AUSTRALIAN CAPITAL TERRITORY

2016 Update

ACT Comments on Commonwealth Grants Commission Staff Discussion Paper

CGC 2015-05-S

Wage Costs Assessment

December 2015

Chief Minster, Treasury and
Economic Development Directorate

EXECUTIVE SUMMARY

Conceptual Case

The ACT welcomes and supports the Commission staff view that the new data set and independently commissioned academic research continue to support the conceptual case for the wage cost assessment.

States opposing the basis of the assessment have failed to develop any new arguments or progress previous arguments as to why the assessment should be discontinued.

The findings and evidence clearly establish the ongoing validity of this assessment, and the conceptual case requires no further consideration.

Options for Wage Costs Assessment in the 2016 Update

While the conceptual case for continuing the assessment is sound, the ACT is not convinced that the case has been made to adopt the new Characteristics of Employees (CoE) dataset in the 2016 Update. The ACT favours what has been characterised as strategy one in the CGC staff paper for adoption in the 2016 Update. This means no change to method or data from the 2015 Review.

This view is largely premised on the belief that it would be premature to make the proposed change, given the absence of qualifications data in the CoE dataset and the lack of time for all parties to properly analyse the data that is available to ensure its robustness and reliability.

The severe time constraints have also meant that we have not been able to effectively develop a case for a State specific adjustment to apply to the assessment for the ACT, arising from the dominant role played by the Commonwealth government sector in the ACT. Further support for the significance of this factor has been provided in the consultants' report recently provided to States in draft form.

For these reasons, the ACT's strong recommendation is that implementation of the new data set, with associated adjustments to the assessment methodology, should be deferred to the 2017 Update.

The phasing in of CoE data in the 2017 Update, including data on qualifications, with the phasing out of SET data over the assessment years is likely to provide the most robust and stable approach to implementation.

While the Commission's own update guidelines, agreed with States, give it the flexibility to make changes by applying new or better data to ensure the relativities remain as contemporaneous as possible, we consider the new wage costs data has not met the required quality control test at this point.

All Governments are looking for certainty, a clear message coming out of the White Paper process underway regarding Federation Reform and National Tax Reform. The practice of horizontal fiscal equalisation is under review and it is incumbent on the Commission and parties not to deliver any surprises to Governments particularly in an Update context.

As the staff paper itself states, it is not possible to accurately model the GST impact of adopting a new hybrid SET/CoE approach incorporating 2014-15 expense data, given 2016 Update assessments across all categories are too preliminary. The ACT considers that the CGC Staff attempt to illustrate the impact by applying the 2016 wage assessment factors to 2015 assessment years is potentially misleading and cannot be used to brief our respective Governments on the likely impact of any change to this assessment.

Discounting of the Assessment

The staff proposal to continue to apply the discount to the overall assessment in the 2016 Update reinforces what has been said previously about the maturity of the new data set.

The fact that the staff consider the uncertainty of this assessment has not changed even with the proposed revised data source adds weight to the view that the SET-based assessment should continue in the 2016 Update.

We note that the CGC staff expect in the next few updates to incorporate higher quality contemporaneous data, which implies that the discount should diminish or be removed in the future.

Capital City or Whole-of-State Assessment Approach

The ACT is satisfied that the concept of private sector wages in the capital cities, rather than for the whole of a State, acting as a better proxy for community wage pressures has not been established. Measures such as the correlation of State public sector wages with the alternative private sector wage benchmarks (capital city and whole of State) and the dispersion of relative wages indicate that there is no case to support the use of capital city private sector wages as the proxy.

Without emergence of new and convincing evidence, this concept should not be pursued further.

State Specific Adjustments

Australian Capital Territory

The ACT continues to strongly argue that the large influence of the Commonwealth government in the Territory means that private sector wage levels do not fully reflect community wage pressures. The most appropriate proxy measure for the ACT would be a combination of private sector and Commonwealth government wages.

An adjustment similar to that in existence prior to the 2011 Update is warranted. Information presented in the recent consultants' report adds further weight to the case for such an adjustment.

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INTRODUCTION

This submission builds on the ACT Government's earlier submission titled *ACT Comments on Commonwealth Grants Commission Staff Discussion Paper CGC 2015-03S* to the Commonwealth Grants Commission (CGC) review of the wage costs assessment as part of the 2016 Update on GST Revenue Sharing Relativities.

