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When do municipal consolidations reduce government expenditures? Evidence on the role of local involvement

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Abstract

Higher levels of government motivate municipal consolidations as a tool to increase efficiency in the local government sector, yet research shows consolidations typically fail to deliver the promised spending reductions. Since mergers often require significant changes to institutional structures, one potential explanation is that local decision makers can substantially influence the outcomes of the consolidations process. To explore this possibility, this paper contrasts "encouraged but voluntary" mergers with those that were "forced" on local governments in the state of New South Wales, Australia. Results show voluntary mergers resulted in a ten percent decline in total per capita expenditures, but forced consolidations failed to reduce spending across the board. The policy conclusion is decision makers considering structural reform should invest in obtaining the support and participation of local government decision makers.

JEL Codes: H770, H720, R510.

Keywords: local government expenditures, economies of scale, municipal amalgamation, Australia, fiscal federalism

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Introduction

Consolidation is a popular method of restructuring local government, in the latter half of the 20th century countries as diverse as Australia, Japan, Israel, Finland, Latvia, Denmark, Turkey and the United Kingdom reduced the number of local governments in this way. Such policies are almost always initiated by a higher level (state or federal) of government with the primary aim of increasing efficiency by enabling municipalities to benefit from economies of scale (Fox and Gurley 2006, Dollery and Fleming 2006).

Despite their widespread popularity, there is little empirical evidence municipal mergers lead to the predicted spending reductions (Rouse and Putterill 2005, Reingewertz 2012, Moisio and Uusitalo 2013, Bell, Dollery and Drew 2016, and Blom-Hansen et al. 2016, McQuestin and Drew 2016 and Fahey, Drew and Dollery 2016). A question unanswered by the previous literature is whether these null results are caused by a failure of mergers to generate economies of scale or by a reluctance of local officials to capitalize on the efficiency enhancing opportunities mergers present.

There are several reasons local decision makers may be uncooperative with consolidation efforts. Combining organizations of any type is difficult and costly, local government employee morale is a "potential landmine" (Staley et al. 2015, 14) in any consolidation effort and local communities often resist state consolidation efforts that are viewed as an infringement on local control and community cohesion (Dollery et al. 2010). There are also a variety of context specific factors, for example the failure of Finnish local government reform to reduce per capita expenditures may have resulted from a matching grant system that negated incentives for local government officials to decrease spending (Moisio and Uusitalo 2013). A collective

interpretation of research on municipal consolidation paints the picture that combining governments is difficult, requiring significant structural changes, transition costs, cultural workplace adjustments, and sensitive political and personnel decisions.

This article provides evidence on the role of local government decision-makers by examining two consolidation regimes in the state of New South Wales (NSW), Australia. Between 1999 and 2001, the state government encouraged and provided support for efforts by local governments (councils henceforth) that collaborated to undertake consolidation, resulting in the creation of four new councils. The council consolidations of this period are referred to as "voluntary" because these councils opted into consolidation and the merger required the ongoing support of each council. In 2004, the state government undertook a second round of mergers in which the state government selected 42 councils to be combined as well as the neighbor(s) with whom they would form a new government. Mergers resulting from this process are referred to as "forced".[1] Councils involved in forcible mergers opposed consolidation and thus were not active in the process leading up to the merger or the transition itself (Independent Local Government Review Panel 2013) whereas councils that chose to merge were active participants in the consolidation process, working with their counterparts in preparing and executing the details of the merger. The presence of two distinct types of merger regimes provides evidence both on the ability of consolidations to reduce expenditures and the impact local involvement has on the outcomes of the consolidation process.

A difference-in-difference design with year specific treatment effects is used to compare changes in various financial measures for two treatment groups, voluntarily and forcibly merged councils. Results indicate voluntary mergers were associated with a 10 percent decline in total per capita expenditures, whereas forced mergers failed to produce expenditure reductions.

Councils that merged voluntarily also experienced a decline in 'other' expenditures post-consolidation. The results are robust to potential selection bias and collectively indicate consolidation *can* increase efficiency in municipal governments, however the ability to do so is contingent on the willingness of local decision makers to engage in structural reform and make changes that enable their governments to capitalize on the advantages size offers.

This article is an addition to a growing body of work using panel data to study the efficiency effects of municipal consolidations. It is also one of the first studies to explore how characteristics of merger regimes affect expenditure outcomes, although others have pointed to this as an area for future research. For example, Blom-Hansen and coauthors conclude "Further research will also be needed to pin down *why* economies of scale failed to materialize, in this case and in others (2016, 829)" and Moisio and Uusitalo note their intention to study the effect a matching grant system has on merger outcomes in future work (2013, 163). Lastly, this research makes an important methodological improvement in adjusting for a small number of clusters, a frequent concern in studies of government consolidations where the number of treated units is often small.[2] Failing to address a small number of clusters can lead to over-rejection of the null hypothesis stemming from downwardly biased standard errors (Cameron and Miller 2015).

Theory and Literature Review

The primary reason for municipal mergers is lowering the aggregate cost of government through economies of scale, which are present when the per resident cost of government declines as the number of residents increases (Fox and Gurley 2006). In the presence of economies of scale larger governments are able to operate more efficiently, providing services at a lower cost per

resident. However, municipal governments are multipurpose, they provide a range of services, and the existence and extent of savings achieved via scale economies is dependent on the characteristics of specific services (Dollery and Fleming 2006, Holcombe and Williams 2009). Capital intensive services (for example waste management and road maintenance) are expected to exhibit economies of scale as larger municipalities are able to use physical capital more efficiently and spread the substantial fixed costs over a larger base (Drew and Dollery 2014). Consolidation may also lead to cost savings in labor-intensive services (for example customer service orientated positions, child care centers and libraries) if larger governments are able to eliminate duplicative positions. However, these expenditure reductions may be offset if an increase in population requires a larger workforce in services involving significant human-to-human interaction. Additionally, staffing is a contentious aspect of mergers and governments often reach agreements to prevent or limit redundancies. Therefore, although theory suggests savings in human capital intensive services via reduced wages and staff related expenses, whether that translates into a decline administrative spending is ultimately an empirical question.[3]

Panel data studies on the effectiveness of municipal mergers employ per capita total and disaggregated expenditure categories as outcome measures.[4] Categories of spending are reported in either functional (administration, infrastructure, etc.) or service (education, health, etc.) orientations. In the latter, the impact of expanding the geographic size and population of the local government on the efficiency of the organization providing the service (school, hospital, etc.) is unclear because expanding the size and even resource base of the local government does not necessarily change the cost/service balance of the organizations providing many local services.[5] Functional spending categories, on the other hand, have a direct relationship to council size,

elimination of duplicative staff roles should result in lower per capita employee costs, larger councils should be able to reduce the per unit cost of infrastructure maintenance through more efficient use of physical capital.

As demonstrated in table 1, there is little evidence from quasi-experimental studies to suggest consolidation reduces the total cost of government. An exception is Reingewertz (2012), where the forced consolidation of 22 Israeli municipalities is found to result in a nine percent decrease in total per capita expenditure in consolidated municipalities. However, Cobban (2017), Blom-Hansen et al. (2016), Allers and Geertsema (2016) (all using a differences-in-differences research design) and Moisio and Uusitalo (2013) **(**using a matching approach) find mergers reduce per capita administrative costs.

