

A photograph of a bookshelf filled with books, viewed from a low angle. The books are of various colors and sizes, creating a sense of depth and knowledge. The image is partially obscured by a large blue diagonal shape on the left side.

AUSTRALIAN INVESTMENT IN EDUCATION: HIGHER EDUCATION

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About us

The Mitchell Institute for Education and Health Policy's mission is to improve evidence-based health and education policy, to increase access and opportunities in education and health for all Australians. Our focus is on improving our education and health systems so more Australians can engage with and benefit from these services, supporting a healthier, fairer and more productive society. We are informed, independent and influential, with a proven ability to identify current and emerging problems in education and health, and use evidence to develop achievable solutions.

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Table of contents

| | |
|---|----|
| About us | i |
| Acknowledgements | i |
| Suggested citation | i |
| Table of contents | ii |
| Key points | 3 |
| Policy context for investment in higher education | 5 |
| What is the total investment in higher education in Australia? | 6 |
| What is the total investment in education provision in the higher education sector? | 9 |
| How much does the Australian Government invest in education provision in the higher education sector? | 11 |
| What is the investment per domestic student in higher education? | 13 |
| How much are international students investing in Australia’s higher education sector? ... | 15 |
| How have these changes impacted on different universities? | 19 |
| Group of Eight (Go8) universities..... | 20 |
| “Mid-ranked” universities | 21 |
| Smaller universities | 22 |
| Implications for future higher education policy | 23 |
| 1. Increase capacity across the tertiary education sector | 23 |
| 2. Support a recovery of the international student market | 23 |
| 3. Funding models that respond to diversity among institutions and students | 24 |
| Appendix A: 2018 University domestic and international student revenue..... | 26 |
| Appendix B: Notes on the data..... | 28 |
| Glossary..... | 30 |
| References | 32 |

Key points

- The coronavirus pandemic means Australia's higher education sector is facing an unprecedented set of challenges.
- Modelling suggests that Australia's universities face a cumulative loss of between \$10 billion to \$19 billion from 2020-2023 because of the collapse in international student revenue.
- The coronavirus response also impacts on future domestic student demand. It is important to change current policy settings to increase capacity across the tertiary sector.
- Before the impact of the coronavirus, Australia's investment in higher education had increased 42% in real terms between 2008 and 2018.
- The increase in investment in the higher education sector was driven by the large increase in international student revenue and the introduction of demand driven funding for universities.
- Despite increases over the past decade, funding for domestic students has plateaued and participation rates for domestic students in higher education are decreasing for the first time in over 10 years.
- Between 2008 and 2018, international student numbers increased by 57.9% while international student revenue increased in real terms by 137%. This suggests that higher education providers were able to enrol more international students and charge them higher fees.
- Increases in revenue associated with domestic students are closely aligned to participation. Between 2008 and 2018 there was an increase of 37.5% in full time equivalent domestic students, and an increase in revenue of 43.2% for the same cohort.
- While the introduction of demand driven funding meant that the Australian Government increased its investment in education provision at universities, a large proportion of this increase will be repaid through income contingent loans.
- Despite the overall increase in revenue, universities are not reporting larger surpluses than previously. If anything, university surpluses are trending downwards.
- Growth in revenue has been uneven. "Mid-ranked" universities have benefited most from demand driven funding whereas Go8 universities have benefited most from the increase in international student revenue.
- Smaller universities have not grown at the same rate as larger universities. The reasons for this have little to do with quality as many of these universities score highly on quality indicators.

- The lower level of growth at smaller universities is a problem because these universities generally service regional and outer-metropolitan communities and have a higher proportion of enrolments of students from equity groups.

Policy context for investment in higher education

Over the past decade, higher education funding has been substantially influenced by the introduction of demand driven funding in 2012, following recommendations made by the “Bradley Review” (2008). The reforms moved away from the previous supply driven model, under which the Australian Government played a much greater role in managing higher education enrolments. Instead, funding of undergraduate places at universities became uncapped. This resulted in an upswing in participation in higher education, including among groups of students historically under-represented in Australian universities.

After several years of policy uncertainty, in 2017 the Australian Government changed the arrangements for demand driven funding. While university places remained uncapped, a cap was introduced on increases in funding allocations to institutions. From 2020, further increases in funding allocations are tied to increases in population growth in the 18-64 year old age bracket. There are also new “performance-based” measures that influence the level of funding institutions will receive (Wellings, Black, Craven, Freshwater, & Harding, 2019). These measures include graduate employment outcomes, the reported quality of the student experience, and the level of participation of students from equity groups.

Government policies and institutional practices impacting international students over the last decade have also had a significant impact on the higher education sector. International student revenue is closely linked to migration policy and from 2008 to 2012, several reforms affected access to international student visas. These reforms resulted in a fall in international student commencements in higher education from 2010 to 2013 (Commonwealth DESE, 2020b). However, following the “Knight Review” (Knight, 2011), further reforms loosened some of the visa eligibility criteria for international students wishing to enrol at universities and other higher education providers (Birrell, 2019). These reforms reduced the amount of savings required to apply for a visa, and created more opportunities for graduates to work in Australia after their studies. These reforms ensured that international students remained major contributors to funding the Australian higher education sector, and since 2014, international student commencements increased sharply (Commonwealth DESE, 2020b).

The higher education sector in Australia is largely comprised of public universities, with a small number of private universities and other higher education providers (OHEPs) also contributing to the sector. OHEPs are non-university accredited institutions, such as theological colleges, specialised private institutions, and some TAFEs, which provide higher education courses like bachelor’s degrees.

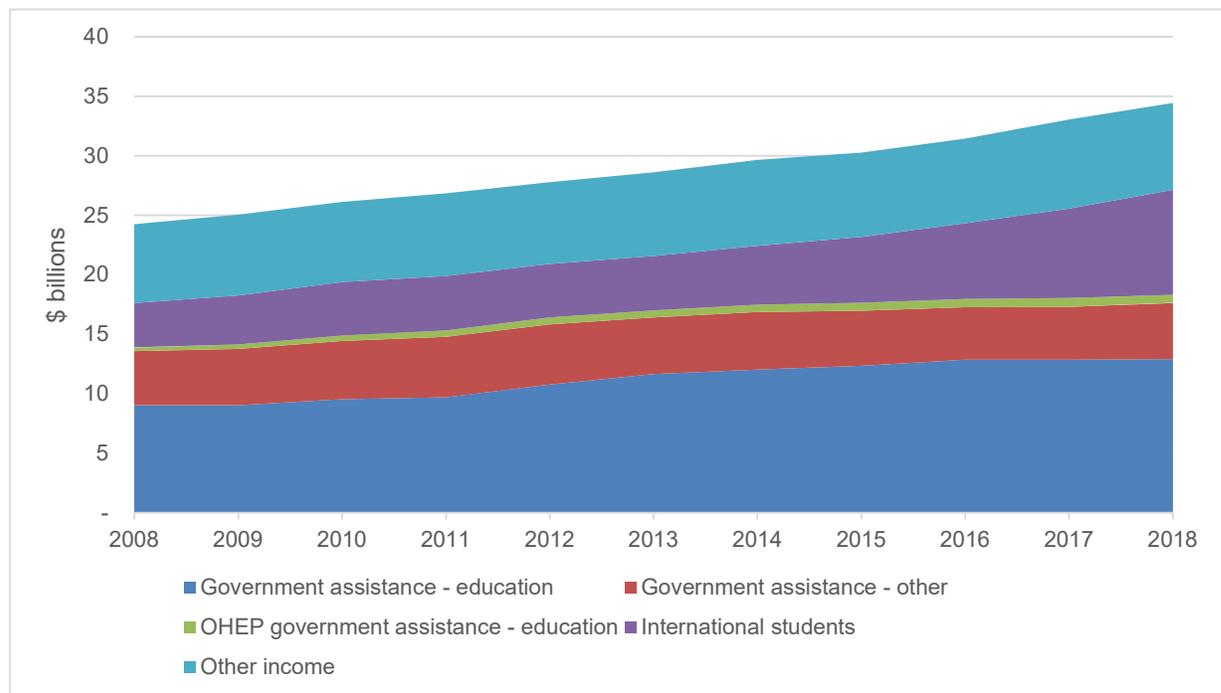
Investment in higher education is usually viewed as an Australian Government responsibility. Since 2011, quality assurance for higher education providers has been the responsibility of a single national regulatory agency, the Tertiary Education Standards Quality Agency (TEQSA). While state and territory governments play an important role in the governance of universities and may invest in higher education institutions, for example by investing in research, their contribution to funding for the sector lies outside the scope of analysis for this report.