- The CGC had previously deferred its review of the assessment in the *Report on GST Revenue Sharing Relativities 2015* Review (which recommends the 5 yearly methodology framework) until new data became available.

- As part of this 2016 Update review, the CGC staff released a CGC Staff Discussion Paper CGC 2015-03S, *Wages Costs Assessment* (CGC 2015-03S). This paper framed the initial discussion to be had on the review of this assessment. In addition CGC staff released Information Paper CGC 2015-04 *History of the Wage Costs Assessment* which provided the relevant background to the development of the current assessment.

The CGC subsequently released a further discussion paper to the States and Territories on 20 November 2015 - *Wage Costs Assessment – Staff Discussion Paper CGC 2015-05-S* (CGC2015-05-S) which describes their proposed recommendations to the Commission. This paper has been drafted with the benefit of earlier State submissions and the release of new ABS data. Notably the paper does not include the subsequent receipt by the CGC of a consultant's report commissioned separately by the CGC.

States and Territories have been invited to make final submissions by 24 December 2015.

CONCEPTUAL CASE

The review of the Wage costs assessments has offered the opportunity to consider the conceptual case for the continuation of this assessment. In the ACT's view, the conceptual case is established if three criteria are met:

- Relevant theory/academic literature supports it.

- It makes intuitive sense.

- Current and substantive data support it.

Our first submission presented evidence of the substantial theoretical underpinnings for the conceptual case, and of the intuitive reasonableness of the case. The third criterion has now been bolstered by the Characteristics of Employees (CoE) data for 2014 recently provided by the CGC.

The academic study on public-private sector wage differentials recently commissioned by the CGC has further reinforced the case for the assessment. For example, this report states that: "those who live in a major city are paid 8% more than those who do not, with no discernible difference between public and private sector pay" (p.8). This supports the arguments the ACT has put forward about the influence of factors such as cost of living on nominal wage differences between regions and States, and that public and private sector wages respond to the same underlying pressures.

In our first submission we also thoroughly examined each of the main arguments put in their first submissions by States opposing the current basis of the assessment and demonstrated that they were either misconceptions or were, in fact, not inconsistent with the current assessment approach.

These States have failed again to develop any new arguments as to why the assessment should be discontinued. In addition many have failed to progress their arguments in light of the positions put forward by Staff in CGC 2015-03S. A detailed critique of the inconsistencies in other States' first submissions is at Attachment A.

As there does not appear to be anything further to add to the debate, and the initial CoE results support the conceptual case for this assessment, the ACT considers that the ongoing validity of this assessment has been clearly established and requires no further consideration.

OPTIONS FOR WAGE COSTS ASSESSMENT IN THE 2016 UPDATE

The ACT considers that the CGC should adopt strategy one (as per para 10 of CGC Staff Discussion Paper 2015-05-S) for measuring wages in the 2016 Update, rather than the strategy CGC Staff are proposing. That is, the introduction of the new data should be delayed and the Survey of Education and Training (SET) 2009 estimates should be indexed for another year. This is not to say that the CoE should not be adopted at all, but rather that it would be premature to adopt it in the 2016 Update, particularly given the issues with the 2014 CoE dataset. The ACT contends that the adoption of the CoE dataset should be delayed until the 2015 CoE data is made available, in time for the 2017 Update.

CGC 2015-05-S outlines a number of concerns that make it clear that it would be inappropriate to adopt this dataset at this early stage. In particular, it is evident that it is unclear what impact this would have on the GST distribution. The ACT has itself attempted to reproduce the figures in Table 2, however were unable to. At Attachment B is an explanation of how we attempted to do this. The complexity of attempting to estimate the impact of this proposal is an indication the hybrid mix is not developed enough to satisfy quality of data concerns for an Update.

The ACT notes that the SET indexation results, as illustrated in Table 1 of the CGC 2015-05-S, overall appear more stable than the EEBTUM/CoE results. A similar argument applies to the use of a hybrid SET/CoE approach, as the CoE has significantly different results from the indexed SET for 2014-15, particularly for the smaller States such as SA and TAS. Given these approaches involve combining datasets this is not unexpected.

If the 2014 CoE were to be adopted now, then the inconsistencies across the assessment are only likely to be further exacerbated in the 2017 Update. As the 2014 CoE dataset does not contain qualification data, but the 2015 CoE is expected to include this data, if we were to move ahead with introducing the 2014 CoE dataset and using the SET dataset, this would mean that the 2017 Update would be effectively using three different types of dataset.