Insert Table 1 Here

There is a significant body of work on consolidations in Australia, largely failing to find evidence of cost savings following consolidation. Bell and coauthors conduct an analysis of variance comparing consolidated councils classified as "small regional" to councils of the same classification that were not subject to a merger (2016). They find no statistically significant difference in the performance between the two groups along any of their outcome measures. Using data envelopment analysis McQuestin and Drew (2016) study 2008 mergers in the state of Queensland, finding that two years after merger consolidated councils had lower efficiency scores than non-consolidated councils. Studying the same round of mergers Drew, Kortt and Dollery (2016) fail to find evidence of economies of scale.[6]

Like this paper, Blesse and Baskaran (2016) study the differential expenditure effects of voluntary and forced mergers, arguing that voluntary mergers are more likely to result in expenditure declines as both parties are invested in successful merger; "Voluntary agreements should, in theory, be more efficient than compulsory ones as both partners must consider the merger as beneficial (Blesse and Baskaran 2016, 56)." However, the empirical analysis suggests the opposite, forced consolidations led to a decline in administrative spending whereas voluntary mergers failed to produce cost savings. These results may be explained by selection bias; the state government's pursued a policy of compulsory consolidation for municipalities that failed to complete a voluntary merger, raising the possibility that municipalities opted into voluntarily merger to avoid forced consolidation but neglected to carry out the restructuring necessary to produce efficiency gains. This paper improves on Blesse and Baskaran (2016) by exploiting institutional details of mergers in NSW to more convincingly address such endogeneity.

Background and Institutional Features of Consolidations in NSW

Local Government in NSW

Australian local governments deliver a limited range of services compared to their international counterparts. The majority of services councils provide are often characterized as 'services to property' and include the provision and maintenance of roads, water, sewage and solid waste disposal. This feature of Australian local government lends itself to the study of economies of scale as these are capital intensive services theory suggests are characterized by economies of scale. In recent decades councils have expanded into providing 'services to people' which tend to rely more heavily on human capital and include recreational, cultural, public safety, and housing

services. However, major services such as primary education, police, and firefighting that have a local orientation in other countries fall under the remit of the state government.

Like many of their international counterparts, Australian councils' primary revenue mechanism used to fund the local services is the property tax. According to the data used in this paper, on average annual property tax revenue accounts for 40.9 percent of total council revenue.[7] Councils also generate funds through user fees and annual charges for services and receive grant monies.

Table 2 presents pre-merger descriptive statistics for councils for voluntary, forced and non-consolidated councils as well as results of a difference in means test. Descriptively, the major difference between groups is councils subjected to forcible merger have significantly lower population densities than non-merged councils.

Insert Table 2 Here

In terms of expenses, both groups of merged councils spend more per capita than do non-merged councils. Employee costs, materials, and contracts comprise slightly less than two thirds of council spending. Examination of council financial statements reveals wages and salaries, employee leave entitlements, and contributions to retirement savings account for the majority of employee costs. Materials and contracts are costs related to day-to-day functioning of the council and consist of raw materials, consumables, and contractor costs.

The final significant spending category is ‘other’ expenditure. To shed some light on its contents 2011-2012 financial statements from the City of Sydney, an urban capital city, and Corwa, a very large rural agricultural council, are compared. The City of Sydney lists 26 unique items in ‘other’ expenditures while Corwa’s statement lists nine. Reported by both councils are; advertising, bad and doubtful debts, councilor expenses, insurance, street lighting and telephone and communication (a complete list of items contained in ‘other’ expenditures can be found in Figure 2A of the Appendix). The difference in the number of reported items is reflective of the tendency of larger, urban councils to take part in a wider array of activities. The diversity of items represented makes it difficult to make general statements about spending contained in ‘other’ expenditures; however, what is clear is these are direct expenditures on marginal, rather than core, council functions.

Apart from the ‘other’ expenditure category, results from a t-test of group means (presented in column 4 of Table 2), indicate no significant differences in average per capita spending by voluntarily merged and non-merged councils prior to merger. The same is not true for forcibly merged councils. This poses a threat to the empirical analysis as it suggests councils were selected for merger because they had larger potential for spending reductions relative to non-merged councils. How the paper addresses potential selection bias is discussed at length in the Empirical Strategy and Results Section of the paper.

Mergers in NSW

Local government consolidation has a long history in Australia, between the 1960’s and 1990’s mergers reduced the number of councils in NSW from 224 to 177. These mergers are almost always initiated by the minister for local government (the minister henceforth) under authority derived from the Local Government Act of 1993 (NSW) (the Act). Section 218E of the Act gives

the minister the power to initiate consolidations by issuing a call for proposals, which may be submitted by councils or by the minister.

When mergers are imposed on local councils by the state government they are considered to be 'forced'. The typical process proceeds as follows, prior to invoking section 218E the minister makes a series of public statements expressing concern over inefficiency in the local government sector and the long-term financial sustainability of many councils. Eventually a call for proposals is issued in which councils are encouraged to submit proposals detailing their preferred merging plan. These proposals do not require (and often lack) the consent of all councils named in the document. Submissions are reviewed by the Local Boundaries Commission (or the director general) which makes a final recommendation to the minister.[8]

The mergers regimes studied in this paper are discussed here in reverse chorological order. The later round of mergers took place in 2004 are an example of forced consolidations. After campaigning on a policy of no forced consolidations, on the 15th of April of 2003 the newly elected state Labor government postponed local government elections, warning councils of the need to consider structural reform. The minister formally launched the consolidation process on the 30th of July 2003, however only 15 out of 172 councils submitted merger proposals (87 councils submitted proposals suggesting no change) (NSW Department of Local Government 2004). The process resulted in the formation of 21 new councils which began operations on various dates throughout the first five months of 2004.

For their part, councils have resisted forced mergers. In 2016, after the study period of this paper, the NSW state government abandoned a pair of forced consolidation efforts due to council resistance, court challenges, and fears of electoral backlash (Glanville and Stuart 2017). In a case study of five of the forced mergers of 2004, the following was said of each.

"No planning was undertaken by the State Government for implementation of the amalgamation and no planning or implementation support was offered before or after the amalgamation. Likewise, no planning took place at the Local Government level in advance of the amalgamation given that the former Councils and communities were opposed to it (Jeff Tate Consulting 2013, 22)." [9]

Prior to the 2004 mergers, the state government maintained a policy of no forced mergers. However, it did encourage councils to explore ways to increase cooperation and resource sharing. This position was echoed by the Local Government Association of NSW and the Shires Association of NSW, whose position was that structural change was inevitable and it was in the interest of councils to be proactive in implementing structural changes (LGNSW 2015). Reform efforts peaked in 1999 when the state government invited councils to participate in structural reform and made three changes to the Act to facilitate voluntary mergers (NSW Department of Local Government 2000):

1. Elections were deferred to allow councils to focus on consolidation
2. Greater consideration was given to community views via main surveys of residents via mail surveys
3. Provision was made for equitable rate adjustment in areas subject to consolidation

These efforts resulted in eight proposals (involving 24 councils) and four new councils (from eight former councils) which began operations at various dates throughout 2000 and 2001. A critical difference between these and the forced mergers is the continued support of each to-be-merged council was required if the merger was to occur (Tiley 2010). This often proved to be an insurmountable obstacle, four of the proposals failed due to one or more councils withdrawing support. The consent requirement is also important in distinguishing the two merger types because it implies that, unlike forcibly merged councils, those merging voluntarily were abreast

of developments in the merger process, were incentivized to cooperate/negotiate to achieve their desired outcomes, and ultimately had the power to affect outcomes.

