRP engaged Jeff Tate Consulting Pty Ltd to evaluate the 2004 NSW council mergers. The ILGRP provided Jeff Tate Consulting Pty Ltd (2013: 1) with the following terms of engagement:

- ‘Review relevant research into the processes and outcomes of Council amalgamations in NSW and other states over the last 20 years;
- identify relevant findings from the research to inform an assessment of the processes and outcomes of a sample of recent (2004) amalgamations in NSW;
- assess the processes and outcomes of a sample of five Council amalgamations that occurred in 2004, considering the following matters:
 - whether each amalgamation has produced positive outcomes;
 - the circumstances, process and/or scale of change required for amalgamations to produce positive outcomes;
 - how significant and lasting the costs and disruption associated with amalgamations were, relative to any benefits;
 - the lessons that can be learned for managing implementation of any future amalgamations or major boundary changes;
 - the lessons that can be learned in terms of barriers and incentives for voluntary or ‘guided’ boundary changes;
- prepare a report summarizing findings from each case study and an overall report for the ILGRP, taking into consideration its terms of reference’.

The ILGRP also nominated the five merged local authorities to be assessed by Jeff Tate Consulting Pty Ltd.

Against this background, it should be noted that the 2004 NSW municipal merger program resulted in a fall in the number of local authorities from 174 to 152 entities. A thorough evaluation of the 22 merged entities would have compared their subsequent performance with unmerged councils falling in the same Australian Local Government Classification Categories employed by the NSW OLG using official NSW local government data to ensure a comparison of ‘like’ council with ‘like’ council. To gauge performance, a competent assessment would have used data drawn from the annual NSW *Comparative Information on Local Government Councils* (OLG, 2013), which contains comparative data by council across a range of indicators. In addition, a comprehensive analysis would also have assessed council performance against the TCorp (2013) financial ratios – some of which were later used as part of the *Fit for the Future* criteria - in order to determine whether the 2004 amalgamation program had enhanced council performance.

However, so loose were the ILGRP’s terms of engagement surrounding the sample of councils, that Jeff Tate Consulting Pty Ltd (2013: 2) was simply instructed to examine the following five councils:

- ‘Clarence Valley Council (amalgamation);
- Glen Innes Severn Council (amalgamation);
- Palerang Council (amalgamation and associated boundary changes);
- Greater Hume Shire (amalgamation and associated boundary changes); and
- City of Albury (boundary changes associated with the Greater Hume Shire amalgamation)’.

No explanation was advanced in Jeff Tate Consulting Pty Ltd (2013) or in any of the ILGRP’s published documents to account for the basis on which these five local authorities were selected or how reflective they were of the total population of merged municipalities in NSW. Furthermore, the discursive ‘research technique’ employed by Jeff Tate Consulting Pty Ltd (2013: 22) was not only entirely qualitative, but also suffered from ‘selection bias’, as attested by the fact that the people ‘interviewed’ were drawn largely from the new post-amalgamation entities and thus most unlikely to criticize the process which had spawned their current councils:

Over 50 people were interviewed either individually or in groups for the case studies of the five Councils selected by the Independent Review Panel. The Council representatives included Mayors, Deputy Mayors, Councillors, General Managers, Directors, middle managers and other staff who had either been through the amalgamation or boundary change process or who have been closely involved since in implementing the new structures and systems.

Given the absence of rigour in its report, it is thus not at all surprising that Jeff Tate Consulting Pty Ltd (2013: 40) was only able to draw highly speculative conclusions which can hardly inform perceptive policymaking:

The research and interviews both confirm that the costs associated with amalgamation are often underestimated. Poor planning and implementation processes combined with legal, industrial and Proclamation restrictions have increased costs, extended the negative impacts associated with amalgamations and hampered the achievement of positive outcomes...However, the 2004 amalgamations have achieved many positive outcomes despite the restrictions and poor planning and implementation. The positive outcomes include improvements in infrastructure and service delivery, the capacity to tackle larger and more complex projects and issues, greater ability to access external funding, the capacity to speak with a unified voice on behalf of local communities and improved opportunities for staff of Councils.