The uncertainty created by this approach is highlighted by the fact that we are considering introducing a new dataset and yet CGC Staff are not inclined to recommend to the CGC the removal of the discount currently applied to the assessment. New data should improve the accuracy of a model and reduce the uncertainty surrounding the results. The fact that CGC Staff cannot ascertain the direction of the impact that the missing qualifications data has on State coefficients, let alone the magnitude, indicates that the data is not of the quality required. The 2015 CoE data, including qualifications information, can be introduced for 2015-16, with indexed SET being used for the first two assessment years as part of the 2017 Update.

Discounting

The ACT contends that by introducing the 2015 CoE data in the 2017 Update, on the assumption it will include qualifications data, the improved data quality combined with its contemporaneity would improve the accuracy of the assessment sufficiently for the CGC to consider the removal of the discount in its entirety.

CAPITAL CITY OR WHOLE-OF-STATE ASSESSMENT

This is now the third attempt that CGC Staff have made to develop the case for an assessment based on relative average capital city wage levels. The 2010 Review rejected its adoption as it was not clear whether States are setting a wage that reflects conditions in the State capital, while paying that wage in the rest of the State, or a wage based on the average conditions across the State.

The proposal was then considered in the 2015 Review, where decisions on the entire Wages costs assessments were deferred until the 2016 Update. Staff now consider that there is a lack of evidence in support of the change and are inclined to recommend the Commission not adopt such a change.

The ACT supports this position. It is clear that there is no conclusive evidence to support this proposal, and there is no need to revisit it in the future without clear evidence first being presented to the contrary.

To date, CGC Staff have only been able to present anecdotal evidence that States might set wages based on the average wage level in their capital city. Victoria have presented data that shows that "(e)ven before standardising for seniority, it is apparent that wages across Victoria for most public sector employees are flat, with limited difference in wages between city and rural and regional employees". CGC Staff too have used the SET data to similar effect.

However, as CGC Staff note in an email that was sent to the States on 17 September 2015, this is only "(o)ne part of the question". The data supplied by Victoria demonstrates that States do appear to pay comparable wages for comparable employees in different regions across the State. In all likelihood this is true; States do appear to set wages on a whole of State basis. However what hasn't been established in any of the data is whether the wage level is based on the whole of State average or the capital city average.

Given the level of correlation between relative private and public sector wage levels across States, and that in an absolute sense State public sector and State private sector wage levels are not likely to be equal, the data does not readily show that capital city is a better proxy than whole of State. One indicative measure is the level of correlation between State public sector wages and each of these measures. The latest CoE data suggest that there is not much difference between whole of State and capital city wages in terms of a benchmark for public sector wages.

Another indicative measure is comparison between the two benchmarks of the dispersion across States of relative wages. Public sector wages are generally less dispersed than private sector wages, as shown both by the 2009 SET data and to a lesser extent by the CoE data. On this measure, whole of State private wages appears to be the better benchmark, as the dispersion of relative wages is less than for capital city private wages.

Further support for this view is provided by the consultants' paper, which finds (p.20) that "in each State, the average rate of pay is higher in major cities than elsewhere, in both the private **and public** sectors..." (our emphasis). The paper also states that "most of the public sector gap is explained by the payment of a premium to city workers...". This indicates that there is some flexibility in public sector remuneration, within the constraints of State-wide agreements, to pay more to workers in particular locations. Hence, it suggests that the assessment is better based on a whole of State average rather than on capital city wage rates.

The proposal has now been rejected three times and CGC Staff are no closer to establishing a basis for its inclusion. The ACT considers that any further enquiry into this proposal, would be an inefficient use of everyone's highly constrained time and resources.

STATE SPECIFIC ADJUSTMENTS

Australian Capital Territory

The ACT is not satisfied with the position that CGC Staff have presented in 2015-05-S on Commonwealth influences on wages paid in the ACT i.e. they do not consider an adjustment is warranted on the basis that private sector wages do fully reflect Commonwealth Government influence. We again contend that a precedent has been set by previous Commissions that has been ignored in the recommendation proposed by Staff.

