

Queensland Treasury Response to
Commonwealth Grants Commission
Discussion Paper 2006/01:

Socio-Demographic Composition

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1 INTRODUCTION

Queensland supports the simplification of the Commission's¹ process for determining the relative fiscal capacity of states² to improve the understanding and acceptance of the Commission's outcomes. Queensland accepts that to simplify the process the Commission should examine the conceptual basis of assessments, and the appropriateness of the methodology and data used.

The Commission has proposed using a top down approach to identifying disabilities and how they might be measured. Queensland supports this approach in so far as it brings consistency to the review of categories and disabilities. However, there may be some impediments to identifying and appropriately measuring disabilities at a high level of aggregation. It is not clear if it is possible to combine the unrelated elements of the existing assessments into a smaller group of conceptually coherent assessments. Nonetheless, Queensland supports the Commission undertaking this work on the basis that it may lead to a credible combination which can improve transparency and simplicity.

A more practical outcome may be the re-examination and possible simplification of existing socio-demographic composition disabilities.

2 WHAT IS SOCIO-DEMOGRAPHIC COMPOSITION DISABILITY?

Socio-Demographic composition disability measures the relative impact that differences in state population characteristics have on the cost of delivering state services because of differences in the states' average use patterns and unit costs.

Queensland considers that there is a conceptual case for assessing socio-demographic disability, and will continue to exist into the future, as there are some population groups that will continue to:

- use services more than average; and or
- be more expensive to provide services to; and
- have differences in population characteristics across states.

Furthermore, Queensland considers that there are demonstrable costs associated with these population groups, on the basis of: age, socio-economic status; Indigeneity; gender; and location.

¹ Commission in this paper refers to the Commonwealth Grants Commission, unless stated otherwise.

² States in this paper refers to States and Territories, unless stated otherwise.

3 DISAGGREGATION

Queensland acknowledges that disaggregation decisions will include consideration of disabilities, including socio-demographic composition, and supports the Commission's proposal that disaggregation will be guided by the category structure guidelines outlined in the Commission's Discussion Papers 2006/06 and 2006/07. Queensland also notes that disaggregation will only occur if:

- a strong conceptual case exists;
- it is likely that material differences are able to be identified; and
- reliable data are available to undertake the disaggregation and the resulting assessments.

However, where socio-demographic disabilities can be more reliably, more simply and more transparently assessed in disaggregated categories compared to an aggregated assessment, then the Commission should proceed with a disaggregated assessment.

4 BROADER AND SIMPLER MEASURES

Broad Measures

Queensland supports simpler, but not necessarily broader measures for the socio-demographic composition disability, and only where appropriate. Should the Commission wish to establish broader, more appropriate measures then rigorous research into the root causes of the demand for government services is required. The socio-demographic composition disability should be assessed on a category by category basis. This will ensure any proposed broad measure reflects differing demand for, and/or the cost of providing government services.

In its discussion paper, the Commission uses an example highlighting the use of mortality rates. The use of this measure is not considered appropriate, in part due to the shortcomings identified by the Commission itself in the discussion paper, but more because it is an outcome measure. Outcomes are not appropriate broad measures as they are:

- not a measure of the demand for, or the cost of service provision;
- policy influenced; and
- not (conclusively) the result of a state government's actions.

Further, there may not be a relationship or link between the broad measure and the activity being measured. A key constraint on the degree to which high level data can be used in assessments is the loss of cost data to high levels of aggregation. The Commission is going to have to balance the objective of simplicity against the issues of the data availability and in particular, hard data on cost and demand differentials between the states.

Proxy Measures

Regression analysis can be a powerful tool for examining the relationship between service provision and the characteristics of the users of such services. However, as with any analysis, the outputs are only as good as the inputs, data and assumptions.

Given the impact any proposed regression analysis could have on the distribution of the GST, Queensland considers that it would be sound practice for the Commission to make available to the states any regression analysis that is performed, including a detailed report that identifies:

- the relationship the Commission was testing;
- the source(s) of data;
- a clear explanation of assumptions used;
- a description of the process used to formulate assumptions;
- results of each analysis (particularly where the Commission is attempting to reduce the number of variables included); and
- a complete suite of statistical tests (not just r^2 and adjusted r^2) to enable a more thorough review of results.

