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**The Price of Populism: The Association Between Directly Elected Mayors and Unit Expenditure in Local Government**

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**ABSTRACT**

It would appear that directly elected Mayors have indeed become fashionable. However, few seem to have paused to ponder the pecuniary impact of directly elected Mayors on local government: Indeed there is no evidence at all from the Antipodes and much of the extant work is somewhat dated. We analyse a five year panel of data for New South Wales, Australia and find evidence of strong and statistically significant increased unit operational expenditure in local governments that employ the directly elected mayor model. We conclude by outlining the effect that this association might have on local government sustainability.

Key Words: Directly Elected Mayors, DEM, Local Government, Populism

**Introduction**

Directly elected Mayors (DEM) have become fashionable (Elcock, 2008). Those who support the innovation, imported from the Americas, point to the transformational potential that might be realised from strong leadership supported by an electoral mandate. By contrast, opponents of the innovation cite the potential for abuse of power given over to just a single pair of populist hands. Political scientists (understandably) focus on the concordance between DEM structure and political philosophy, while economists *assume* an increase in operational efficiency and suppose that enhanced efficiency will contribute to more sustainable local government sectors (for an example of the former see Grant, Dollery and Kortt, 2016; for the latter see Grant, Dollery and Gow, 2011).

It is somewhat surprising that limited robust empirical evidence has been put forward to support the contention that DEMs might indeed enhance efficiency, much less the assertion of a causal link between efficiency and sustainability. In the rhetoric of economics, efficiency is generally taken to refer to technical efficiency (also referred to as productive or x-efficiency): The optimal use of inputs to produce a given set of outputs (Andrews and Entwistle, 2013) (typically proxied by the minimisation of expenditure per person (or per assessment)). This is by no means the only type of efficiency studied by economists, nor is it necessarily the most relevant kind with respect to government (allocative – matching demand for specific services with supply – and dynamic efficiency – change in efficiency over time with emphasis on resourcing for future efficiency – would seem at least as important for democratic government), however it is the subject of a claim that has been made in the literature, and therefore an important avenue for inquiry.

It is not at all obvious that the qualities attributed to DEMs, would translate into improved technical efficiency. For instance, greater community engagement – in the absence of a subsidiarity approach to government – is likely to resolve into higher standards of service and higher quality of local government goods and hence will appear to reduce technical efficiency (Drew and Grant, 2017). This potential is particularly problematic when one considers that taxation limitations, which operate in many local government jurisdictions, are likely to give rise to fiscal illusion (Grant and Drew, 2017). In similar vein, other purported benefits of DEMs, such as enhanced ability to ‘make decisions quickly’, ‘make an impact on the physical, economic and social well-being of their communities’ and ‘cleaning up particular areas’ could also easily resolve into higher unit costs – that is, *prima facie* reduced levels of technical efficiency (Elcock, 2008: 805).

Whether or not DEMs have a higher pecuniary cost associated with them would seem an important matter to investigate in view of the emerging evidence of financial sustainability crises for local government in developed economies (Drew and Grant, 2017). However, the presence of a statistically significant elevated cost need not necessarily spell the end for this ‘fashion’. For one thing, the cost may be relatively modest with respect to total local government budgets – in which case remedial prescriptions may not be deemed urgent. Alternatively, the pecuniary implications may be considered good value in view of the other purported benefits of DEMs (and measures may be taken to increase revenue to cover the additional cost). What is problematic however, is if DEMs involve additional expenditure that is not identified – in this case the financial sustainability of local governments might well be diminished (without conscious attention being drawn to the fact) and this may, in time, lead to the need for significant corrective measures.

We take advantage of an ideal natural experiment to estimate the additional expenditure attributable to DEMs. We are able to do so because local governments in New South Wales (NSW) Australia have been free to decide whether they will adopt the DEM model – and currently only a quarter of the local government cohort have taken it up. Thus, by recourse to a five year panel of data – including appropriate control variables – we are able to analyse the effect that DEM has on spending. Specifically, we seek to answer the research question: What effect do DEM have on local government unit expenditures?

The balance of this journal article is organised as follows. First, we review the literature on DEMs with a view to identifying the major advantages and disadvantages of the model and the likely pecuniary implications of same. This is an important task to carry out so that value-for-money judgements might be made. Next we outline the empirical methodology and the data sources employed. Thereafter we discuss the results of our estimations with reference to the aforementioned literature. The article concludes by outlining the importance of our findings for public policy formulation.

