

DISTRIBUTING FINANCIAL ASSISTANCE GRANTS TO COUNCILS USING A SOCIO-ECONOMIC STATUS (SES) FUNDING MODEL

Background

As part of the Inquiry into cost shifting and local government, the House of Representatives Standing Committee on Economics, Finance and Public Administration has asked DOTARS if a socio-economic status (SES) funding model could provide an alternative picture of “need” for councils.

An example of a SES funding model is that used by the Federal Department of Education, Science and Training (DEST) to determine Commonwealth general recurrent per capita funding entitlements for non-government schools. The DEST SES funding model was specifically designed for school funding purposes. That approach involves linking student residential addresses with Australian Bureau of Statistics (ABS) Census data to obtain a SES measure of the capacity of the school community to support the school. The Index takes into account Occupation, Education and Income (half household income and half income of families with children) information obtained from Census data.

Could a SES model be used to determine the “need” of councils?

The socio-economic status of a council could be determined by applying a statistical technique to summarise a number of relevant socio-economic variables collected in the Census to obtain a single SES score for each council. For instance, in the example below, a single SES score is obtained for each council using measures of occupation, income and education for households within the council’s area. The higher the SES score obtained through this technique the higher the socio-economic status of the community.

The SES scores obtained could then be used to rank councils across Australia, according to the measure of the socio-economic status of the council’s residents, and per capita funding to the councils could be allocated on the basis of this measure. That is, councils with higher SES scores (and hence a higher socio-economic status) would receive less funding per capita compared with councils with lower SES scores. To obtain a council’s general purpose grant, the number of residents of the council would be multiplied by the funding per capita.

A SES funding model for councils developed along these lines would result in a much simpler process for administering financial assistance grants to councils. There would be no need for annual data collections or for Local Government Grants Commissions in each State to determine allocations. As it is based on Census data, the grants could be administered centrally and it could potentially provide councils with greater certainty of and stability in their funding, as the SES score for each council would be held constant for five years.

However, its usefulness for allocating funding on the basis of a horizontal equalisation measure of ‘need’ for all of the services provided by councils is severely limited. This is because, a SES model is usually designed to measure ‘need’ as the capacity of a community to pay for services whereas ‘need’ in the horizontal equalisation context is about measuring the capacity of councils to deliver services.

Currently, the general purpose grants are allocated to councils on a horizontal equalisation basis so as to provide relatively greater funding to those councils which, through no fault of their own, have relatively higher costs in providing services or relatively less ability to raise revenue. This means that an allocation on the basis of horizontal equalisation will involve examining both the revenue and expenditure of councils.

A council's revenue is obtained from a number of sources. Rates are charged on different types of property — residential, commercial, rural and mining properties. Councils may levy additional service charges for garbage disposal, parking and other services. Councils can also receive State and Commonwealth grants to support the provision of particular services. The socio-economic status of residents may provide a measure of the capacity of the community to pay rates or for some services provided by councils but this may be a very poor measure of the overall capacity of a council to raise revenue.

With regard to expenditure, the costs of different services/functions would depend on the number of services provided, the quality of the service/function provided and the cost of providing that standard of service and these will differ depending on the nature of the service/function. For instance, the cost of garbage services would usually depend on the number of occupied urban residences, not the number of residents. The costs of local road maintenance would depend on the type of road (sealed versus unsealed), the length of roads to be maintained, the level of use of the roads particularly for vehicles that put considerable stress on the roads, the climate and the composition of the subgrade of the soil. Aged care services will depend on the number of aged residents in the council area. Many councils also have facilities used by non-residents and the costs of many of these services will not relate directly to the socio-economic status of the resident population or the number of residents.

Further, the geographic location or spatial distribution of the population within rural local government areas can also cause significant variations between councils in their costs of providing services.

A SES model would not measure the differences in revenue and expenditure, which arise from differences in State policies. For example, health and welfare services constitute a reasonable amount of council expenditure but councils in different States have different roles and responsibilities in these areas, and therefore there would be different revenue and expenditure streams.