Data & Hypothesis Testing

Data

The primary data for this study comes from financial reports submitted annually by councils to the NSW Office of Local Government (OLG) and covers the period 1996 through 2011.[10] Total expenditures, employee costs, material and contracting costs, and 'other' expenditures (all scaled by council population) are used as outcome measures, however, these expenditure items are not reported prior to 1999.

A negative relationship between municipal size and total per capita costs is expected if consolidation enables councils to capitalize on economies of scale. Employee costs, materials, and contracts capture spending that falls under the umbrella of administrative costs. Larger councils should be able to reduce employee costs by eliminating duplicative positions and save on material and contracting expenses through bulk purchasing and an ability to negotiate better deals with consultants and outside service providers (Steiner and Kaiser 2017). Finally, consolidation will result in a decline in 'other' expenditures if political actors opt to cut spending on non-core functions where the political costs are lower, all else equal.

The selection of control variables is motivated by theory and previous studies. The literature identifies three general factors that should be controlled for: population, income, wealth, and demographic characteristics (Boyne 1995). In a study on economies of scale in NSW and Victorian councils, Abelson (1981) includes median household income, dependents as a

proportion of population, political affiliation, growth rate of the local government area, number of households, household density, and the amount of federal grants per household as control variables. Population density may influence expenditure if it is positively correlated with population (Holcombe and Williams 2009). Therefore, this research includes average income per worker, the share of council population under 20 and over 70, the amount of grants received per capita and population density as control variables.

The data on wage earners and income is published by the Australian Bureau of Statistics (ABS). The age data originates from the ABS and was retrieved from NSW Ministry of Health who collated the data. Also from ABS are local government boundary maps and a population density map used in the construction of synthetic councils, described in the following section.

Hypotheses

As previously discussed, economic theory as well as positions taken by state and national policymakers suggest consolidation will lead to more efficient municipal governance. However, much of the empirical evidence does not support this presumption. One explanation is that economies of scale do not exist in municipal government. If this is the case, then neither voluntary nor forced mergers will produce spending reductions. On the other hand, it is possible local government services are characterized by economies of scale *and* increasing the size of municipal governments is sufficient to reduce costs. If this is the case, then a decline in per capita expenditures should be detected in both treatment groups. This gives the first hypothesis:

Hypotheses 1: Mergers will decrease total expenditures for all local governments.

An explanation more consistent with the mixed findings in the literature is that municipal government is characterized by scale economies, but this does not a guarantee cost savings will

be realized through consolidation (Reingewertz 2012). This paper seeks to test the premise that an ability and/or willingness of local officials to capitalize on the cost saving opportunities mergers present is necessary to achieve spending reductions through size. Because local officials are typically opposed to forced mergers whereas local officials involved in voluntary mergers are engaged in the process larger spending decreases are expected when mergers are voluntary. Therefore, the second hypothesis tested is:

Hypotheses 2: There will be greater decreases in spending when councils merge voluntarily than when merger is forced.

However, even in cases where local leaders are cooperative with consolidation efforts, they may be disinclined to make politically sensitive changes, preferring to make adjustments at the margin. This leads to the final hypothesis:

Hypotheses 3: In both treatment groups, there will be spending reductions in marginal spending categories, represented by 'other expenditures', but not in politically sensitive categories, represented by 'employee costs'

Council Construction

Data is only available for the merged council's composite parts prior to merger, which are not directly comparable to the single council observed post consolidation. This problem is typically solved by aggregating the data of to-be-merged councils and scaling by population, giving greater influence to the council with the larger population (Reingewertz 2012, Gaffney and Marlowe 2014, Blom-Hansen et al., 2016). This approach is not applicable to NSW because the majority of forced mergers did not combine two existing councils. Rather, Council Z_{new} may be composed of the entirety of Council A_{old}, 70 percent of the land area of Council B_{old} and 22

percent of Council C_{old}'s area. Therefore, the approach of Rouse and Putterill (2005) is employed, whereby synthetic councils are constructed as linear combinations of the data of the to-be-merged councils.

To construct the synthetic councils, local government boundary maps in the year immediately before and after amalgamation are used to calculate the area of each segment of the divided councils. However, stopping here would ignore the influence of population on service demand. For example, perhaps the 22 percent land area of C_{old} used to create Z_{new} is sparsely populated, containing only five percent of C_{old}'s population. Ignoring this fact would overstate C_{old}'s impact on the synthetic Z_{new}'s pre-merger expenditures. To account for the spatial distribution of the population, a population density map is combined with the boundary maps and the data of each council segment is weighted by the share of (original) council population residing in that segment. New councils are then created as a linear combination of the composite councils.

Empirical Strategy and Results

Figure 1 provides a time series depiction of the group means in the main dependent variables of interest to the empirical analysis in the forced, voluntary, and control groups prior to their actual merging. The control group consists of councils that were not involved in a merger. Treatment year is defined as the first year new councils reported a financial statement, which was 2004 in the case of forcible mergers and varied between 1999 and 2001 for voluntary mergers. Due to this variation, treatment year is not indicated in figure 1.

Insert Figure 1 Here

Figure 1 shows a similar trajectory in trends in both treatments and control groups in the pre-treatment period which is supportive of the necessary assumptions for causal inference in the difference-in-differences design as it accounts for any time varying confounding factors.[11] Councils are followed over an extended post period because efficiency gains are most likely emerge over time as councils adjust to the new institutional structures, change management, buy new equipment, train employees in new roles, etc. According to figure 1, average total expenditure and employee costs in voluntary merged councils decline in the post-treatment period, eventually dipping below the control group average. When amalgamation is forced, however, the trend closely tracks that of the control group throughout the sample period.

Table 2 suggested potential selection bias in case of forcible mergers. This is addressed through the use of an alternate control group accounting for potential bias originating from the choices of the minister (Reingewertz 2012; and Allers and Geertsema 2016). Because the state selects councils for forcible merger on the basis of financial viability 22 unmerged councils whose finances were monitored by the DLG in at least one year between 2000 and 2004, are employed as an alternate control group. This reduces potential selection bias by ensuring consolidated councils are similar to control councils along financial outcomes in the pre-treatment period. Results using this alternate control group is presented in the Robustness Section of the paper.

Differences-in-Differences with Varying Treatment Years

A difference-in-differences (DiD) model interacting treatment status with a dummy indicating an observation belongs in the post period has two major limitations in the context of NSW mergers. First, it is unable to accommodate variation in treatment date. Second, because the treatment effect is averaged across post-treatment years it is not possible to detect a delay in treatment effect (Blom-Hansen et al. 2016). For example, during the forced consolidations a three year moratorium was placed on employee redundancies in consolidating councils meaning any treatment effect would be attenuated in a DiD specification estimating the average treatment effect.

To resolve these shortcomings the interaction term commonly used to estimate the treatment effect in DiD designs is replaced with a series of dummies, $t_{k,}$ equal to 1 if a council was merged *k* years ago.[12] The model also includes control variables, council and year fixed effects and clusters standard errors at the council level.

$$\text{Fiscal}_{it} = \beta_0 + \beta_1 Merge_{it}^{k} + \beta_2 X_{it} + \delta_i + \lambda_t + \varepsilon_{it} \qquad (1)$$

Before proceeding the small number of clusters must be addressed. A small number of clusters can lead to downwardly biased standard errors which raises the possibility of type I error (Cameron and Miller 2015).[13] The basic issue posed by a finite number of clusters is that the true distribution of the estimated test statistic is unknown. The permutation test allows for accurate inference by enabling the comparison of the empirical test statistic to a distribution of test statistics generated under placebo conditions.