**Directly Elected Mayors in the Literature**

There is both a political (normative) and pecuniary empirical strand of DEM literature. We first review the political arguments for and against DEM, before turning our attention to the extant empirical literature.

*Political Arguments Regarding Directly Elected Mayors*

Only a quarter of local governments in New South Wales have DEMs despite the fact that the option has been available to local governments for many decades (see the Local Government Act (1993) (NSW)). Except for the capital city of Sydney (which must have a DEM under the City of Sydney Act (1988)) the default position for local governments in NSW is that the elected Councillors are responsible for selecting the Mayor from within their ranks for a term of two years (prior to 2016 Councillors elected the Mayor for a period of just twelve months). For voters to be given the opportunity to directly elect a Mayor the legislation requires that a plebiscite be carried in the affirmative at the previous local government election (which ordinarily occur every four years in NSW (Grant and Drew, 2017)). Notably, the powers and roles of the Mayor (whether directly elected or elected by the Councillors) are the same for all local governments outside of the City of Sydney and include *inter alia*: to be the leader of the local government and the community; to be the spokesperson of the governing body; to preside over meetings and ensure good conduct of same; to ensure strategic documents are produced in a timely fashion; to promote partnerships between local government and stakeholders; to carry out ceremonial functions; to lead performance appraisals of the General Manager (in conjunction with other Councillors), and to represent the local government at regional forums and to higher tiers of government. Given that the legislated functions of the Mayor are not dependent on the route by which the person arrives in the top job, there is no *prima facie* compelling reason to believe that the practice of DEMs will be significantly different to that of their non-DEM elected peers

However, proponents of the DEM model would suggest otherwise and it seems that the main rationale for believing in significantly different practice may be due to the *outlook* engendered as a consequence of the mode of election (Copus, 2004). A DEM owes their position to the wider constituency of the local government area and can therefore be expected to focus on pleasing voters, (assuming that the Mayor wishes to remain in their position). Thus, a DEM might be expected to be engaged with the community more and respond more effectively to community needs (Grant and Drew, 2017). Moreover, in being elected by the wider body of voters a Mayor receives a personal mandate, particularly for matters which were clearly articulated during campaigning and this may prove important when trying to convince Councillors to accept a particular policy direction (Copus, 2004). It is also asserted that a DEM has a higher personal profile which brings greater influence in stakeholder negotiations (including negotiations with business and higher tiers of government), helps to provide a focal point for stakeholders wishing to engage with the local government, and thus results in more projects getting off of the ground (Grant et al., 2016; Elcock, 2008). This higher personal profile also means that the DEM may be able to gain some freedom from the party political machine – if a Mayor does not depend on their party colleagues for the position (or even pre-selection), it may be possible for the Mayor to build issue by issue coalitions and deviate from party positions (Bochel and Bochel, 2010; Copus, 2004).

Many of the underlying mechanisms which are said to give rise to perceived advantages of the DEM are also cited by opponents of the model. For instance, if Mayors owe their position to the voters rather than the body of Councillors some believe that this may weaken both the power and relevancy of the Council body (that is, a DEM does not *need* to please the body of Councillors to remain in their position; Bochel and Bochel, 2010; Elcock, 2008). Moreover, the higher profile of the DEM is said to give an unfair advantage to the Mayor, over both his Councillor colleagues (the Mayor is seen to be in a better position to take credit for the outcomes of the elected Council body), and also party political candidates (wishing to run for Mayoral office, but who may not be known outside of the political party machine; Copus, 2004). Indeed, it has been noted that a DEM may not even need to belong to a political party, or have any political experience – all that would seem to be required (at least for the initial rise to office) is a high public profile – thus, the fear of celebrity Mayors (from the arts, or sporting arenas) is a recurring theme in the literature (Copus, 2004; Grant and Drew, 2017). Somewhat related are the fears that a DEM with extremist views may arise, or that wealthy individuals may buy their way to Office (Grant and Drew, 2017). The view that DEMs represent an inadvisable concentration of power and patronage into a single person – and that this may result in abuse of power and corruption – are also perennial objections to the model (see, Copus, 2004; Grant and Drew, 2017). Indeed, some have also speculated that the job description may prove daunting to potential candidates and thus dissuade otherwise high calibre candidates from pursuing Office (Grant et al., 2016). The last major objection to a DEM is the potential for gridlock, if the Mayor comes from a political party other than the party that holds the majority of local government seats (Grant and Drew, 2017; Copus, 2004). Notably many of these ‘nightmare scenarios’ do not require a DEM model to be in operation for their manifestation (for instance, corruption and abuse of power occurred long before the advent of DEMs in NSW; Grant and Drew, 2017).