What is the total investment in higher education in Australia?

Higher education revenue has steadily increased since 2008, with fastest growth in international student revenue.

Figure 1 shows Australia's total reported annual investment in higher education from 2008 to 2018. This data is from two sources¹. The first is university finance figures collected by the Australian Department of Education. The second is Australian Government support in the form of income contingent loans provided to other higher education providers (OHEP).

Figure 1: Total reported annual investment in higher education (2018 dollars)



| (\$ billions) | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Government assistance - education | \$9.04 | \$9.04 | \$9.55 | \$9.71 | \$10.77 | \$11.65 | \$12.03 | \$12.36 | \$12.85 | \$12.85 | \$12.90 |
| Government assistance - other | \$4.55 | \$4.72 | \$4.90 | \$5.08 | \$5.07 | \$4.79 | \$4.85 | \$4.61 | \$4.42 | \$4.46 | \$4.72 |
| OHEP gov't assistance - education | \$0.31 | \$0.38 | \$0.45 | \$0.52 | \$0.59 | \$0.58 | \$0.59 | \$0.68 | \$0.68 | \$0.71 | \$0.68 |
| International students (university only) | \$3.72 | \$4.11 | \$4.50 | \$4.59 | \$4.46 | \$4.57 | \$4.97 | \$5.53 | \$6.38 | \$7.52 | \$8.84 |
| Other revenue | \$6.63 | \$6.79 | \$6.73 | \$6.93 | \$6.90 | \$7.04 | \$7.21 | \$7.09 | \$7.11 | \$7.49 | \$7.28 |
| Total | \$24.24 | \$25.04 | \$26.13 | \$26.84 | \$27.79 | \$28.62 | \$29.65 | \$30.27 | \$31.44 | \$33.03 | \$34.42 |

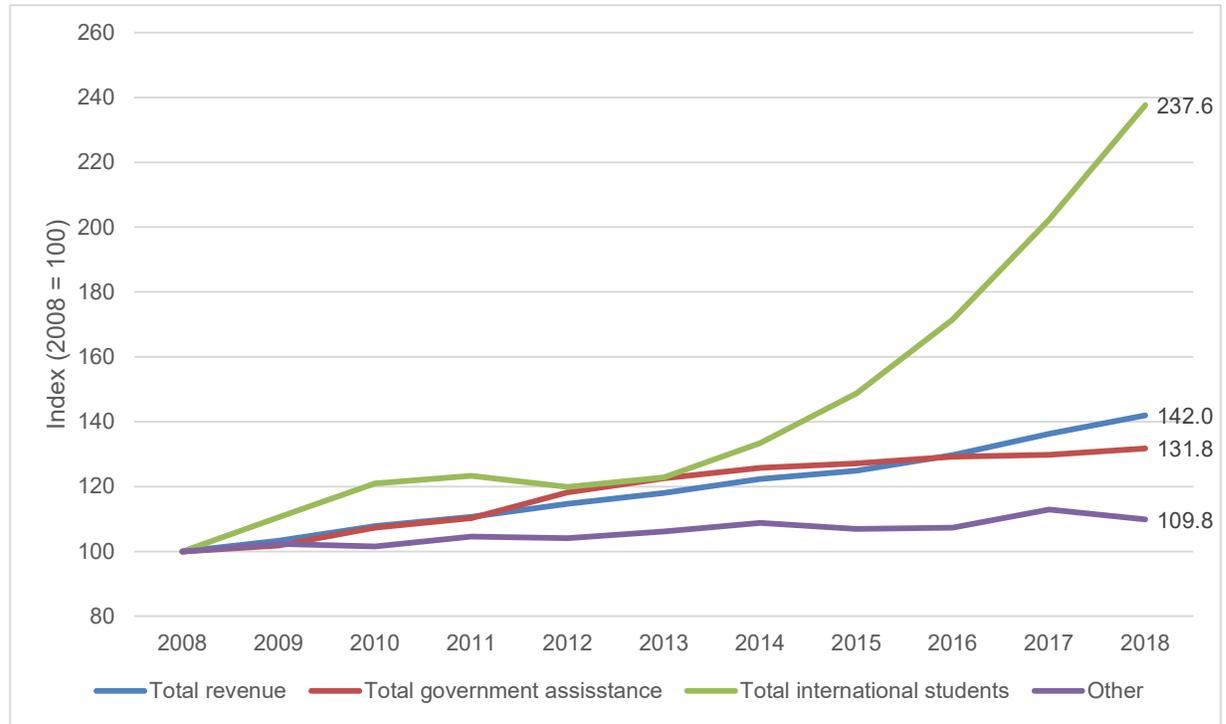
Source: Commonwealth DET (2019a), Grattan Institute (unpublished)

¹ There are other forms of investment in the higher education sector that this set of data does not capture. For instance, TEQSA also collects data from institutional sources for non-higher education fee-for-service revenue, such as English Language Intensive Courses for Overseas Students (ELICOS). However, this data only begins from 2015 and it has not been included in this report.

Figure 1 shows that Australia's total reported investment in higher education has increased 42% in real terms between 2008 and 2018. Despite this overall increase, the growth in revenue has not been even, and growth varies across different revenue sources.

Figure 2 shows the rate of growth in real higher education revenue by various sources using 2008 as the base year.

Figure 2: Percentage change in real higher education revenue by source (proportion of 2008 funding)



| (\$ billions) | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Total government assistance (including OHEP and research) | \$13.89 | \$14.14 | \$14.90 | \$15.31 | \$16.42 | \$17.01 | \$17.47 | \$17.65 | \$17.95 | \$18.02 | \$18.30 |
| Total international students (university only) | \$3.72 | \$4.11 | \$4.50 | \$4.59 | \$4.46 | \$4.57 | \$4.97 | \$5.53 | \$6.38 | \$7.52 | \$8.83 |
| Other (university only) | \$6.63 | \$6.79 | \$6.73 | \$6.93 | \$6.90 | \$7.04 | \$7.21 | \$7.09 | \$7.11 | \$7.49 | \$7.28 |
| Total revenue | \$24.24 | \$25.04 | \$26.13 | \$26.84 | \$27.79 | \$28.62 | \$29.65 | \$30.27 | \$31.44 | \$33.03 | \$34.42 |

Source: Commonwealth DET (2019a), Grattan Institute (unpublished)

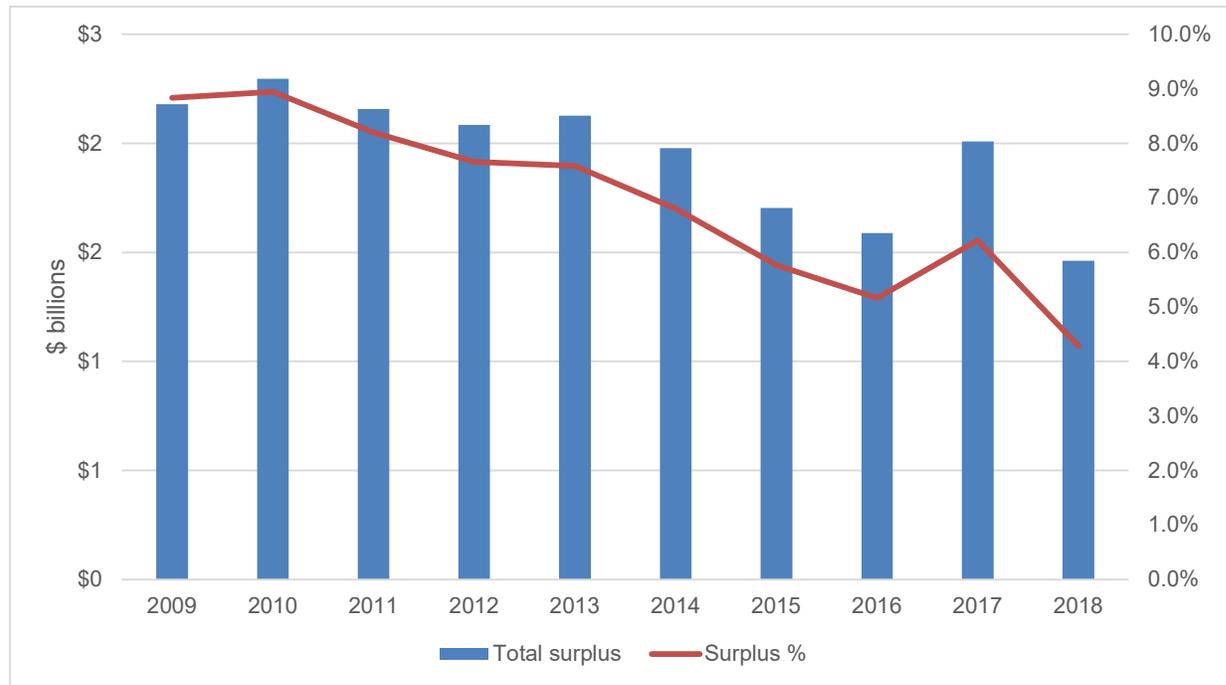
Note: For the purpose of calculation, all figures were adjusted to 2018 dollars.