Prior to the introduction of the 2009 SET data, the ACT received an adjustment to its Wage costs assessment final factor as the CGC considered that the private sector wage relativities did not fully reflect the wage pressures that come from the Commonwealth Government. It increased the ACT wage relativities by one percentage point. This was discontinued when the results of the 2009 SET showed strong growth in the ACT's private sector wages, relative to the public sector, so that public and private sector relative wages were broadly consistent.

The preliminary results provided by CGC Staff on the CoE dataset illustrate that this gap is once again present in the data, the ACT's public sector wages being 11.5% above the national average, whereas ACT private sector wages for the same period are only 3.2% above the national average. Previous Commissions considered this to be sufficient in demonstrating that private sector wages do not adequately capture the influence of Commonwealth Government wages on ACTPS wages.

To illustrate the unusual profile of employment in the ACT, the public sector in the ACT comprises about 56% of all employment, compared with 22% nationally. Moreover, Commonwealth government employment constitutes almost 80% of the ACT public sector, compared with 16% of the public sector nationally. In this context, the overall level of public sector wages in the ACT cannot be considered as subject to policy influence by the Territory government.

We do appreciate that the CGC 2015-05-S does not consider the arguments put forward in the draft Consultants' Paper *Public-private sector wage differentials in Australia: What are the differences by State and how do they impact GST redistribution decisions* and that the proposed position of Staff may change as a result. The paper makes particular note of the ACT being a special case due to the distinctive nature of our public service. The ACT has provided in depth analysis of the draft consultants' paper at <u>Attachment C</u>.

The figures presented in the paper are indicative of the unique nature of the ACT. For example, Table 5 (p.10) shows that the total gap between public and private sector pay over the period 2001 to 2013 was higher for the ACT than any other State, and the premium of public over private sector pay was the second highest of any State.

The consultants' paper also highlights that there are two factors driving relatively high public sector premiums; remoteness and relatively low private sector pay. Yet the ACT does not offer either of these characteristics, being a major city and having a private sector that attracts a relatively high wage. The unique behaviour of the ACT is further emphasised when you consider the analysis on the pre- and post-GFC public-private pay gap. The ACT saw a large negative change in both the total wage gap and the wage gap attributed to differences in human capital in the post-GFC period. This led to the ACT being the only jurisdiction to experience a reduction in the premium paid to public sector employees. In assessing these results it is important to note the authors point out that they are unable to distinguish between the trend and the shock effects.

The ACT has compared the pre- and post-GFC period against the number of APS engagements over the same period. Interestingly they show that the decline in the public-private gap over this period also coincides with the Commonwealth Government's cutbacks to the APS. Table 1 and 2 below show the pre- and post-GFC APS engagements. The average annual growth rate in engagements pre-GFC was 5.9%, while the post-GFC period saw negative average annual growth of -13.8%.

Table 1. Pre-GFC APS Engagements (2001-2007)

	2001	2002	2003	2004	2005	2006	2007
Total	13791	12138	15201	9407	11592	20950	19430

Table 2. Post-GFC APS Engagements (2008-2013)

	2008	2009	2010	2011	2012	2013
Total	16091	13108	10321	12828	11270	7639

Just as the consultants note, it is not possible to determine the exact impact that the reduction in engagements had on the reduction in the premium paid to public sector employees in the ACT. However, we consider it would be foolish to think it had no impact. The ACT considers that it is likely that the consolidation did contribute in some way to the decline in the wage gap that the Consultants have found over this period. We also contend that it is due to the significant proportion of Commonwealth employees within the ACT that the ACT has behaved in a different manner to other jurisdictions.

This again highlights the significant impact the Commonwealth Government has on the labour market within the ACT and wage levels paid by the ACTPS and why there is a need for the Wage costs assessment to reflect this accordingly.

We consulted with ACT Government Shared Services and the Australian Public Service Commission for data on the level of turnover between the ACTPS and the APS. Unfortunately the data each agency has is incomplete, and a data matching exercise that would have tracked the number of former ACTPS employees that had moved to the APS could not proceed as it would have breached privacy obligations.

Another possible avenue to be explored relates to the data within the Australian Bureau of Statistics Census Longitudinal Data. Unfortunately time constraints and restrictions on us have meant we have not been able to access. We urge the CGC staff to review this dataset.