In order to remedy the lack of rigour in Jeff Tate Consulting Pty Ltd (2013), we now provide an empirical evaluation of the 2000-2004 council mergers in NSW using quantitative analysis.

5. SELECTION OF SAMPLE OF 2004 MERGED AND UNMERGED COUNCILS

The OLG has classified NSW councils into 11 groups termed 'OLG Groupings' (OLG, 2009: 11). In general, the OLG groupings (Table 1) are based on broad demographic variables and arranged according to different population sizes in terms of 'metropolitan', 'metropolitan fringe', 'regional' and 'rural' contexts.

TABLE 1 COMES HERE

Councils in OLG Group 4 comprised the sample employed in the empirical analysis in this paper. Table 2 lists the 24 councils chosen from Group 4. This group of councils undertakes generally similar functions and their performance against selected indicators can thus be compared on a ‘like-for-like’ basis. Group 4 councils all possess the following characteristics: Each of the 24 councils is centred in a discrete regional town or city; all are significant regional cities and towns in NSW; all are ‘general purpose’ councils providing the broad range of general council services to their communities; and all provide water and sewer services to their communities. These characteristics are not as common to the other ten groupings of NSW councils.

TABLE 2 COMES HERE

With respect to the sample, with a single exception, population ranges in the chosen councils fall between 19,000 and 62,000 persons. The exceptional council has a population of approximately 7,300 persons. Each of the councils in the sample derives its funding from similar activities and all have similar governance structures. Ten of the 24 councils have been merged since at least 2004, which implies that any comparative performance differences should be readily apparent by the 2012-2014 data collection period (i.e. a minimum eight year period since amalgamation).

6. ANALYSIS OF 2000/2004 NSW AMALGAMATIONS

Table 3 provides details of the ten general-purpose councils which were subject to amalgamation over the period from 2000 to 2004. Because most of the amalgamations involved the dismembering of constituent councils, this presents difficulties for empirical analysis. However, we can gauge the success of the merger program by examining and comparing the performance of the cohort of general-purpose amalgamated entities against (a) all councils in the jurisdiction and (b) a group of peers drawn from Group 4 of the NSW OLG classification system.

TABLE 3 COMES HERE

Table 4 compares the Financial Sustainability Rating (FSR) of the ten general-purpose NSW councils with the FSR for the entire NSW local government system. This comparison clearly demonstrates that the FSR assigned to the two cohorts by TCorp (2013) do not show any material difference in performance between the ten general-purpose councils which

experienced forced amalgamation and the remainder of NSW councils. In fact, the ten general-purpose councils under consideration had a higher proportion of sub-standard performance (i.e. ‘very weak’ and ‘weak’) than the rest of NSW councils. By way of contrast, the remaining NSW municipalities had a slightly higher proportion of councils exhibiting acceptable levels of performance (‘moderate’, ‘sound’, ‘strong’).

TABLE 4 COMES HERE

Given the claims made by proponents of municipal mergers it is somewhat surprising that the performance of the ten general-purpose councils amalgamated in earlier programs is slightly lower than the remainder of the jurisdiction. This data suggests that the 2000/04 amalgamations program may not have been as successful as its architects had predicted.

A more nuanced result is possible by comparing over the three year period the individual financial ratio indicators in the *Fit for the Future* assessments. Table 5 summarizes the ratios in *Fit for the Future*.

TABLE 5 COMES HERE

For this purpose, four of the *Fit for the Future* ratios are defined and employed in exactly the same way as prescribed by the OLG (2013): Operating Performance, Own Source Revenue, Building and Infrastructure Renewal, and Asset Maintenance ratios.

However, we examined the Infrastructure Backlog ratio over three years instead of one owing to existing evidence of significant ‘gaming’ by councils of this data. The Debt service cover ratio has been dropped entirely owing to the logical flaws in the method adopted by the OLG (2013), centered on the fact that a council with no debt could improve its ranking by taking on an additional ‘token’ amount of debt. The Debt ratio was also radically altered in direct contradiction to the advice provided to the OLG by TCorp (2013) which the OLG had previously commissioned to measure financial sustainability.

