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Is Bigger Local Government Better? An Evaluation of the Economic Case for Australian Municipal Amalgamation Programs

Brian Dollery and Lin Crase**

Abstract

Municipal amalgamation through local government restructuring programs have historically accounted for a substantial reduction in the number of councils in Australia. Proponents of municipal consolidation, convinced that ‘bigger is better’ in local governance, typically argue that substantial economic benefits will inevitably flow from fewer, larger municipal councils. Common economic arguments advanced in support of this view include economies of scale, economies of scope, local government capacity, and administrative and compliance costs. This paper seeks to evaluate the validity of the generic economic case for council amalgamation in Australia by considering both the theoretical literature and the available empirical evidence.

Key Words: amalgamation, economic efficiency, local government.

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Municipal amalgamations have been aptly described as “a thread which runs through Australian local government history” (Vince, 1997, p.151). The current process of council restructuring in NSW serves to further illustrate the enduring and apparently timeless belief by Australian state and territory policy makers that “bigger is better” in local governance. It also serves as an appropriate reminder of the need to take stock of the conceptual and empirical arguments used to champion the economic case for local government amalgamation in Australia.

While both the nature and extent of the periodic attempts at Australian municipal consolidation have been well documented (see, for instance, Jones, 1993; Chapman et al, 1997; Vince, 1997; Marshall et al, 1999; Dollery and Soul, 2000; and May, 2003), relatively little effort has been directed at identifying and evaluating the economic arguments advanced by proponents of council mergers. Moreover, the nascent literature that does exist on this aspect of Australian local government usually considers only some selected arguments surrounding a particular amalgamation program rather than the full constellation of argumentation on the economic wisdom of municipal amalgamation per se (see, for example, Institute for Public Affairs, 1993; Dollery, 1997; Witherby et al, 1999; Allan, 2001; 2003; and NSW Legislative Council, 2003). There is thus an urgent need for a comprehensive appraisal of the generic economic arguments advanced in favour of municipal amalgamation in Australia and this forms the
subject matter of the present paper. Since the paper is concerned with the validity of the *economic arguments* advanced in favour of larger, amalgamated municipalities, we will not examine the important “non-economic” debate surrounding local government mergers.

The paper itself is divided into four main parts. The first section seeks to anchor the succeeding discussion in the context of the international literature on municipal consolidation in general and the present amalgamation program in NSW in particular. Section two examines the theoretical economic arguments advanced in favour of amalgamation, whereas the third part of the paper focuses on the available empirical evidence on these theoretical arguments. The paper ends in section four with a brief synopsis of the policy implications that derive from the preceding evaluation of the theoretical and empirical literature on municipal amalgamations in Australia.

1. **BACKGROUND**

Local government in NSW is presently struggling to come to terms with the NSW state government’s apparent recent reversal of its longstanding policy of voluntary (and not compulsory) restructuring. Shortly after the March 2003 NSW state government elections, the Carr government dramatically suspended the forthcoming local government elections and announced its intention to instigate a program of wide-ranging municipal amalgamation. The stated rationale for this
policy reversal stressed the need to consolidate small and financially “unviable” rural and regional councils into larger amalgamated municipal organizations (Carr, 2003).

The proposed restructuring of a significant proportion of NSW local governments has a number of important economic implications for the local government community as a whole. For instance, while the belief in NSW and Australian municipal policy circles that “bigger is better” may make some intuitive sense, it certainly does not enjoy much empirical support. As we shall see, both the international and Australian theoretical and empirical literature on the relationship between municipal size (in population terms) and efficient service delivery (measured in cost per capita) suggests precisely the opposite; smaller local councils typically produce many, but not all, services more efficiently.