*Empirical Evidence on Directly Elected Mayors*

The extant literature on the pecuniary impact of the different mayoral forms hails mostly from America and has been somewhat mixed and inconclusive. These studies can be separated into three categories: (i) those which detect reduced expenditure levels, (ii) those which conclude no significant differences between the two mayoral models, and (iii) others which observe increased expenditure levels in local governments which employ a DEM model.

Analyses in the first category emphasise the restrictions on policy or program implementation that may be created when additional power is invested in a single individual (in this instance the DEM). For instance, Coate and Knight (2011) suggest that projects are less likely to come to fruition under a DEM model, because it is necessary for the project to gain the support of both the DEM and a majority of the council (they argue that projects under the indirectly elected mayor model only require the majority support of the council). Thus, according to Coate and Knight (2011), some projects which have the support of a majority of elected councillors may not be implemented if the Mayor is reluctant to support or approve the policy. As a result local governments which employ a DEM structure may experience a relatively lower rate of project approval, and hence lower project-related expense. We note that this argument tends to run counter to the narrative in the political strand of literature, and that it is not supported by evidence of lower policy approval rates at DEM local governments. However, multiple analyses in an American context have identified significantly lower municipal expenditure in local governments with a DEM form including Deno and Mehay, (1987), Clark (1968), Sherbenou (1961), and most recently Coate and Knight (2011) who identified expenditure reductions in the order of $70 to $150 per capita.

Analyses in the second category – which fail to find evidence of statistically significant differences in expenditure for local governments with DEM – base their arguments on the median voter hypothesis. The hypothesis suggests that a DEM who wishes to maximise their chances of re-election will attempt to adhere to the preferences of the median (or typical) voter. Similarly, it is argued that an indirectly elected Mayor – chosen by democratically elected Councillors – would try to satisfy the preferences of the typical Councillor (who each also attempt to satisfy the preferences of their voters). Thus, it has been argued that both approaches attempt to satisfy the median voter, but that in the case of the non-DEM, the median voter’s preferences are mediated by Councillors. As a result of the assertion that DEM is merely an unmediated version of the median voter hypothesis it has been argued that expenditure patterns between the two local government forms will not be materially different (Deno and Mehay, 1987). This argument runs counter to the political strand of DEM research, but studies have demonstrated a lack of statistical significance between the two local government models (see, MacDonald (2008), Deno and Mehay (1987), Farnham (1990), Hayes and Chang (1990) and Morgan and Pelissero (1980)).

The analyses in the remaining category suggest that local governments employing DEM structures may have statistically higher expenditure levels compared to their non-DEM counterparts. The theoretical basis employed by scholars to explain this outcome is consistent with the political strand of the extant literature and revolves around the political motives of DEMs. Specifically, it is argued that a DEM will focus on pleasing voters, (in order to maximise their chances of re-election). Thus, a DEM might be expected to prioritise community engagement and respond more effectively to community needs (Grant and Drew, 2017). It is claimed that this desire to please the wider constituent base, and convert spending into political capital, is likely to result in a greater volume of municipal services or projects. The individual calibre, experience and personality of the Mayors elected to office under DEM has also been employed to explain associations between DEM and higher unit expenditure. Specifically it has been suggested that DEM attracts candidates with a high personal or community profile, who may not be constrained by the political or professional experience and networks typically found in indirectly elected counterparts (Deno and Mehay, 1987). The idea that DEM might attract higher profile unconstrained candidates who are keen to please the wider voter base (and hence need to satisfy a greater diversity of wants) is consistent with much of the political strand of the DEM literature (see, for example, Copus, 2004). Studies which have provided support to the notion of relatively higher expenditure of DEM local governments include Booms (1966) and Lineberry and Fowler (1967).

*Combining Political and Empirical Perspectives to Make Predictions in the Antipodes*

Our hypothesis is that DEM will be associated with additional unit expenditure owing principally to the different type of candidate and outlook engendered as a consequence of being directly elected by the local government constituent base (see, Grant and Drew 2017). As noted in both strands of literature DEM’s owe their position to the diverse local government constituent base and are therefore likely to be keen to generate political capital through spending aimed at pleasing these voters (DEM are also more likely to hear constituent’s ‘voice’ (in the Hirschman sense)). Moreover, the personal profile of the DEM is likely to gain greater attention from stakeholders (including potential partners from business and higher tiers of governments), resulting in more projects getting off of the ground. Additionally, a DEM holding little allegiance to the party machine (hence allowing for coalitions to be built on an issue by issue basis), might be expected to have more proposals passed by council (with a concomitant increase to expenditure).