We have also altered the expenditure per capita ratio to reflect the functional unit most appropriate to municipal service provision (i.e. number of assessments). Finally, we have included a measure of staffing ratios which – in the absence of more sophisticated data envelopment analysis – is necessary for an elementary understanding of municipal efficiency (although we stress that this is an empirical compromise required by our efforts to conform to the OLG model).

Table 6 details the various ratios of the amalgamated cohort (set out in Table 4) and the fourteen councils which represent the peer group according to OLG classification. A cursory examination of the data suggests that there is very little difference in the performance of the amalgamated cohort with respect to the peer group (which is consistent with our examination of FSR detailed in Table 4).

TABLE 6 COMES HERE

However, a superior way of evaluating whether there is a real difference in performance between the two cohorts is to conduct an analysis of variance (ANOVA). An ANOVA compares the spread of the various financial ratios of individual councils within cohorts (amalgamated and non-amalgamated peers) to the spread of the same financial ratio between cohorts and thus provides a robust statistical test to determine whether there are statistically important differences between the financial ratios of the two cohorts.

The standard deviations in parentheses in Table 7 provide an indication of the average variation in each financial ratio of individual councils to the mean financial ratio within the particular cohort. Somewhat predictably Table 7 - which contains the ANOVA results - finds no statistically significant difference between the two cohorts for each and every one of the seven financial ratios¹. It should be noted that ANOVA deals with the possibility of sampling error and other statistical noise. What this means is that there is absolutely no empirical basis for supposing that the performance of the amalgamated cohort is in any way superior to that of their peers. It is worth stressing that this is a highly ‘inconvenient’ result for proponents of amalgamation, based on sustainability criteria.

TABLE 7 COMES HERE

7. POLICY IMPLICATIONS

As we have demonstrated in this paper had the ILGRP approached the question of the outcomes of the 2004 NSW mergers in a technically competent manner, instead of simply instructing Jeff Tate Consulting Pty Ltd to use a biased and unrepresentative five council sample, then it would have discovered that the earlier 2000-04 council mergers did not

¹ Removal of the ‘outlier’ from the amalgamated cohort results in no change to the various findings of no statistically significant difference between the cohorts.

produce local authorities exhibiting superior performance, as measured using *Fit for the Future* FSR.

From a policy perspective, an empirically rigorous evaluation of the outcomes of the 2000-2004 council mergers of the kind undertaken in this paper would surely have given both the ILGRP and the NSW Government pause for thought on the desirability of a further round of costly council amalgamation which offered no prospect of improved local government performance. ‘Fact-free’ public policy making of the kind currently underway in NSW is a recipe for disaster.

From the perspective of empirical research on the impact of forced amalgamation on local government, our paper breaks new ground by employing the ‘natural experiment’ offered by the 2000/04 NSW municipal mergers by examining the performance of merged and unmerged councils using 2014 data. In those local government systems where widespread forced mergers have taken place, and where comparable data is available after reasonable time period, future research could replicate the approach taken in this paper. In addition, future work along these lines could decompose performance data into discrete categories, such as financial indicators, service provision indicators, and the like, and then compare amalgamated and non-amalgamated councils of the same kind.

