

2020 REVIEW

POST-SECONDARY EDUCATION

STAFF DRAFT ASSESSMENT PAPER CGC 2018-01/11-S

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POST-SECONDARY EDUCATION

The paper provides the Commission staff proposals for the assessment of Post-secondary education expenses for the 2020 Review.

2015 REVIEW APPROACH

Services included in this category

- The Post-secondary education category covers State expenses on vocational education and training (VET) and other higher education. Most State spending on post-secondary education is for VET, with less than 5% of funding for other higher education services. State VET expenses include spending on subsidised courses provided in State government institutions, as well as subsidies provided to private training providers.
- Public technical and further education (TAFE) institutes and private registered training organisations (RTOs) are the main providers of VET services in Australia. Other higher education services are generally provided by universities.

Category expenses

4 Post-secondary education expenses were \$5 billion in 2016-17 or 2% of total State operating expenses. The Post-secondary education category is not disaggregated into components.

Data sources and assessment methods

Overview of assessment methods

- 5 The assessment for Post-secondary education includes three main disabilities:
 - a socio-demographic composition (SDC) disability which recognises there are differences in the use and cost of services for different population groups and locations
 - a cross-border disability which recognises the cost to the ACT of providing post-secondary education to New South Wales residents
 - a wage costs disability which recognises that State expenses are affected by differences in wage costs between States.

Data Sources

Data for the SDC and cross-border assessments are sourced from the National Centre for Vocational Education Research (NCVER). The NCVER provides annual data on government funded contact hours for persons between 15 and 64 years of age. State-provided data on the additional cost of Indigenous students are used to calculate an Indigenous cost loading. The remoteness cost loading is based on the general regional costs gradient.

SDC assessment

The features of the SDC profile of the population that give rise to differences in post-secondary education costs are age, Indigenous status, remoteness and socio-economic status (SES). The disaggregation of these variables in the 2015 Review is shown in Table 1.

Table 1 Socio-demographic breakdown, 2015 Review

Age	Indigenous status	Remoteness	IRSEO/NISEIFA
15 to 64 years	Indigenous	Remote	Bottom two quintiles
	Non-Indigenous	Non-Remote	Middle quintile
			Top two quintiles

Note: IRSEO (Indigenous Relative Socioeconomic Outcomes), NISEIFA (Non-Indigenous Socio-Economic

Index for Areas).

Source: 2015 Review, Report on General Revenue Sharing Relativities, Volume 2, page 164.

Cross-border service use

The NCVER data allow the Commission to determine the annual hours each State provides to residents of other States. For most States the cross-border provision is not material but it is material for the ACT. A cross-border factor is calculated to measure the effect of net cross-border use for New South Wales and the ACT.

Wage costs

The assessment recognises that differences between the States in wage costs have a differential effect on the cost of providing post-secondary education services. These influences are measured in a similar way for most expense categories.

Regional costs

The assessment recognises that the cost of delivering services is higher in remote and very remote regions. A remoteness cost loading, based on the general regional costs gradient, is applied to remote and very remote contact hours. The gradient is discounted by 25% because of uncertainty about how well it reflects post-secondary education costs.

User charges

All user charges are deducted from post-secondary education expenses before making the assessment.

Investment and depreciation

- Post-secondary education accounted for 1.4% of total State assets in 2016-17. The infrastructure assessments recognise that the level of service use, including cross-border use, affects the stock of assets States require to deliver the average level of services. Interstate differences in wage levels, the price of materials and other unavoidable factors affecting the cost of infrastructure are also taken into account.
- In addition, the investment assessment recognises the impact of differences between States in population growth on the need for infrastructure.

GST redistribution

14 Table 2 shows the GST redistributed for the category in the 2018 Update.

Table 2 GST redistribution, Post-secondary education, 2018 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
Dollars million	-22	-51	19	25	0	1	6	22	73
Dollars per capita	-3	-8	4	10	0	3	15	90	3

Source: Commission calculation for the 2018 Update.

