



Australian Government


Commonwealth Grants Commission

2016 UPDATE

WAGE COSTS ASSESSMENT

**STAFF DISCUSSION PAPER
CGC 2015-05-S**

November 2015

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BACKGROUND

- 1 Our normal practice in an update is to present a new issues paper to States, describing our proposed recommendations to the Commission. This allows the Commission to consider our proposals with the benefits of the views of the States. As such, this paper outlines current staff views on how we should interpret and use the latest data from the ABS in the assessment. At this stage, no account has been taken of our consultant's findings, except we note they are not inconsistent with a wage cost assessment.

CHARACTERISTICS OF EMPLOYEES SURVEY

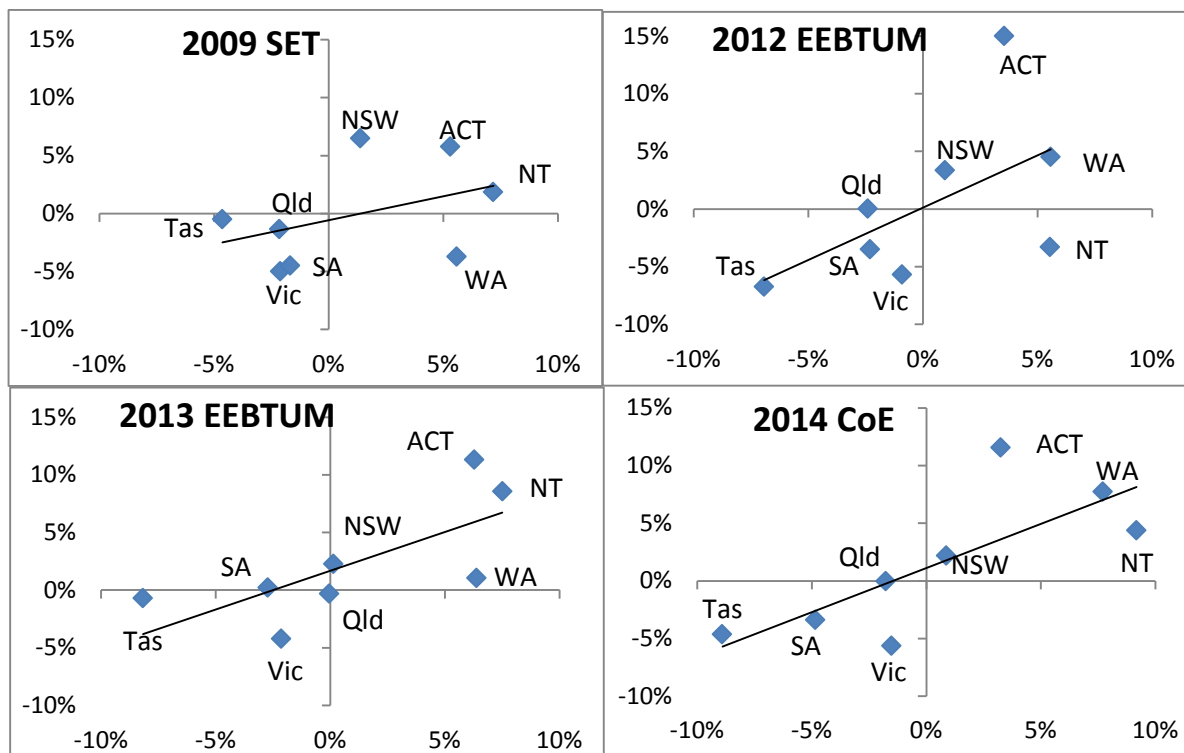
- 2 Data and results from the Characteristics of Employees survey (CoE) were sent to States in the email of 12 November 2015. Staff have given some consideration to these and undertaken further analysis.

Public and private relationship

- 3 The new data support the conceptual case for continuing the assessment. Public and private wage levels appear to be strongly influenced by the same community wage pressures. Figure 1 shows a stronger relationship between the relative private and relative public sector wages in the recent surveys than was found in the 2009 Survey of Education and Training (SET). We show estimates produced from the CoE survey, as well as results from the 2012 and 2013 Employee Earnings, Benefits and Trade Union Membership (EEBTUM) survey. In the 2012 to 2014 surveys, 3 out of 24 States were not in the expected quadrants¹ (above average in both private and public sectors, or below average in both).
- 4 The 2009 relationship was not statistically significant, and this drew comment from several States, notably Queensland. The 2012 relationship is not significant, but the 2013 and 2014 relationships are, and the relationship over all four surveys is highly significant.

¹ Northern Territory in 2012 is in the bottom right quadrant. Queensland in 2012 and South Australia in 2013 have public sector wages very marginally above the national average.

Figure 1 Public and private relative wages, 2009 and 2012-2014



Note: 2009 SET: $Y = 0.413 - 0.006X$. $R^2 = 0.17$ 2012 EEBTUM: $Y = 0.908 - 0.001X$. $R^2 = 0.31$;
 2013 EEBTUM: $Y = 0.672 - 0.017X$. $R^2 = 0.51$ 2014 CoE: $Y = 0.765 - 0.011X$. $R^2 = 0.58$
 The y-axis shows relative public sector wages, and the x-axis relative private sector wages.