Federal Financial Relations
ACT Treasury
CMTEDD
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ATTACHMENT A

ACT ANALYSIS

ISSUES ARISING FROM STATE SUBMISSIONS ON CGC STAFF DISCUSSION PAPER CGC 2015-03S - WAGE COSTS ASSESSMENT

Introduction

This critique has been drafted in response to the arguments put forward in the States' responses to CGC Staff Discussion Paper *CGC 2015-03S Wage Costs Assessment*. It seeks to outline the lack of a compelling argument against the conceptual case for this assessment and how CGC Staff should now recommend that the CGC take the view that this question has been resolved. The arguments put forward by States in opposition to the assessment in this review were lacking in originality and failed to progress the debate any further than where it has already gone. The position that CGC Staff have proposed taking to the CGC on why the conceptual case exists has not been refuted by any party in this review and this should indicate that that position is the correct one.

Macroeconomic & Other Factors

Some States have claimed that factors such as the business cycle, general economic conditions and State government wage setting policies are significant determinants of wage differentials between States (e.g. Victorian submission p.2; Queensland submission p.4). If these factors were significant you would expect to see shifts in relative wages between States over time, given that States vary at any point in time in where they are at in the business cycle and the political cycle i.e. some are likely to be in a tightening phase and others in a loosening phase at any given time.

However, the data show that relative wages (both public and private sector) between States are quite stable over long periods of time. The relative positions of States and the degree of difference between them does not change much. This indicates that there are persistent, underlying drivers of difference which are not cyclical in nature.

If, as claimed by SA, observed wage differentials between States "are more likely to be the result of differences in responsibilities, differences in employment status (e.g. tenure), timing differences from when pay adjustments take effect, the impact of non-wage benefits and other policy choice differences", then you would expect the differentials to be more volatile over time, with the relative positions of States moving around. Figure 2 of Staff Discussion Paper CGC 2015-03S (p.8) shows that States' relative public sector wages have remained quite stable over long periods of time, with only secular changes (eg: that of WA) being significant.

State Government Wage Setting Processes

States opposing the current basis of assessment claim that State government wage setting policy is not significantly influenced by private sector wages and that “the Commission is attempting to equalise for costs that are not being realised” (Victoria, p.3). These arguments appear to rely on perceived or stated industrial relations policies of State governments, rather than being based on data. However, it is what the data show that matters. Figure 2 on p.8 of the CGC’s Staff Discussion Paper is illustrative of the long-term relative positions of State public sector wages.

The debate on this point is typified by what appears to be a misunderstanding of the meaning of “average policy”. States such as Queensland have emphasised the declared wage setting policies of the State government as a measure of average policy, whereas the Commission regards average policy as a data-driven concept, which represents what actually happens in practice.
The 2015 Review Final Report (Vol 2, Attachment 8, p.667) defines “policy averages” as:

> The average policies as reflected in the practices of the States in the collection of revenue and the provision of services. These averages are usually weighted according to the size of the user or revenue bases in each State.

Average policy is therefore quantitatively determined, using the available data. It is not determined by a qualitative analysis of declared State policies.

Labour Mobility and National Markets

The ACT submission, among others, discusses labour mobility primarily in terms of mobility between States, and whether labour markets operate primarily on a national basis or primarily on a geographically segregated basis. On the other hand, the Victorian submission emphasises mobility between the public and private sectors as critical. They claim that lack of mobility between the public and private sectors undermines the case for basing the assessment on private sector wage differentials. However, this argument really depends on the proposition that private sector wages drive public sector wage determination – as we have argued, that is a misrepresentation of the current assessment approach.

A related issue is that of whether labour markets for public sector jobs operate primarily on a national basis or as a set of geographically segregated markets. Some States have claimed that evidence that national markets exist for roles such as nurses, teachers and police, which are dominated by the State government sector, invalidates the current assessment approach. However, the existence of national markets does not eliminate the possibility of State differences, driven by factors such as cost of living and other amenities, which are an “add-on” to what could be considered as a national base rate. These concepts are not mutually exclusive.

On the question of so-called “dominant employer” effects, Victoria has claimed that, if there is a valid conceptual case that private sector wages for some occupations are influenced by public sector wages, then those occupations should be removed from the regression model. The underlying implication is that private sector wages in these occupations are subject to policy influence by State governments. However, if national markets operate for such occupations then the scope for policy influence by individual State governments is surely limited, calling into doubt Queensland’s assertion (p.9 of submission) that “the State government has a significant level of monopsonistic power over teacher wages”.