ISSUES AND ANALYSIS

Indigenous cost loading

- In the 2015 Review, the Commission applied a 35% loading to Indigenous contact hours to recognise the higher cost of providing services to Indigenous students. The current Indigenous cost loading is based on data collected from States for the 2015 Review.
- We observe that all States provide additional assistance for Indigenous students in one form or another including supplementary support services, fee concessions or exemptions, and cost loadings applied to subsidies for Indigenous students. The funding models of New South Wales, Victoria and Western Australia include Indigenous loadings (15%, 50% and 40% respectively). The ACT also provides an Indigenous loading of \$500 per student. Most other States provide support for Indigenous students by directly funding the services that the loadings facilitate. Support services broadly include career and course advice services, advice services

- for starting and running businesses, student mentoring, and assistance in finding apprenticeships and traineeships.
- 17 Based on these observations, staff propose to retain an Indigenous cost loading in the 2020 Review. We propose to collect new data from States to recalculate the loading for the 2020 Review.

Staff propose to recommend the Commission:

 retain the Indigenous cost loading but update the loading using State provided data reflecting current spending allocations.

Remoteness cost loadings

- In the 2015 Review, the Commission recognised the higher costs of providing VET services in remote regions by applying a remoteness cost loading to remote and very remote contact hours. The cost loading was based on the general regional cost gradient derived from schools and police data because there were no post-secondary cost data available. A medium discount (25%) was applied to the general gradient before it was applied because the Commission was not sure how well it reflected what was happening in areas other than schools and police.
- 19 There remains a strong conceptual case for applying a regional cost loading in this category. We observe that all States except Tasmania and the ACT apply remoteness loadings for training delivered by RTOs located outside major cities.
- 20 Staff have calculated category specific remoteness loadings for post-secondary education which we propose to use for the 2020 Review. The new loadings are based on NCVER contact hours by delivery location and remoteness loadings sourced from State funding models. Actual State remoteness loadings are shown in Table 3.

Table 3 Actual State loadings by remoteness area

	NSW	Vic (a)	Qld	WA	SA	Tas (b)	ACT	NT (c)
Major Cities of Australia	1.00	1.01	1.00	1.00	1.00	na	1.00	na
Inner Regional Australia	1.10	1.10	1.14	1.11	1.00	1.10	1.00	na
Outer Regional Australia	1.10	1.10	1.17	1.33	1.12	1.10	1.00	1.19
Remote Australia	1.20	1.10	1.52	1.96	1.23	1.10	na	1.26
Very Remote Australia	1.20	na	1.92	1.97	1.36	1.10	na	1.76

Note: Some minor errors in the previously circulated calculations have been corrected.

- (a) Victoria major cities average is non-zero as Victoria applies loadings to some postcodes that are classified as major cities by the ABS.
- (b) Tasmania's loadings have been generated to account for Hobart being classified as inner regional.
- (c) The Northern Territory's loadings have been adjusted to account for Darwin being classified as outer regional.

Source: Regional loadings contained in State funding models sourced from State agency websites. Staff requested data from the Northern Territory.

The average loadings we have calculated for each remoteness area are shown in Table 4. Table 4 also compares the new loadings with the general regional costs gradient for the 2017 Update. States have been provided with the detailed calculations underlying the average loadings shown in Table 4. The method we have used to calculate these remoteness cost loadings should ensure we are not including any additional costs associated with a student's Indigenous status.

Table 4 National average remotess loadings and general gradient from the 2018 Update

	National average loading	General gradient (undiscounted)	General gradient (discounted)
Major Cities of Australia	1.00	1.00	1.00
Inner Regional Australia	1.10	1.05	1.04
Outer Regional Australia	1.16	1.21	1.16
Remote Australia	1.62	1.45	1.34
Very Remote Australia	1.87	1.64	1.48

Note: Some minor errors in the previously circulated calculations have been corrected.

Source: Staff calculation based on State remoteness loadings and NCVER hours data by remoteness area.

