

Universities are not rolling in gold: Average funding per student and other funding facts

IRU members oppose the Government's Higher Education package. It does not address the key issue of ensuring needed level of resources for universities while effectively balancing Government investment with student contributions. Students need better resourced universities, not to pay more for less.

The Government case that universities can sustain further reductions in revenue rests on false assertions about the financial robustness of universities and over egged claims about the value of Government funding over the past decade and its additional expenditure over the coming four years.

IRU members assess that they would:

- lose \$43 million a year by 2021 through the cut to CGS funding;
- have at risk \$79 million a year by 2021 through the performance proposal; and
- have at risk \$74 million a year from loss of New Zealander and Permanent Resident students.

The IRU has provided additional analysis to the Senate Education Committee that is considering the impact of the *Higher Education Support Legislation Amendment Bill 2017*. The major elements are:

1. a summary of the IRU members' financial positions, 2010 to 2015, showing the downward pressure on university surpluses and a shift in expenditure towards renewal of university facilities and resources;
2. that 61% of the Government's stated increase in higher education expenditure is for the non HECS parts of HELP. The increase has little relationship to the main Government funding of undergraduate student places, the focus of the *HESLA* package;
3. an analysis of the average funding per Commonwealth funding student that challenges the Government assertion that average funding has risen in real terms. The most significant element is the adjustment factor used to create 2017 dollar values, more than any change in the actual funding rates or university enrolment of students; and
4. a reminder that in England significant increases in student payments have also significantly increased revenue per student.

1. University financial positions, 2010 to 2015

Table One summarises financial revenue and expenditure information for the IRU members from the annual *Higher Education Financial Report* to show the main revenue sources and the main expenditure items.

Between 2010 and 2015:

- revenue has risen 21%, with revenue from students rising much more than revenue from the Australian Government, 42% against 16%; and
- expenditure has risen 33%, with that on depreciation and amortization nearly doubled, increasing by 95%.

Across 2010 to 2015 the surplus of revenue over expenditure has fallen from 13% to 5% as universities have reworked expenditures to focus on ensuring their future sustainability. It reflects the lack of Commonwealth programs to support university capital needs.

Table One: IRU revenue and expenditure 2010 to 2015 (\$'000)

IRU Group Revenue	2010	2011	2012	2013	2014	2015	Change 2010 to 2015
Australian Government Grants	\$1,091,529	\$1,127,150	\$1,207,852	\$1,186,201	\$1,285,569	\$1,270,068	16%
Student Contributions	\$896,717	\$910,850	\$992,940	\$1,119,734	\$1,202,164	\$1,269,292	42%
Contracts, Royalties, Trademarks and Licenses	\$161,070	\$184,065	\$183,495	\$190,608	\$178,615	\$168,624	5%
Other Income	\$415,640	\$444,832	\$458,570	\$452,270	\$427,198	\$406,727	-2%
Total Revenues from Continuing Operations	\$2,564,956	\$2,666,897	\$2,842,857	\$2,948,813	\$3,093,546	\$3,114,711	21%
Percentage of revenue per Category							
Australian Government Grants	43%	42%	42%	40%	42%	41%	
Student Contributions	35%	34%	35%	38%	39%	41%	
Contracts, Royalties, Trademarks and Licenses	6%	7%	6%	6%	6%	5%	
Other Income	16%	17%	16%	15%	14%	13%	
Total Revenues from Continuing Operations	100%	100%	100%	100%	100%	100%	
IRU Group Expenditure	2010	2011	2012	2013	2014	2015	Change 2010 to 2015
Academic Employee Benefits	\$706,019	\$773,640	\$827,204	\$864,128	\$909,105	\$888,182	26%
Non-Academic Employee Benefits	\$653,747	\$677,490	\$729,978	\$780,137	\$836,471	\$838,105	28%
Depreciation and Amortisation	\$118,685	\$131,259	\$143,467	\$158,889	\$179,870	\$231,997	95%
Maintenance, Impairment of Assets & Finance Costs	\$81,263	\$70,796	\$76,258	\$88,888	\$84,959	\$98,081	21%
Other Expenses	\$673,567	\$710,257	\$780,939	\$838,021	\$900,171	\$915,919	36%
Total Expenses from Continuing Operations	\$2,233,281	\$2,363,442	\$2,557,846	\$2,730,063	\$2,910,576	\$2,972,284	33%
Percentage of expenditure per Category							
Academic Employee Benefits	32%	33%	32%	32%	31%	30%	
Non-Academic Employee Benefits	29%	29%	29%	29%	29%	28%	
Depreciation and Amortisation	5%	6%	6%	6%	6%	8%	
Maintenance, Impairment of Assets & Finance Costs	4%	3%	3%	3%	3%	3%	
Other Expenses	30%	30%	31%	31%	31%	31%	
Total Expenses from Continuing Operations	100%	100%	100%	100%	100%	100%	
Balance	\$331,675	\$303,455	\$285,011	\$218,750	\$182,970	\$142,427	
Balance as percentage of revenue	13%	11%	10%	7%	6%	5%	