A useful way of approaching the problem is to place it squarely within the broader international and Australian experience of municipal consolidation over the long run (Dolley, Marshall and Worthington, 2003). For instance, Andrew Sancton (2000, p. 166) has pointed out that while “people in various democratic countries have been thinking and acting on proposals for municipal amalgamation for at least a century and a half”, not surprisingly in contemporary debates over amalgamation “there are no new arguments”. Similarly, in her analysis of municipal restructuring in Australia, Anne Vince (1997, p.151) has described the
gradual diminution in the number of councils across Australia since federation as “almost exclusively attributable to a program of amalgamations in every state”. Notwithstanding the long history of municipal amalgamation in western countries in general, and Australia in particular, and the mixed economic consequences of these consolidation processes, recent history is replete with numerous contemporary examples of amalgamation programs. In his *Merger Mania*, Andrew Sancton (2000) provides a useful synoptic review of amalgamation in the 1990s that illustrates that widespread municipal consolidation programs have been instituted in New Zealand, Australia (and more particularly Victoria and Tasmania), the United Kingdom, and Canada (especially Nova Scotia and Ontario). If New Zealand is excluded as a “special case” on grounds of being a “small unitary state whose central government was intent on substantial decentralization”, then it is possible to conclude that the majority of amalgamations were induced “in part by an attempt to avoid or eliminate two-tier systems that were seen as dysfunctional” (Sancton, 2000, p. 112). Moreover, “there has been a clear belief that municipal politicians and municipalities were inherently wasteful, inefficient, and incapable of cooperating with one another”. Despite substantial evidence to the contrary, policy makers sought to “save money and promote economic development by creating bigger municipalities governed by fewer elected councilors”. Much the same sentiments seem to be propelling the
NSW drive for local government amalgamation, except that the consolidation process has focused on regional and rural towns rather than the large metropolitan areas centred on Sydney, Newcastle and Wollongong.

The literature on the economics of local government amalgamation may be divided into two inter-related components. On the one hand, economists have examined local governance through the analytical prism of public economics and public choice theory within the content of the theory of fiscal federalism. This line of inquiry has generated various *ex ante* propositions, some of which are amenable to empirical testing. On the other hand, a substantial empirical body of work has considered the relationship between jurisdictional size and the economic efficiency of service delivery, primarily with a North American institutional focus. We will now examine these two approaches to amalgamation in order to see what light they can throw on the economic case for council amalgamations in Australia.

2. THEORETICAL CONSIDERATIONS

2.1. Theory of Fiscal Federalism and Optimum Community Size

A crucial aspect of the theory of fiscal federalism is concerned with the question of whether public goods and services should be provided in a federation like Australia on a centralized or decentralized basis. Put differently, which levels of government (national, state or local) should provide particular categories of public goods? The key to answering this question derives from Wallace Oates’ (1972)
correspondence principle. In essence, this principle holds that the size of a specific governmental entity should correspond to the area of benefit from the goods it provides to its citizens. Accordingly, each public good or service should thus be provided by the smallest (i.e. lowest level) government consistent with no spatial spillovers into other regions. This principle has a central bearing on the problem of local government amalgamation.

The concept of a benefit region is critical in this context. Almost all public goods have limited areas over which they confer benefits to citizens. If the spatial benefit region is limited, then the benefits of some public good will be confined to residents of the area. Some public goods are such that the incidence of their benefits is nation-wide (e.g. national defence, medical research, etc.) whereas others are geographically limited (e.g. local fire brigades, street lighting, etc.). Accordingly, the members of the group who share in the benefits of some public good are limited to the residents of a particular spatial region.

In a democracy, the political process enables citizens to express their preferences for the type of goods and services they want governments to provide. It follows that the citizens of specific benefit regions vote for the services they want and pay for these services. In other words, services that are nation-wide in their benefit incidence (like national defence) should be provided by the central government; services with local benefits (e.g. pavements) should be provided locally; still
others (such as major roads) should be provided on a regional basis. Given the spatial characteristics of government services, there is thus a *prima facie* case for multiple jurisdictions. Some services call for nation-wide provision, others for state-wide delivery, and yet others for metropolitan-area-wide or local provision. The notion of a benefit region thus provides the logical basis for the concept of an optimal community size that underlies arguments for amalgamation.