In the current assessment, the remoteness cost loading is only applied to remote and very remote contact hours. Staff have tested the materiality of further disaggregating the SDC assessment to include additional remoteness areas. Table 5 shows the effect on the GST redistribution of using five remoteness areas instead of two, based on the new remoteness loadings.

Table 5 Impact on GST redistribution of new SDC breakdown and updated regional cost loadings

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Dollars million	-14	-13	17	2	-3	6	0	4
Dollars per capita	-2	-2	3	1	-2	12	0	15

Source: Staff calculation U2018 basis.

- We consider that the new category specific remoteness loadings are reliable and should not require discounting.
- 24 Staff will consider whether a multiplicative or additive method is needed for combining the remoteness and Indigenous cost loadings based on the degree to which the loadings interact in State funding models. In the 2015 Review, the loadings were combined using an additive method.

Staff propose to recommend the Commission:

 adopt the new category specific regional cost loadings and use them in the assessment on an undiscounted basis.

Qualification level loading

- We observe there is considerable variation in the subsidies provided for different qualification level courses (for example, Certificate I, II) with lower level qualifications often attracting higher subsidies. In addition, we observe that certain SDC groups are more likely to enrol in lower level qualification courses. For example, about 45% of Indigenous training hours are in foundational, Certificate I or Certificate II level courses compared to about 25% for non-Indigenous hours. This suggests there may be a case for including a qualification cost loading in the assessment.
- The main obstacle to calculating a qualification cost loading will be obtaining cost data from the States classified by qualification level. To calculate the loading we would require basic subsidy data by qualification level before any other loadings are applied. If States are able to provide this information, we would combine it with NCVER contact hour data to derive an average cost loading for different qualification levels. Staff will send a draft data request to States in May 2018 asking for VET cost data by qualification level. Including a qualification level cost loading will be contingent on States providing reliable data, and it being material.

Staff propose to recommend the Commission:

 investigate if a qualification level loading should be included in the assessment to recognise that different level courses attract different subsidies.

Industry mix

- The subsidies States provide for courses are based on a range of factors including staffing costs, equipment and facility costs, qualification level and the level of public benefit. This gives rise to different subsidies based on field of study or industry mix. NCVER data shows that course mixes are not the same across States (see Figure 1).
- It is likely that the industry profile of State economies affects the types of courses students choose to complete and therefore State spending. To investigate the extent to which the economic profile of States affects spending, we would need data on State spending by field of study. Previous attempts to collect this data were not successful. Part of the problem has been that States have been unable to provide cost data by field of study on a consistent basis. In addition, Western Australia has raised concerns about the potential for State pricing policies to influence the demand for different types of courses.
- 29 Staff do not propose to progress this work given the data issues and potential for State subsidy policies to influence State course mixes.

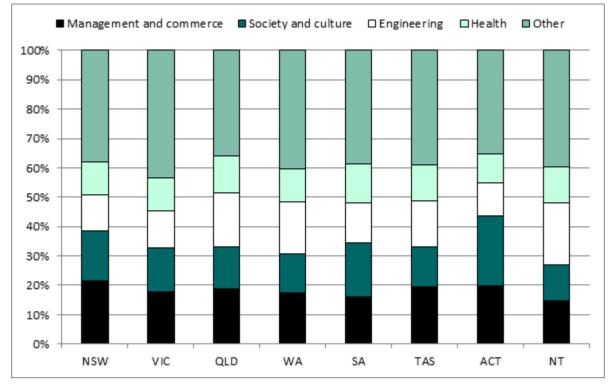


Figure 1 VET contact hours by field of study, 2015

Source: NCVER data, 2015.

Staff propose to recommend the Commission:

 not include a State course mix disability because States are unlikely to be able to provide the necessary cost data and there is potential for State subsidy policies to influence the course mix.

