This submission responds to the Commonwealth Grants Commission's (CGC's) discussion paper CGC 2016-18-S.

## The Education Variables

We support the proposal for the CGC to include the education variables in its econometric model for this year and in the future, as they are material.

## The General Discount

We do not support the proposal for the CGC to continue to apply the 12.5% discount for this assessment.

The discussion paper states at paragraph 3 that the discount reflects concerns about the data and method used in the assessment. However, the discount was originally applied in the 2010 Review because of data uncertainty alone (see paragraph 15 of the discussion paper CGC 2015-05-S).

We believe the Characteristics of Employment Survey (CoES) data for 2015-16 is of superior quality to the 2012-13 data it replaces, producing more reliable and accurate outcomes than previously. Due to the inclusion of the education variables, it is also superior to the 2014-15 data. Therefore, the 12.5% discount should be removed for the 2015-16 data year.

If the CGC does not accept that the 2015-16 data year wage factors are better quality than the factors for the earlier data years and decides to apply a discount, it should recognise that discounting these factors towards equal per capita (EPC) would <u>not</u> produce a better horizontal fiscal equalisation (HFE) outcome.

It is possible to derive two alternative measures of 2015-16 wages disabilities by:

- escalating the 2013-14 wage factors by the ABS wage price index; or
- escalating the 2014-15 wage factors by the ABS wage price index, and adding the impact of the education variables identified in Table 1 of the discussion paper.

While these measures might not be as good as the factors calculated from the 2015-16 CoES data, they use the ABS wage price index which the CGC has previously considered to be an acceptable proxy for movements in wage disabilities.[1] Hence, these alternative measures can be used to assess the data uncertainty in the factors calculated from the 2015-16 CoES data.

If the alternative measures are closer to EPC, then they call into question the CGC's 2015-16 CoES factors (i.e. they should be discounted towards EPC). However, if they are further from EPC then they support the CGC's 2015-16 CoES factors – in fact, they suggest that those factors understate disabilities. In that case, the evidence would say that discounting towards EPC produces a worse HFE outcome.

The 2015-16 undiscounted wage factors derived from the above approaches, and the CGC's proposed undiscounted 2015-16 CoES factors, are as follows:

| | NSW | Vic | Qld | WA | SA | Tas | NT | ACT |
|---|---|---|---|---|---|---|---|---|
| Derived from 2013-14 | 1.009 | 0.981 | 0.977 | 1.063 | 0.987 | 0.955 | 1.077 | 1.041 |
| Derived from 2014-15 | 1.008 | 0.985 | 0.983 | 1.074 | 0.955 | 0.922 | 1.098 | 1.025 |
| CGC proposed | 1.001 | 0.984 | 0.997 | 1.055 | 0.975 | 0.930 | 1.060 | 1.056 |

As the derived factors are further from EPC than the 2015-16 CoES factors, discounting the CGC proposed factors towards EPC could be expected to introduce errors into the results, and hence move away from HFE.

The directions in which the CGC's proposed undiscounted factors would need to move to get closer to the alternative estimates, and the directions that the CGC's proposed discounting would actually move the proposed factors, are as follows:

| | NSW | Vic | Qld | WA | SA | Tas | NT | ACT |
|---|---|---|---|---|---|---|---|---|
| Derived from 2013-14 | **up** | **down** | **down** | **up** | up | up | **up** | down |
| Derived from 2014-15 | **up** | up | **down** | **up** | **down** | **down** | **up** | down |
| CGC proposed | down | up | up | down | up | up | down | down |

[1] In paragraph 54, page 468 of the 2015 Review Report, Volume 2, the CGC stated that it saw indexing by the wage price index to only result in a minor increase in uncertainty (insufficient to alter the discount).

In the above table, the directions are bolded where they are opposite to the CGC's proposal. It can be seen that the direction is opposite for five States for the alternative factors derived from 2013-14 data and six States for the alternative factors derived from 2014-15 data.

Hence, we conclude that discounting towards EPC would give a worse HFE outcome.

If the CGC wishes to discount, it would be more appropriate to discount towards one of the sets of alternative factors that we have derived. For example, if the CGC wants to keep the 12.5% discount, it could take a weighted average of the escalated 2014-15 factors (weighted by 12.5%) and the 2015-16 CoES factors (weighted by 87.5%). A precedent would be the CGC's decision to average Rawlinsons cost factors with recurrent cost factors for the capital assessments.

## The State Specific Adjustment for Tasmania

We support the proposal for the CGC to not introduce a State specific adjustment for Tasmania. We believe Tasmania's modelled outcome falls within the bounds of public sector wages, hence warranting no adjustment.