REFERENCES

- Allan, P. (2006) “Are Councils Sustainable? Final Report: Findings and Recommendations” Independent Local Government Inquiry, (Sydney: NSW Local Government and Shires Association),
<http://www.lgnsw.org.au/files/imce-uploads/35/final-report-findings-and-recommendations.pdf>
- Daily Telegraph, (2015) “Local Government Minister Paul Toole reveals how council chaos costs ratepayers \$1.7b” (Sydney: Daily Telegraph).
(<http://www.dailytelegraph.com.au/news/nsw/local-government-minister-paul-toole-reveals-how-council-chaos-costs-ratepayers-17b/story-fnfn1181-1227364408071?login=1>).
- De Souza, S., B. Dollery and M. Kortt (2014) ‘De-amalgamation in Action: The Queensland Experience’, *Public Management Review*, In Print.
- Drew, J. and B. Dollery (2013) “Does Size Still Matter? An Empirical Analysis of the Effectiveness of Victorian Local Authorities”, *Local Government Studies*, DOI: 10.1080/03003930.2013.869497.
- Drew, J. and B. Dollery (2014a) “The Impact of Metropolitan Amalgamations in Sydney on Financial Sustainability”, *Public Money and Management*, 34(4), pp. 281-288.
- Drew, J. and B. Dollery (2014b) “Would Bigger Councils Yield Scale Economies in the Greater Perth Metropolitan Region? A Critique of the Metropolitan Local Government Review for Perth Local Government”, *Australian Journal of Public Administration*, 73(1) pp. 128-137.
- Dollery, B., B. Grant and M. Kortt (2012) *Councils in Cooperation: Shared Services and Australian Local Government* (Sydney: Federation Press).
- Dollery, B., B. Grant and M. Kortt (2013) “An Evaluation of Amalgamation and Financial Viability in Australian Local Government”, *Public Finance and Management*, 13(3), pp. 215-238.
- Drew, J., M. Kortt and B. Dollery (2014) “Can’t get no Satisfaction: The Association between Community Satisfaction and Population Size for Victoria”, *Australian Journal of Public Administration*, DOI: 10.1111/1467-8500.12117.
- Drew, J., M. Kortt and B. Dollery (2015) “No Aladdin’s Cave in New South Wales? Local Government Amalgamation, Scale Economies and Data Envelopment Specification”, *Administration & Society*, DOI: 10.1177/0095399715581045.
- Dollery, B., and L. Robotti (eds) (2008) *The Theory and Practice of Local Government Reform*, (Cheltenham: Edward Elgar).
- Faulk, D. and G. Grassmueck (2012) “City-county Consolidation and Local Government Expenditures”, *State and Local Government Review*, 44(3), pp. 196-205.

Faulk, D. and M. Hicks (2011), *Local Government Consolidation in the United States*, (New York: Cambria Press).

Feiock, R. (2004) “Do Consolidation Entrepreneurs Make a Deal with the Devil?”, in J. B. Carr and R. C. Feiock (eds) *City-County Consolidation and its Alternatives Reshaping the Local Government Landscape*, (Armonk: M. E. Sharpe), pp. 39-52.

Hansard. Accessed 14 May, 2015 (http://www.parliament.nsw.gov.au/Prod/parlament/-hansart.nsf/V3Key/LA20150514005?open&refNavID=HA8_1).

Independent Local Government Review Panel (ILGRP) (2012) *Better Stronger Local Government: The Case for Sustainable Change*, (Sydney: ILGRP), <http://www.localgovernmentreview.nsw.gov.au/Index.asp?areaindex=LGR&index=49&acode=GL&mi=1>

Independent Local Government Review Panel (ILGRP) (2013a) *Future Directions for NSW Local Government: Twenty Essential Steps*, (Sydney: ILGRP), <http://www.localgovernmentreview.nsw.gov.au/Index.asp?areaindex=LGR&index=49&acode=GL&mi=1>

Independent Local Government Review Panel (ILGRP) (2013b) *Revitalizing Local Government*, (Sydney: ILGRP), <http://www.localgovernmentreview.nsw.gov.au/Index.asp?areaindex=LGR&index=49&acode=GL&mi=1>

Independent Pricing and Regulatory Tribunal (IPART) (2009) *Review of the revenue framework for local government*, (Sydney: IPART), http://www.ipart.nsw.gov.au/Home/Industries/Other/Reviews/Local_Government/Review_of_the_Revenue_Framework_for_Local_Government

Jeff Tate Consulting Pty Ltd (2013) *Assessing processes and outcomes of the 2004 Local Government boundary changes in NSW*, (McLaren Vale: South Australia).

Lago-Penas, S. and J. Martinez-Vazquez (2013) (eds) *Challenge of Local Government Size*, (Cheltenham: Edward Elgar).