Source: *Higher Education Financial Report*, 2010 to 2015, Department of Education and Training

2. Where is the additional Commonwealth expenditure going?

The Government has made much of the apparent 23% increase in its expenditures from 2017 to 2021, using this to argue its package is modest and necessary. It is important to break down that increase as shown in Table Two.

The Government data show that 87% of the increase is from HELP. IRU has estimated how much of that is HECS-HELP based on the known proportionate relationship to the Commonwealth Grant Scheme – starting at 42% student payments to 58% Commonwealth Grant Scheme in 2017 and changing through to 46% to 54% in 2021.

On this basis 61% of the total increase in Government expenditure is FEE HELP and the other non HECS parts of HELP. The increase has little relationship to the main Government funding of undergraduate student places, the focus of the *HESLA* package.

Table Two: Growth in Commonwealth higher education expenditure, 2017 to 2021

	2017 \$b (estimate)	2018 \$b (estimate)	2019 \$b (estimate)	2020 \$b (estimate)	2021 \$b (estimate)	Change	% of change
CGS	7.1	6.9	6.9	7.0	7.1	0.0	0%
HECS HELP	5.1	5.3	5.6	5.9	6.2	1.0	26%
Other HELP	1.3	2.5	2.9	3.2	3.6	2.4	61%
HEPPP	0.1	0.1	0.2	0.2	0.2	0.0	1%
Research grants	2.8	2.9	2.9	3.1	3.1	0.3	8%
Other	0.7	0.8	0.8	0.9	0.9	0.2	5%
Total	17.2	18.6	19.2	20.2	21.1	3.9	100%

Source: Government tables released to justify the 23% claim.

3. Understanding changes in average revenue per Commonwealth funded student

The Minister for Education and Training, Senator Birmingham, has provided data to the Australian media suggesting that over the past decade that funding per head of Australian students in university has risen, set out at Table Three.

Table Three: Government estimate of average funding per EFTSL (2017 dollars)

Year	CGS (Constant 2017 \$\$)	EFTSL Funded	Year on year change	Change on 2010
2009	\$17,623	469,073		
2010	\$18,670	499,323	6%	
2011	\$18,024	517,776	-3%	-3.5%
2012	\$18,947	547,848	5%	1.5%
2013	\$19,208	576,242	1%	2.9%
2014	\$19,080	596,734	-1%	2.2%
2015	\$19,178	606,380	1%	2.7%
2016	\$19,632	616,789	2%	5.2%
2017	\$19,334	625,400	-2%	3.6%

The figures are presented as being in 2017 dollar value. The figures go up and down with little apparent reason from year to year, reflecting that all of the figures are estimates not actual figures:

- those from 2009 to 2016 reflect actual data on Commonwealth Grant Scheme and other programs, adjusted into 2017 values by a factor not defined;
- 2017 is based on university estimates of the number and discipline of students this year; and
- 2018 onwards are Department guesses based on current university enrolments.

Universities dispute that funding has risen per student. Our main argument that there has been no change to the combined funding by discipline from the Commonwealth Grant Scheme places and student contributions.

The most significant element is the adjustment factor used to create 2017 dollar values, more than any change in the actual funding rates or university enrolment of students.