In addition, Censuses occur every 5 years, and so the SES scores are held constant for the five years. Considerable changes can often occur within a local government area within such a timeframe, which have a large influence on a council's "need". For example, economic downturn due to drought means incomes may fall and people may become unemployed as businesses close.

While other ABS Census variables could be included in a purpose-designed SES model for local government (for example age, proficiency in spoken English and tenure type), the Census does not provide adequate or relevant data associated with the variable costs of providing council services. Therefore, an allocation on the basis

of the socio-economic status of residents may not reflect the need of councils for funding in order to provide services. An allocation on the basis of horizontal fiscal equalisation is designed to address these issues.

Quantitatively, how do SES and FAGs outcomes compare?

We obtained SES scores for local government areas from Stephen Farish of the University of Melbourne. He derived these scores using ABS data on Occupation, Education and Income from the 1996 Census. We could not match all local government areas with a SES score —only 600 out of 722 local government areas could be matched. The difference includes the Indigenous and other Community Councils, primarily in Northern Territory and Queensland. Some councils that have amalgamated since 1996 were not able to be matched with local government areas.

For the matched local government areas, their financial assistance grant allocations for 2001–02 were extracted.

The current approach for allocating general purpose grants already determines those councils with lesser needs — these are the minimum grant councils. Local Government Grants Commissions have determined that, based on horizontal fiscal equalisation principles, these councils should receive less than the amounts they actually get in general purpose grants. That is, an allocation on horizontal equalisation principles would have provided less to these councils than what has actually been allocated given that 30 per cent of the general purpose grant has been allocated on a per capita basis.

There appears to be general acceptance amongst those involved in local government about which councils should be on the minimum grant, and therefore which councils have lesser need.

Across all councils, the SES scores vary from 67 (most disadvantaged) to 132 (least disadvantaged). In Table 1, councils on the minimum grant in 2001–02 are listed from the least disadvantaged councils according to the SES score (ie the minimum grant council with the highest SES scores) to the most disadvantaged (ie the minimum grant council with the lowest SES score). Note that in 2001–02, there were 74 councils across all States on minimum grants but out of the 600 councils that have been matched with a SES score, only 70 of these were on minimum grants.

If the SES score is an appropriate indicator of needs for councils, we would expect all minimum grant councils to have high SES scores. This is not the case. The SES score of minimum grant councils varies from 87 to 132 compared with a range of 67 to 132 for all 600 councils.

In Figure 1, we have plotted the SES score for local government areas on the vertical axis and general purpose grant per capita on the horizontal axis for the 600 councils with an SES score. In this graph, the general purpose grant per capita is used as the measure of the relative need of councils under Local Government Grants Commission methodologies. Because of the wide variation in the value of the general purpose grant per capita for councils, a logarithmic scale has been used on the horizontal axis. Note that the minimum grant councils listed in Table 1 have a general purpose grant

per capita of around \$15.00 in Figure 1 and appear in a vertical alignment on the left of the figure.

The data shows a weak relationship between the SES score and the general purpose grant per capita. A trendline, added to Figure 1, illustrates this. Those councils with lower SES scores (ie having greater socio-economic disadvantage) tend to have higher general purpose grants per capita (ie in relatively greater fiscal need) but while a large number of councils have an SES score between 90 and 95, their levels of grants per capita vary enormously.

One way in which the general purpose grants for a council could be determined using a SES model would be to use the trendline in Figure 1 to convert a council's SES score to an allocation per capita. For instance, a SES score of 90 would convert into around \$600 per capita. By comparison, in 2001–02, the per capita general purpose grant for councils with an SES score around 90 varied between \$15 and \$5,000 per capita.