The Commission may wish to also consider how the use of regression analysis aligns with its objective of simplifying its methodology. The use of regression analysis may also be seen by some to reduce the transparency of the Commission's methodology.

Regression analysis may be used as a guide to develop and quantify some of the newer, simpler methods. Ideally, where simpler methods are being considered regression analysis should be used to help explain the basis of assessment, as it will increase the understanding and acceptance of the Commission's work.

5 IMPROVING THE 2004 REVIEW APPROACH

Cross-tabulations

Queensland supports the use of joint factors to reduce the prospect of double-counting.

Where appropriate, cross-tabulations may be able to be simplified by using a broader measure that captures the root causes of government service provision, for example young males in law and order or low socio-economic status; and greater use of hospital services due to age or socio-economic status.

Population Characteristics

Queensland supports the reduction of the number of population characteristics, where a lesser number of characteristics can still appropriately capture the vast majority of needs.

Characteristic Disaggregation

Although Queensland supports the application of thresholds to reduce the disaggregation of population characteristics in principle, it is probably more important for the Commission to be satisfied that a conceptual case exists for disaggregating a population characteristic. It is also paramount that the Commission be satisfied that a particular population characteristic impacts on the demand for and/or the cost of providing a service.

A separate socio-demographic composition characteristic factor could be used where the Commission is satisfied that there is only one factor, or one overriding factor, that influences the demand for and/or cost of providing a service. Separate socio-demographic composition characteristic factors could also be used where two factors are not positively correlated.

Indigeneity

Given the recurrent discussions on the influence that different groups of Indigenous people have on the cost of service provision, there is a need to investigate the impact of these groups on the demand for, and cost of state government services.

Queensland will cooperate with the Commission in seeking data that will assist in determining whether the existing cost weights used by the Commission are adequate. Until this analysis is completed, Queensland would prefer not to comment on whether greater use of government services is attributable to low income status and location.

Cultural Diversity

Queensland supports an examination of low English fluency and CALD³. It is recognised that people with low English fluency increase the cost of service provision in some areas.

In the 2004 Review, the Commission made assumptions regarding persons from a non-English speaking background. Queensland suggests that these assumptions and the measurement of different demand, and cost impacts of different CALD groups should be investigated further as part of this review. Issues to be considered include:

- Whether CALD groups are sufficiently homogeneous to make broad assumptions about their demand for, and cost of service provision;
- How CALD issues differ from those of people with a low English fluency; and
- Whether the impact of different CALD groups can be reliably measured and if there are material differences.

Further, it is likely a downward sloping relationship exists between CALD group size and reliance on government services. It is proposed that initially, where there are a small number of people from a specific CALD group, the demand for services and additional costs may be much higher. As the size of this group increases and reaches a critical mass, it then tends to rely less on government services, providing support to its community members internally and reducing costs to the state. A final stage would be reached when the group (perhaps like the Greek community in Melbourne) is no more costly to provide services to than the general community.

Socio-economic Status

The Commission has suggested that it investigate whether adjustments should be made for family size and cost of living, and whether it would be possible to implement these adjustments. Queensland proposes that any such adjustments would add an extra level of complexity, when a key objective this review is the simplification of the Commission's processes.

In the current methodology these issues are, at least in some way, taken into account, through the low income assessment being different for families and individuals. However by developing a more sophisticated way of acknowledging these issues may introduce greater discontent with the assessment of socio-economic status, evidenced by the lack of agreement in academia about appropriate measures.

³ CALD in this paper refers to culturally and linguistically diverse populations groups.

Determining what an appropriate equivalence scale is would be problematic. In the words of National Centre for Social and Economic Modelling (NATSEM)⁴, “Numerous equivalence scales have been developed but no one scale has been overwhelmingly endorsed by the research community”⁵.