Labour Quality and Productivity

As pointed out by the CGC (Staff Discussion Paper, para 60), the current assessment approach controls for productivity determined wage differences between States at an industry and occupation level i.e. the fact that a State has a different mix of industries or occupations from other States will not affect its position in the assessment. However, differences between States within industries and occupations are captured – thus “region specific reasons” will affect the assessment.

NSW has contested the view that a comparable employee should have the same productivity in each State. Their position is that inter-State differences in productivity, or in occupational or industry structure, due to factors beyond a State’s control, are part of the influences on community wage levels and this need not be standardised for. There is substantial merit in this view, though it would be difficult to separate out what is and is not beyond State government control (NSW do acknowledge that national government policies can affect industry structure).

It should also be noted that some factors relevant to human capital quality (eg: level of education, age, tenure) and thus to individual productivity are controlled for in the regression model. SA has incorrectly stated in the discussion of this issue in their submission (p.5) that only industry and occupation are controlled for.

Capital City Basis

WA contends that the proposed capital city approach would give most but not all States (not WA) capacity to pay above market wages in regional areas, thus reflecting “an approach to HFE not used elsewhere” (WA submission, p.1). However, it is the case with all CGC assessments that they do not attempt to equalise at a regional or sub-State level, recognising that States retain the flexibility to provide different levels of service (or different levels of remuneration) in regional areas as compared with cities – or to provide the same level of services, at a viable cost.

Again, the key point is what States actually do – as shown by the data. If there are available data which indicate that, in State public sectors, there is a premium in actual remuneration for staff in particular locations (whether capital cities or regional locations), then it would confirm the appropriateness of the whole of State approach. If no such premium is evident, it may indicate that the capital city approach is more appropriate. However, to determine in the latter case whether the single rate is set on a capital city or whole of State basis requires a comparison of the correlations for the two approaches to see which gives the closest fit.

Victoria’s submission casts doubt on the whole basis of the current assessment, but then strongly supports a change to a capital city based assessment, apparently ignoring the fact that the latter approach is still based on the fundamental assumption that private sector wages are a good proxy for public sector wages. The contradiction inherent in this position is highlighted by Victoria’s statement that the capital city based approach would bring the assessment more closely in line with the principle of “what States do” - that would clearly not be the case if you consider that private sector wages are not a good proxy for, or driver of, public sector wages.

Further to this, the ACT notes that, if the basis of the assessment were to shift from a whole of State to capital city basis, Victoria is the only State which would shift position in relation to the average, moving from below average to above average. It would also make the biggest percentage gain of any State from this change.

Technical/Data Issues

The Queensland submission (p.6) claims, based on analysis by the Queensland Government Statistician's Office (QGSO), that the SET data modelling underpinning the current assessment ignored the significant measurement error associated with both the private sector and public sector relativities. It is alleged that, as a result, the goodness of fit of the model is overstated.

This is taken from a report by the QGSO that was prepared as part of the Queensland response to the 2015 Review. The QGSO report claims that "(t)he (S)tate level coefficients can only reflect true residential (S)tate level differences in weekly wage once *all* significant person-level determinants have been included in the model." The report claimed to find three variables to be statistically significant in estimating weekly wages that would improve the CGC model:

- Cumulative duration of employment in current occupation;
- Self-assessed health status; and
- Disability status.

In the case of replacing *time in job* with *duration of employment in current occupation*, a change in the adjusted R-squared 0.0033 is hardly significant enough to warrant undertaking this change, particularly if the ABS dataset does not already include this variable. This is effectively saying the QGSO model is able to explain 0.33% more variation in the response variable (the log of wages).

The model proposed by the QGSO report which includes all three variables fails to produce a significant improvement in the goodness-of-fit measure. Of particular note, the use of the R-squared as a comparison between the two models is inappropriate as we are not comparing like for like. The QGSO model includes two additional variables, and so naturally this model would produce a greater R-squared measure, since the R-squared measure is positively correlated with the number of variables in the regression model.

As a result, it is more appropriate to compare the adjusted R-squared for each model rather than the R-squared measure. The model proposed by the QGSO has an adjusted R-squared measure that is only 0.0046 higher than the model it is suggesting has a significant measurement error. That can be interpreted as saying that in the QGSO model, 78.79% per cent of the variance in the response variable can be explained by the explanatory variables, while in the model the QGSO claims is inaccurate, 78.33% is explained by the explanatory variables. This is not a significant improvement in explanatory power.