Because there are four observations in the voluntary treatment group and 21 in the forced group, a cluster permutation test is used to correct for potential bias in the standard errors. The test proceeds as follows, treated councils are removed from the sample and treatment status is

randomly assigned to *c* councils where *c* is equal to the number of councils that actually received treatment. Equation (1) is estimated using the placebo treatment group, with the remaining councils acting as controls. Coefficient estimates and standard errors are stored and the process is repeated 10,000 times for voluntarily and forcibly merged councils. Afterwards a t-statistic t_i is calculated for each repetition. The p-value is calculated as the number of times the absolute value of t_i is greater than the absolute value of the empirical t-statistic (the t-statistic from the original regression).

The permutation test is employed only in cases where a statistically significant treatment effect was detected. Table 3 displays the results for total expenditures. Along with coefficient estimates and their standard errors, p statistics from the permutation test are presented. This is done to highlight the importance of the correction. Control variables are included in each specification; however, their inclusion does not alter the size or significance of the treatment effect estimates and as such they are not shown here.

Insert Table 3 Here

I now turn to the results of the differences-in-differences analyses. The first two columns of table 3 show treatment effects for total expenditures. The first thing to highlight is the difference in the magnitude of the estimates between treatment groups. The largest decrease in spending among the forced merger occurred six years after consolidation when, holding all else constant, total per capita expenditure in forcibly merged councils was 2.9 percent lower than total per capita expenditure in control councils. This treatment effect is less than the smallest

yearly spending reduction in the voluntary merger group (setting aside the transition year) where yearly treatment effects estimates ranged from -5.7 to -20.4 percent.[14]

The last column of table 3 displays the p-values generated through the permutation test for the estimates in the voluntary merger group. The significance level of several point estimates is reduced, implying the standard errors in the main specification are biased downwards. For example, the five percent level statistical significance of the treatment effect one year after voluntary merger is negated in the permutation test to a p-value of 0.176. Still, many point estimates remain significant after the permutation test increases the size of the standard errors, two-to-five years following treatment, voluntary mergers reduced per capita spending by between 8.6 and 10.5 percent. These results are highly significant and consistent with the nine percent average treatment effect found in Reingewertz (2012).

Insert Table 4 Here

Table 4 continues the analysis, presenting results for the three largest expenditure categories, employee costs, materials and contracts and other expenditures. Estimates provide no evidence that mergers lead to reduced staff or daily operating expenses, even as late as eleven years after consolidation.[15] A possible explanation is that consolidation does not provide an opportunity to reduce staffing levels, however, this seems unlikely given the three year ban on redundancies. A more plausible explanation is local officials are reluctant to fire employees, a result consistent with the third hypothesis, local officials will avoid difficult and/or politically sensitive changes. Nevertheless, the result is somewhat surprising as over the longer term

managers could lower employee costs while avoiding difficult choices by opting not to replace staff who retire or find employment elsewhere. In terms of daily operating expenses, it appears councils are not able to achieve savings by negotiating more substantively favorable contracts with suppliers or through bulk purchasing.

There is also no evidence of spending reductions in other expenditures under forced mergers. However, voluntary mergers see substantive, sustained declines in the category that are highly significant even after the standard error correction. As in total expenditures the effect of consolidation takes two years to manifest, but unlike total expenditures the significant declines are sustained throughout the post period. A reduction in other expenses following consolidation provides additional support for the second and third hypotheses, councils are more likely to make adjustments at the margin and spending decreases are larger when councils merge voluntarily.

For a richer perspective on the permutation testing in table 4, figure 2 provides the corresponding histograms for each post-treatment year when other expenditures is the dependent variable.

Insert Figure 2 Here

The vertical line in each graph represents the value of the empirical t-statistic and the distribution consists of the t-statistics generated under the placebo treatment. In the absence of a treatment effect the value of the original t-statistic will fall in the body of the null distribution. Figure 2 shows that after the first two years the red line moves into the tail of the distribution, an unlikely event under the null hypothesis of no effect.

Robustness

Few Councils

Like much of the previous research on government consolidations, one weakness of this study is the small number of councils undergoing voluntary merger. Ordinary least squares regression estimates the effect of consolidation on the average value of the given expenditure measure, holding other variables constant. The small number of treated units raises the possibility that estimates are sensitive to the composition of the treatment group. If this is the case estimated treatment effects do not accurately capture the average effect of consolidation, meaning the results have low external validity.

To test whether results are unduly influenced by one council treatment effects are estimated after dropping each treated council in turn. Table 5 provides these results for the main outcome of interest, total expenditures. Estimates for the other dependent variables are not affected and thus are not presented here; an exception is employee costs when dropping a large urban council changes treatment effect estimates. The asterisks in table 5 indicate initial significance level after making the standard error correction.

Insert Table 5 Here

Total expenditure estimates are robust to the composition of the treatment group. Estimates remain (in)significant regardless of which council is dropped. They also remain negatively signed and change little in magnitude. For example, two years after merger the largest change from the main result (shown in column 1) is 3.1 percentage points, and five years after merger the largest change is .07 percentage points. The exclusion of Canada Bay (CB), a large

urban council, tends to have the greatest effect. When Canada Bay is dropped from the analysis, the remaining councils experience decreases in employee costs of up to 27 percent. It is possible these relatively sparsely populated councils had a greater degree of duplication in staff roles compared to Canada Bay and thus were more able to reduce staff. It is also consistent with the observation that urban councils provide a wider array of services, which may provide more opportunities to reassign staff within the council as an alternative to redundancy.

Alternate Control Group

If the most inefficient councils were selected for merger by the local government minister based on predicted expenditure benefits treatment effects may be the result of unobserved characteristics of those councils rather than economies of scale achieved via consolidation. This threat can be addressed by comparing councils that were forcibly merged to councils under financial monitoring by the DLG in at least one year between 2000 and 2004. Collectively, these councils are referred to as the 'Financial Hardship' control group.[16] Table 6 presents year specific treatment effects for forced mergers obtained using both the full set of control councils (columns 1 and 3) and the 'Financial Hardship' control group (columns 2 and 4). Results are presented for total expenditures and other expenditures.

Insert Table 6 Here

In the case of both outcome variables, the choice of control group does not change the significance of estimated treatment effects. Regardless of the choice of control group estimates are small in magnitude and statistically insignificant.

Discussion and Conclusion

This study contributes to the growing body of quasi-experimental studies of municipal consolidations, finding that, on average local government mergers did not result in a significant reduction in total expenditures. It also expands the literature by taking up the question of *why* mergers often fail to deliver the promised efficiency gains. This is critical from a policy standpoint as the relevant question is not 'should state and national governments pursue consolidations as a method of local government sector reform?' but 'how can municipal consolidation policy be designed and implemented so mergers achieve the desired outcomes?'.