Source: Commission analysis of various ABS surveys

Results

5 Table 1 shows the relative private sector wages paid for comparable employees in each State. It shows our measurement of this indexed forward from the 2009 SET to 2014-15 using the Labour Price Index (LPI), and the 2014-15 estimate produced from the CoE. We have also included 2012 and 2013 EEBTUM results. The data used to create this table have previously been provided to States.

Table 1 Relative private sector wages, 2012-13 to 2014-15

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	%	%	%	%	%	%	%	%
SET indexation (a)								
2012-13	1.0	-2.0	-2.3	7.0	-2.2	-5.4	4.6	7.7
2013-14	0.9	-2.0	-2.3	7.0	-1.6	-5.8	4.3	8.0
2014-15	0.7	-1.8	-2.2	6.6	-1.4	-5.5	4.3	8.0
Average	0.9	-1.9	-2.3	6.9	-1.7	-5.6	4.4	7.9
New EEBTUM/CoE								
2012-13	1.0	-0.9	-2.4	5.6	-2.3	-6.9	3.5	5.5
2013-14	0.1	-2.1	0.0	6.4	-2.7	-8.2	6.3	7.5
2014-15	0.9	-1.5	-1.8	7.7	-4.8	-8.9	3.2	9.2
Average	0.7	-1.5	-1.4	6.6	-3.3	-8.0	4.4	7.4
Difference								
2012-13	-0.1	1.1	-0.1	-1.4	-0.1	-1.5	-1.0	-2.2
2013-14	-0.7	-0.1	2.2	-0.6	-1.1	-2.4	1.9	-0.5
2014-15	0.1	0.3	0.5	1.2	-3.5	-3.4	-1.1	1.1
Average	-0.2	0.4	0.8	-0.3	-1.6	-2.4	0.0	-0.5

(a) 2009 SET data indexed by relative change in the ABS Labour Price Index.

Source: Commission analysis of ABS survey and LPI data.

Missing qualification data

- 6 The 2014 CoE survey contained questions on education and qualifications, and our choice of this survey was partly based on their inclusion. However, these data are not available, due to a data processing failure by the ABS. The ABS assures us that the issue has now been resolved, and that future CoE data will contain this information.
- 7 We have found that models which do not include education or qualification variables but which instead include detailed industry and occupation data perform very similarly to the former models. Goodness-of-fit measures such as R-squared are similar when using detailed data or qualifications. It appears that information on detailed occupation is as effective in predicting an individual's income as broad occupation such as 'medical professional' along with qualification information.
- 8 However, while changes in State coefficients are relatively small, they may be material. Given the complexities involved in the models, staff cannot confidently measure or predict the impact on State estimates, and so cannot recommend any adjustment be made for it.
- 9 The 2012 and 2013 EEBTUM surveys were available for previous updates. However, the detailed occupation and industry data needed to create a model as accurate as one with qualifications was not. The ABS has freed up access to its data, and for the

first time in this update, we have had access to the detailed industry and occupation data that are collected in these surveys.

Options for wage costs assessment

- 10 There are two obvious strategies for measuring wages in this update:
 - delay the introduction of new data and continue to index the SET 2009 estimates forward until we have survey data including qualifications, or
 - decide that the contemporaneity of the CoE/EEBTUM surveys outweighs their lack of qualification data, given the improved results due to the inclusion of more detailed occupation and industry data.
- 11 The first means no change to method or data we would use. The second would mean a change in data source but no change in method.
- 12 Staff consider that the lack of qualifications means that the new data are well short of ideal, but are also concerned with the age of the SET data. On balance, we think that the best overall HFE result is produced by using both. We intend recommending the Commission use indexed SET in 2012-13 and 2013-14 and CoE in 2014-15. We consider this gives the appropriate balance between estimating wages controlling for all important differences in human capital (including education), and using contemporaneous data.
- 13 For the 2017 Update and beyond, staff intend to recommend the Commission bring in the incoming estimates from CoE surveys as they become available.
- 14 Table 2 shows the illustrative GST impact of adopting a SET/CoE approach. This table uses the 2015 Review assessed expenses, as the 2016 Update assessments are too preliminary to provide reasonable estimates of impacts.

Table 2 Illustrative GST impact of proposed wages assessment, 2015-16

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Dollars million	297	-539	-438	869	-220	-140	74	97	1 337
Dollars per capita	39	-90	-90	321	-129	-271	185	383	55

Note: The GST distribution calculation is made on the basis of 2015 Review applying the 2016 wage assessment factors to 2015 assessment years. The 2016 Update contains very preliminary data, and so we cannot meaningfully measure the impact of wages in 2016 yet.

Discounting

- 15 In the 2010 Review the Commission said:

We acknowledge that there could be some uncertainty in our approach — how accurately SET data measure wage costs; how accurately our econometric model controls for differences in productivity; and how well private sector wages proxy wage

pressures in the public sector. We have decided to apply the low discount (12.5 per cent) because of data uncertainty.