The following explores:

1. what is meant by 'funding per student';
2. what if any policy changes could or should have changed the funding received for a student; and
3. how to adjust past funding levels to produce 'current day' dollar values.

What does 'funding per student' mean?

The debate is complicated by two distinct approaches to the question of what funding per student means.

Universities are concerned about the actual students they enrol to teach. It makes a difference whether a student is to study engineering, nursing or accountancy. An engineer generally costs more to educate than a nurse and both more than an accountant. The funding that comes with each student recognises this.

Universities with the same number of students but different mixes of students will receive different levels of total funding, and hence the average per student will be different. That does not make one better funded than the other but that both receive funding in line with likely costs.

Hence, for universities the question is whether funding for each student discipline by discipline has increased or decreased over time, not the average across all students regardless of changes in the mix of students by discipline.

For the Government the detail of individual students matters less. It focuses in this discussion on the total number of students and total expenditure. It tends to disregard whether the funds are supporting the same set of students or a different set. It makes a crude argument that there is more per student.

What policy changes affected funding per student since 2010?

Over the period since 2010 Governments of both sides have not changed the combined funding from Commonwealth Grant Scheme and student charge by discipline, other than through annual indexation. The figures for Accounting and for Engineering are set out below as two examples of the regular steady increase by annual indexation.

Table Four: Commonwealth Grant Scheme and student payments for Accounting and Engineering, 2010 to 2017

	2010	2011	2012	2013	2014	2015	2016	2017
Accounting								
CGS	\$1,765	\$1,793	\$1,861	\$1,933	\$1,951	\$1,961	\$2,059	\$2,089
Student	\$8,859	\$9,080	\$9,425	\$9,792	\$10,085	\$10,266	\$10,440	\$10,596
total	\$10,624	\$10,873	\$11,286	\$11,725	\$12,036	\$12,227	\$12,499	\$12,685
Engineering								
CGS	\$15,156	\$15,398	\$15,983	\$16,606	\$16,762	\$16,850	\$17,706	\$19,971
Student	\$7,567	\$7,756	\$8,050	\$8,363	\$8,613	\$8,768	\$8,917	\$9,050
total	\$22,723	\$23,154	\$24,033	\$24,969	\$25,375	\$25,618	\$26,623	\$29,021

Indexation

Since 1997, the Government's higher education programs have been indexed each year by a factor intentionally less than the actual increase in universities expenditures.

From 1997 to 2010, the index reflected changes in the minimum wage, a rate that was severely less than the growth in salaries across the economy and the impact of price changes for other purchases.

The replacement index from 2011 was more realistic. It combined the consumer price index with an element for increases in professional salaries discounted by ten percent. As the then Government said: "the new arrangements will still require productivity improvements to contribute to wage increases" (*Jobs, Productivity and fairness*, May 2009, p60).

From 2018 the Government will index higher education programs solely by the consumer price index. It is a savings measure. With this change the index will be lower than previously, continuing to reduce the real value of funding year to year.

Overall the impact of indexation should be to have reduced the effective value of funding since the index has always been pitched below the estimate of reasonable cost increases for a university.

Funding for all students enrolled not just those within the allocated envelope

Before demand-driven funding universities were funded for a set number of students in each discipline. If they enrolled additional students, they received the student contribution but not the

Commonwealth Grant Scheme funding amount. To the extent that universities enrolled extra students the average funding per student was pushed down, particularly as the over-enrolment concentrated in the low cost disciplines of business, accounting and, to a lesser extent, humanities.

When demand driven funding was introduced from 2012 all students were fully funded. This created a one off upward rise of the apparent average funding per student.

Changes in the mix of students by discipline

The demand driven system was intended to promote a better mix of student degrees by allowing all interested students to pursue their ambitions. The system has worked, with strong growth in the number of students studying science, technology, engineering and mathematics (STEM) and in health professions. These growth areas are all medium to high cost disciplines, which has tended to push up the apparent funding per student.