Leland, S. and K. Thurmaier (2010) (eds) *City-County Consolidation: Promises Made, Promises Kept?* Washington, (DC: Georgetown University Press).

Leland, S. and K. Thurmaier (2006) “Lessons from 35 years of City-County Consolidation Attempts”, in *The Municipal Yearbook 2006*, International City/ County Management Association, (Washington),pp. 3–10.

LG Focus (2011), “Sweeping reforms for local government in NSW”, <http://www.lgfocus.com.au/editions/2011-11/sweeping-reforms-for-local-government-in-nsw.php>

Marques, R., B. Dollery and M. Kortt (2014) “The Optimal Size of Local Government: The Case of Tasmania Councils”, *Australian Journal of Public Administration*, In Print.

Martin, L. and J. Schiff (2011) “City-county consolidations: Promise versus performance”, *State and Local Government Review*, 43(2), pp. 167–77.

NSW Office of Local Government (2009) “Snapshot of NSW Councils: Comparative Information on NSW Local Government Councils 2008/09”. (Sydney: OLG), www.olg.nsw.gov.au/sites/default/files/Comparatives_2008_09.pdf

NSW Office of Local Government (2013) *Comparative Data 2008/09*, NSW Local Government, (Sydney: Office of Local Government, Department of Premier and Cabinet).

Reese, L. (2004) “Same Governance, Different Day: Does Metropolitan Reorganization Make a Difference?”, *Review of Policy Research*, 21(4), pp. 595–611.

Sansom, G. (2015) “Submission to IPART Methodology Consultation”, (Sydney: Graham Sansom Pty Ltd), http://www.ipart.nsw.gov.au/files/sharedassets/website/trimholdingbay/online_submission_-_individual_-_g._sansom_-_25_may_2015_191500000.pdf

Soul, S. (2000) *Population Size and Economic and Political Performance of Local Government Jurisdictions*, PhD thesis, (Lismore: Southern Cross University).

Special Edition of *Journal of Public Management and Finance: Symposium on Local Government Consolidation and Financial Sustainability* (2013), 13(3).

Special Edition of *Journal of Public Management and Finance: Symposium on Local Government Consolidation and Financial Sustainability* (2013), 13(2).

Special Edition of *Local Government Studies on European Amalgamation* (2010), 36(2).

Productivity Commission (2008) *Assessing Local Government Revenue raising Capacity*, Canberra: Productivity Commission Research Report.

Sydney Morning Herald (2015a) “If Auckland Has Just One Council, Why Does Sydney Need 41?” Sydney: Sydney Morning Herald, (<http://www.smh.com.au/comment/smh-editorial/if-auckland-has-just-one-council-why-does-sydney-need-41-20150628-ghznl2.html>).

Sydney Morning Herald (2015b) “Council Amalgamation: MPs Vow to Fight Forced Mergers” (Sydney: Sydney Morning Herald), (<http://www.smh.com.au/nsw/council-amalgamation-mps-vow-to-fight-forced-mergers-20150611-ghltvx.html>).

TCorp (2013) “Financial Sustainability of the New South Wales Local Government Sector”, (Sydney: TCorp), <http://www.olg.nsw.gov.au/strengthening-local-government/local-government-reform/TCORP-financial-assessments>

Vojnovic, I. (2000) “The Transitional Impacts of Municipal Consolidations”, *Journal of Urban Affairs*, 22(4), pp. 385-417.

Table 1: NSW Office of Local Government Groupings

Council Profile	Description	Population	OLG Group
Metropolitan	Capital City	Not Applicable	1
	Metropolitan Small	Less than 70,000	2
	Metropolitan Large	Greater than 70,000	3
Regional Towns & Cities	Regional Small	Between 20,000 – 70,000	4
	Regional Large	Greater than 70,000	5
Metropolitan Fringe	Metropolitan Fringe Small	Less than 70,000	6
	Metropolitan Fringe Large	Greater than 70,000	7
Rural	Rural Small	Less than 2,000	8
	Rural Medium	Between 2,000 – 5,000	9
	Rural Large	Between 5,000 – 10,000	10
	Rural Very Large	Between 10,001 – 20,000	11

