PRIVATE SUBMISSION TO NATIONAL SCHOOL RESOURCING BOARD

Stephen Farish February 2018

Submissions to the Board include numerous suggestions of ways in which the SES scores derived from ABS census data may be less than optimal in assessing Capacity to Contribute. It should be remembered at the outset that there will be never be a perfect means for measuring such capacity. "Capacity to Contribute" is itself a concept that is neither clearly defined nor agreed upon. Thus the current ABS-based SES measure is an imperfect means of measuring an indefinite concept.

There are several dangers to viewing this imperfection as a failure of the SES model that requires it to be discarded in favour of something "better".

Before the SES model was adopted at the end of the 1990s a simulation project was used to assess both the practicality of such an approach and to provide stakeholders with a clear perception of the outcomes generated. It was widely agreed – albeit based on subjective judgements – that the SES scores provided a valid measure of Capacity to Contribute, at least in ranking schools.

The SES measure was adopted and widely accepted with caveats related to the potential problem of students being drawn into different schools from the same Census Collector District (CCD) according to individual wealth (see two schools example). This is one of the major criticisms of the SES measure.

The criticism regarding differential drawing of students from within CCDs has some validity, but the extent to which it potentially affects funding has not been measured. An appendix page herewith shows how differences in school SES can still be measured despite this bias. In geographic areas where CCDs are not widely varied in SES this problem may be more severe.

Another major criticism of the SES is that the Census is conducted only every five years, with another year's delay in the data being available, and a further delay before funding based on the latest census comes online.

The weightings of the SES components of Occupation, Education and Income have been criticised on two fronts. One is that the equal weightings are arbitrary. This is true but no obvious alternative weighting for these three components has been proposed. Occupation and Education were included because the SES committee reasoned that these identified other components of Capacity that income alone did not. The other criticism suggests that only the income dimension should be used.

The temporal stability of ABS data has been criticised because it cannot respond to more immediate changes in communities. For example, major industry closures in a geographic location are unable to be accommodated.

Any change to the methodology for measuring SES or Capacity will cause disruption as the old is replaced with the new. When the SES was introduced the government of the time made a late decision to maintain funding for schools that would otherwise have their funding reduced. This both

added to the funds needed to introduce the SES and created a group of schools that were not funded on their SES score and were thus technically "overfunded". The Gonski reforms further added to these discrepancies with some schools requiring more than a century to achieve their nominal funding level through a gradual approach. Any new change will have the same dangers, and so should be introduced carefully.

The major criticisms of the existing SES are as above. There are numerous minor ones that I am able to comment on separately if needed.

Some of the advantages of the existing SES methodology should be kept in mind:

- A Census-based SES approach has better capacity to measure hidden income, to the extent that one's neighbours reflect one's own status.
- The Census data is already collected and available for use
- The process is relatively straightforward mathematically validated
- The data collection at the student level (geocoding) is reasonably easy
- Year-to-year volatility in funding is almost eliminated

Whilst individual-level data has considerable appeal and its proponents make several excellent points in favour; there are other disadvantages and issues that need to be addressed. These include:

- Privacy issues are substantial and whilst not insurmountable, they are serious
- Individual data collection done more frequently than the Census is a major administrative imposition on schools. Undertaking this every year may create resistance
- To obtain <u>valid</u> measures of individual data there may need to be auditing and/or data linkage to things like ATO data, both of which raise privacy and compliance concerns
- Individual-level data is not real-time. Data collection in one year will relate to incomes in the previous financial year, and then will not be applied until at least the following year. This introduces a minimum 2- to 3-year delay.
- Individual-level data is much more volatile than ABS data simply <u>because</u> it is at the individual level. This is a statistical effect that is unavoidable. Such data may need smoothed averages over previous years to reduce the statistical volatility and thus increase the time lag
- Data collected at the school or parent level has greater potential for inappropriate manipulation, false reporting, and missing data
- Split families and different levels of income and fee-payment by each parent create complex measures of household or parental capacity to contribute

PROPOSAL

I propose that what should be done is a research/simulation project that has multiple aims. Such a project would obtain both individual-based measures of SES /Capacity and census-based measures. This project would measure these outcomes:

- The practicality of gathering individual-level data, including confidentiality, accuracy and validity issues.
- Whether that data appears to better rank schools.
- Whether that data provides similar rankings to census-based SES measures.
- Whether there exists a system-specific bias caused by differential drawing from within Census districts, and if so, whether that bias can be quantified/measured
- Whether there is a geographic bias in differential drawing, and whether that bias can be quantified/measured.
- Whether there is an interaction bias related to systems and geography.
- Whether the quantification of any bias would facilitate some adjustment for that bias.
- Whether the existing SES measure is still considered to rank schools accurately.
- What relationship exists between the SES components of Occupation, Education and Income and the individual-based measures? (ie can the weightings be adjusted to better match individual-level measures?)
- What is the volatility of individual-level data? (this can be statistically determined)
- Does individual-level data provide a means to adjust for local geographic changes in SES after a Census?

A research project/pilot study addressing these issues would be efficient because the ABS SES data is already gathered from schools; only the individual-level data is needed. The schools sampled for individual-level data collection need to be carefully selected to ensure that they answer the relevant research questions. Depending on whether longitudinal analysis is required (eg volatility from year-to-year) 1½ to 3 years would be needed for completion.

Additional Comment

Using fee data to assess Capacity has some major drawbacks. First, when the GST was introduced, the then treasurer promised that there would be no "tax on a tax". Parents paying school fees do so out of post-tax income. If government funding to non-government schools is partially based on fee income, it effectively becomes a "tax on a tax". Second, it has the perverse effect of a negative feedback loop. If higher fees mean reduced government funding, the fee shortfall then needs to be made up with increased fees, which then means even more reduced funding, and so on.

It is also likely that Capacity is a product of fees, as much as the other way around. In other words, parents may either choose schools based on the fees they have the capacity to pay, or they may increase capacity to meet those fees. In either case, basing government funding on the level of such fees seems somewhat perverse.