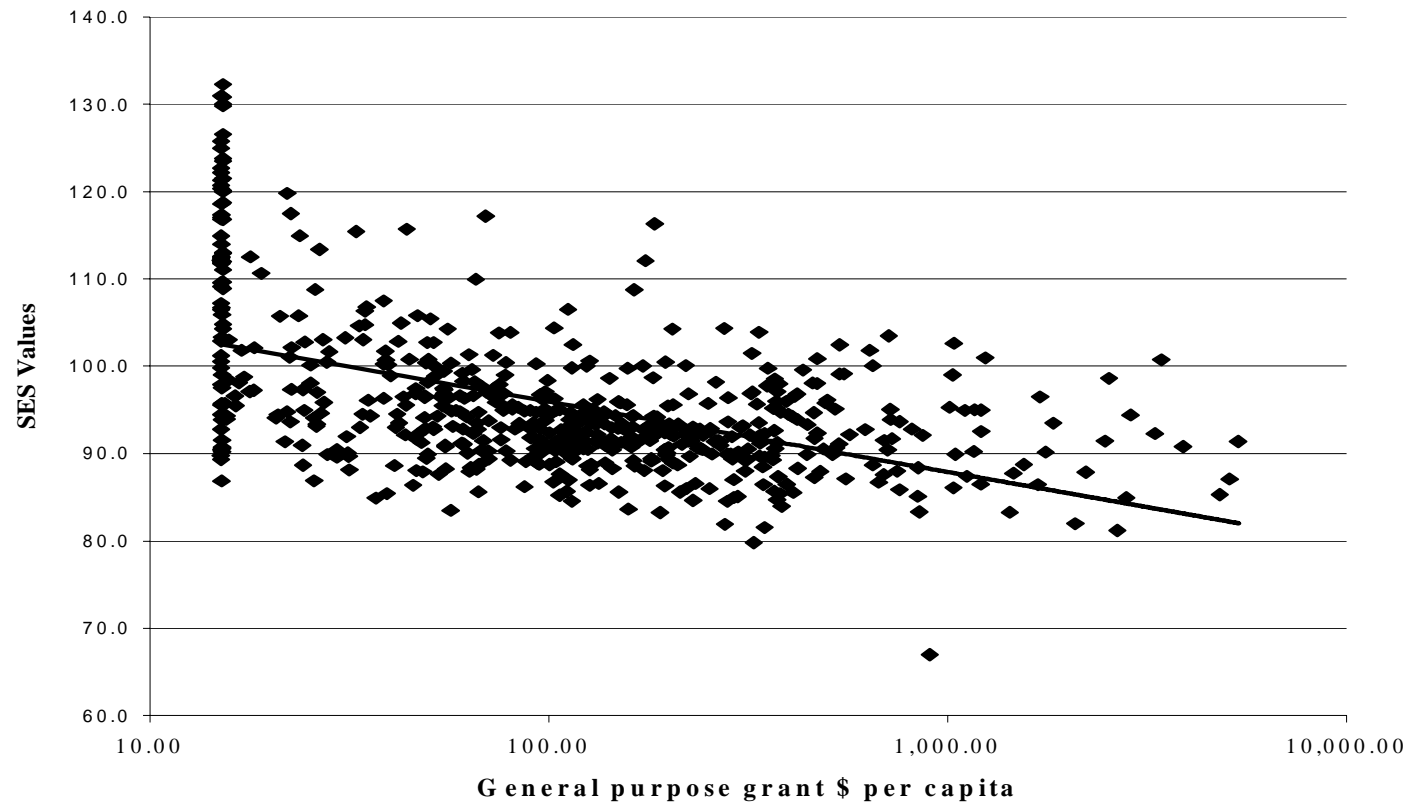
If it is assumed that Local Government Grants Commissions have measured the needs of councils appropriately, Table 1 and Figure 1 imply that the SES score by itself would be a very poor measure of the 'needs' of councils in the context of horizontal fiscal equalisation.