SOURCE: NSW OLG (2009)

Table 2: List of 24 Councils

Council Name	Population 2013 (OLG)	Council Profile	OLG Grouping	Previously Amalgamated
Albury City Council	49,655	Regional Town/City	4	Yes
Armidale Dumaresq Council	25,278	Regional Town/City	4	Yes
Ballina Shire Council	41,006	Regional Town/City	4	No
Bathurst Regional Council	40,253	Regional Town/City	4	Yes
Bega Valley Shire Council	33,259	Regional Town/City	4	No
Broken Hill City Council	19,103	Regional Town/City	4	No
Byron Shire Council	30,960	Regional Town/City	4	No
City of Lithgow Council	21,009	Regional Town/City	4	Yes
Clarence Valley Council	51,346	Regional Town/City	4	Yes
Deniliquin Council	7,327	Regional Town/City	4	No
Dubbo City Council	40,595	Regional Town/City	4	No
Eurobodalla Shire Council	37,048	Regional Town/City	4	No
Goulburn Mulwaree Council	28,721	Regional Town/City	4	Yes
Griffith City Council	25,489	Regional Town/City	4	No
Kempsey Shire Council	29,198	Regional Town/City	4	No
Lismore City Council	44,485	Regional Town/City	4	No
Mid-Western Regional Council	23,493	Regional Town/City	4	Yes
Orange City Council	40,108	Regional Town/City	4	No
Queanbeyan City Council	40,209	Regional Town/City	4	Yes
Richmond Valley Council	22,702	Regional Town/City	4	Yes
Singleton Council	23,785	Regional Town/City	4	No
Tamworth Regional Council	58,922	Regional Town/City	4	Yes
Wagga Wagga City Council	61,746	Regional Town/City	4	No
Wingecarribee Shire Council	46,416	Regional Town/City	4	No

Table 3: NSW General-Purpose Councils Merged over 2000-2004

Amalgamated Council	Date	Constituent Councils
Albury	26 May 2004	Albury and Hume (part)
Armidale-Dumaresq	21 February 2000	Armidale and Dumaresq
Bathurst	26 May 2004	Bathurst and Evans (part)
Lithgow	26 May 2004	Lithgow, Evans (part), Rylstone (part)
Clarence Valley	25 February 2004	Copmanhurst, Grafton City, Maclean, Pristine Waters
Goulburn-Mulwaree	11 February 2004	Goulburn, Mulwaree (part)
Mid-Western Regional	26 May 2004	Merriwa (part), Mudgee, Rylstone (part)
Queanbeyan	11 February 2004	Queanbeyan, Yarrowlunla (part)
Richmond Valley	21 February 2000	Casino, Richmond River
Tamworth	17 March 2004	Barraba (part), Manilla, Nundle (part), Parry (part), Tamworth

Table 4: Comparison of Financial Sustainability Ratings

TCorp (2013) Financial Sustainability Rating	Amalgamated Councils	Rest of Jurisdiction
Very Weak	0	3.5%
Weak	30%	21.8%
Moderate	50%	52%

Sound	20%	21.1%
Strong	0	1.4%
Very Strong	0	0
<hr/>		
Total Number of Councils	10	152
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Table 5: Definitions and Benchmarks of *Fit for the Future* Criteria

Variable	Benchmark	Definition
Dependent		
Operating ratio	>0%	(operating revenue † - operating expenses) / operating revenue †.
Own Source Revenue ratio	>60%	rates, utilities and charges / total operating revenue ‡.
Infrastructure Backlog ratio	<2%	estimated cost to bring assets to a satisfactory condition / total (Written Down Value) infrastructure assets.
Debt Service Cover ratio	Greater than 0 but less than 20%	(interest expense and principal repayments) / total continuing operating revenue†
Buildings and Infrastructure Renewal ratio	>100%	asset renewals (building and infrastructure) / depreciation and impairment of building and infrastructure assets.
Asset Maintenance ratio	>100%	actual asset maintenance / required asset maintenance.
'Efficiency'	Negative linear trend	real operating expenditure (deflated to 2009 terms) per capita

