#### Answers to questions taken on notice

Supplemental submission to the *Inquiry into the Future development of the NSW tertiary education sector* 

Salvatore Babones

1. Mr DAVID SHOEBRIDGE: Could I take you to table 2 on page 2 of your submission. What is the source of that data? Are the revenue figures there gross revenue figures? Are they adjusted for inflation?

#### Answer:

The data underlying my paper are drawn from:

ABS. (2020). 6401.0 - Consumer Price Index, Australia, March 2020. Retrieved from https://www.abs.gov.au/ausstats/abs@.nsf/mf/6401.0.

DESE. (2020). Finance Publication. Retrieved from https://www.education.gov.au/finance-publication.

DESE. (2020). *uCube: Enrolment Count by Citizenship Category by Type Of Attendance*. Retrieved from http://highereducationstatistics.education.gov.au/.

The figures reported in Table 2 of my paper represent gross revenues, adjusted for inflation, expressed in per EFTSL terms.

Gross revenues are drawn from DESE (2020). The raw *Finance Publication* figures are reported in current dollars. I have updated them for inflation using the Consumer Price Index (CPI) to real 2018 dollars using CPI data from the ABS (2020). A simple average of then four quarterly CPI figures for each year has been used as an annual CPI figure. Using the GDP deflator produces similar results (available from the author) to those reported here. Other methods of inflation adjustment, however, can produce quite different results, particularly the use of various government expense deflators. Since the comparison of financial figures over time is highly sensitive to inflation adjustment, these potential sources of variability should be kept in mind. The CPI and GDP deflator are, however, the most broadly-based and widely-used benchmarks for adjusting for inflation. All financial figures reported in this paper are 'real' (i.e., adjusted for inflation using the CPI).

The gross revenues are divided by equivalent full-time student load (EFTSL) to produce revenues per student. Student numbers are drawn from the DESE's (2020) *uCube* database. Student numbers based on EFTSL have been used in my submission. Parallel analyses conducted on the basis of raw student headcounts produce substantively similar results.

2. Mr DAVID SHOEBRIDGE: Sorry, my last question is: To make meaning of this can you give me the cumulative effect? If this is compound annual decrease or increase, can you give us on notice what the cumulative effect of that is over the 10 years?

### Answer:

Table 2a. University domestic revenue trends per EFTSL, 2008-2018, total cumulative change over the ten-year study period (adjusted for inflation)

Location / Group	Gross domestic revenue (10-year cumulative change)	Dom. revenue per dom. student (10- year cumulative change)		Int'l student enrollment (10- year cumulative change)
Australian Capital Territory	23.29%	-10.92%	38.40%	130.31%
New South Wales	32.04%	3.94%	27.04%	88.34%
Northern Territory	-7.34%	-28.01%	28.72%	334.42%
South Australia	10.06%	-13.06%	26.60%	-7.48%
Tasmania	22.57%	-12.85%	40.64%	65.80%
Victoria	25.44%	-10.18%	39.66%	71.83%
Western Australia	14.74%	-14.55%	34.28%	5.53%
Group of Eight	17.39%	-0.40%	17.86%	115.02%
Australia	25.96%	-6.14%	34.20%	56.11%

3. The Hon. COURTNEY HOUSSOS: I wanted to come to that, because you make assertions in your submission about the growth of these research-only academics. I appreciate that you say that the purpose of a university is that students have access to these cutting-edge researchers. Where do you get this information? Is this your anecdotal experience? Is this something that you have found in speaking to your academic colleagues? How have you collated this information?

#### Answer:

I was honest but incorrect in my testimony when I said that "I believe that is broken down by State. We have no reports at all, as far as I am aware, of the breakdown of academics by function at individual universities." In fact, the DESE does provide this breakdown. The main source of data is:

DESE. (2020). *uCube: Staff Count by Function by State - Institution*. Retrieved from http://highereducationstatistics.education.gov.au/.

Tables A and B below reproduces uCube data on staff counts by function by state and institution for 2010 and 2020, respectively. The number of research-only academics in Australia has grown by 22.5% over the last ten years. The percentage rise in teaching-only academics has been even greater, but from a much smaller base, while the number of conventional teaching-and-research academics has actually declined.

## [NEXT PAGE]

Table A. Staff count by function by state - institution (uCube data, 2010)