This article speaks to the latter question by comparing outcomes in local governments that opted into consolidation and local governments where consolidation was forced upon them. Results did not support the first hypothesis, that all else equal consolidations reduced the overall per capita cost of government. However, councils that merged voluntarily experienced significant declines in both total and other expenditures per capita; providing support for the second hypothesis, there will be greater spending declines when consolidations are voluntary. This finding, combined with the lack of decline in employee costs in either treated group, lends support to the third hypothesis, local decision makers are more inclined to make changes in marginal rather than core operational areas. Additionally, it appears new councils required a number of years to adjust to consolidation as they did not realize cost savings until more than two years after merger. This is consistent with the findings of Blom-Hansen et al. (2016) and the general observation that consolidation is challenging and costly in the short term. Robustness checks are included to account for the small number of consolidated councils as well as potential selection bias, a concern running throughout the literature on municipal mergers. Although

endogeneity concerns cannot be completely eliminated, particularly in the case of 'other' expenditures, results are generally robust to both concerns.

The overall finding of the paper, governments that merged voluntarily were able to reduce spending while forcibly merged councils were not, is attributed to the stark differences in local council involvement in the merger process. Both groups of councils were equally placed to capture gains from economies of scale, that one group was successful in doing so while the other failed suggests that, for the most part, efficiency gains should be viewed as potential rather than automatic. Successful mergers require planning, support and cooperation between levels of government and must be operationalized through choices made by local decision makers.

Testing this finding in other countries where local governments provide a wider range of service is a promising area for further work. Additionally, future research is needed into how other characteristics of merger regimes relate to spending outcomes, so scholars and policy makes can begin to untangle when consolidations achieve the promised efficiency gains and why they fail. The study of municipal mergers would benefit from a deeper understanding of the incentives and constraints faced by local government officials and how they impact on expenditure outcomes.

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Notes

1. The terms “forced” and “voluntary” are commonly used in the Australian discourse to describe mergers.
2. For example, Reingewertz (2012) and Cobban (2017) study expenditures in 11 and 16 consolidated municipalities respectively.
3. Administrative costs are a common outcome measure in consolidation studies and can loosely be interpreted as employee costs as both are intended to measure the cost of running the political system (Blom-Hansen et al. 2014). For example, Cobban (2017) uses employee costs as a proxy measure of administrative costs.
4. P*er unit* cost of government output is the ideal measure of municipal efficiency. However, as this measure is almost always unavailable, papers in the municipal consolidation literature use *per capita* spending to test for evidence of economies of scale in local government. See Holcombe and Williams (2009) or Byrnes and Dollery (2002) for an extended discussion of this issue.
5. Blom-Hasen et al. also make this point, “The most relevant cost effects relate to the size of the school, not that of the school district (2016, 815).”
6. There is a much larger non-experimental empirical literature than can be discussed here. Interested readers may see Dollery and Ting (2017); Fahey, Drew and Dollery (2016); Drew, Kortt and Dollery (2016a) or Drew and Dollery (2016).
7. It should be noted that councils vary in their dependence on rate revenue (see Drew et al., 2015). In the data used in this paper the interquartile range on rate revenue as a percent of total revenue is 31.6 percent to 52.3 percent.
8. any local government scholars have a more critical assessment of the merger process, "Australian forced amalgamation programs follow a common pattern (Dollery et al. 2012). In the first instance, a newly elected state government typically grumbles publicly 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. (Bell, Dollery and Drew 2016, 3)"
9. This report has been criticized on the basis that it is qualitative analysis of five consolidated councils rather than a comprehensive quantitative analysis of the merged councils (Bell, Dollery and Drew 2016). It is used here only to illustrate commonly held attitudes towards forced mergers and their consequences.
10. The Department of Local Government was abolished in 2009 and its functions were transferred to the Office of Local Government.
11. Results from an empirical test validating the parallel trends assumption can be found in Table 1A of the Appendix. The coefficient estimates on pretreatment year, treatment interactions are not statistically significant, indicating trends in spending were similar in merged and non-merged councils prior to consolidation.
12. This approach has been used in the study of municipal mergers (Blom-Hansen et al. 2016). It has also been used in other contexts, for example in the study of the effect of liberalizing divorce laws on incidences of domestic violence (Stevenson and Wolfers 2006)
13. The number of clusters that constitutes “too few” is dependent on characteristics of the data. As a rule of thumb any number under 50 suggests robustness tests are in order.
14. To ensure the coefficients are understood correctly, in year 11 on table 3 the 20.4 percent figure is not a year-over-year change from the no merger reference case, but rather implies that 11 years after the merger expenditures are lower than the comparison case by 20.4 percent.
15. The estimates on ten and eleven years post-merger are identified off changes in two and one councils respectively.
16. Table 2A in the Appendix presents summary statistics table with a difference in means test (similar to table 2) using the ‘Financial Hardship’ control group.

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Table 1: Quasi-Experimental Evidence of Consolidation of Local Government Expenditures

Author	Data (Year of Merger)	Country Studied	Forced or Voluntary	# of Municipalities Involved	Results[d]
Reingewertz (2012)	1999-2007 (2003)	Israel	Forced	23 (into 11)	9% decrease in expenditures
Moisio & Uusitalo (2013)	1970-1981 (varies)	Finland	Voluntary	?[c] (into 82)	No evidence of reduction in total expenditures
Blom-Hansen et al. (2016)	2003-2014 (2007)	Denmark	Forced[a]	239 (into 66)	Reduction in administrative spending, no reduction in total expenditures.
Blom-Hansen, Houlberg & Serritzlew (2014)	2003-2014 (2007)	Denmark	Forced[a]	239 (into 66)	Reductions in administrative costs
Allers & Geertsema (2016)	1997-2011 (varies)	Netherlands		572 (into 418)	No evidence of reduction in total expenditures
Blesse & Baskaran (2016)	1995-2010 (2001-2003)	Germany, Brandenburn	Mixed[b]	1319 (into 266)	Reduction in total expenditures in forced mergers, no reductions in cases of voluntary merger
Cobban (2017)	1995-2002 (varies)	Canada, Ontario	Forced	587 (into 146)	Reduction in administrative employee costs

Notes: (a) Municipalities were required to merge but were able to choose their merging partner(s) (Blom-Hansen et al. 2106, 20); (b) Municipalities with populations under 5,000 were given time to negotiate municipalities among themselves with the knowledge that if they failed to do so they would be subject to forced consolidation; (c) The authors do not explicitly state the pre-merger number of municipalities involved in consolidation. (d) All results discussed in per capita terms.

Table 2 Voluntary and Forcibly Merged Council Summary Statistics (Pre-treatment Period)

	Merger Groups			t-test of Group Means[c]	
	Voluntary	Forced	Non-Merged[b]	Voluntary vs Non-Merged	Forced vs Non-Merged
Population	26,914	24,349	46,445	.0859*	.0000***
	(22,204)	(24,963)	(54,650)		
Population density (per km^2)	821	214	757	.9822	.0000***
	(1,340)	(844)	(1,458)		
Percent of population under 20[1]	.278	.280	.282	.6435	.5242
	(.044)	(.035)	(.038)		
Percent of population over 70[1]	.103	.094	.097	.1570	.1286
	(.013)	(.020)	(.026)		
Income per worker[1]	30,465	31,000	31,929	.7523	.1366
	(6,957)	(4,273)	(8,394)		
Number of employees	168	274	269	.0684*	.7738
	(95)	(357)	(251)		
Total expenditures[a]	1,470	1,498	1,304	.3887	.0079***
	(819)	(403)	(798)		
Employee costs[a]	494	516	458	.4483	.0173**
	(311)	(146)	(268)		
Materials & contracts[a]	401	383	365	.5275	.4791
	(237)	(105)	(282)		
Other expenditures[a]	215	170	138	.0001***	.0001***
	(115)	(88)	(86)		
Total revenue	1,328	1,509	1,302	.5739	.0003***
	(744)	(416)	(766)		
Residential rates	392	401	436	.4424	.0135**
	(180)	(131)	(188)		
Business rates	2,417	1,828	1,789	.3667	.7785
	(1,003)	(1,885)	(1,504)		
Grants	433	381	350	.1412	.2541
	(489)	(193)	(362)		
N	25	189	1,114		