† revenue excludes capital grants and contributions

‡ revenue includes capital grants and contributions

Table 6: Comparison of *Fit for the Future* Performance

	Operating Performance Ratio	Operating Performance Ratio	Operating Performance Ratio	Own Source Revenue Ratio	Own Source Revenue Ratio	Own Source Revenue Ratio
	2014	2013	2012	2014	2013	2012
Amalgamated						
Quartile 1	11.3%	-10.0%	-11.4%	69.6%	67.0%	60.7%
Median	-7.5%	-5.3%	-4.4%	74.6%	71.8%	65.4%
Quartile 3	-6.4%	-1.5%	-3.0%	78.8%	74.9%	73.1%
Non-Amalgamated						
Quartile 1	11.1%	-7.7%	-14.8%	73.9%	67.7%	62.3%
Median	-7.3%	-4.9%	-1.4%	76.7%	69.2%	72.5%
Quartile 3	-3.6%	2.5%	2.3%	78.6%	76.5%	75.0%
	Employees per Thousand Assessments	Employees per Thousand Assessments	Employees per Thousand Assessments	Expense per Assessment	Expense per Assessment	Expense per Assessment
	2014	2013	2012	2014	2013	2012
Amalgamated						
Quartile 1	17.6	17.5	18.1	\$4,287	\$4,287	\$4,327
Median	19.75	19.9	19.85	\$4,401	\$4,584	\$4,666
Quartile 3	20.8	20.6	21	\$4,581	\$4,796	\$4,812
Non-Amalgamated						
Quartile 1	17.2	17.7	16.6	\$4,052	\$4,289	\$4,175
Median	19.15	18.55	19	\$4,296	\$4,412	\$4,390
Quartile 3	20.8	20.8	20.4	\$4,984	\$5,179	\$4,852
	Infrastructure Backlog Ratio	Infrastructure Backlog Ratio	Infrastructure Backlog Ratio	Asset Maintenance Ratio	Asset Maintenance Ratio	Asset Maintenance Ratio
	2014	2013	2012	2014	2013	2012
Amalgamated						
Quartile 1	0.04	0.05	0.05	0.85	0.77	0.63
Median	0.07	0.06	0.12	0.94	0.90	0.95
Quartile 3	0.11	0.11	0.19	1.03	1.09	0.99
Non-Amalgamated						
Quartile 1	0.01	0.02	0.02	0.68	0.74	0.71
Median	0.06	0.07	0.05	0.85	0.88	0.80
Quartile 3	0.08	0.10	0.11	0.95	1.00	1.00
	Building & Infrastructure Renewal Ratio		Building & Infrastructure Renewal Ratio		Building & Infrastructure Renewal Ratio	
	2014		2013		2012	
Amalgamated						
Quartile 1	64.4%		42.5%		32.8%	
Median	73.0%		55.9%		51.8%	
Quartile 3	81.7%		91.3%		93.4%	
Non-Amalgamated						

Quartile 1	39.6%	33.4%	36.5%
Median	57.5%	60.0%	62.8%
Quartile 3	73.7%	106.8%	82.7%

Table 7: ANOVA of 2014 *Fit for the Future* Indicators

	Amalgamated	Non-Amalgamated	Differences
Operating Performance Ratio	-0.07 (0.059)	-0.099 (0.116)	No statistically significant difference
Own Source Revenue Ratio	0.744 (0.063)	0.749 (0.073)	No statistically significant difference
Employees per Thousand Assessments	19.48 (1.962)	19.257 (2.955)	No statistically significant difference
Expense per Assessment	4356 (421.051)	4497.5 (594.713)	No statistically significant difference
Building & Infrastructure Renewal Ratio	0.765 (0.293)	0.602 (0.399)	No statistically significant difference
Infrastructure Backlog Ratio	0.084 (0.064)	0.061 (0.060)	No statistically significant difference
Asset Maintenance Ratio	0.947 (0.201)	0.820 (0.175)	No statistically significant difference