Similarly, determining what an appropriate “poverty line” or “state specific poverty lines” is problematic. Again NATSEM notes that “The question of where to draw the poverty line is another issue about which there is little consensus among researchers”⁶.

Making more sophisticated adjustments for these issues may be at odds with the requirement in of the 2010 Review’s terms of reference for the simplification of assessments. As stated previously, Queensland broadly supports simplification of assessments; therefore it may be worthwhile for the Commission to investigate better broad measures that identify the root causes of demand for government services.

At the June 2006 working group meeting, potential measures were discussed for example; more tightly specified SEIFA⁷ indexes. SEIFA indexes show where the affluent (as opposed to just high income earning) live; where disadvantaged (as opposed to the unemployed) live; and where the highly skilled and educated (as opposed to the tertiary educated people) live. SEIFA indexes could be useful across more than just socio-economic status, but with the caution that it may have issues relating to pockets of disadvantage rather than overall disadvantage. Queensland supports the proposed further research in this area.

Another option discussed was an examination of the Australian Bureau of Statistics’ spatial price index. Queensland supports further examination of the spatial price index, but considers it unlikely that the index will provide an appropriate measure of interstate differences in the cost of or demand for state government services. The index will represent supply costs but will also be influenced by the level of commercial competition in the sale of the products contained in the basket. It is unlikely that the index will capture differences across Australia for the provision of a standard level of state government services. It is essential to be clear about what is actually being measured in the index for example; the index is likely to reflect differences that are due to wage differentials. This may lead to double counting for differences already accounted for in wages input costs.

6 DATA AND MEASUREMENT ISSUES

Queensland supports the use of administrative data. In many instances, administrative data is the only source of available information; however Queensland recognises that some states may need to improve the data provided.

The main issue from a Queensland perspective is the need to ensure that data used to determine the relevance of any socio-demographic composition disability is:

- of good quality; and
- comparable across states.

⁴ NATSEM is a research centre associated with the [University of Canberra](#) that undertakes research and analysis specialising in the use of microdata and [microsimulation](#) modelling.

⁵ NATSEM Discussion Paper Number 55, page 15.

⁶ NATSEM Discussion Paper Number 55, page 18,

⁷ SEIFA in this paper refers to socio-economic indexes for areas. The ABS has developed four SEIFA indexes to allow ranking of regions/areas, providing a method of determining the level of social and economic well-being in that region.

In terms of special data requests, as with the annual update data requests, the Commission and states need to be very clear about:

- what the Commission is attempting to measure;
- how the data will be used; and
- the specification of the data requested. For example, what data the Commission wants collected and how it wants it presented.

Queensland is prepared to work with the Commission to ensure that the most appropriate and reliable data is used in the Commission's assessments.

8 USE OF EXTERNAL EXPERTISE

The Commission suggests that external experts may be engaged to provide advice on the identification and measurement of socio-demographic composition effects. Queensland proposes that the Commission initially utilise its in-house expertise prior to the engagement of any external consultants. Commission staff have comprehensive working knowledge of the Commission's socio-demographic composition disability assessment, the shortcomings of data used (particularly administrative data), relevant state arguments regarding various assessments, and the 2010 Review's preliminary structure.

Backed with this knowledge, Commission staff are best placed to appraise, identify and recommend measurement methodology for socio-demographic composition effects in the 6 proposed expenditure and 5 proposed revenue assessment categories outlined in the Commission's Discussion Papers 2006/06 and 2006/07. The states would then be able to comment on their findings. If state consultation is unable to establish an appropriate way forward, an option may be to engage an external expert consultant.

9 CONCLUSION AND FURTHER WORK

Queensland generally supports the top down process the Commission proposes to use to simplify socio-demographic composition disabilities, as it is consistent with the approach being used to determine the appropriate assessment categories for the 2010 Review.

However, it is not clear to Queensland how the disparate elements of the existing socio-demographic composition disability assessments can be addressed in broader assessments. A more practical outcome may be the re-examination and possible simplification of existing socio-demographic composition disabilities.