- 16 We do not consider the uncertainty of this assessment has markedly changed, and do not recommend the Commission change the discount. Any marginal increase in uncertainty by not including education variables is offset by the increased contemporaneity. We also note that we expect in the next few updates to incorporate higher quality contemporaneous data, and so increasing the discount for a single year appears unwarranted.

CAPITAL CITY OR WHOLE-OF-STATE ASSESSMENT

- 17 Commission staff have raised the prospect that private sector wages in the capital cities are a better proxy for the community wage affecting public sector wages. While staff have been able to find some evidence in support of this conceptual case, we do not currently consider the empirical results compelling enough to support a change in methods. In particular, evidence was not conclusive in regards to:
- public sector employees receiving the same wage everywhere in the State
 - private sector wage levels in capital cities producing a better measure than State wide wage levels of the community wage levels affecting the public sector.
- 18 While some States have made arguments for change, we consider that issues raised by other States should be further explored before any change is made. Western Australia, in particular, made arguments that such an assessment may conflict with the principles of HFE, and that to adopt a stricter interpretation of the 'what States do' supporting principle in this case would require a much more detailed investigation of State service delivery models.
- 19 Queensland, South Australia and the ACT considered that there was little evidence to support the choice of the capital city region as the benchmark for any State. Queensland also noted that more dispersed States may have a greater focus on regional areas rather than capital cities.
- 20 Staff consider that the lack of compelling evidence in support of a change, combined with the points raised by the States, mean that it would be premature to introduce such a change. Staff are inclined to recommend the Commission not adopt such a change in this review.

STATE SPECIFIC ADJUSTMENTS

Tasmania

- 21 In the 2010 Review, the CGC applied a 25 per cent discount to Tasmania’s modelled wage outcome. It considered data from the 1997, 2001 and 2005 SET ‘indicates there are constraints on the variation of public sector wages, and that there are likely to be bounds within which public sector wages lie.’² The Commission suggested relative public sector wages in Tasmania could not fall as low as the SET data suggested Tasmania’s relative private sector wages had fallen. In the 2011 Update, with the release of the 2009 SET, the Commission discontinued this adjustment, as Tasmanian private sector wages were no longer outside the bounds within which public sector wages lay. With the release of the CoE data, we again find that Tasmania’s private sector wages (8.8% below average) are well outside the range found for any public sector wage relativities (Victoria being the lowest at 5.6% below average).
- 22 We consider that using the indexed SET numbers for the first two assessment years mitigates the effect of the new data, putting the average Tasmanian private sector wage for the three years at 6.7%. Given that Victoria appears able to pay wages 5.6% below the national average, we do not consider there is sufficient evidence that Tasmania is unable to pay wages 6.7% below.

Australian Capital Territory

- 23 The ACT considers that the large influence of the Commonwealth government means that private sector wage levels do not fully reflect community wage pressures because of the influence of the Commonwealth Government with which it competes.
- 24 The new data show that the public sector relativities in the ACT (driven primarily by the Commonwealth) are considerably higher than the private sector wage relativities:
- 2012 EEBTUM – 16% for public and 4% for private
 - 2013 EEBTUM – 11% for public and 6% for private
 - 2014 CoE – 12% for public and 3% for private.
- 25 We do not consider this means an adjustment is warranted. The private sector wages in the ACT are higher than the national average. The wage pressures faced by the ACT and the private sector presumably reflect the impact that the Commonwealth has on local community wages.

² CGC, 2010 Review, Volume 2, p. 505.

Western Australia

- 26 Western Australia notes that neither the SET nor CoE are collected in very remote areas. 2.5% of Western Australia's population is very remote. If the private sector workers in these areas receive higher wages than comparable workers in the rest of Western Australia, then by excluding this population from our data we may be underestimating Western Australia's wage pressure.
- 27 Census data show that Western Australian very remote wages are higher than elsewhere in the country. It suggests that if the ABS surveys included very remote areas Western Australia's wages factor would increase, and that increase would be around \$30 per capita. However, this analysis is done on much poorer quality data than the ABS surveys used in the rest of the assessment, and relates to 2011, probably the peak of any wages spike in very remote Western Australia.
- 28 As such, while we accept there is probably a bias against Western Australia, we cannot reliably control for it, and an adjustment is probably unlikely to be material.

RECOMMENDATIONS

In this update, staff intend to recommend the Commission:

- use the 2009 SET indexed forward for the 2012-13 and 2013-14 assessment years
- use the CoE derived estimate for the 2014-15 assessment year
- continue to discount the assessment by 12.5%
- make no adjustment for State specific influences
- retain a whole-of-State approach to the assessment.

REVISED TIMETABLE

- 29 As part of the 2016 Update, we commissioned researchers at the National Institute of Labour Studies at Flinders University to undertake a review of data to examine support for our conceptual case. Due to significant periods of illness among the key authors, and a greater than anticipated complexity of the results, the draft report was delayed.
- 30 Due to the delays in the Mavoramaras paper, and the ABS survey results, our original deadline for State submissions of late November is no longer appropriate. We intend to submit a paper to the Commission in early January, and so ask for any State views by Christmas Eve.