Interestingly, the QGSO report itself points out how tenuous this difference is in its discussion on the significance of the State relativity term. The QGSO report states that a shift from an R-squared of 0.7913 to 0.7859 in its own model is "...a negligible change in the goodness-of-fit measured by the R-squared value". Clearly, the statements made by the QGSO on how significant these variables are and how overstated the goodness-of-fit of the model is are themselves overstated. This is hardly evidence that significant measurement error exists in the current SET data modelling.

Queensland also claims that the evidence does not support the notion that the deterioration in the relationship between private and public sector wages is the result of a lag in responsiveness of public sector wage setting, primarily in Western Australia. They state that, when WA is removed from the plot, the slope of the fitted line and the R^2 value are not significantly changed. However, logic would suggest that the data for WA should not be excluded but moved between years to reflect the lagged effect.

Federal Financial Relations
ACT Treasury
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ATTACHMENT B

ACT ANALYSIS

GST IMPLICATIONS OF PROPOSED HYBRID APPROACH ADOPTED IN CGC 2015-05-S – WAGE COSTS ASSESSMENT

This attachment outlines the approach taken by the ACT in attempting to reproduce the illustrative GST impacts of the proposed wages assessment in 2015-16, as shown in Table 2 of the CGC Staff Discussion Paper CGC 2015-05-S. The initial intention was to brief Government on the implied results but this has proven to be too complex and unreliable.

Spreadsheets provided by CGC staff to States on 12 November 2015 (*Consolidated Outputs for States*) did not provide a table amalgamating the indexed SET results for 2012-13 and 2013-14 with the CoE results for 2014-15, even though this appeared to be the assessment option favoured by CGC staff. We produced an amalgamated table with the rescaled factors as advised by the CGC, averaged the factors for each State across the three assessment years and compared these with the average for indexed SET for all three assessment years.

The difference in factors between the two methods was then applied to the relevant expenses data, using the following process. A simplifying assumption was used in adjusting the operating expenses – we did not go down to ETF level in these calculations.

- Take the Adjusted Budget Operating Expenses figures for the assessment years and remove Depreciation and Non-Government Schools funding.
    - The three-year average total from this is close, but not identical, to the total from Table 3 (p.471 of Volume 2, 2015 Review Report) – so scale the totals for each assessment year by the ratio of these two numbers.
- Take the population share for each State for each assessment year.
- Multiply each State's factor difference by its population share by the national total adjusted operating expenses for each year multiplied by 0.596 (the wages share of total operating expenses). This gives the Assessment Distribution.
- Compare the Assessment Distribution with EPC shares for each State (the latter just involves removing the factor from the previous calculation) to get the Redistribution Impact.
- Average the Redistribution Impact over the three assessment years to give application year figures.
- Upscale the Redistribution Impact to the 2015-16 GST pool.

We then compared these results with those shown in Table 2 of the CGC Staff Discussion Paper CGC 2015-05-S. This showed substantial differences for some States, in both directions, with the Discussion Paper figures being substantially worse for SA (-$40m) and better for NSW (+$57m). As the Discussion Paper table should be based on the factors given in the *Consolidated Outputs for States* spreadsheets, there must be some cause for caution about the numbers, which has been reinforced by discussion with CGC staff.

The ACT could not pursue this any further within the time available, however the initial analysis supports the approach of sticking to the current method (indexed SET for all three years) in the 2016 Update.

Federal Financial Relations
ACT Treasury
CMTEDD
December 2015

ATTACHMENT C

ACT ANALYSIS

WAGE COSTS ASSESSMENT – DRAFT - PUBLIC-PRIVATE SECTOR WAGE DIFFERENTIALS IN AUSTRALIA: WHAT ARE THE DIFFERENCES BY STATE AND HOW DO THEY IMPACT GST REDISTRIBUTION DECISIONS

Kostas Mavromaras, Stephane Mahuteau, Sue Richardson and Rong Zhu

In framing its response to the CGC Staff Paper CGC 2015-05-S the ACT has considered the draft consultant's report on wage differentials across jurisdictions in some detail. The following offers in depth analysis and commentary on the key issues from the paper, with a focus on aspects of particular relevance to the ACT.