Figure 2 shows that total government financial assistance, including assistance for research, has grown, but at a slower pace than the increase in other areas. The biggest growth has come from international student revenue, particularly since 2013.

Since 2008, university revenue from international student fees has more than doubled. In contrast, total government assistance to the higher education sector has increased only marginally since 2014, and at a rate lower than the overall increase in total revenue.

Even though there has been significant growth in overall revenue, this does not mean that higher education institutions are necessarily recording larger surpluses. The financial data used for this report include total surpluses recorded at universities, which is shown in Figure 3. These data indicate that university surpluses have not grown in real terms since 2009.

Figure 3: Total university sector surplus (2018 dollars)



| (\$ billions) | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total surplus (billions) | \$2.18 | \$2.30 | \$2.16 | \$2.08 | \$2.13 | \$1.98 | \$1.70 | \$1.59 | \$2.01 | \$1.46 |
| Surplus % | 8.8% | 8.9% | 8.2% | 7.7% | 7.6% | 6.8% | 5.8% | 5.2% | 6.2% | 4.3% |

Source: Commonwealth DET (2019a)

These figures show that despite the increase in total revenue, the total surplus in the university sector has decreased from approximately around 8.8% to 4.3%. Possible reasons for this downward trend include that additional revenue has been absorbed in increases to participation, or re-invested in the development of higher education institutions.

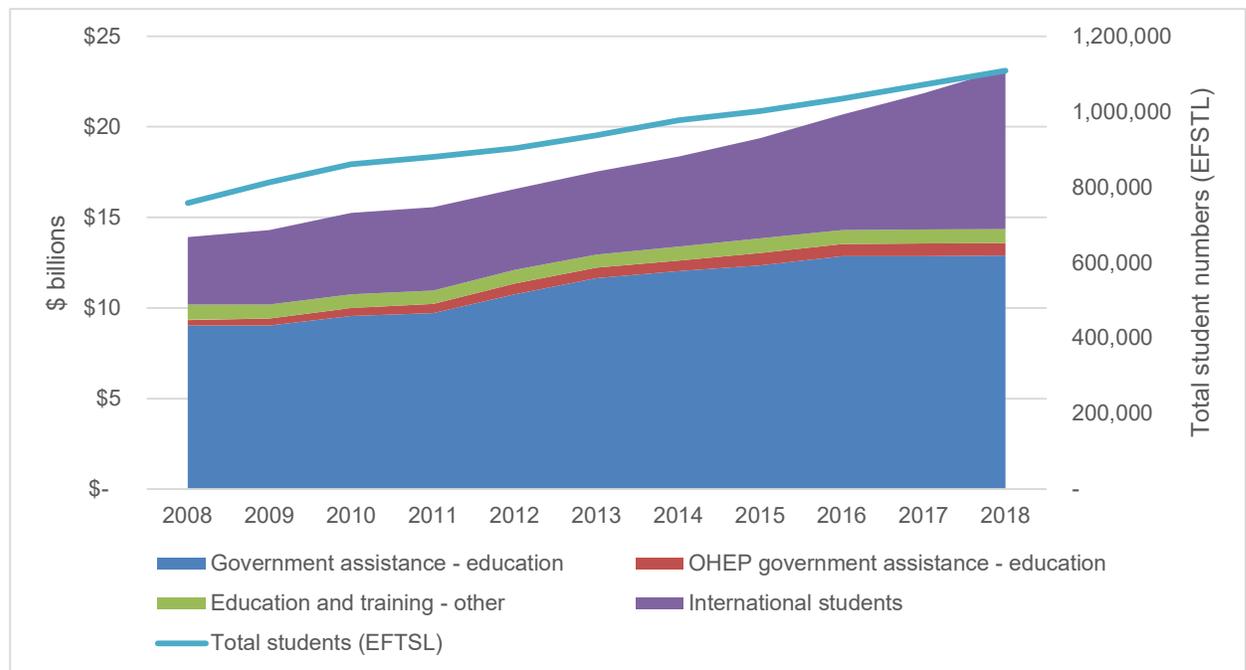
What is the total investment in education provision in the higher education sector?

Revenue for education provision in the higher education sector has risen, and so too have total enrolments.

Universities are very large organisations and a significant proportion of their revenue is collected for purposes other than education provision, such as research. It is possible to collect information on education provision in the higher education sector by selecting revenue data from certain categories. These categories include certain Commonwealth grants, funds for income contingent loans to higher education providers, payments to universities for tuition fees, and international student revenue at universities.

Figure 4 shows revenue for activity classified in this report as education provision. It also includes student enrolment numbers, as equivalent full-time student load (EFTSL).

Figure 4: Education provision revenue in the higher education sector and student enrolments (EFTSL) (2018 dollars)



| (\$ billions) | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|
| Government assistance - education | \$9.04 | \$9.04 | \$9.55 | \$9.71 | \$10.77 | \$11.65 | \$12.03 | \$12.36 | \$12.85 | \$12.85 | \$12.90 |
| OHEP gov't assistance - education | \$0.31 | \$0.38 | \$0.45 | \$0.52 | \$0.59 | \$0.58 | \$0.59 | \$0.68 | \$0.68 | \$0.71 | \$0.68 |
| Education and training - other | \$0.85 | \$0.78 | \$0.76 | \$0.74 | \$0.75 | \$0.73 | \$0.77 | \$0.81 | \$0.78 | \$0.77 | \$0.79 |
| International students | \$3.72 | \$4.11 | \$4.50 | \$4.59 | \$4.46 | \$4.57 | \$4.97 | \$5.53 | \$6.38 | \$7.52 | \$8.84 |
| Total students (EFTSL) | 757,850 | 813,049 | 861,459 | 879,981 | 903,094 | 937,661 | 977,238 | 1,002,379 | 1,034,916 | 1,072,262 | 1,109,303 |

Source: Commonwealth DET (2019a, 2019b)

These data show that while education and training revenue has increased since 2008, so too have enrolments. Revenue associated with education provision has increased by 66.7%, while participation has increased by 46.4%. These data indicate a strong correlation between revenue and participation.

However, this growth in overall revenue and participation can obscure trends in certain sources of revenue. For instance, international student revenue has grown at a much higher rate than domestic student revenue. This differential growth means that the correlation between participation and revenue may be stronger for some cohorts when compared to others. This report will explore this issue when examining changes in per student revenue between domestic students and international students.

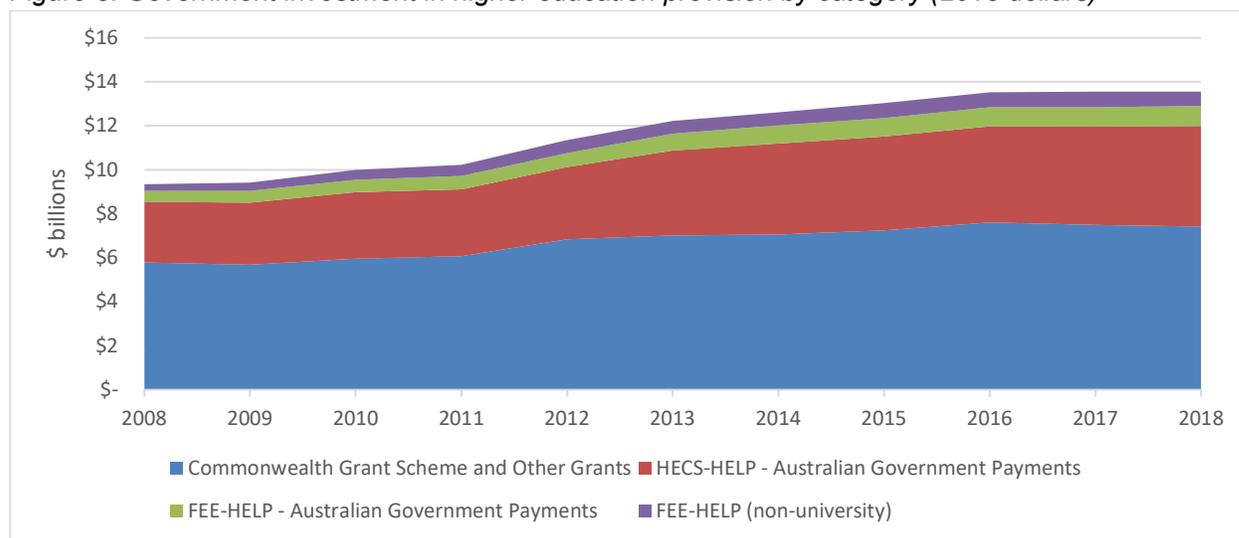
How much does the Australian Government invest in education provision in the higher education sector?