2.2. *Economies of Scale*

Economies of scale refer to a decrease in average cost as the quantity of output rises and are frequently cited as a reason for local government amalgamations. In the context of the optimal size of municipalities, economies of scale usually refer to a decrease in the cost per person for a given amount of service as population served increases. Thus, the larger the jurisdictional unit, the lower will be the per capita costs of service provision. Economies of scale typically depend on the technological nature of the production process. In particular, if high fixed costs co-exist with low or constant variable costs, then we can expect significant economies of scale to come into play.

In comparison to its counterparts in comparable countries, excepting New Zealand, Australian local government has a predominantly “services to property” orientation in terms of the goods and services it provides. Nevertheless, despite its
relative narrow range, Australian local governments still provide a wide range of goods and services that are produced by heterogeneous technological means. Accordingly, for a given benefit region, there is no a priori reason for different goods and services to exhibit the same cost characteristics. On the contrary, there is every reason to expect that no uniform pattern of economies of scale will emerge across the range of goods and services produced by Australian councils. For example, it is highly unlikely that the optimal service district for fire services will coincide with, or even resemble, optimal service districts for, say, garbage collection, public parks, or sewage treatment services (Dollery, 1997). It follows that whereas amalgamation may capture economies of scale in some outputs, it could reap diseconomies of scale in other areas. Sancton (2000, p. 74) has put the argument in a nutshell: “There is no functionally optimal size for municipal governments because different municipal activities have quite different optimal areas”.

The existence of economies of scale may not be relevant to optimal municipal size if provision of the service can be separated from production of that service (the so-called purchaser-provider split), since scale economies only arise during the production phase. Governments too small to achieve all economies of scale on their own can nonetheless accrue the advantages of any scale economies by purchasing the good or service in question from other public agencies or private
firms that are large enough production units to secure economies of scale. By contracting with commercial firms or other governments (and through analogous joint purchasing agreements with other councils, or even Regional Organizations of Councils (ROCs)), small municipalities can provide the quantity and quality of services desired by their limited number of constituents and simultaneously enjoy the cost advantages deriving from scale economies in production.

To the extent that opportunities along these lines actually exist, scale economies are thus removed as an economic argument for the optimal size of councils in the amalgamation debate. This is a critical finding from the theoretical literature on the economics of local government since economies of scale is often advanced as a key justification for amalgamation (Witherby, Dollery, Auster and Marshall, 1997).

2.3. **Economies of Scope**

Economies of scope, sometimes also called economies of joint production, refer to the economic advantages that flow from providing a broad range of goods and services in a single organization, like a municipal council. In particular, economies of scope arise when the cost of producing a given set of services in a single organization is lower than the cost of those services being produced by a number of specialized organizations. The standard explanation for this lower cost of production derives from the fact that a single organization can attribute the cost of
fixed inputs or “overheads”, like central administrative staff, computing facilities, etc., across many of the services it produces. Thus, where related services are provided by a single council, lower total production costs may follow.

In the context of the Australian local government amalgamation debate, scope economies represent an *a priori* theoretical argument against many small councils each generating their own services. It is also an argument against the fragmentation of existing large municipalities into several fully autonomous or privatised business units. However, economies of scope can support the concept of several small and adjacent municipalities forming some umbrella organization, like a ROCs, in an attempt to capture scope economies.

2.4. *Local Government Capacity*

An argument sometimes advanced in the Australian debate over amalgamation is that larger councils tend to possess greater levels of administrative and other expertise, in part due to the fact that their size permits the employment of specialist skills that cannot be acquired readily by smaller municipalities. Given the increasing burden placed on Australian local government by its state and federal counterparts, it is held that this confers a significant advantage on larger municipal units because it enables them to accomplish a wider and more complex range of tasks in a more efficient manner.
There is undoubted merit in this argument. Small regional and rural councils do struggle in terms of expertise and cannot always use consultants in an effective and prudent way. However, since it is in many respects a variant of the economies of scope argument for amalgamation, many of the same reservations apply. For instance, ROCs may also be able to pool their resources to acquire the skills in question, at no greater cost than to single and larger councils.