Table 1: Minimum Grant Councils in 2001-02 listed by SES Index from least to most disadvantaged

LGA	State	SES index	2001-02 Actual general purpose grant \$	2001-02 General purpose grant per capita \$
Mosman Municipal	NSW	132.3	432,256	15.21
Peppermint Grove (S)	WA	130.9	26,298	15.04
Ku-ring-gai	NSW	130.9	1,645,020	15.21
North Sydney	NSW	130.0	895,316	15.21
Woollahra Municipal	NSW	129.8	833,304	15.21
Lane Cove Municipal	NSW	126.5	483,416	15.21
Cottesloe (T)	WA	125.7	114,326	15.04
Nedlands (C)	WA	125.0	323,540	15.04
Willoughby City	NSW	123.8	937,292	15.21
Hunters Hill Municipal	NSW	123.5	210,800	15.21
Cambridge (T)	WA	122.7	361,062	15.04
Boroondara (C)	VIC	122.2	2,403,280	15.05
Manly	NSW	121.5	585,884	15.21
Claremont (T)	WA	121.3	143,257	15.04
Stonnington (C)	VIC	120.8	1,393,761	15.06
Subiaco (C)	WA	120.3	237,153	15.04
Hornsby Shire	NSW	120.1	2,282,508	15.21
Baulkham Hills Shire	NSW	120.0	2,077,716	15.21
Sydney City	NSW	118.8	378,928	15.21
Burnside (C)	SA	118.6	635,626	15.10
Walkerville (M)	SA	117.4	107,604	15.10

Bayside (C)	VIC	117.0	1,365,523	15.05
LGA	State	SES index	2001-02 Actual general purpose grant \$	2001-02 General purpose grant per capita \$
Melbourne (C)	VIC	116.8	780,587	15.06
Pittwater	NSW	116.8	853,144	15.21
Port Phillip (C)	VIC	114.9	1,227,357	15.05
Unley (C)	SA	114.0	558,529	15.10
Warringah	NSW	113.0	2,049,968	15.21
Sutherland Shire	NSW	112.9	3,242,532	15.21
Mosman Park (T)	WA	112.6	122,150	15.04
Roxby Downs (M)	SA	112.5	62,826	15.10
East Fremantle (T)	WA	112.3	100,199	15.04
Hobart (C)	TAS	112.1	690,175	15.03
Perth (C)	WA	112.1	102,080	15.04
Ryde City	NSW	112.0	1,488,184	15.21
South Perth (C)	WA	111.9	566,952	15.04
Melville (C)	WA	111.8	1,464,606	15.04
Mitcham (C)	SA	111.8	931,948	15.10
Randwick City	NSW	111.1	1,927,660	15.21
Strathfield Municipal	NSW	109.7	436,240	15.21
Glen Eira (C)	VIC	109.6	1,875,829	15.06
Stirling (C)	WA	101.2	2,659,772	15.04
Fremantle (C)	WA	100.5	391,227	15.04
Victoria Park (T)	WA	99.8	413,720	15.04
Redland	QLD	99.0	1,740,341	15.13
Bayswater (C)	WA	97.9	855,709	15.04
Gold Coast	QLD	97.5	6,134,372	15.13
Beaudesert	QLD	95.8	795,986	15.13
Maroochy	QLD	95.7	1,840,802	15.13
Swan (S)	WA	95.6	1,239,263	15.04
Cockburn (C)	WA	94.5	1,025,656	15.04
Logan	QLD	93.9	2,537,810	15.13
Rockingham (C)	WA	92.8	1,064,456	15.04
Caloundra	QLD	91.6	1,102,847	15.13
Caboolture	QLD	90.8	1,696,564	15.13
Redcliffe	QLD	90.6	760,971	15.13
Belmont (C)	WA	90.4	442,982	15.04
Victor Harbor	SA	90.2	157,785	15.13
Glenorchy (C)	TAS	89.8	659,441	15.03
Mandurah (C)	WA	89.3	685,746	15.04
Kwinana (T)	WA	86.9	325,598	15.11