We reject the idea that that a DEM structure – certainly in the Australian system of local government – means that there are additional hurdles placed before projects. That is, in the Australian system there is nothing preventing a Councillor or Councillors from proposing and advocating for a project (executive power is invested in the Council body in Australia, not merely in the Mayor). Moreover, the idea that gridlock in a fractious council might reduce project approval and hence expenditure seems to have little potential as an explanation given the relatively low levels of political party affiliation amongst local government elected representatives in Australia (see, Grant and Drew, 2017 and also the statistics provided in our discussion of variables in the following section). We also do not think that the median voter hypothesis applies similarly to both directly and indirectly elected Mayors in Australia. Essentially non-DEM represents a two-round preference revelation system (voters reveal their preferences for a candidate who then reveals their preference in council) and there is a large literature that demonstrates how the Condorcet winner may be defeated in multiple rounds of voting that seems applicable here (Riker, 1986). Furthermore, for non-DEM to truly be a mediated version of the median voter hypothesis it would require Councillors to faithfully reflect the typical view of their constituents and eschew political strategy such as logrolling (Riker, 1986).

For all these reasons we predict an association between DEM and higher unit expenditure in Australia, that may differ somewhat to the experience in jurisdictions abroad. We emphasise that higher spending is not necessarily a bad thing – indeed it may bring considerable benefits for local communities – however, it is critical that regulatory authorities, local governments and academics are aware of the higher spending, so that they can suggest and put in place measures to mitigate same. We now outline the empirical strategy employed to test our prediction.

**Empirical Strategy**

In order to determine if the direct (DEM) or indirect (non-DEM) election of a local government Mayor has a significant impact on the expenditure incurred by the local governments, data from the 152 ‘general purpose’ NSW local governments over the period 2012 to 2016 was collected.

As the analysis uses panel data, a multiple regression model employing either fixed effects or random effects was indicated. Whilst both models provide relatively good estimates on average (Drew and Dollery, 2016)the models differ in that the former accounts for the differences between local governments through the use of individual intercept terms, whilst the latter incorporates these differences into the composite error term (µ). In general, the fixed effects model can always be used to estimate the empirical relationship between the regressor and regressand albeit at the cost of inefficiency in the model through larger variances, and the inability to incorporate time-invariant variables. The random effects model, although it is the more efficient alternative and can incorporate time-invariant variables (especially important in this case given that DEM status is close to time invariant), can produce inconsistent results if the composite error term is correlated with the explanatory variables (Drew and Dollery, 2016). To determine if this correlation exists, a Hausman test was conducted (Kennedy, 2003). Upon obtaining favourable results (p=0.1563>0.05), a random effects model was employed. The final model specification has been presented below:

*i*=1…152 *t*=1…5

in which E is the local government operational expenditure per assessment, M is a dummy variable where a value of 0 is assigned to local governments which have non-DEM and a value of 1 is assigned to local governments with DEMs, X is a vector of control variables which can influence local government expenditure (see Table 1 below for the variables employed) and µ is an independently and identically distributed random error term. The subscripts (*i, t)* are used to identify the *i*th local government and *t*th year. Natural log transformation were required to control for skewness in several of the variables (see Table 1). The descriptive statistics for these variables have been provided in Table 1:

*[PLEASE INSERT TABLE 1 HERE]*

Data for operational expenditure was obtained from the individual audited local government financial statements. The data relating to the proportion of ATSI and NESB persons, the median wage, the percentage of individuals under 15, and the percentage of persons receiving the aged pension, disability support pension and Newstart allowance has been collected from the Australian Bureau of Statistics (ABS) *National Regional Profile* (ABS, 2017a) and the ABS (2017b) *Data by Region*. The length of roads maintained by individual local governments and the quantum of financial assistance grants (which are Federal funds allocated to local governments according to a formula) was obtained from the Local Government Grants Commission’s (2016) annual reportwhilst assessment data was compiled from the Office of Local Government’s (2016) *Your Council* Reports. The assessment growth and population density variables were calculated manually. To determine the municipalities with a DEM model, the mayoral election data for individual local governments was obtained from the Electoral Commission NSW (ECNSW, 2017).