Notes: All revenue and expenditure variables are expressed in per capita terms except for rates which are scaled by number of properties. Standard deviations in parentheses. All variables are presented in level form however are logged for the purpose of statistical analysis. (a) Because these variables are not reported in every year the number of observations is 13, 26 and 743 in the first second and third columns respectively. (b) The pre-treatment period for non-merged municipalities is 1996-2004. (c) p-values presented

Sources: (1) Australian Bureau of Statistics. All other data comes from NSW Comparative Information on Local Government Councils Reports, NSW Office of Local Governments

Table 3: DiD Yearly Treatment Effect Estimates of Voluntary and Forced Consolidation on Major Expenditure Categories

	Total Expenditure		Total Expenditure (Permutation)
	(Vol)	(Forced)	(Vol: p-value)
Trt Yr	.004	-.017	.950
	(.04)	(.02)	
1 Yr	-.057**	-.024	.176
	(.03)	(.02)	
2 Yr	-.100***	.007	.043**
	(.03)	(.03)	
3 Yr	-.105***	-.003	.003***
	(.02)	(.02)	
4 Yr	-.104***	.009	.005***
	(.02)	(.04)	
5 Yr	-.086***	-.017	.005***
	(.01)	(.03)	
6 Yr	-.120	-.029	.300
	(.08)	(.03)	
7 Yr	-.174**		.170
	(.18)		
8 Yr	-.103		.424
	(.09)		
9 Yr	-.127***		.051*
	(.05)		
10 Yr	-.197***		.047**
	(.05)		
11 Yr	-.204***		.117
	(.04)		
N	1,658	1,875	
Controls	✓	✓	✓
Council FE	✓	✓	✓
Time FE	✓	✓	✓

Notes: Reported are the coefficients and standard errors for treatment effects from Equation 2 for each treatment group. Standard errors clustered by municipality are reported in in parentheses. *'s in (Vol) and (Forced) columns indicate significance levels from the original regression. *'s in the (Vol: p-value) column indicate the significance levels given by the permutation test and correspond to the p values reported in the table.
*p < .1, **p < .05, *** p <.01

Table 4: DiD Yearly Treatment Effect Estimates of Voluntary and Forced Consolidation on Components of Total Expenditures

	Employee Costs		Materials & Contracts		Other Expenditure		Other Expenditure (Permutation)
	Vol	Forced	Vol	Forced	Vol	Forced	Vol: p-value
Trt Yr	.065	.008	-.049	-.047	.104	-.041	.797
	(.16)	(.03)	(.07)	(.05)	(.26)	(.05)	
1 Yr	-.015	-.013	-.078	-.098*	-.126	.022	.583
	(.16)	(.03)	(.08)	(.06)	(.15)	(.05)	
2 Yr	-.025	-.032	-.103	.023	-.331***	-.016	.003***
	(.17)	(.03)	(.10)	(.07)	(.06)	(.06)	
3 Yr	-.060	-.010	-.069	-.023	-.303***	.021	.015**
	(.16)	(.03)	(.11)	(.06)	(.08)	(.07)	
4 Yr	-.023	.009	-.130	-.045	-.277***	-.014	.058*
	(.15)	(.03)	(.11)	(.06)	(.10)	(.07)	
5 Yr	.005	.000	-.088	-.047	-.369***	-.044	.033*
	(.15)	(.03)	(.11)	(.05)	(.11)	(.07)	
6 Yr	-.065	-.001	-.086	-.040	-.405***	.081	.023**
	(.18)	(.03)	(.16)	(.06)	(.11)	(.08)	
7 Yr	-.043		-.232		-.472***		.003***
	(.18)		(.14)		(.08)		
8 Yr	-.038		.013		-.448***		.031**
	(.21)		(.17)		(.13)		
9 Yr	-.012		-.251*		-.398***		.033**
	(.18)		(.14)		(.12)		
10 Yr	-.104		-.134		-.610***		.020**
	(.18)		(.09)		(.12)		
11 Yr	-.024		-.026		-.453***		.123
	(.15)		(.09)		(.10)		
N	1,658	1,875	1,658	1,875	1,658	1,875	
Controls	✓	✓	✓	✓	✓	✓	✓
Council FE	✓	✓	✓	✓	✓	✓	✓
Time FE	✓	✓	✓	✓	✓	✓	✓

Notes: Reported are the coefficients and standard errors for treatment effects from Equation 2 for each treatment group. Standard errors clustered by municipality are reported in in parentheses. *'s in (Vol) and (Forced) columns indicate significance levels from the original regression. *'s in the (Vol: p-value) column indicate the significance levels given by the permutation test and correspond to the p values reported in the table.

*p < .1, **p < .05, *** p <.01

Table 5: Robustness Check of Sensitivity to Treatment Group Composition of DiD Estimates in Voluntary Mergers

	Total Expenditures					Employee Costs	
	None	**AD**	**RV**	**CB**	**CN**	**None**	**CB**
Trt Yr	.004	.018	-.041	.006	.040	.065	-.135*
	(.04)	(.05)	(.02)	(.06)	(.04)	(.16)	(.05)
1 Yr	-.057	-.069	-.045	-.078	-.031	-.015	-.217***
	(.03)	(.03)	(.03)	(.03)	(.03)	(.16)	(.03)
2 Yr	-.100**	-.093*	.119**	-.111*	-.069**	-.025	-.211
	(.03)	(.03)	(.03)	(.04)	(.02)	(.17)	(.10)
3 Yr	-.105***	-.102***	-.109***	-.111**	-.088***	-.060	-.244*
	(.02)	(.01)	(.02)	(.02)	(.01)	(.16)	(.09)
4 Yr	-.104***	-.091**	-.096**	-.113***	-.106***	-.023	-.206***
	(.02)	(.02)	(.02)	(.02)	(.01)	(.15)	(.04)
5 Yr	-.086***	-.081***	-.093***	-.080**	-.081**	.005	-.182***
	(.01)	(.02)	(.01)	(.02)	(.02)	(.15)	(.04)
6 Yr	-.120	.181	-.093	-.080	-.081	.005	-.182***
	(.08)	(.07)	(.01)	(.02)	(.02)	(.15)	(.04)
7 Yr	-.174	-.233*	-.199	-.175	-.081	-.043	-.261**
	(.18)	(.08)	(.10)	(.12)	(.05)	(.18)	(.07)
8 Yr	-.103	-.137	-.173	-.091	.004	-.038	-.270*
	(.09)	(.11)	(.09)	(.13)	(.06)	(.21)	(.11)
9 Yr	-.127*	-.148**	-.142*	-.084**	-.125	-.012	-.226*
	(.05)	(.05)	(.05)	(.03)	(.06)	(.18)	(.07)
10 Yr	-.197**	-.260***	-.163**	-.195*	-.163*	-.104	-.279
	(.05)	(.04)	(.04)	(.06)	(.05)	(.18)	(.10)
11 Yr	-.204	-	-.217	-.202	-.169	-.024	-.209
	(.04)		(.04)	(.05)	(.03)	(.15)	(.06)
N	1,658	1,645	1,645	1,645	1,645	1,658	1,645
Controls	✓	✓	✓	✓	✓	✓	✓
Council FE	✓	✓	✓	✓	✓	✓	✓
Time FE	✓	✓	✓	✓	✓	✓	✓