		Teaching only function	Research only function	aff Count on   Teaching and research function   Other functi		
		2010	2010	2010	2010	
	Avondale University College	5	5	60	9	
New South Wales	Charles Sturt University	82	57	559	1,23	
	Macquarie University	10	206	797	1,15	
	Southern Cross University	107	48	194	61	
	The University of New England	3	68	432	72	
	The University of Newcastle	35	461	770	1,51	
	The University of Sydney		1,431	1,987	3,25	
	University of New South Wales	324	1,657	3,209	2,54	
	University of Technology Sydney		202	755	1,41	
	University of Wollongong		237	706	1,029	
	Western Sydney University	27	22	700	1,39	
	Total	593	4,394	10,169	14,97	
	Deakin University	62		874	1,56	
	Federation University Australia	39	14	211	519	
	La Trobe University	72	314	994	1,482	
	Monash University		1,499	1,936	3,840	
Maka ata	RMIT University		219	1,000	1,93	
Victoria	Swinburne University of Technology	24	87	535	860	
	The University of Melbourne	12	1,333	1,723	3,743	
	University of Divinity	30	6	76	42	
	Victoria University	128	103	409	1,200	
	Total	367	3,825	7,758	15,19	
	Bond University	63	9	225	402	
	CQUniversity	12	56	301	720	
	Griffith University	31	453	1,010	2,17	
	James Cook University	6	209	566	1,01	
Queensland	Queensland University of Technology	112	443	1,337	2,27	
	The University of Queensland	199	1,891	1,469	3,29	
	University of Southern Queensland	70	17	374	814	
	University of the Sunshine Coast		4	223	379	
	Total	493	3,082	5,505	11,06	
	Curtin University	207	281	872	1,95	
	Edith Cowan University	44	79	524	1,09	
	Murdoch University	31	104	455	884	
Western Australia	The University of Notre Dame Australia	65	5	240	248	
	The University of Western Australia	64	795	982	2,10	
	Total	411	1,264	3,073	6,289	
	Flinders University		317	622	1,09	
Court Accessorie	The University of Adelaide	3		899	1,410	
South Australia	University of South Australia	2	322	770	1,508	
	Total	5	1,478	2,291	4,01	
	University of Tasmania	128	245	782	1,430	
Tasmania	Total	128	245	782	1,430	
	Batchelor Institute of Indigenous Tertiary					
	Educati	49	13		18:	
Northern Territory	Charles Darwin University	25	74	188	472	
	Total	74	87	188	653	
Australian Capital Territory	The Australian National University		1,292	689	2,004	
	University of Canberra	6	1	365	503	
	Total	6	1,293	1,054	2,50	
	Australian Catholic University		43	485	73	
Multi-State	Total		43	485	73	
Total	1.33	2,077	15,711	31,305	56,860	

Table B. Staff count by function by state - institution (uCube data, 2020)

		Staff Count				
			-	Teaching and research function		
		2020	2020	2020	2020	
	Avondale University College			47	10	
New South Wales	Charles Sturt University	421	77	508	1,44	
	Macquarie University	111	436	911	1,84	
	Southern Cross University	105	38	212	60	
	The University of New England	3	125	430	79	
	The University of Newcastle	94	640	826	1,76	
	The University of Sydney	319	1,386	2,188	4,45	
	University of New South Wales	315	1,615	1,379	3,92	
	University of Technology Sydney	122	586	1,068	2,09	
	University of Wollongong		363	818	1,57	
	Western Sydney University	36	146	919	1,74	
	Total	1,526	5,412	9,306	20,35	
	Deakin University	299	608	1,121	2,91	
	Federation University Australia	86	32	265	90	
	La Trobe University		396	1,016	1,78	
	Monash University		1,524	2,166	4,77	
	RMIT University		519	1,367	2,82	
/ictoria	Swinburne University of Technology	91	233	601	1,36	
	The University of Melbourne	607	1,956	1,797	5,00	
	University of Divinity	18	12	115	10	
	Victoria University	107	144	293	1,08	
	Total	1,208	5,424	8,741	20,78	
	Bond University	93	29	186	48	
	CQUniversity	360	109	301	1,12	
	Griffith University	274	481	781	2,56	
	James Cook University	187	244	438	1,10	
Queensland	·	161	585	1,685	2,55	
Queensianu	Queensland University of Technology	223	2,305	1,333	3,97	
	The University of Queensland	89	132	415	90	
	University of Southern Queensland	7	77	409	76	
	University of the Sunshine Coast	1,394	3,962	5,548	13.47	
Total		331	481	580	2,10	
	Curtin University	176	138	390	1,13	
	Edith Cowan University	176	138	390		
Western Australia	Murdoch University	157	142	518 544	1,02	
	The University of Notre Dame Australia	225			48	
	The University of Western Australia	225	765	848	2,07	
	Total	889	1,543	2,680	6,81	
	Flinders University	273	341	440	1,25	
	The University of Adelaide	152	690	826	2,17	
South Australia	Torrens University Australia	215	23	42		
	University of South Australia	275	485	506	1,70	
	Total	915	1,539	1,814	5,12	
Tasmania	University of Tasmania	187	366	835	1,73	
asmania	Total	187	366	835	1,73	
	Batchelor Institute of Indigenous Tertiary					
1 T 1	Educati	15		3	1	
Northern Territory	Charles Darwin University	60	63	151	53	
	Total	75	63	154	54	
	The Australian National University	5	706	1,289	2,81	
Australian Capital Territory	University of Canberra	123	88	276	63	
	Total	128	794	1,565	3,44	
	Australian Catholic University	406	143	217	1,29	
Multi-State	Total	406	143	217	1,29	
Total		6,728	19,246	30,860	73,58	

# END OF SUPPLEMENTAL SUBMISSION