A large proportion of government investment in higher education provision is expected to be paid back.

An important aspect of Australian Government investment in education provision in the higher education sector is that a large proportion of funding is issued in the form of income contingent loans. Therefore, a significant amount of what this report defines as 'education provision' will be paid back through higher rates of income tax. It can be difficult to calculate the final amount of income contingent loans that the Australian government will recoup. Some estimates suggest approximately 83% of income contingent loans for higher education courses will be paid back, with 17% not repaid for various reasons (Norton & Cherastidham, 2014).

Figure 5 breaks down Australian Government investment in education provision in the higher education sector by different categories².

Figure 5: Government investment in higher education provision by category (2018 dollars)



| (\$ billions) | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Commonwealth Grant Scheme and Other Grants | \$5.78 | \$5.69 | \$5.97 | \$6.07 | \$6.85 | \$7.01 | \$7.07 | \$7.24 | \$7.61 | \$7.48 | \$7.42 |
| HECS-HELP - Australian Government Payments | \$2.76 | \$2.81 | \$3.01 | \$3.04 | \$3.28 | \$3.87 | \$4.13 | \$4.27 | \$4.36 | \$4.47 | \$4.57 |
| FEE-HELP - Australian Government Payments | \$0.49 | \$0.53 | \$0.57 | \$0.60 | \$0.64 | \$0.77 | \$0.83 | \$0.85 | \$0.87 | \$0.89 | \$0.91 |
| FEE-HELP (non-university providers) | \$0.31 | \$0.38 | \$0.45 | \$0.52 | \$0.59 | \$0.58 | \$0.59 | \$0.68 | \$0.68 | \$0.71 | \$0.68 |
| Total | \$9.34 | \$9.42 | \$10.00 | \$10.23 | \$11.36 | \$12.22 | \$12.62 | \$13.04 | \$13.53 | \$13.56 | \$13.58 |

Source: Commonwealth DET (2019a), Grattan Institute (unpublished)

² FEE-HELP figures exclude VET FEE-HELP income contingent loans revenue collected by dual sector universities.

Figure 5 shows that there has been a steady increase in government investment in education provision in the higher education sector, which began before the introduction of demand driven funding in 2012. While the Australian Government provides support of around \$13.6 billion to education provision in the higher education sector, almost 45% of that investment is in the form of income contingent loans.

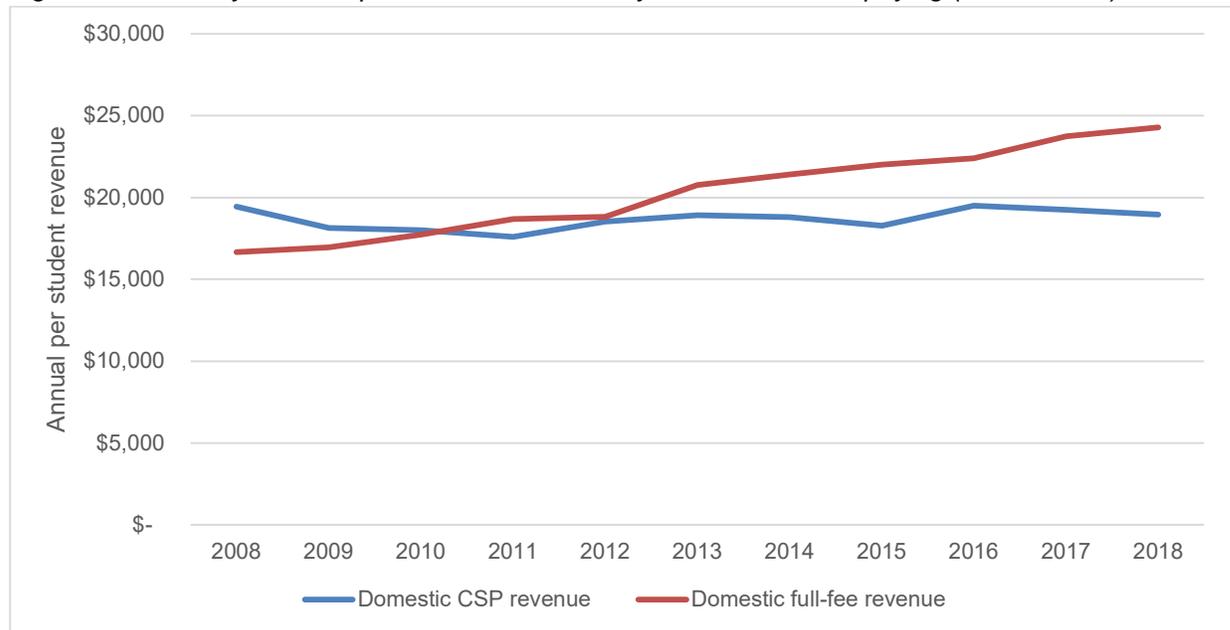
From 2012, the demand driven system did result in an increase in government supported education provision. The Commonwealth Grants and HECS payments, the two categories most impacted by demand driven funding, increased by approximately \$2.7 billion since the full introduction of the policy. However, approximately 50% of the increase in government investment in education provision in the higher education sector still came in the form of HECS-HELP income contingent loans. This means that the total long term cost of the introduction of demand driven funding will be less than it appears when using only the total amount of money paid to universities because much of this cost will be recouped in higher income tax.

What is the investment per domestic student in higher education?

Per domestic student investment in higher education is presented here for universities, as the most common form of higher education provision. Many factors influence the revenue a university receives per student. These include the area of study for a course and whether the student is full fee paying.

Figure 6 shows the average university revenue per domestic student from 2008 to 2018 by Commonwealth supported place (CSP) and full fee paying students. This figure is calculated by dividing the total revenue for education provision for each student category by the number of full time equivalent students in that category.

Figure 6: University revenue per domestic student by CSP and full fee paying (2018 dollars)



| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Domestic per student CSP revenue | \$19,438 | \$18,150 | \$17,998 | \$17,597 | \$18,525 | \$18,913 | \$18,802 | \$18,271 | \$19,494 | \$19,240 | \$18,955 |
| Domestic per student full-fee revenue | \$16,665 | \$16,966 | \$17,729 | \$18,672 | \$18,815 | \$20,753 | \$21,406 | \$22,005 | \$22,381 | \$23,731 | \$24,287 |
| University CSP students (EFTSL) | 439,439 | 468,623 | 498,724 | 517,832 | 546,649 | 575,087 | 595,602 | 605,296 | 614,398 | 621,450 | 623,100 |
| University domestic full fee paying students (EFTSL) | 57,318 | 54,885 | 54,674 | 53,083 | 54,325 | 55,917 | 57,759 | 57,281 | 56,805 | 54,862 | 54,289 |

Source: Commonwealth DET (2019a, 2019b)

Figure 6 shows that in real terms since 2008, universities have gradually been receiving more revenue per domestic full fee-paying student, while per student CSP revenue has been relatively constant. For students enrolled in a CSP course, the Australian Government sets the level of per student funding universities receive according to the area of study. For full-

fee students, however, universities are largely free to set their own price, even though students may still be eligible to access an income contingent loan to cover the cost.

These data also show that for the first time in a decade, domestic student participation rates have fallen. Overall population growth between 2017 and 2018 was 1.5% while there has been virtually no growth in domestic student equivalent full time student numbers, with growth in domestic enrolments only 0.2% between 2017 and 2018 (ABS, 2019a; Commonwealth DET, 2019b).

How much are international students investing in Australia's higher education sector?