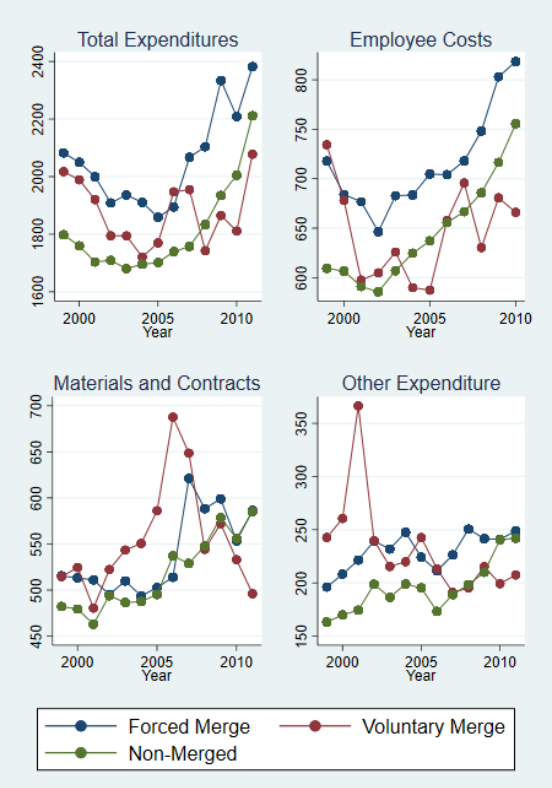
Notes: Reported are the coefficients and standard errors for treatment effects from Equation 2 for each treatment group after dropping one treated council. Standard errors clustered by municipality are reported in in parentheses. *'s indicate the significance levels given by the permutation test
*p < .1, **p < .05, *** p <.01

Table 6: Controlling for Selection Bias in Forced Mergers: Different Control Groups

	Total Expenditures		Other Expenditures	
	All Control Councils	Financial Hardship Councils	All Control Councils	Financial Hardship Councils
Trt Yr	-.017	.007	-.041	-.036
	(.02)	(.03)	(.05)	(.09)
1 Yr	-.024	.010	.022	.075
	(.02)	(.03)	(.05)	(.09)
2 Yr	.007	.059	-.016	.057
	(.03)	(.04)	(.06)	(.10)
3 Yr	-.003	.037	.021	.066
	(.02)	(.04)	(.07)	(.10)
4 Yr	.009	.025	-.014	-.054
	(.004)	(.06)	(.07)	(.14)
5 Yr	-.017	-.000	-.044	-.001
	(.03)	(.04)	(.07)	(.11)
6 Yr	-.029	.020	.081	.058
	(.03)	(.04)	(.08)	(.11)
N	1,875	554	1,875	554
Controls	✓	✓	✓	✓
Council FE	✓	✓	✓	✓
Time FE	✓	✓	✓	✓

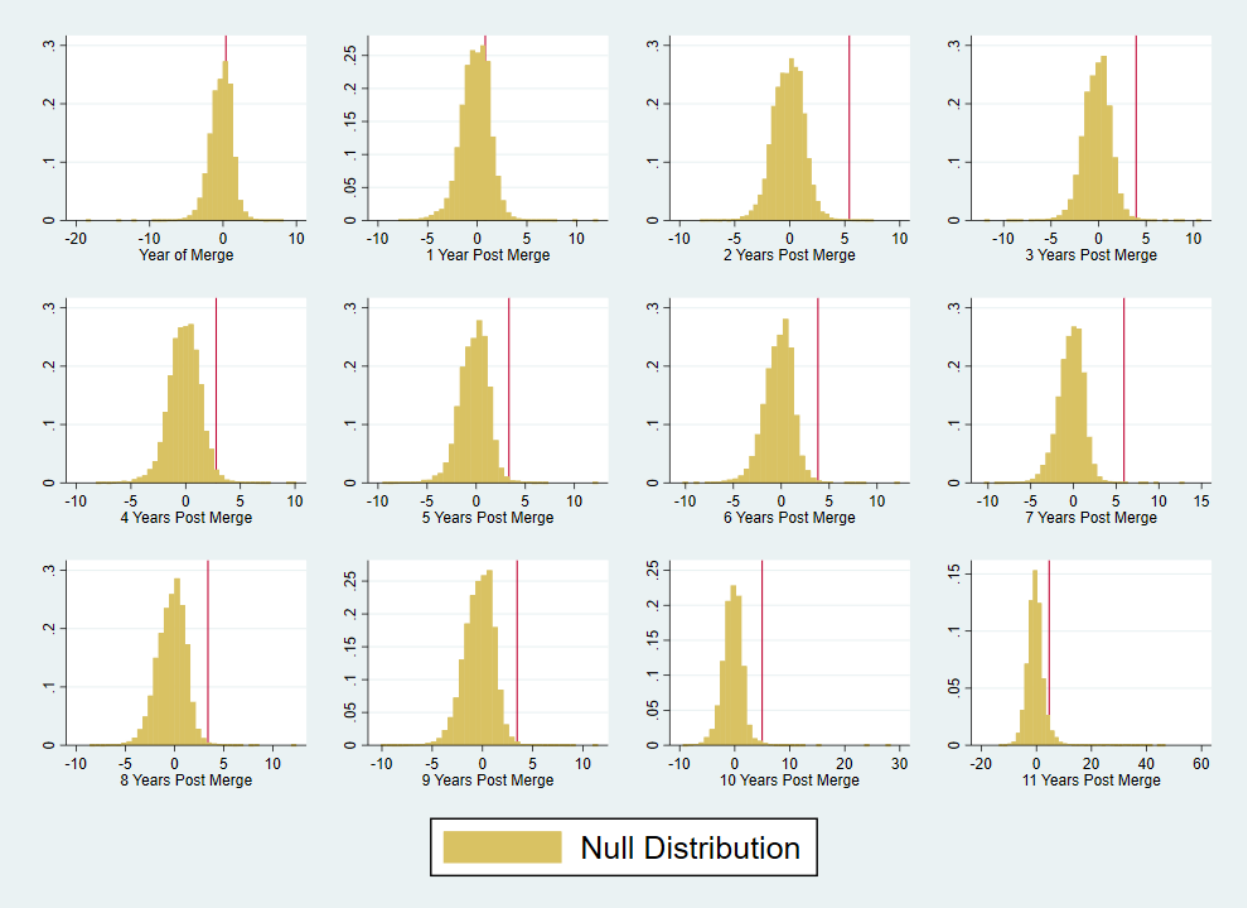
Notes: Dependent variables are total expenditures and other expenditures. Columns 1 and 3 present the results from the main analysis generated using the full set of control councils. Results under the limited set of controls to address potential selection bias are presented in columns 2 and 4. Standard errors are clustered by municipality and reported in in parentheses. *'s represent significance levels given by the permutation test

Figure 1: Per Capita Group Means on Dependent Variables: 1999-2011



Notes: Non-merged trend line represents average values for councils that were not consolidated. Forced merge and voluntary merge trends capture average values for councils that were engaged in forcible and voluntary mergers respectively. All values in 2011 AUD.
Source: NSW Comparative Information on Local Government Councils Reports, NSW Office of Local Governments.