2.5. Administration and Compliance Costs

A further economic factor often put forward in support of local government amalgamation is that larger consolidated councils economize on their direct costs of administration and the compliance costs imposed on individuals who participate in the municipal political process. Administrative costs include the compensation paid to elected and appointed officials and staff and the overheads (buildings, supplies, utilities, etc.) required to support those officials. Compliance costs include the costs incurred by municipal voters to keep informed on issues and candidate positions and the potential cash and time costs of registering an opinion by participating in hearings, meetings, voting, etc. Fewer local governments may reduce these costs in aggregate.

If it is argued that centralization will reduce administrative costs, then this is analogous to arguing that there are economies of scale in the administration of government, just as there may be scale economies in the production of public
services. However, there is obviously no guarantee that such opportunities will always, or even usually, exist. It could just as easily be argued that administrators become less effective the further removed they are from their constituents and operations they are supposed to coordinate. If this is the case, then diseconomies of scale could result, with larger governments requiring proportionately more administrators (perhaps with more layers in the administrative hierarchy). Administrative scale economies could thus be a factor in favour of both larger and smaller local government units. In this instance, administrative economies become an empirical issue.

A variant of scale economies in administration can also be applied to the administrative apparatus in the state government bureaucracy charged with oversight of a given local government system. This could be called scale diseconomies in regulatory administration. State departments of local government, as well as their federal counterparts, should expend fewer resources on the administration of local governance, if fewer and larger councils are involved. It follows that municipal amalgamation should serve to lower the costs associated with system administration and regulation.

2.6. Coincidence of Municipal and Natural Boundaries

A novel quasi-economic argument advanced in the present NSW debate on municipal amalgamation rests on the proposition that economic, environmental
and other largely unspecified advantages accrue from an alignment of local government boundaries with natural boundaries. Given that this argument is likely to gain currency in future Australian amalgamation debates given the apparent persuasiveness of “green” arguments with various policy elites, it is thus worth considering this proposition in further detail. In his submission to the NSW Legislative Council’s (2003, p. 94) Inquriry into Local Government Amalgamation, Brunckhorst outlined three “principles” for “drawing boundaries that best reflect the social functions of regional communities as well as the ecological functions of the landscape. In the first place, “the region should capture the place that is the social capital…the landscape area that is of greatest interest to the region or local residents”. Secondly, “that the region maximizes or captures the greatest similarities of environmental landscape, which reflects land uses, management of ecological resources, water supply, and so on”. Finally, jurisdictional boundaries drawn on these grounds must be capable of “being scaled up and scaled down for integration for other kinds of service delivery or management”. In essence, this argument proposes a move away from current tests of economic and sociological “communities of interest” in municipal boundary determinations by state local government boundary commissions to physical ecological “communities of interest” and contends that ecological, economic, and other benefits will result. Thus far, the notion of the alignment of municipal and natural catchment
boundaries in local governance has been accorded a high priority by the amalgamation proposals submitted to the NSW Minister for Local Government Tony Kelly by the three ‘facilitators’ (Daly, Simmons and Varden) responsible for investigating possible council mergers.

However, it is exceedingly difficult to understand why natural or ecological boundaries should coincide exactly with local government boundaries. After all, the fact that the same argument could be raised with respect to national, state and metropolitan council boundaries, but never is raised in these broader contexts, surely demonstrates its spurious nature. Moreover, this notion has many additional shortcomings: it ignores the cultural and historical legacy embodied in existing council boundaries; it neglects the critical concept of the economic “community of interest” of the people involved; and it overlooks the impact of council boundaries on the efficient delivery of council services, especially since environmental considerations form only a small part of overall municipal responsibilities.

The sole rationale for the exact coincidence of natural boundaries and council boundaries, at least in the present NSW debate over local government restructuring, seems to derive exclusively from the recently created Catchment Management Authorities (CMAs). Thus, to link local government boundaries to CMA boundaries to the exclusion of all else, including ratepayers, roads,
townships and communities, seems to demonstrate a peculiar narrowness of focus and a neglect of the totality of contemporary local governance. Indeed, this approach is surely akin to “the tail waving the dog”!