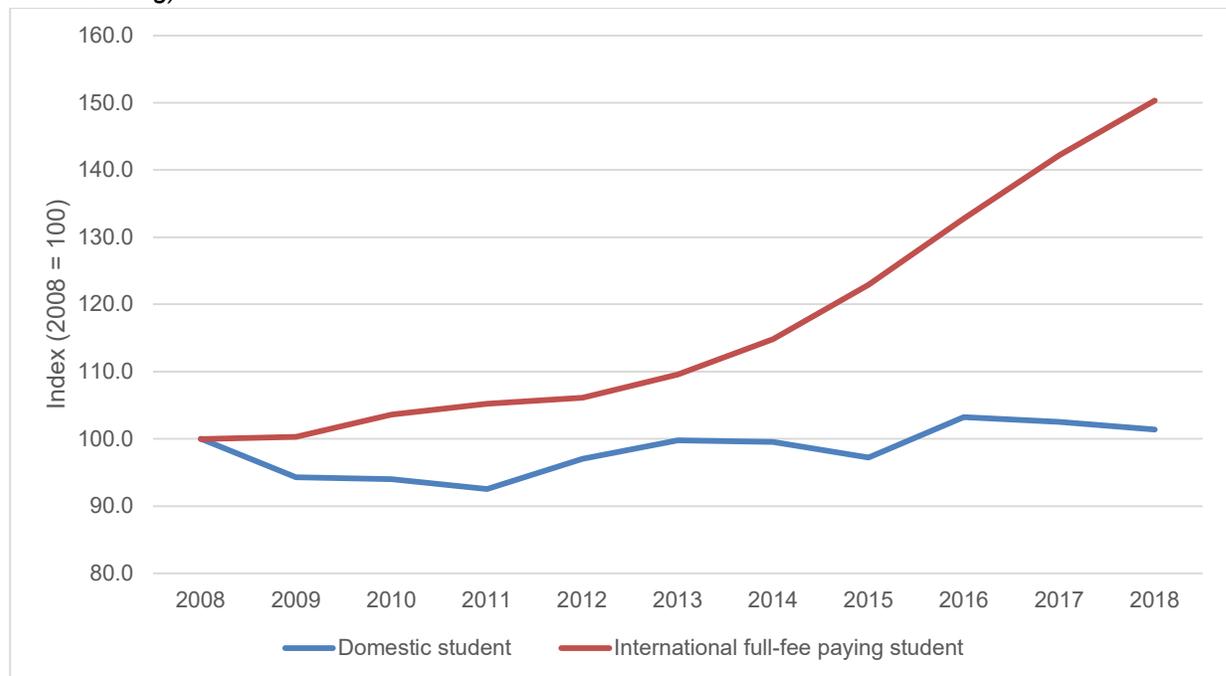
The collapse in international student revenue is a major threat to universities and their financial position.

International students are an important source of revenue for Australian universities. The data above show that there has been enormous growth in international student revenue over the past decade, particularly since 2013. There are a number of reasons for this growth.

First, there has been an increase in the absolute number of international students. From 2008 to 2018, the number of international students increased from 198,536 to 313,493 full-time equivalent students (Commonwealth DET, 2019c). This is an increase of 57%.

Second, universities have been collecting more revenue per international student over the past decade. Figure 7 shows per international student revenue and per domestic student revenue (CSP and full-fee paying) at universities as a proportion of 2008 figures. This approach shows changes in the amount of revenue universities are receiving per international student compared to per domestic student.

Figure 7: Per student revenue for international students and domestic student (proportion of 2008 funding)



Source: Commonwealth DET (2019a, 2019b)

Figure 7 shows that the amount of money universities have received per international student has increased by over 50% since 2008 in real terms. This means that since 2008,

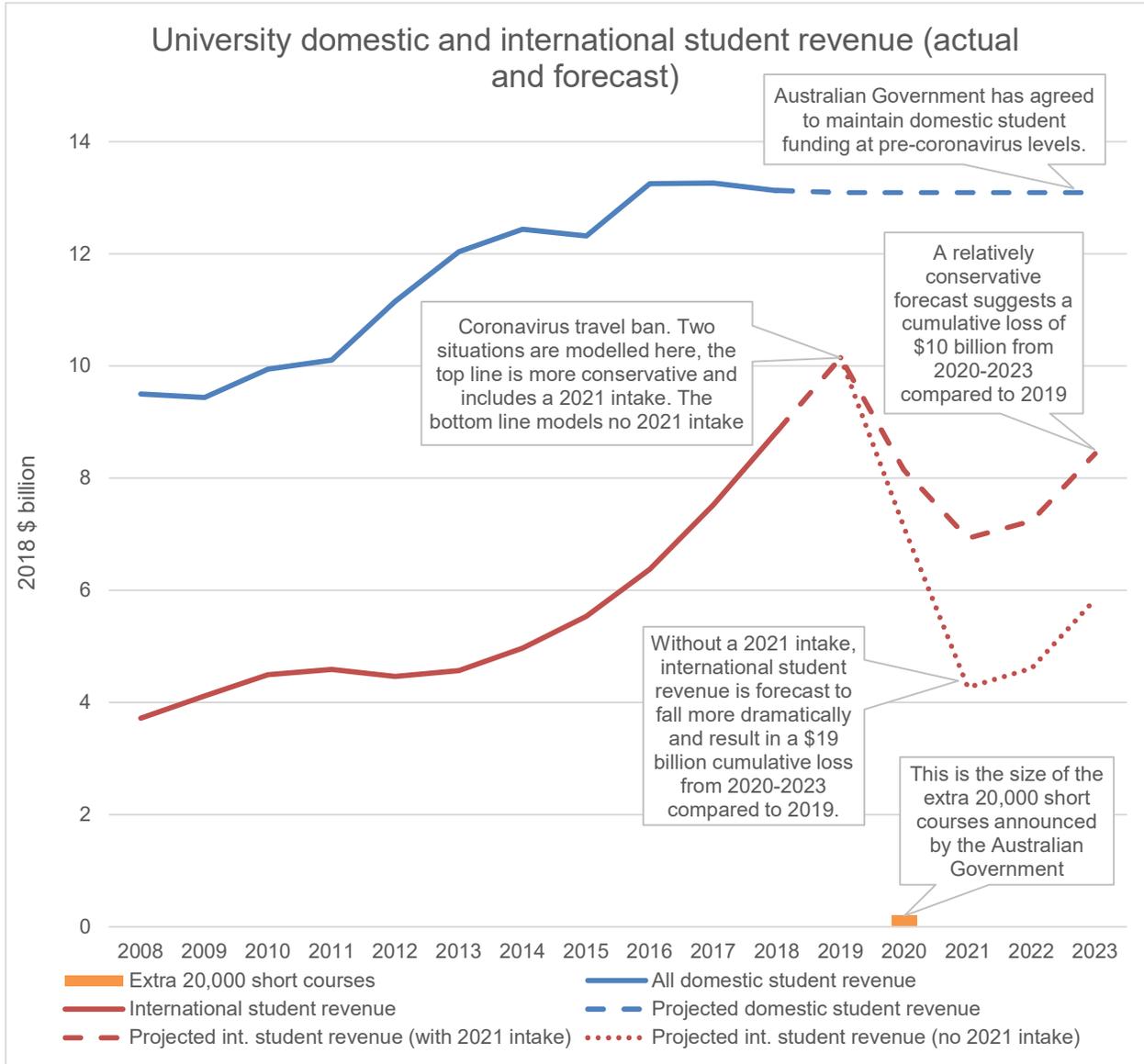
there are both higher numbers of international students at Australian universities, and international students are paying higher student fees, than before.

However, the coronavirus pandemic will have an enormous impact on this revenue stream. In order to understand this impact, Figure 8 models the change to university revenue caused by the coronavirus pandemic and subsequent impact on international student numbers.

The modelling shows two scenarios. The first is a relatively conservative scenario where some international students can commence their studies in 2021. This scenario uses a model where international student commencements are 50% in 2020 and 2021 of what they were in 2019, before increasing to 75% in 2022 and returning to 100% of 2019 levels by 2023. The second scenario models a more dramatic fall in international student commencements. It uses a scenario where travel bans continue into 2021 and result in no international student commencements in 2021. When compared to 2019 numbers, the second scenario models international student commencements at 25% in 2020, 0% in 2021, before gradually beginning to increase to 25% of 2019 commencements in 2022, and to 50% of 2019 commencements by 2023.

This modelling also uses a number of assumptions. First, the modelling follows international student data that suggests in each yearly cohort of international students, 40% are commencing students and 60% are continuing students (Commonwealth DESE, 2020b). Second, it assumes that currently enrolled international students stay in Australia to finish their course.