Table Five sets out the discipline funding groups and the estimated equivalent full time student numbers from 2010 to 2015. These are estimates since the Department of Education and Training does not publish this data. It is compiled from the data on undergraduate Australian student enrolments by Field of Education, with the fields allocated to the relevant funding group. 2013 is missing since IRU had not previously analysed that year's data. 2016 data is not yet published.

Table Six shows the changing proportion of students in each funding group across 2010 to 2015, showing the growth in the middle to high cost groups.

Table Five: Student by funding cluster (EFTSL)

Year	2010	2011	2012	2014	2015
Law, accounting, administration, economics, commerce	101,761	102,163	104,064	110,804	113,089
Humanities	21,447	21,342	22,282	20,656	20,339
Behavioural Science and Social Studies	71,666	74,395	78,009	83,222	85,890
Education	41,845	42,637	45,176	48,954	48,932
Maths, Statistics, Computing, built environment Other health	57,494	61,074	65,240	74,123	75,942
Foreign languages, visual and performing arts, clinical psychology	55,315	57,357	60,758	67,501	67,633
Allied health	13,717	13,499	13,801	15,122	17,140
Nursing	24,912	26,904	28,855	32,473	35,077
Science, Engineering, Surveying	82,803	86,358	92,347	101,237	102,815
Agriculture	6,797	6,927	7,256	7,791	7,860
Dentistry, medicine, veterinary science	18,257	19,355	19,766	18,830	18,071
All disciplines	496,013	512,011	537,553	580,712	592,788

Source: Higher Education Student Statistics 2010 to 2015, Department of Education and Training. Allocation of load to funding clusters by IRU.

Table Six: Proportion of students by funding cluster (EFTSL)

Year	2010	2011	2012	2014	2015
Law, accounting, administration, economics, commerce	21%	20%	19%	19%	19%
Humanities	4%	4%	4%	4%	3%
Behavioural Science and Social Studies	14%	15%	15%	14%	14%
Education	8%	8%	8%	8%	8%
Maths, Statistics, Computing, built environment and Other health	12%	12%	12%	13%	13%
Foreign languages, visual and performing arts, clinical psychology	11%	11%	11%	12%	11%
Allied health	3%	3%	3%	3%	3%
Nursing	5%	5%	5%	6%	6%
Science, Engineering, Surveying	17%	17%	17%	17%	17%
Agriculture	1%	1%	1%	1%	1%
Dentistry, medicine, veterinary science	4%	4%	4%	3%	3%
All disciplines	100%	100%	100%	100%	100%

To take a simple example. If a university has 9,000 students spread equally across accounting, nursing and engineering its funding at the 2017 rates would be:

	Students	\$\$ per student	Total
Accounting	3000	\$12,685	\$38.1 million
Nursing	3000	\$20,462	\$61.4 million
Engineering	3000	\$27,021	\$81.1 million
All students	9000		\$180.1 million
<i>Average</i>			<i>\$20,056</i>

If several years later its students have grown to 12,000 but with more growth in nursing and engineering the apparent average funding per student has risen by 2% yet for the university there is no real improvement: the money for each discipline remains the same.

	Students	\$\$ per student	Total
Accounting	3600	\$12,685	\$45.7 million
Nursing	4200	\$20,462	\$85.9 million
Engineering	4200	\$27,021	\$113.5 million
All students	12000		\$245.1 million
<i>Average</i>			<i>\$20,425</i>

To test the extent that the changing discipline mix has driven up the average funding level IRU applied the 2017 funding rates to the enrolments from 2010 to 2015. This is set out in table seven below, showing how the average funding on the 2017 rates rose from 2010.

Table Seven: Change in average funding due to change in students' discipline mix

	Estimated total CGS discipline revenue	Estimated total EFTSL	Average funding
2010	\$9.5 billion	496,013	\$19,131
2011	\$9.8 billion	512,011	\$19,204
2012	\$10.3 billion	537,553	\$19,253
2014	\$11.2 billion	580,712	\$19,277
2015	\$11.4 billion	592,788	\$19,261

Over the period since 2010 the change in the mix of student disciplines has pushed up the overall average funding per student but equally has required universities to expend more to cover the greater proportion of students in higher cost courses.

This increase in the average is not a gain to universities.