Effective environmental protection can be secured through the cooperation of state agencies and vibrant local governments working in concert, rather through the destruction of small councils attendant upon forced amalgamation. Moreover, spatially large natural catchment areas, typical of the Australian landscape, can also be managed by means of ROCs of affected municipalities.

2.7. Public Choice Considerations

Finally, it is sometimes argued on grounds of public choice theory that greater difficulties are involved in monitoring large municipalities. Ratepayers, as voters, cannot easily acquire the necessary information to assess whether or not councils are providing “value for money”. By contrast, smaller councils are often less complex operations with a greater degree of transparency and consequently more amenable to scrutiny by ratepayers. If smaller municipalities are indeed subject to closer and more informed scrutiny, then it can be anticipated a priori that they could experience greater public pressures to deliver local public goods more efficiently (see, for example, Boyne, 1998; and Bailey, 1999).
3. EMPIRICAL CONSIDERATIONS

Some (but not all) of these theoretical considerations have been subjected to empirical scrutiny. In this section of the paper, we review available empirical evidence on scale economies and the public choice perspectives. Almost no evidence exists on economies of scope, local government capacity, and administrative and compliance costs.

3.1. Economies of Scale

Only one comprehensive study of both international evidence and Australian evidence on the question of economies of scale in local government has been conducted (Byrnes and Dollery, 2002). In Table 1, Byrnes and Dollery (2002, p. 394) detail 34 major international empirical investigations into the existence of economies of scale in municipal service delivery, largely in the American and Canadian institutional contexts. After discussing various aspects of this body of research, Byrnes and Dollery (2002, p. 393) conclude that “overall, 29 per cent of the research papers find evidence of U-shaped cost curves, 39 per cent find no statistical relationship between per capita expenditure and size, 8 per cent find economies of scale, and 24 per cent find diseconomies of scale”.

In an analogous, but much more comprehensive exercise, Byrnes and Dollery (2002) examined all published Australian empirical research into the question of economies of scale in local government service delivery. In total, 9 independent studies are examined in considerable detail (Byrnes and Dollery, 2002, p. 396,
Table 2). They offer “three generic criticisms” of the Australian body of work: “The relative importance of population may be overstated”; all but two studies, ignored the “vast diversity of functions carried out by government”, which served to render comparisons between councils “a risky exercise”; and “the nine studies cited above are not measuring economies of scale, but rather determining how population affects short-run costs”.

After evaluating both extant international and Australian evidence, Byrnes and Dollery (2002) draw three main conclusions. In the first place, “given the mixed results that emerge from the international evidence, it seems reasonable to conclude that considerable uncertainty exists as to whether economies of scale do or do not exist” (Byrnes and Dollery, 2002, p. 405). Secondly, Australian work was almost uniformly miss-specified and thus did not measure scale economies at all. Finally, from a policy perspective, the lack of rigorous evidence of significant economies of scale in municipal service provision casts considerable doubt on using this as the basis for amalgamations”. Moreover, while “advocates of amalgamation have premised their arguments on the proposition that substantial efficiency gains would flow from the formation of larger local authorities”, it appears that “research on economies of scale in local government does not support this proposition” (Byrnes and Dollery, 2002, p. 405).
In an early comparable, but broader survey of the international empirical evidence on scale economies, which included state, regional and local governments, Bahl and Vogt (1975, p. 13/14) concluded that “most positive findings of scale economies are based on statistical results that show a negative relationship between population size and per capita expenditures”. However, “there are great statistical and theoretical problems with interpreting such results as showing scale economies, and about as many studies that find a negative relationship find a positive one”.