Figure 8: Total revenue for domestic and international student – actual and projected (2018 dollars)



| (\$ billions) | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| All domestic students (actual) | \$9.50 | \$9.44 | \$9.95 | \$10.10 | \$11.15 | \$12.04 | \$12.43 | \$12.32 |
| International student revenue (actual) | \$3.72 | \$4.11 | \$4.50 | \$4.59 | \$4.46 | \$4.57 | \$4.97 | \$5.53 |
| (\$ billions) | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| All domestic students (actual) | \$13.25 | \$13.26 | \$13.13 | | | | | |
| International student revenue (actual) | \$6.38 | \$7.52 | \$8.83 | | | | | |
| All domestic students (projected) | | | | \$13.09 | \$13.09 | \$13.09 | \$13.09 | \$13.09 |
| Projected int. student revenue (with 2021 intake) | | | | \$10.15 | \$8.14 | \$6.93 | \$7.23 | \$8.44 |
| Projected int. student revenue (no 2021 intake) | | | | \$10.15 | \$7.11 | \$4.27 | \$4.61 | \$5.84 |

Source: Commonwealth DET (2019a, 2019b)

This figure forecasts very large losses in university revenue because of the decline in international student commencements. In the conservative scenario, the model forecasts a cumulative loss of over \$10 billion to the university sector between 2020 and 2023 when compared to 2019 international student revenue. However, if the coronavirus travel ban continues, these losses are forecast to be much greater, at \$19 billion between 2020 and 2023 when compared to 2019 international student revenue. The figure also shows the impact of the 20,000 extra short courses announced by the Australian Government. The graph shows the extra funding does not offset the forecast losses that universities will experience because of a drop in international student revenue.

This modelling points to an enormous problem for the university sector. In 2018, universities recorded a surplus across the sector of \$1.5 billion, which is not enough to counter the large forecast losses caused by the drop in international student revenue.

It is also important to point out that the decline in international student commencements is not just a university problem. Australian Bureau of Statistics (ABS, 2019b) figures show that for every \$1 universities collect in tuition fees there is another \$2 of other activity associated with international students³. This other activity comes in the form of money spent in the wider economy and also fees paid by students enrolled at vocational education and training (VET) providers and at English language schools. The scenarios above suggest that Australia's economy faces a wider loss of between \$30 billion and \$60 billion between 2020 and 2023 because of the impact of the coronavirus on international student enrolments.

To put this into context, this is about five to ten times the size of the automotive manufacturing sector before it largely shut down (Productivity Commission, 2014). Moreover, it will take time for any loss to work its way through the system. International students contribute to the economy for a number of years while they complete their course. As Figure 8 shows, the inability to enrol in a course affects the supply of international student revenue for a number of years. This means any decrease in international student revenue will be felt for at least two to three years.

³ It is noted that there is some disagreement concerning the figures published by the Australian Bureau of Statistics regarding international students (Birrell & Smith, 2010). However, the ABS is the most authoritative source on wider international student revenue and ABS data are used in this report to contextualise the wider impact of international student revenue on the economy.

How have these changes impacted on different universities?

The increase in revenue across the higher education sector hides different stories for different institutions.

This section analyses higher education finances for three different groups of higher education institutions. The first group consists of Group of Eight (Go8) universities, an alliance of Australia’s highest internationally ranked research-intensive universities. The second group consists of “mid-ranked” universities, ranked 9 to 21 in Australia according to the Academic Ranking of World University (ARWU) rankings (and which also focus on research and citations). The third group are smaller universities with revenue under \$500 million in 2018.

| Group of Eight (Go8) universities | “Mid-ranked” universities (ranked 9-21 by ARWU) | Smaller universities (revenue under \$500 million in 2018) |
|--|--|---|
| <ul style="list-style-type: none"> • Australian National University • Monash University • University of Adelaide • University of Melbourne • University of New South Wales • University of Queensland • University of Sydney • University of Western Australia | <ul style="list-style-type: none"> • Deakin University • Griffith University • James Cook University • La Trobe University • Macquarie University • Queensland University of Technology • RMIT University • Swinburne University of Technology • University of Newcastle • University of Tasmania • University of Technology Sydney • University of Wollongong | <ul style="list-style-type: none"> • Batchelor Institute of Indigenous Tertiary Education • Central Queensland University • Charles Darwin University • Edith Cowan University • Federation University • Southern Cross University • The University of New England • The University of Notre Dame Australia • University of Canberra • University of Southern Queensland • University of the Sunshine Coast • Victoria University |

This categorisation was based broadly on operational model and size. The resulting groupings do not include all 40 Australian universities, as some did not fit into any of these three categories (for example, universities with ARWU ranks above 21 and revenue of over \$500 million). These institutions will have their own distinctive experience of funding reform.

There are many other possible ways that Australian universities could have been grouped, such as by location (recognising that regional universities face particular challenges and opportunities, compared to metropolitan ones); date of establishment (in that “younger” universities may have distinct challenges); or the proportion of students from equity groups (which can impact heavily on the costs of university provision). All of these alternative groupings may offer useful points of comparison in relation to universities’ experience of funding reform.

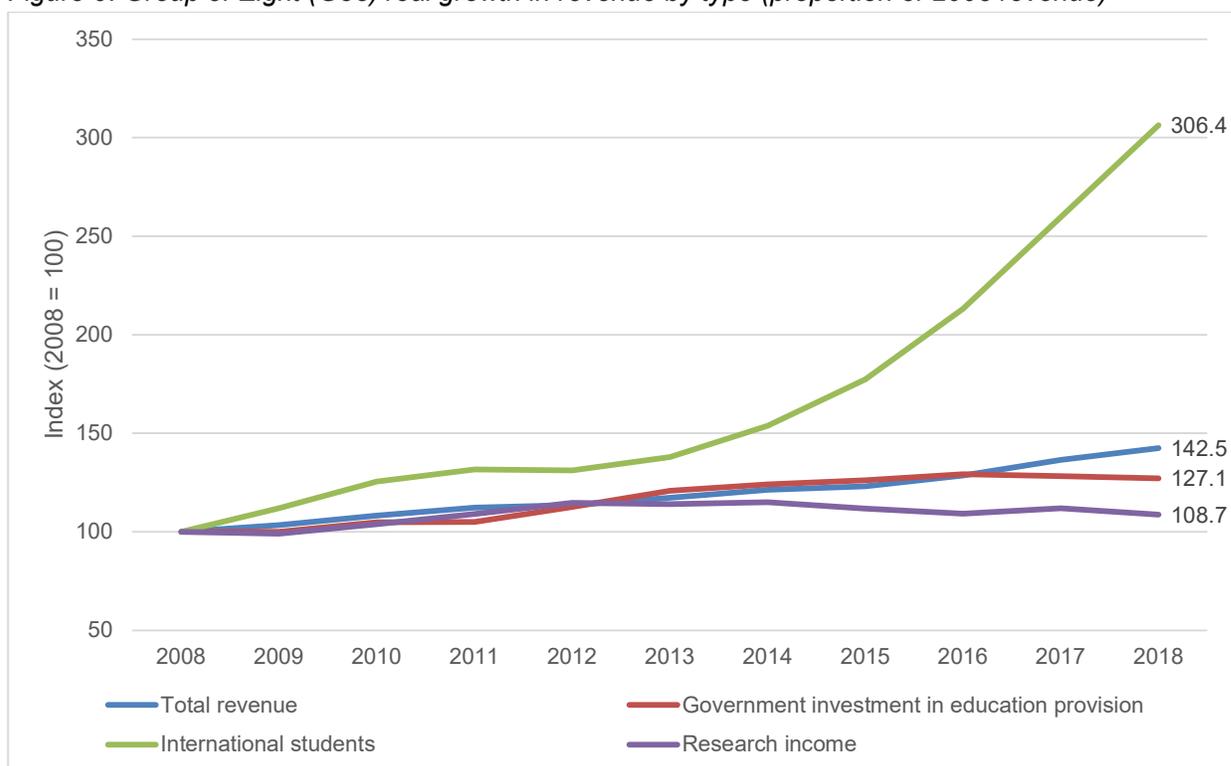
Group of Eight (Go8) universities

Go8 universities have grown their international revenue substantially.

Go8 universities are the largest institutions in the higher education sector. They operate a research-intensive model, and attract the highest numbers of students from the most advantaged backgrounds. The top six universities in 2018 by total revenue are from the Go8.

Figure 9 shows that since 2008, international student income at Go8 universities has grown rapidly (base year 2008 = 100). Total government supported education provision for Go8 universities, however, has increased at a lower rate than the average across all universities. This suggests Go8 universities have not taken advantage of the demand driven funding system as much as other institutions have. Indeed, Go8 institutions now receive more revenue for education provision from international students than they do from the Australian Government.