The control variables selected are largely consistent with the existing (predominantly American) empirical literature, although a number of changes have been made to account for the unique nature of the Australian local government system, and we detail these main differences below.

Number of assessments, rather than population values, have been used in this analysis to reflect the role of Australian local government. Local government in Australia provides a relatively limited range of ‘services to properties’ (through functions such as waste collection and disposal, water and sewer provision) which stands in contrast to the ‘services to individuals’ remit (police, welfare and educational services) typically provided by local governments in the United Kingdom, and North America1 (Drew and Dollery, 2014; Stevens, 2012). Thus, to control for varying output and size of local government in NSW, which may result in differing expenditure patterns, it is the number of assessments rather than population which has be employed. The inclusion of a quadratic term in the model is used to account for the potential for economies and diseconomies of scale in service provision (see Drew and Dollery, 2014). Population density and assessment growth have been included in the regression as the former has long been recognised to result in significantly lower infrastructure costs, whereas the latter has been seen to increase demand for labour intensive services whilst potentially exhausting the infrastructure capacity (Ladd, 1992).

In line with other empirical analyses on DEMs, we also controlled for the heterogeneity of local government populations. Thus variables reflecting the ethnicity of the resident population, measured in terms of the proportion of Aboriginal and Torres Strait Islanders (the native people of Australia) and residents from a foreign background (measured through the proportion non-English speaking background individuals), were included. Differences in the age profile of the resident population were also represented through the proportion of individuals under 15 and proportion of persons receiving the aged pension. These variables are similar to the extant literature – with appropriate cultural changes (for instance, the American literature has variables for ‘blacks’ and ‘Hispanic’ demographics which are not present in significant concentrations in Australia) – and reflect the drivers of demand for local government goods such as playgrounds, libraries, indigenous cultural centres and senior citizen clubs (Drew, Dollery and Kortt, 2015). We also included a variable for the proportion of disabled residents (those receiving a disability support pension) due to the fact that provision of home care for disabled persons is an emerging local government service in Australia (Grant and Drew, 2017).

In common with existing analyse median wage and proportion of persons receiving Newstart allowance (a payment provided to unemployed persons) were included in our models to account for the socioeconomic status of local government residents which may influence demand for services (as public services are considered normal goods; MacDonald 2008). The Newstart variable was used in lieu of an unemployment rate due to data limitations, at the local government level, in Australia. Unavailability of data, mostly explains the absence of variables for median house price, and owner-occupier ratio (included in studies from America) although it should also be noted that the variables have less relevance to NSW where local government taxation is capped and based on unimproved land value (not capital improved value; see Deno and Mehay, 1987; Grant and Drew, 2017).

Length of roads maintained by local governments (in kms) are an important determinant of expenditure in Australia (accounting for approximately a quarter of total spending; Drew and Dollery, 2014) and have thus been included in our models. Formula-based intergovernmental grants have also been included (similar to some studies from abroad) due to the fact that they are a relatively predictable and stable source of revenue and hence a determinant of expenditure (Booms, 1966; non-formula based intergovernmental grant data was not available). Median intergovernmental grants as a proportion of expenditure over the period 2012-2016 were 2.89%, 5.77%, and 14.15% for urban, regional and rural local governments respectively, which reflects a high level of spatial dependency. To achieve the purposes of this analysis, and in line with existing theoretical frameworks, a dummy variable was included in the regressions to allow for identification of associations with unit expenditure for DEM (assigned a binary value of 1), and non-DEM local governments (assigned a binary value of 0).

It will be noted that variables relating to political affiliation of Councillors and Mayors, and fragmentation of councils, have not been included in this analysis despite their use in studies abroad. This is due to the fact that Australian local government, unlike its American and European counterparts, is largely free from party politics. Thus in the recent 2016 New South Wales local government elections only 6% of mayoral candidates and just 11% of councillor candidates declared affiliations with the two major political parties in Australia (the Australian Labor Party, and the Liberal Party of Australia; ECNSW, 2017). Moreover, there wasn’t a single instance where the political affiliation of the Mayor differed to the political affiliation of the majority of Councillors which might have set up the conditions for gridlock (ECNSW, 2017). Thus, whilst variables reflecting political affiliations may be important for analyses in the context of Europe or America, they are largely irrelevant for Australia.