3.2. Public Choice Considerations

Public choice analyses of local government efficiency are founded on the proposition that economic and political competition within and between municipalities, state and central government agencies, and the private sector is a potent force in determining outcomes. An implication that derives from the public choice paradigm, amenable to empirical analysis, is that a “fragmented” local government system, containing numerous municipal entities, should be more efficient than a “concentrated” system, with a few, large councils. After a study examining extant American empirical evidence on this question, Boyne (1998, p. 252) concluded that “the broad pattern of evidence suggests that lower spending is a feature of fragmented and deconcentrated local government systems”. By contrast, “consolidated and concentrated tend to be associated with higher
spending”. This may mean that “the technical benefits of large units with big
market shares, such as economies of scale and scope, are outweighed by
competitive and political costs, such as disincentives toward fiscal migration and
problems of public scrutiny”.

After a similar, more recent review of the empirical public choice literature,
Andrew Sancton reached much the same conclusion. In essence, “the public
choice perspective shows us that it is no longer obvious that the existence of many
municipalities within the same city-region causes wasteful overlap and
duplication” (Sancton, 2000, p. 75).

4. POLICY CONSIDERATIONS

The review of the theoretical and empirical economics literature conducted above
provides food for thought for even the most sanguine exponent of amalgamation.
As we have seen, from an a priori theoretical angle there are scant grounds for
anticipating substantial financial benefits to flow from amalgamation, except
possibly in terms of local government capacity and scope economies. The
empirical literature is even more bleak than its theoretical counterpart.

What implications does this analysis have for contemporary amalgamation
proposals in Australian local government that can be of benefit to policy makers?

At least four avenues suggest themselves:
In the first place, the economic benefits that are likely to flow for amalgamation are unlikely to be significant in the light of recent Australian experience with municipal amalgamation programs. For instance, despite the inflated promises of the architects of the South Australian and Victorian council mergers, the economic results have proved disappointing. For example, whereas the Victorian State Government claimed that its amalgamation program would yield direct cost savings of 20 per cent, the net result has been only 8.5 per cent, most of which has derived from competitive tendering and not restructuring (Allan, 2003, p. 75). Similarly, in South Australia the authorities promised savings of 17.4 per cent, but only achieved a mere 2.3 per cent (Allan, 2003, p. 75)! Moreover, it should be emphasized that these net cost savings do not take into account the indirect costs of forced amalgamation, such as increased unemployment, lower economic activity, and a loss of services, which often threaten the very existence of small communities.

Secondly, where economic benefits do stem from amalgamation, these are probably due largely to scope economies and enhanced local government capacity. However, the paucity of empirical evidence on these economic aspects of council mergers should be stressed. There is an urgent need for detailed empirical evidence on both economies of scope and any cost advantages attendant upon improved administrative capacity.
Thirdly, since no systematic relationships exist between size and economic efficiency in local government, specific councils should be selected for restructuring on the basis of current performance rather than current size. Put differently, effective small municipalities should be left unscathed and inefficient small councils identified and then merged.

Finally, the drastic nature of forced mergers should be recognized and non-economic factors given due consideration. Councils often represent the focal point of small communities and enhance people’s ‘sense of place’ and identity with their towns and regions. Effective participatory democracy is facilitated through small councils where citizens feel that they can influence local outcomes. It captures the benefits of detailed local knowledge and thus improves the quality of decisions taken at the local level. It also involves people in their local communities and encourages socially beneficial behaviour, such as volunteering.

Accordingly, alternative models to amalgamation, especially ROCs (Marshall and Witherby, 2002) and virtual local government (Dollery, 2003), should be explored to complement the proposed amalgamation program. In particular, ROCs, based on voluntary and not compulsory arrangements, may not only capture any benefits that can flow from joint service delivery and coordination, as well as foster a spirit of cooperation between neighbouring councils, but also avoid the inevitable bitterness and expense forced amalgamation. Where economies of scale and
economies of scope can be identified, these could be harnessed much more effectively through voluntary cooperation and good neighbourliness rather than through forced mergers imposed by state governments. Moreover, highly successful ROCs already exist in Australia, like the Riverina Regional Organization of Council (RERO), and there is thus scope for many more. Public policy would thus facilitate and encourage municipalities across Australia to form voluntary ROCs.

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