Figure 1: SES values for councils plotted against their general purpose grant per capita in 2001-02



Socio-economic indicators: some methodological issues

There are also a number of more general methodological issues with the use of an index derived from a SES model or the ABS's Socio-Economic Indexes for Areas (SEIFA) to measure need. The ABS has developed SEIFA, which is a collection of indexes to measure the socio-economic status of populations living in different geographic areas. Using latest available population census data, these have been derived by a multi-variate analysis technique known as principal component analysis. This technique summarises a large number of socio-economic variables into a single measure which can then be used to rank areas (from highest to lowest) on a broad socio-economic scale.

The socio-economic indexes in SEIFA comprise five summary measures derived from the Census of Population and Housing to measure different conditions by geographic area. Each index summarises a different aspect of the socio-economic conditions in an area. The indexes have been obtained by summarising the information from a variety of underlying social and economic factors, with each index using a different set of underlying variables:

The five indexes are:

- Urban Index of Relative Socio-Economic Advantage
- Rural Index of Relative Socio-Economic Advantage
- Index of Relative Socio-Economic Disadvantage
- Index of Economic Resources
- Index of Education and Occupation

The indexes are ordinal measures and not interval measures. That is, using the indexes to order local government areas is meaningful but other arithmetic relationships between index values are not meaningful. For example, a score of 1200 is not necessarily twice as advantaged as a score of 600. The indexes can therefore only be used for ordering, not for quantification. Similarly, the socio-economic difference between two LGAs with index values of 800 and 900, is not necessarily the same as the difference between two LGAs with index values of 1050 and 1150.

Government funding programmes use SEIFA indexes as an indicator for determining regions that may require priority or a greater quantum of available funding. However, other factors/measures are also used to determine the actual amount of funding allocated to bodies within that region.

The ABS states that the indexes are good overall measures, but should be used in conjunction with other information that relates to the topic of interest. It also acknowledges that, for example, the index of socio-economic disadvantage does not indicate other influences such as locational disadvantage. It further states that SEIFA ranks areas but that there is no simple way to relate intervals in this ranking to degrees of demand for government services or for quantifying relative differences between areas (ABS, 1998).

In November 2002, the Commonwealth Grants Commission released a discussion paper on the socio-demographic composition disability factor which it uses to measure the effects of differences in the characteristics of State populations on the demand for services and the cost of each unit of service provided. The Commission

examined the use of the SEIFA index to measure socio-economic status. It rejected the use of the SEIFA index on the basis that it is a very broad measure and its use would mean a loss of transparency due to the impossibility of identifying specific data incorporated within the indexes (Commonwealth Grants Commission, July 2002).

Local Government Grants Commission models

The State Local Government Grants Commissions have developed methodologies for estimating the cost of providing an average level of service and the estimated revenue raised when applying average effort (less other grant support received by councils to provide those services).

The models Grants Commissions develop must comply with National Principles (see Attachment A for the National Principles for General Purpose Grants). A SES model does not comply with the “horizontal equalisation” and “other grant support” National Principles. It complies with the “effort neutrality” National Principle but it is unclear whether it would comply with the “Aboriginal and Torres Strait Islander” National Principle. A SES model could be constructed so that it complies with the “minimum grant” National Principle.

In our view, a strength of the current Grants Commission approach is the involvement of Grants Commissioners. The tasks Grants Commissioners undertake are difficult, requiring considerable experience and judgement. Grants Commissions need to accurately and quantitatively assess the unique circumstances of a large number of councils in their jurisdiction in terms of providing a variety of services and raising revenue from a variety of sources. This strength of the current system would be lost if a SES model was applied.