After obtaining initial results based on regressions of all NSW local governments, we then ran additional stratified models based on whether the local government operated in an urban, regional or rural environment (using the Department of Infrastructure and Regional Development (DIRD) (2016) *Australian Classification of Local Government* codes). This is necessary due to the substantial differences which can exist between local governments as a result of their location and the associated characteristics and municipal responsibilities (see Table 2). For instance, regional and rural local governments, unlike their urban counterparts, are typically required to provide a greater range of services (such as the provision of airport, childcare and livestock exchange facilities) to address areas of market failure. Moreover, rural local governments (and to a lesser extent regional local governments) generally cover a wider area with a smaller population and have more limited revenue raising capacity (for example few rural local governments can hope to levy parking fees because demand for street parking is weak (this is an important source of revenue for many urban local governments)). Thus, through stratification one can disentangle otherwise confounding factors.

*[PLEASE INSERT TABLE 2 HERE]*

**Discussion**

The results from our empirical analysis of the effect of DEMs on operational expenditure have been provided in Table 32. Overall the results suggest that local governments with DEMs have expenditures (per assessment) which are eight percent larger, on average, than their indirectly elected counterparts, *ceteris paribus* (significant at the 6% level). However, as we noted earlier stratification is required in view of the fact that the three categories of local governments have very different characteristics (and hence different demands for expenditure).

*[PLEASE INSERT TABLE 3 HERE]*

When the regression was stratified (into urban, rural and regional categories) the size of the coefficient increased markedly. Our results suggest that DEMs have a statistically significant association with increased operational expenditure for both urban and rural local governments in the order of thirteen and a half percent, *ceteris paribus*. Moreover, the urban result is statistically significant at the 1% level, although the rural result is only significant at the 10% level (the regional local government group was not statistically significant).

Our results from the regression analyses are broadly consistent with Booms (1966) and Lineberry and Fowler (1967), and hence the third category of empirical literature on the effect of DEMs (that suggests increased unit expenditures associated with DEMs). We consider three of the prominent arguments used to explain higher unit expenditure in DEM local governments: The potential for greater political capitalisation (resulting in a higher volume, wider range and higher quality of services and hence greater expenditure), greater effectiveness in getting developments off of the ground (and therefore more expenditure to accommodate same), and better advocacy with higher tiers of government (and hence more partnerships with other tiers of government with concomitant increases to non-formula based grant money to partly fund projects).

Although the significantly higher spending by DEMs is not completely unexpected, or undocumented, what is surprising, is the magnitude of the coefficients – especially when one considers that the mean operating surplus for NSW local governments is just 9.7%. Moreover, the very similar coefficients are intriguing (the difference in the statistical significance for the two cohorts is probably mostly down to the relative number of DEM local governments in each group). Despite the similar coefficient size, it is not unreasonable to suspect that there might be different drivers for the observed increase in operational spending for urban and rural local governments respectively.

We can explore the relative likelihood of two of the potential drivers a little by considering some additional data. For instance, the room for discretionary spending (to facilitate political capitalisation) would appear greatest for urban local governments given that their mean operating surplus is generally superior to rural local governments (an average of 15% for the former and just 7% for the later). Moreover, urban local governments generally have greater flexibility in raising own source revenue in areas which are not regulated – for instance, few rural local governments can tap into lucrative metred parking because the demand for street carparking is relatively muted in low population density areas – and greater revenue flexibility would seem to create more room for discretionary spending, all other factors being equal. In similar vein, potential demand for developments in urban areas is likely to far outstrip demand in rural local governments: Actual development application data seems to confirm this (in 2016 the average value of development applications in urban local governments was over 30 times that of rural peers ($555,539 for urban and $17,147 for rural; OLG, 2016))3. Unfortunately it is difficult to get suitable data on the quantum of non-formula grants awarded to local governments, from state and federal government, which might result from superior advocacy by DEMs (grant data is confounded by *inter alia* transfers to cover pensioner discounts, Roads and Maritime Services work, and rural fire service payments).

The fact that budgetary space for political capitalisation and value of development approvals are both relatively higher in urban local government areas than they are in rural areas seems to suggest that the most likely explanations for the observed increase to expenditure in DEM local governments are either:

1. significantly dominated by projects in partnership with higher tiers of government (funded through non-formula grants) arising from better advocacy for both types of local government areas (which would mean that political capitalisation and getting developments off of the ground (which both seem more likely for urban local governments) comprise a relatively small part of the additional costs), or
2. stronger contributions from political capitalisation and getting developments off of the ground in urban local governments (where it seems more likely) being mitigated by relatively stronger advocacy outcomes for rural local governments (where data availability is currently insufficient to clarify matters).