Figure 9: Group of Eight (Go8) real growth in revenue by type (proportion of 2008 revenue)



| (\$ billions) | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Total revenue | \$10.38 | \$10.72 | \$11.24 | \$11.65 | \$11.79 | \$12.17 | \$12.59 | \$12.78 | \$13.35 | \$14.18 | \$14.80 |
| Government investment in education provision | \$2.93 | \$2.93 | \$3.07 | \$3.07 | \$3.30 | \$3.54 | \$3.63 | \$3.69 | \$3.78 | \$3.75 | \$3.72 |
| Research income | \$1.51 | \$1.50 | \$1.57 | \$1.65 | \$1.74 | \$1.73 | \$1.74 | \$1.69 | \$1.65 | \$1.70 | \$1.64 |
| International students | \$1.50 | \$1.68 | \$1.88 | \$1.98 | \$1.97 | \$2.07 | \$2.31 | \$2.66 | \$3.20 | \$3.90 | \$4.60 |
| Total surplus | -\$0.63 | \$0.79 | \$0.84 | \$0.92 | \$0.77 | \$0.96 | \$0.87 | \$0.76 | \$0.71 | \$1.04 | \$0.74 |

Source: Commonwealth DET (2019a).

Note: For the purpose of calculation, all figures were adjusted to 2018 dollars.

“Mid-ranked” universities

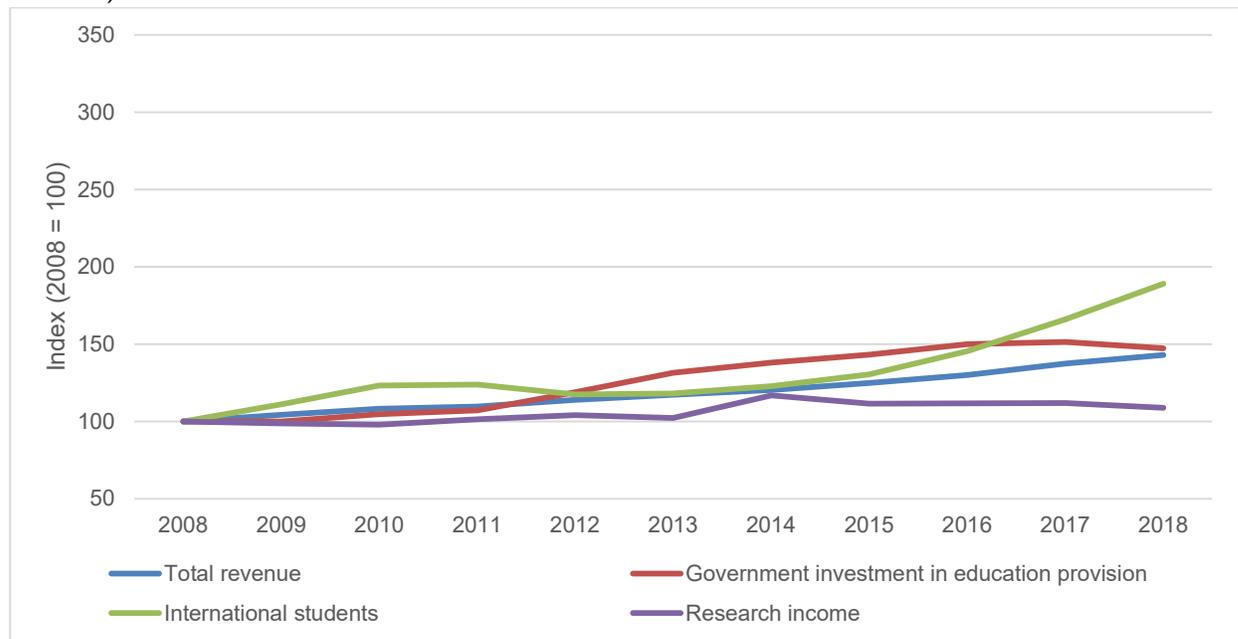
Growth in “mid-ranked” universities has come from international students and demand driven funding.

“Mid-ranked” universities have more evenly grown their revenue across different revenue streams. Compared to G08 universities, this set of universities has experienced higher rates of growth in government investment in education, up 37.3% in real terms since 2011. This suggests it is the universities ranked behind the Go8 that have benefited most financially from the implementation of demand driven funding.

Figure 10 shows that “mid-ranked” universities have also benefited from the increase in international student revenue, but not to the same extent as Go8 universities.

Overall, the financial position of “mid-ranked” universities remains relatively strong, although there has been a downward trend in surplus margins.

Figure 10: “Mid-ranked” universities real growth in revenue by type (proportion of 2008 revenue)



| (\$ billions) | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| Total revenue | \$8.17 | \$8.54 | \$8.84 | \$8.96 | \$9.31 | \$9.60 | \$9.84 | \$10.20 | \$10.63 | \$11.23 | \$11.68 |
| Government investment in education provision | \$3.47 | \$3.47 | \$3.63 | \$3.73 | \$4.13 | \$4.56 | \$4.79 | \$4.97 | \$5.21 | \$5.26 | \$5.12 |
| Research income | \$0.60 | \$0.59 | \$0.59 | \$0.61 | \$0.63 | \$0.62 | \$0.70 | \$0.67 | \$0.67 | \$0.67 | \$0.65 |
| International students | \$1.50 | \$1.67 | \$1.85 | \$1.85 | \$1.76 | \$1.77 | \$1.84 | \$1.95 | \$2.18 | \$2.49 | \$2.83 |
| Total surplus | \$0.71 | \$0.96 | \$0.98 | \$0.80 | \$0.78 | \$0.72 | \$0.56 | \$0.57 | \$0.57 | \$0.81 | \$0.50 |

Source: Commonwealth DET (2019a).

Note: For the purpose of calculation, all figures were adjusted to 2018 dollars.

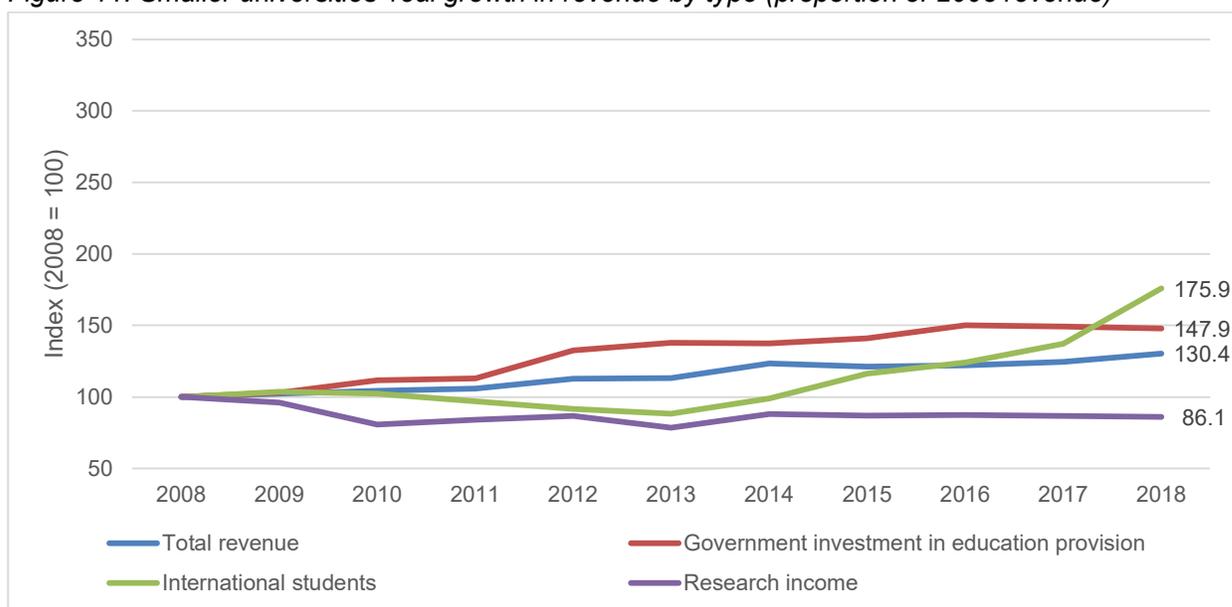
Smaller universities

Smaller universities have grown more slowly than other universities.

Figure 11 shows that smaller universities have benefited slightly less from the introduction of demand driven funding than universities that are “mid-ranked”, but more so than the Go8 universities. Government investment in education at smaller universities increased by 30.3% in real terms since 2011, compared to 37.3% at “mid-ranked” universities. Growth in international student revenue is less than for the mid-ranked universities, and much less than for the Go8 universities. The revenue smaller universities receive for research is lower in real terms in 2018 than it was in 2008.