Public RTO loading

- 30 Subsidised VET services are provided by public and private RTOs and we observe the relative importance of private RTOs differs across States. The ACT said that in a number of States, the subsidies paid for public students are higher than for private students. This would suggest that States with more students attending private RTOs face lower costs.
- 31 Staff research found that although some States provide a higher subsidy to public RTOs, this is not average policy. Also, the mix of public and private RTOs is highly policy influenced. Therefore, staff do not propose to include a disability based on the sector of the training provider.

Staff propose to recommend the Commission:

 not investigate a disability based on the sector of training providers because most States provide the same subsidy to all providers regardless of sector, and the mix of public and private providers is highly policy influenced.

User charges

- 32 User charges include fee-for-service income from full fee paying students, fees and charges from government subsidised students, and ancillary income. In the current assessment all user charges are netted off expenses before making an assessment.
- It is appropriate to deduct fee-for-service revenue from State expenses before making an assessment because this revenue covers State spending on non-subsidised training and has little or no effect on State fiscal capacities. Fee-for-service income accounts for about 70% of post-secondary education revenue (see Table 6).
- Conceptually, there is no case for netting off fees from students participating in government subsidised training courses. States with an above average need for spending on subsidised VET services are not necessarily those with the greatest capacity to cost recover because many of the high cost groups (Indigenous and low socio-economic status) are eligible for fee concessions or exemptions. Income from government subsidised students accounts for about 30% of post-secondary education revenue (see Table 6).

Table 6 User charges for Post-secondary education, 2015

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	\$m								
Fee for service income	336	441	131	85	64	16	29	20	1 123
Student fees and other income	118	136	132	79	26	6	11	3	511
Total	454	578	262	164	90	22	40	23	1 634
	%	%	%	%	%	%	%	%	%
Fee for service income	74.0	76.4	49.8	51.9	71.2	73.4	71.4	87.1	68.7
Student fees and other income	26.0	23.6	50.2	48.1	28.8	26.6	28.6	12.9	31.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: NCVER VET Finance data for 2015, available from the NCVER website.

In the 2015 Review, the Commission decided to net off all post-secondary education revenue. This produced a GST distribution not materially different from the more conceptually sound alternative of only netting off revenue from fee-for-service students. For this review we intend to retest the materiality of making a data adjustment to ensure only fee-for-service revenue is deducted. We consider NCVER VET finance data provides a reliable basis for identifying fee-for-service revenue. The

materiality test for a data adjustment in the 2020 Review has tentatively been set at \$10 per capita for any State.

Staff propose to recommend the Commission:

 make a data adjustment to ensure only fee-for-service revenue is netted of expenses, if it is material.

CONCLUSION AND WAY FORWARD

- There are unlikely to be any significant changes to the Post-secondary education assessment in the 2020 Review, however, staff intend to:
 - update the remoteness and Indigenous cost loadings
 - investigate qualification level as a potential cost driver
 - only deduct fee-for-service revenue from expenses, instead of all post-secondary revenue, but only if making the data adjustment is material.

Proposed assessment structure

37 Staff propose the following assessment structure for this category in the 2020 Review.

Table 7 Proposed Post-secondary education category structure

Component	Component expense	Disability	Influence measured by disability
	\$m		
Post-secondary education	4 960	Socio-demographic composition	Recognises that for the working age population certain characteristics affect the use and cost of providing post-secondary education services, for example, Indigenous status, remoteness, qualification level and SES.
		Cross-border	Recognises the cost to the ACT of providing post-secondary education to New South Wales residents.
		Wage costs	Recognises differences in wage costs between States.

Source: Staff proposal.

Data and information sought from States

Table 8 shows the data and other information being sought from States to assist with the development of this assessment.

Table 8 Data and information sought from States

Component	Data requested	Status	Timing
Indigenous cost loading	State spending on Indigenous student	ts Request yet to be sent	Draft – May 2018 Final – August 2018
Regional cost loading	Feedback on regional cost analysis	Feedback received from some States	Further feedback should be included in
Qualification level cost loading	State spending by qualification level	Request yet to be sent	State submissions Draft – May 2018