Without additional data it is hard to determine which explanation is most accurate – however, the principle of parsimony would suggest the first explanation (domination by non-formula grant outcomes from improved advocacy) as being the most likely cause.

The slightly negative result for regional local governments is not statistically significant. Despite our efforts to make the category as homogenous as possible, there is still a good deal of variation between observations. Moreover, the very high rate of growth for this cohort (see Table 2) tends to confound any association that might be present.

**Public Policy Implications**

This paper has taken the first strides towards answering an important question relating to DEMs which seems to have hitherto largely escaped the attention of academics in the Antipodes: Is there a fiscal implication associated with the method by which the Mayor arrives in the top job? Our empirical evidence based on a five year panel of NSW local government data suggests that there is indeed a cost – moreover, that the cost is quite substantial. Specifically, we produced empirical evidence of an association in the order of an additional thirteen and a half percent expenditure for both urban and rural local governments, statistically significant at the 1% and 10% levels respectively, *ceteris paribus*. To explore which of the explanations gleaned from the extant literature best explained the results we also provided some additional data on budgetary space for discretionary spending and value of development approvals. This led us to propose that the associations between DEM and increased spending might be explained by either: (i) high levels of non-formula grant related spending arising from advocacy with higher tiers of government or (ii) high levels of political capitalisation and getting projects off of the ground in urban local governments matched by relatively stronger advocacy outcomes in rural areas.

If the advocacy explanation for increased expenditure holds true for both types of local government or just rural local governments then this suggests at least two important public policy implications. First, it would seem to beg some questions regarding the accountability and transparency of non-formula grant allocations (suggesting inequity and the potential for pork-barrelling – see, for example Bradbury and Stephenson (2003)). Second, it poses some problems for the advocates of DEM, for clearly one of the big advantages of DEM will dissipate in proportion to the number of local governments that employ the model (if we consider, as seems likely, that there is a fixed pool of money available for non-formula grant based partnerships between tiers of government). Otherwise, stated if all local governments have a DEM, and the total quantum of funds available for partnerships remains constant, then the relative advantage of the model (with respect to advocacy resolving as funding for partnerships) tends towards zero. Given that the principle of parsimony suggests this explanation for the observed additional operating expenditure at urban and rural local governments, this is an important question to investigate further (when suitable data becomes available).

If instead our second explanation for the observed increase in operational expenditure is correct – that DEMs result in increased operational expenditure in urban local governments as a result of giving voters what they want and also getting projects off of the ground – then it may indeed suggest that DEMs improve allocative efficiency for urban residents. However, this explanation may raise further questions regarding political propriety and prudence – especially in the absence of increased revenue – and underlines the importance of an oversight function for elected Councillors (Copus, 2004).

Irrespective of the cause of the observed DEM effect the research also has important public policy implications in relation to local government financial sustainability. As we note, the mean increase to (per assessment) operational expenditure is rather large and is certainly sufficient to put financial sustainability at risk if changes are made to how Mayors are elected without complementary (mitigating) changes being made to revenue structures. This is particularly important in the case of NSW local government because of the extant taxation limitations – not only is it difficult for local governments to react appropriately by increasing revenue, but there could also be long-standing fiscal illusion to overcome, whereby residents don’t appreciate that increased spending should resolve into increased fees and taxes (NSW has been operating tax limitations since 1977 (Abelson and Joyeux, 2015)). If this all occurs *unnoticed*, then recent history tells us that a disruptive reckoning will occur at a later time – probably when unfunded asset renewals and maintenance reach a critical level (see Drew and Campbell (2016) for an account of the disruption to local community when Central Darling Shire was placed into a seven year period of financial administration). If it *is noticed* and measures are taken to ensure that the additional expenditure is mitigated through increases to revenue then there is no financial sustainability issue. Public policy measures may be for the regulatory authority to take DEM status into account when determining the rate of taxation limitations (an exemption from the peg or a higher peg for DEM local governments), to introduce balanced budget legislation (to force local governments to ensure that additional spending is matched by additional revenue), and to ensure that partnerships with higher tiers of government to roll-out projects are fully funded (in terms of both initial capital costs and ongoing expenditure associated with the project).

We reiterate that the additional spending is no bad thing – indeed it might bring considerable benefits to the community (for instance through greater capacity to respond to community needs (see Copus, 2004))– however, it is critical that citizens and their elected representatives are aware of the additional cost associated with DEM, particularly in the transition phase, and take appropriate measures to mitigate same.