- The data cover a substantial time period (2001-2013), with some analysis comparing the pre- and post-GFC periods of 2001-07 and 2008-13 respectively. Thus, it is good for analysing long-term trends and differences, but less applicable to identifying shorter term changes which are reflected in the assessment year data used by the CGC in each Update/Review.
- In general, the study treats both the ACT and the NT as special cases, so in the broadest terms supports substantiated arguments for special treatment for these two jurisdictions.
- The study analyses and controls for a comprehensive range of influences on individual productivity (human capital) differences, including age, gender, level of education, marital status, job tenure, whether living in a major city. It does not take into account broader structural factors which influence productivity, such as industry and occupation. The study authors acknowledge that the human capital factors explain about one-third of the variance in wages.
- The factors mentioned above are described (p.2) as the composition part of the wage gap between public and private sectors by State, with the other part being an "unexplained" effect or premium caused by other factors. This premium represents differences which may be caused, among other things, by factors such as cost of living, travel time/congestion and other amenities.
- Overall, for workers with the same observed productivity characteristics, public sector workers receive a 6% higher wage than their private sector counterparts (p.8). This is fundamentally because the public sector employs a more highly skilled workforce (see Table 7, p.13) [note that Table 7 relates to occupation, which is not one of the compositional factors controlled for in the regression].
- Those who live in a major city are paid 8% more than those who do not, with no discernible difference between public and private sector pay (p.8). This reinforces the arguments we have put forward about the influence of factors such as cost of living on nominal wage differences between regions and States, and that public and private sector wages respond to the same underlying pressures.
- The study finds (p.9) that private sector pay responded more rapidly to the sharp slowdown the economy after 2007 than did public sector pay, but the public sector did eventually slow down to match the private sector rates of growth. Note also the comment (p.18) that the public sector adjustment to the GFC was, in comparison to the private sector, homogeneous and less swift, but "equally responsive". Again, this supports the ACT's argument that the public and private sectors over time respond to the same underlying pressures.
- Over the whole period of the study (2001-2013) the ACT had the highest gap of any State between its public and private sector wages, with the premium component accounting for about a quarter of the gap (the rest being compositional), or about a 10% premium, compared with around 3.3% for NSW and 1.7% for Victoria (Table 5, p.10).

- The study finds (p.11) that there are two external factors driving relatively high public sector premiums: remoteness; and relatively low private sector pay. The first factor applies in particular to the NT. The second factor applies to States such as SA and TAS, which have relatively low private sector pay and recognises that much of the public sector competes with the public sector in other States, particularly for professional staff
  - In its first submission, the ACT did not attempt to argue against the existence of national labour markets for public sector workers, rather proposing that there is quite high inter-State mobility in these markets which should produce an equalisation of real wages, while still allowing for inter-State differences to affect nominal wages. <u>The study supports the ACT view.</u>
- The study finds (p.20) that the average rate of pay is higher in major cities than elsewhere, in both the private and public sectors, with a substantially larger gap in NSW and VIC than in the other States, noting that "most of the <u>public</u> sector gap is explained by the payment of a premium to city workers". This indicates that there is some flexibility in public sector remuneration, within the constraints of State-wide agreements, to pay more to workers in particular locations. Consequently, the view that all public sector workers in a State should be regarded as being paid at the same rate, being the capital city rate, may be inaccurate i.e. a whole of State average approach better represents "what States do".
- The authors comment (p.21) that the most likely explanation for NSW and VIC having the highest city wage gap and wage premium for both the private and public sector workforces is the relative size of Sydney and Melbourne, "where large city size confers both higher costs of living and higher productivity". <u>This accords with the ACT's review of the relevant literature/research (limited though that has been).</u>
- The authors comment (p.22) that the ACT has low dispersion in its public sector wages and high dispersion in its private sector wages.

<u>Relevant conclusions of the study are (pp.25-26):</u>

- Jurisdictions pay at different rates to attract the same quality of labour. "The key evidence is the public sector premium identified in the decompositions".
- States compete for workers in two labour markets simultaneously: the national labour market for public sector workers; and the local labour market – where the private sector is also relevant.
- The ACT should be treated as a special case because its public sector has a high proportion of Commonwealth public sector workers who are relatively of high quality and highly paid.
- When public sector pay is compared across jurisdictions, for a given quality workforce the ACT pays more.
- Market forces did affect the public sector as expected, but with a lag of several years (in relation to the GFC).
- There appears to be a high level of public sector to public sector job mobility – both within and across jurisdictions.

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