Adjusting dollar value across years

The figures Senator Birmingham released are stated to be in 2017 dollar value. The basis for the adjustment is not stated. In previous reports (Bradley and Lomax-Smith) the Department used the CPI as the basis to increase past year dollar figures into a current year value. The CPI is part of the annual index, and indeed will soon be the whole index.

It is noticeable that the Government's average funding figures released bounce around year to year, without any obvious reason. This suggests the major factor driving the apparent increase is the variable gap year to year between the index applied to higher education funding to maintain its value close to the level of the previous year, and the adjustment factor the Government has used.

If this is so, the apparent increase is an artefact not a real reflection of the impact for universities.

Conclusion

There has been no increase to the revenue for a discipline since 2010, other than the annual indexation process.

The proportion of students enrolled in medium to higher cost disciplines has grown, which creates an increase in the average across all students along with a balancing increase in the needed expenditure to educate those students. This accounts for almost 1% increase in the average between 2010 and 2015.

The index applied to the funding rates was considerably less than the rise in university costs through to 2011. Since then the index has intentionally been just under a reasonable estimate of the rise in university costs.

We do not know the factor the Government uses to inflate past year figures into 2017 dollar values. The difference between this factor and the annual indexation factor appear to be the main driver of the Government's claim for funding to have increased in real terms in most years from 2009 to 2016.

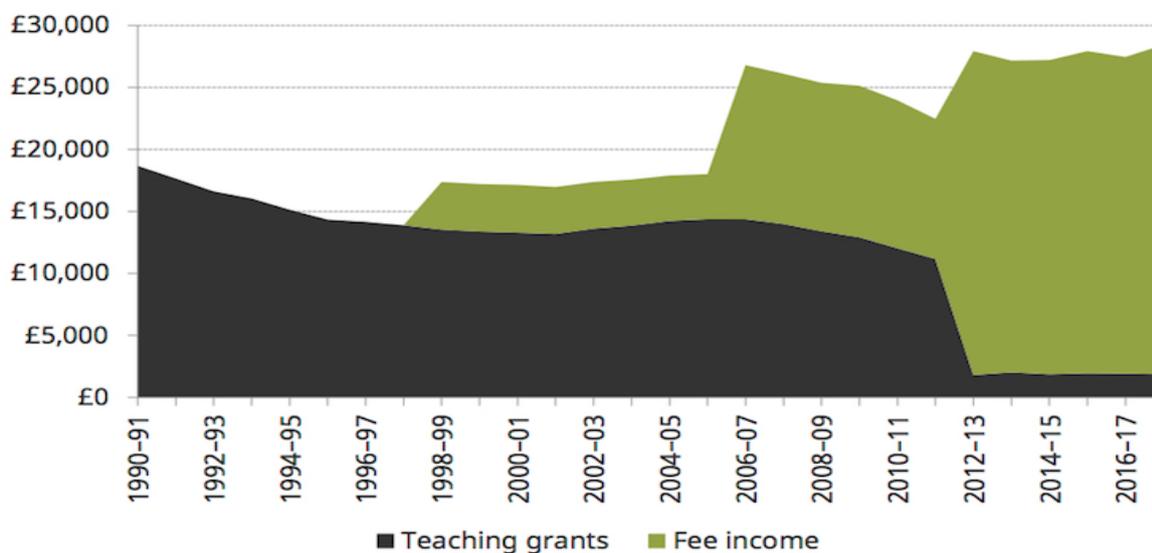
4. England: a real example of rising per student funding

The Australian outcome of dueling estimates of whether funding per head is marginally better or worse year to year is in marked contrast to the changes in England.

Over the past decade the substantial increases in English student charges have flowed through to universities, permitting much greater investment in student's education. In Australia increases in student charges, other than in 2005, have been balanced by reductions in Government funding.

The chart below comes from the Institute of Fiscal Studies report [Higher Education funding in England: past, present and options for the future](#). It shows how the introduction of a student fee and then subsequent rises in it clearly improved university revenue per student. Students were paying more but receiving a benefit from doing so.

Figure 4.1. University resources per student per degree for students starting between 1990-91 and 2017-18 (2017 prices)



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