There may be opportunities for Grants Commissions to use socio-economic status indexes within their existing methodologies. In a current research project, the South Australian Local Government Grants Commission is seeking to develop an alternative indicator or an index, which can be used in conjunction with property values, and which will provide, as far as possible, an objective reflection of the capacity of individual Councils to raise rate revenue from their communities. The South Australian Grants Commission is aware that property values alone may not adequately reflect the capacity of council residents to pay rates and that other measures such as income or socio-economic indicators could be used in its assessment. However, the assessment of revenue raising capacity will still be combined with an assessment of expenditure to determine “need”.

Conclusion

Because of the difficulty in trying to balance and account for the large number of variables which influence ‘need’, there is generally a trade-off between simplicity of process and fairness of outcome in determining an approach to allocating grants. Experience is that the simpler the methodology and therefore the easier it usually is to understand, the less fair the resulting distribution tends to be.

An SES model is clearly a simpler methodology compared with the current methods used by Local Government Grants Commissions to allocate grants to councils. However, the measure provides a different measure of “needs” to that which is required to allocate financial assistance grants to local government. It can provide

only one aspect to the measure of 'needs' in a horizontal equalisation framework since it measures just a few of the factors that may influence a council's capacity to raise revenue through rates and user charges. While it can be a valuable indicator of the 'need' for some services, it would not fully capture the range of costs to councils to provide the range of services they currently deliver. Of itself, it is likely to be a poor measure of the variation in costs faced by councils across Australia.

Some Useful References

Australian Bureau of Statistics, Information Paper 2039.0, (1998) *1996 Census of Population and Housing, Socio-Economic Indexes for Area*.

Australian Urban and Regional Development Review, (1994) Discussion Paper 1, *Financing Local Government, A review of the Local Government (Financial Assistance) Act 1986*

Commonwealth Grants Commission, (July 2002) Discussion Paper CGC 2002/21, *Socio-Demographic Composition*

Commonwealth Grants Commission, (November 2002) Discussion Paper CGC 2002/45, *Welfare Part 2: Family and Child Services*

Department of Transport and Regional Services, (2001) *2000-01 Report on the operation of the Local Government (Financial Assistance) Act 1995*

South Australian Local Government Grants Commission, (December 2002), Discussion Paper, *Review of the Use of Property Values as the Sole Indicator of Capacity to Raise Revenue*

NATIONAL PRINCIPLES FOR THE ALLOCATION OF GENERAL PURPOSE GRANTS

In determining grant allocations, Grants Commissions are required to make their recommendations in line with National Principles. The main purpose of having National Principles is to establish a nationally consistent basis for distributing financial assistance grants to Local Government under the Act.

The National Principles relating to allocation of general purpose grants payable under section 9 of the *Local Government (Financial Assistance) Act 1995* (the Act) among local governing bodies are as follows:

1. Horizontal equalisation

General purpose grants will be allocated to local governing bodies, as far as practicable, on a full horizontal equalisation basis as defined by the Act. This is a basis that ensures that each local governing body in the State/Territory is able to function, by reasonable effort, at a standard not lower than the average standard of other local governing bodies in the State/Territory. It takes account of differences in the expenditure required by those local governing bodies in the performance of their functions and in the capacity of those local governing bodies to raise revenue.

2. Effort neutrality

An effort or policy neutral approach will be used in assessing the expenditure requirements and revenue-raising capacity of each local governing body. This means as far as practicable, that policies of individual local governing bodies in terms of expenditure and revenue effort will not affect grant determination.

3. Minimum grant

The minimum general purpose grant allocation for a local governing body in a year will be not less than the amount to which the local governing body would be entitled if 30 per cent of the total amount of general purpose grants to which the State/Territory is entitled under section 9 of the Act in respect of the year were allocated among local governing bodies in the State/Territory on a per capita basis.

4. Other grant support

Other relevant grant support provided to local governing bodies to meet any of the expenditure needs assessed should be taken into account using an inclusion approach.

5. Aboriginal and Torres Strait Islander people

Financial assistance shall be allocated to councils in a way that recognises the needs of Aboriginal and Torres Strait Islander people within their boundaries.