Figure 2: Permutation Test Correction for Downwardly Biased Standard Errors: 'Other' Expenditures



Notes: Histograms depict the distribution of t-statistics on DiD treatment effects for other expenditures from Equation 1 when treatment was randomly assigned to control group councils. Equation 1 was iterated 10,000 times to generate the null distributions in figure 2. The top left histogram year depicts t-statistics on treatment effects in the year of merger while each following histogram represents the following year in the post-merger period. The red line represents the empirical t-statistic on the treatment effect, i.e. the treatment effect estimate from councils that were consolidated. An empirical t-statistic in the tails of the distribution is unlikely under the null hypothesis of no effect.

Appendix

Table 1A: Parallel Trends Test: Forced Mergers vs Full Set of Controls

	Total Expenditure		Employee Costs		Materials and Contracts		Other Expenditure	
	Vol	Forced	Vol	Forced	Vol	Forced	Vol	Forced
Treat*1999	-.006	-.001	-.032	-.030**	-.025	.002	.063	.044
	(.01)	(.03)	(.03)	(.01)	(.08)	(.06)	(.04)	(.06)
Treat*2000	.046	.003	-.107**	-.018	.012	.022	.386	.032
	(.06)	(.02)	(.04)	(.02)	(.10)	(.05)	(.31)	(.06)
Treat*2001	.001	-.049	.052	-.053**	.013	-.072	-.067	.035
	(.04)	(.03)	(.16)	(.02)	(.11)	(.06)	(.16)	(.07)
Treat*2002	.	-.027	.	-.040	.	-.046	.	.055
		(.03)		(.03)		(.07)		(.07)
Treat*2003	.	-.047	.	-.065**	.	-.072	.	.081
		(.03)		(.03)		(.06)		(.08)
Treat*2004	.	-.050	.	-.044	.	-.087	.	.026
		(.03)		(.04)		(.07)		(.07)

Notes: Dependent variables are listed in the first row. Standard errors are clustered at the council level.

Table 2A: Difference in Means: Forced Mergers and Financial Hardship Control Group (Pre-treatment Period Only)

	t-test of Group Means[b]
Population	.7234
Population density (per km^2)	.1027
Percent of population under 20[1]	.0048***
Percent of population over 70[1]	.2209
Income per worker[1]	.0817*
Number of employees	.0014**
Total expenditures[a]	.7032
Employee costs[a]	.4537
Materials & contracts[a]	.0039***
Other expenditures[a]	.7651
Total revenue	.6198
Residential rates	.2419
Business rates	.0010***
Grants	.1007
N	387

Notes: All revenue and expenditure variables are expressed in per capita terms except for rates which are scaled by number of properties. Standard deviations in parentheses. The pre-treatment period 1996-2004. All variables are presented in level form however are logged for the purpose of statistical analysis. (a) Because these variables are not reported in every year the number of observations is 258. (b) p-values presented
Sources: (1) Australian Bureau of Statistics. All other data comes from NSW Comparative Information on Local Government Councils Reports, NSW Office of Local Governments

Table 3A: List of Merged Councils and Corresponding Treatment Year

Voluntary Mergers		Forced Mergers	
Council Name	Treatment Year	Council Name	Treatment Year
Armidale Dumarseq	1999/00	Albury	2004/05
Richmond Valley	2000/01	City of Lithgow	2004/05
Canada Bay	2001/02	Bathurst	2004/05
Conargo	2001/02	Clarence Valley	2004/05
		Cooma-Monaro	2004/05
		Corowa	2004/05
		Glenn Innes	2004/05
		Goulburn Mulwaree	2004/05
		Greater Hume	2004/05
		Gwydir	2004/05
		Liverpool Plains	2004/05
		Mid-Western Regional	2004/05
		Oberon	2004/05
		Palerang	2004/05
		Queanbeyan	2004/05
		Sydney	2004/05
		Tamworth Regional	2004/05
		Tumut	2004/05
		Upper Hunter	2004/05
		Upper Lachlan	2004/05
		Yass Valley	2004/05

Notes: Listed here is the first year the new merger submitted an annual financial report (i.e. Treatment Year). In the case of forced mergers, Conargo and Richmond Valley this is the same year the new councils began functioning as a single unit. Canada Bay began operations on 1 December 2000 but did not submit a financial report until the following year. Armidale Dumarseq submitted a financial report in 1999 even though the council was proclaimed on 18 February 2000.

Figure 1A: GENERAL OUTLINE OF THE PROCESS OF FORCED MERGERS

- A proposal for an amalgamation or a boundary change may be initiated by the Minister or it may be made to the Minister by a council or by a minimum number of electors
- On making or receiving a proposal, the Minister must refer it to the Boundaries Commission ***or the Director General*** (emphasis added by LGNSW) for examination and report
- When a proposal is referred to the Commission or director general for examination and report, they may hold a public inquiry if the Minister so approves, and must hold an inquiry if the minister so directs.
- An inquiry must be held if the proposal is one for the amalgamation of two or more local government areas. In addition, the Commission or the Director General must seek the views of electors in each of the affected areas by means of advertised public meetings, invitations for public submissions, postal surveys or opinion polls, in which reply-paid questionnaires are distributed to all electors, or a 'formal poll' (local referendum).
- If a proposal has been reviewed by the Director General, his or her report must be forwarded to the Boundaries Commission for ***comment and advice*** to the minister (emphasis added by LGNSW)
- The Minister may recommend to the governor that the proposal be implemented with such modifications as arise out of the Boundaries Commission's report, ***and with such other modifications as the minister determines (***emphasis added by LGNSW), but may not do so if of the opinion that the modifications constitute a 'new proposal'.

Notes: Quoted from LGNSW, *Amalgamations: To Merge or not to Merge* (2015, 13)

Figure 2A: Item Categories from Corwa and Sydney City's 2011/2012 Reporting of "Other Expenses" (in AUD 000's)

	Corwa Council		Sydney City Council	
	2011	2012	2011	2012
Advertising	81	73	2,761	2,930
Bad & doubtful debts	-	7	3,307	(413)
Councillor expenses- mayoral fees	21	22	175	181
Councillor expenses - councillor's fees	85	80	319	325
Councillor expenses - other	16	22	775	758
Insurance	304	402	2,960	2,613
Street lighting	185	194	4,519	4,767
Telephone & communication	106	99	1,970	2,378
Electricity & Heating	597	764		
Bank charges			1,417	1,466
Books & periodicals			175	175
Computing costs			1,354	1,148
Contributions/levies of other levels of governments			22,524	24,581
Donations, contributions & assistance to other organizations			6,924	6,535
Events & project costs			11,734	13,586
Land tax & water rates			1,370	1,680
Management fees			54	23
Other property related expenditure			259	346
Parking enforcement property share			6,498	5,688
Postage & couriers			828	974
Printing & stationary			1,805	2,003
Public domain enhancement contributions			109	193
Research & development			388	336
Security			1,022	1,059
Storage			715	608
Utilities			3,266	4,496
Other			2,480	2,518
Total	**2,168**	**2,369**	**79,437**	**80,953**

Sources: Corwa Shire Council Annual Report 2011/2012 and City of Sydney Statutory Returns and Financial Statements 2011/2012