There are similar implications and policy recommendations for international jurisdictions, particularly if a similar magnitude of increased spending are found to be associated with DEM. Specifically, regulatory authorities need to ensure that citizens and elected representatives are aware of the response, and take appropriate measures to mitigate additional expenditure. Moreover, it is important that the potential for reducing marginal benefit of expanding DEM local governments is taken into account by jurisdictions with optional DEM which are considering expanding uptake of the model.

In sum, this study has introduced a new and important angle to the DEM debate (especially in Australia) and one which is worthy of further investigation – and we thus commend same to our peers.

**Notes**

1. It might be noted that the role of Australian local government has been expanding in recent decades to include more functions provided directly to individuals (and certain functions typically provided by state governments) such as aged care and public libraries: However, services to property still dominate expenditure (Grant and Drew 2017).
2. Due to spatial limitations, and for simplicity of discussion, we only report on the variables relevant to our research question. A complete set of results is available from the authors upon request.
3. It might be noted that development applications do not just refer to houses and shops – items such as garages, swimming pools, house extensions and decks are also included in the data – hence the relatively small average values (particularly for rural local governments).

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**Tables**

**Table 1. Variables Employed in Regressions, New South Wales, 2012-16**

|  |  |  |
| --- | --- | --- |
| **Variable** | **Mean** | **Standard Deviation** |
| **Dependent Variable**  Operational Expenditure per assess (ln) | 1.147 | 0.375 |
| **Control Variables**  No. assessments (ln) | 9.259 | 1.184 |
| Population Density (ln) | 2.966 | 3.317 |
| Proportion of Aboriginal and Torres Strait Islanders (ln) | 1.034 | 1.212 |
| Proportion of Non-English Speaking Persons (ln) | 1.566 | 1.204 |
| Median Wage (ln) | 10.704 | 0.156 |
| Length of Roads (km) | 961.884 | 631.290 |
| Financial Assistance Grants per assessment (ln) | 5.883 | 1.048 |
| Persons under 15 years of age (%) | 19.278 | 2.484 |
| Persons on Aged Pension (%) | 11.98 | 4.102 |
| Persons on Disability Support Pension (%) | 4.253 | 1.882 |
| Persons on Newstart Allowance (%) | 3.114 | 1.499 |
| Assessment Growth (%) | 0.714 | 1.671 |

**Table 2. Median Differences between Urban, Regional and Rural Local governments**

|  |  |  |  |
| --- | --- | --- | --- |
| **Indicator** | **Urban** | **Rural** | **Regional** |
| **Number of Assessments** | 35,664 | 4,331 | 25,088 |
| **Population Density** | 2652.9 | 1.70 | 34.6 |
| **Length of Roads (km)** | 301 | 1,135 | 962 |
| **Proportion of Aboriginal and Torres Strait Islanders (%)** | 0.6 | 5.0 | 3.6 |
| **Proportion of Non-English Speaking Persons (%)** | 28.5 | 2.0 | 3.7 |
| **Median Wage ($)** | 50,500 | 40,909 | 43,905 |
| **Financial Assistance Grants per Assessment ($)** | 103.77 | 939.11 | 262.67 |
| **Assessment Growth** | 0.66% | 0.33% | 0.76% |

**Table 3. Effect of Directly Elected Mayor on Operating Expenditure, New South Wales 2012-2016**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Entire State** | **Urban** | **Rural** | **Regional** |
| **Mayor** | 0.0800+ (0.0438) | 0.1348\*\* (0.0516) | 0.1346+ (0.0829) | -0.0516 (0.0995) |
| **No. of assessments (ln)** | -0.7977\*\* (0.2929) | -0.5348 (0.9233) | -1.5488 (0.9613) | 4.3698 (4.2122) |
| **No. of assessments squared (ln)** | 0.0322\* (0.0149) | 0.0268 (0.0468) | 0.0690 (0.0571) | -0.2088 (0.2009) |
| **Controls** | Yes | Yes | Yes | Yes |
| **N** | 152 | 43 | 82 | 27 |
| **Years** | 5 | 5 | 5 | 5 |
| **No. DEM** | 38 | 13 | 17 | 8 |
| **Coefficient of Determination** | 0.6412 | 0.5070 | 0.5268 | 0.6301 |

+ p<0.1 \*p<0.05 \*\*p<0.01