## Technical Supplement

This appendix is supplementary to the *Commentary* paper *International Rankings: Income versus Quality in New Zealand and Australia* (November 2017, Issue 7). It outlines the methodology used for matching New Zealand and Australian universities' financial accounts, and other issues pertaining to the analysis.

## Matching up New Zealand and Australian universities' financial accounts

Revenue reporting categories for the Australian Universities (Group of Eight example used below) are as outlined in Table A1. In order to match these up with the reporting categories of the New Zealand universities, guidance was found in the University of Sydney's Annual Report<sup>1</sup>, which groups the various revenue sources into categories that are more consistent with those used in New Zealand universities' financial reporting and thereby gave insight into how to allocate items that were not self-explanatory (e.g. scholarships and state and local government financial assistance, both of which are classified as research income). The first column indicates a code given to each reporting line to help guide the reader from Table A1 to Table A2. Bold letters/numbers in Table A2 indicate that the reporting line is a sub-total of several lines marked with the same letter/number combination from Table A1.

### Table A1. Revenue reporting categories for Group of Eight Universities

	Australian Government Financial Assistance	6,423,231
	Australian Government Grants	4,923,056
А	Commonwealth Grants Scheme and Other Grants	2,096,277
B1	Scholarships	181,896
B2	Education Research Grants	947,521
F	Education Investment Fund and One-off Capital Grants	5,549
B1	Australian Research Council	506,836
B1	Other Australian Government Financial Assistance	1,184,977
С	HECS-HELP - Australian Government Payments	1,121,190
С	FEE-HELP - Australian Government Payments	352,947
С	VET FEE-HELP – Australian Government Payments	112
С	SA-HELP- Australian Government Payments	25,926
B3	State and Local Government Financial Assistance	222,530
С	Upfront Student Contributions	203,230
	Fees and Charges	3,307,256
С	Continuing Education	56,257
D	Fee Paying Overseas Students	2,575,208
С	Fee Paying Non-Overseas Postgraduate Students	144,626
С	Fee Paying Non-Overseas Undergraduate Students	12,694
С	Fee Paying Non-Overseas Non-Award Students	10,296
С	Other Domestic Course Fees and Charges	74,447
Е	Student Services and Amenities Fees (non-course related)	40,805
Е	Other Fees and Charges (non-course related)	392,923
Е	Investment Income	583,336
Е	Royalties, Trademarks and Licenses	60,183
B4	Consultancy and Contracts	623,854
Е	Other Income	932,159
	Donations and Bequests	294,063
	Scholarships and Prizes	31,302
	Non-Government Grants	188,367
	Net Gain on Disposal of Property, Plant and Equipment	39,942
	Net Foreign Exchange Gains	61
	Other Revenue	378,424
R	Total Revenues from Continuing Operations	12,355,779

Table A2. Matching up Australian revenue sources with New Zealand reporting categories

А	Government tuition funding	2,096,277	
	Student tuition fees	4,576,933	
С	Domestic	2,001,725	
D	International	2,575,208	
B2	Other Government income <sup>i</sup>	947,521	
B1,B3,B4	Research income	2,720,093	
E	Other income (from private sources)	2,009,406	
R-F	Total Operating Revenue	12,350,230	

The reporting line 'Other Government Income' is normally named Performance Based Research Fund (PBRF) in the New Zealand universities' financial statements. However, Australian universities do not have an identical fund, even if they have Government grants that are similar in intent. For the purpose of this exercise, the PBRF category has therefore been renamed to reflect this. In the case of Australia 'Other Government Income' is comprised of the income/grants that are reported as part of Education research in Australian universities' financial reporting (Financial Statement Guidelines p. 60. https://docs.education.gov.au/system/files/doc/other/financial\_statement\_guidelines\_2014\_0.pdf), with the exception of the Research Training Scheme which has been categorised as Government tuition funding. These grants include: Joint Research Engagement Program; JRE Engineering Cadetships; Research Infrastructure Block Grants; Implementation Assistance Program; Australian Scheme for Higher Education Repositories; Commercialisation Training Scheme; Sustainable Research Excellence in Universities.

### Notes on dual providers and Research Training Scheme funding classification

Some Australian universities are dual providers (university and vocational education and training (VET) provision). The 'all NZ universities versus all Australian QS500 universities' analysis reflect this by excluding VET income and adjusting the EFTS of dual providers. Specifically, EFTS were reduced by 20% as per Moodie and Wheelahan's<sup>2</sup> classification, which holds that a dual provider has "at least 20 per cent but less than 80 per cent of their student load enrolled in each sector." Reducing the number of EFTS of dual providers by 20% to estimate university delivery amounts to a somewhat conservative estimate.

As noted previously, Research Training Scheme (RTS) funding has been categorised as Government tuition funding. This is consistent with the approach used by Larkins and Marshman.<sup>3</sup> The Research Training Scheme (RTS) is funded through the Australian Research Council (ARC) and supports research student supervision, and should therefore be categorised as Teaching and Learning funding.

#### Calculating the income gap assuming the same domestic/international student split as the Australian comparison

Using the University of Auckland vs Group of Eight universities comparison as an example, the income gap that would have existed had the University of Auckland had the same domestic/international student split as the Group of Eight universities has been calculated as follows. International students have been substituted for domestic students, holding the total number of students the same.

### Table A3: University of Auckland EFTS (Actual and assumed same split as in Group of Eight universities)

University of Auckland	Domestic EFTS	International EFTS	Total EFTS
Actual	29,613 (88%)	3,877 (12%)	33,490
Split if assumed to be the same as Group of Eight	23,443 (70%)	10,047 (30%)	33,490

Applying the same domestic/international student split as in the Group of Eight results in:

Total domestic tuition income per EFTS: (\$11,543\*23,443)/33,490 = US\$8,080

International fee income per EFTS: (\$18,290\*10,047)/33,490 = US\$5,487

# Table A4: 2015 Income sources per EFTS (domestic, international, total) for the University of Auckland and the Group of Eight universities assuming Auckland had the same domestic/international student split as the Group of Eight universities

	Income Stream	University of Auckland	Group of Eight	\$ difference AUS vs NZ
		US\$ PPP	US\$ PPP	
	Government tuition funding	\$7,604	\$8,527	\$923
Per domestic EFTS	Domestic fee income	\$3,939	\$6,791	\$2,851
	Total domestic tuition income	\$11,543	\$15,317	\$3,774
Per international EFTS	International fee income	\$18,290	\$20,194	\$1,904
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	Total domestic tuition income	\$8,080	\$10,692	\$2,612
	International fees income	\$5,487	\$6,098	\$611
Dow total EETC	Other Government income	\$1,735	\$1,256	-\$480
Per total EFTS	Research income	\$5,138	\$6,441	\$1,303
	Other income	\$2,631	\$4,758	\$2,127
	Total Revenue	\$23,071	\$29,245	\$6,173

<sup>1</sup>https://ses.library.usyd.edu.au/bitstream/2123/14989/1/University-of-Sydney-2015-Annual-Report.pdf

2Moodie, G. and Wheelahan, L. (2009). The Significance of Australian Vocational Education Institutions in Opening Access to Higher Education. Higher Education Quarterly, 63(4), pp. 356-370.

<sup>3</sup>Larkins, F. P. and Marshman, I. (2016). Domestic student load and financing trends for the deregulated demand-driven Australian universities system. LH Martin Institute for Tertiary Education Leadership and Management. Retrieved from: http://www.lhmartininstitute.edu.au/insights-blog/2016/06/229-domestic-student-load-and-financing-trends-for-the-deregulated-demand-driven-australian-universities



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