These figures also show that some smaller universities are missing out on the growth that other universities have experienced. There can be many reasons for this and they may have little to do with the quality of teaching or research at these universities. Indeed, many smaller universities perform very well on student satisfaction and graduate outcome surveys (QILT, 2019). The areas that have driven growth at other universities can be strongly influenced by factors associated with location and status, especially with respect to international student revenue. This means that smaller universities can find it more difficult to compete with larger or more established universities, regardless of the quality of their education and training provision.

Figure 11: Smaller universities’ real growth in revenue by type (proportion of 2008 revenue)



| (\$ billions) | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total revenue | \$2.82 | \$2.88 | \$2.94 | \$2.98 | \$3.18 | \$3.19 | \$3.48 | \$3.41 | \$3.44 | \$3.51 | \$3.67 |
| Government investment in education provision | \$1.28 | \$1.32 | \$1.43 | \$1.45 | \$1.70 | \$1.76 | \$1.76 | \$1.80 | \$1.92 | \$1.91 | \$1.89 |
| Research income | \$0.13 | \$0.12 | \$0.10 | \$0.11 | \$0.11 | \$0.10 | \$0.11 | \$0.11 | \$0.11 | \$0.11 | \$0.11 |
| International students | \$0.44 | \$0.45 | \$0.45 | \$0.42 | \$0.40 | \$0.39 | \$0.43 | \$0.51 | \$0.54 | \$0.60 | \$0.77 |
| Total surplus | \$0.16 | \$0.21 | \$0.18 | \$0.19 | \$0.24 | \$0.18 | \$0.30 | \$0.17 | \$0.10 | \$0.03 | \$0.03 |

Source: Commonwealth DET (2019a). Note: For the purpose of calculation, all figures were adjusted to 2018 dollars.

Implications for future higher education policy

Higher education faces an unprecedented crisis.

Until the onset of the coronavirus pandemic, these figures showed a sector that had healthy growth over the past ten years. There had been two major influences on university finances between 2008 to 2019: the increase in government financial assistance caused by the implementation of the demand driven system; and the large increase in international student numbers. However, the increase in total investment hid different stories within the higher education sector. The ten-year trend also culminated in the current plateau of government investment in higher education funding, which has concerning implications for future university participation.

The coronavirus pandemic and subsequent travel ban has meant the higher education sector is facing an unprecedented crisis. It is still too early to discern the full policy implications of the coronavirus on the higher education sector. However, it is possible to identify policy directions that may assist the sector, and also ensure higher education can play its role in recovery efforts following the coronavirus response.

1. Increase capacity across the tertiary education sector

The coronavirus pandemic creates considerable uncertainty regarding demand for domestic university places. For instance, 25% of school leavers who go on to study at university take some form of gap year (Lumsden & Stanwick, 2012). This gap year option may no longer be viable for many school leavers because of an inability to travel overseas. Other school leaver pathways are similarly affected. According to data from the Longitudinal Survey of Australian Youth (LSAY), 23% of school leavers choose to pursue options other than higher education that lead to some form of full-time work (Marshall, Mlotkowski, Chew, & Ranasinghe, 2019). A weak employment market may make university a more attractive option for the many school leavers who would otherwise have chosen to enter the workforce directly.

However, current policy settings mean universities are not able to respond to increases in domestic student demand. Current policy settings tie increases in funding allocations for CSP places to increases in population growth in the 18-64 year-old age bracket. This means universities have limited ability to accommodate any extra domestic students who may wish to enrol.

Re-examining the limits on funding to higher education providers is important in order to allow universities to meet any increased demand, particularly from school leavers. This should be done as part of a wider approach to increasing capacity across the tertiary education sector. VET also has an important role to play in any post-coronavirus recovery. Increased capacity in the higher education is vital to meet any future demand but it is also important to ensure there are other viable tertiary education options.

2. Support a recovery of the international student market

The figures in this report show that international students have become vital to the financial health of universities. While the reliance on international student has been identified as a risk, and particularly a reliance on Chinese international students (Audit Office of New South

Wales, 2019), the coronavirus is an extraordinary event that is difficult to adequately prepare for. Indeed, even if international student revenue was at levels seen ten years ago, the impact of the coronavirus would still be devastating on higher education revenue.

The modelling in this report suggests it is vital to support measures that aid a quick recovery in international student numbers. Revenue associated with international students occurs as part of a pipeline so that each enrolling cohort impacts investment over a two to three year period. A slow recovery will impact revenue for many years. Consequently, it is important to implement measures that support a quick recovery to international student commencements when travel bans are lifted.

A further important point concerning international students is that they are more than simply revenue for universities. They are vital parts of communities. Indeed, many international students are future Australian citizens. It is estimated that between 20,000 to 30,000 international students move from student visas to permanent residency visas every year (Ferguson & Sherrell, 2019). This figure likely underestimates the number of international students who become permanent residents because it does not include those international students who transition to another temporary visa before gaining a permanent residency visa. These figures help illustrate all the different ways that international students contribute to Australian society and it is important to investigate measures and approaches that will support international students during the coronavirus crisis.

3. Funding models that respond to diversity among institutions and students

Amidst the uncertainty caused by the coronavirus, it can be easy to forget some of the other stories that this analysis of higher education investment shows. Not all universities have benefitted equally from the growth in overall revenue in the higher education sector over the last decade. Go8 universities have especially benefitted from the growth in revenue from international students, and international student fees in 2018 account for 30.3% of their total revenue (compared with 24.2% and 21.1% for “mid-ranked” and smaller universities, respectively). “Mid-ranked” universities appear to have benefited most from demand driven policy settings, with a 37.3% increase in real terms in government supported education provision since 2011.

In contrast, some smaller universities have missed out on the revenue increases that other universities have experienced. These institutions are generally smaller and service regional and outer suburban areas. They have been unable to benefit from the demand driven funding and the increase in international student numbers in the same way as larger universities. These types of institutions also have a larger proportion of equity groups as part of their student population (NCSEHE, 2019). The learning profile of students from equity groups is such that they likely need more resources to reach the same level of educational attainment as students from non-equity groups. However, the financial reports of smaller universities suggest that they may not have the resources to provide this extra support.

There have been reviews of regional loading, and supporting regional universities has been a government policy priority (DEEWR, 2012). However, subsidies of regional and smaller universities can simply result in the maintenance of campuses that are unprofitable or have

small enrolment numbers that make the provision of broad tertiary education difficult. The aim of any policy reform should be to encourage lively and creative learning spaces at smaller and regional universities, rather than propping up campuses that have low enrolments. It may also include encouraging international students towards rural and regional universities, which can benefit both the student and their host community (Dawkins, Jackson, & Noonan, 2019).

These educational spaces play important roles in individual communities, and access to tertiary education where such opportunities are limited. Maintaining their quality and viability is therefore an important objective in a sustainable higher education funding model, and especially during the crisis caused by the coronavirus pandemic.

Appendix A: 2018 University domestic and international student revenue

| University | Domestic student revenue (\$000) | International student revenue (\$000) | International student revenue as % of total student revenue |
|--|----------------------------------|---------------------------------------|---|
| Charles Sturt University | \$345,401 | \$158,471 | 31.5% |
| Macquarie University | \$420,678 | \$309,280 | 42.4% |
| Southern Cross University | \$151,983 | \$73,996 | 32.7% |
| The University of New England | \$210,781 | \$24,423 | 10.4% |
| The University of New South Wales | \$549,968 | \$712,461 | 56.4% |
| The University of Newcastle | \$411,464 | \$114,425 | 21.8% |
| The University of Sydney | \$662,114 | \$884,693 | 57.2% |
| University of Technology, Sydney | \$488,320 | \$362,464 | 42.6% |
| University of Wollongong | \$271,867 | \$169,034 | 38.3% |
| Western Sydney University | \$545,233 | \$132,618 | 19.6% |
| New South Wales | \$4,057,809 | \$2,941,865 | 42.0% |
| Deakin University | \$595,817 | \$343,208 | 36.5% |
| Federation University Australia | \$123,986 | \$127,724 | 50.7% |
| La Trobe University | \$424,632 | \$158,433 | 27.2% |
| Monash University | \$715,180 | \$851,989 | 54.4% |
| RMIT University | \$575,796 | \$463,206 | 44.6% |
| Swinburne University of Technology | \$389,402 | \$157,089 | 28.7% |
| The University of Melbourne | \$685,942 | \$879,312 | 56.2% |
| Victoria University | \$236,687 | \$89,038 | 27.3% |
| Victoria | \$3,747,442 | \$3,069,999 | 45.0% |
| Central Queensland University | \$222,594 | \$144,742 | 39.4% |
| Griffith University | \$563,062 | \$181,477 | 24.4% |
| James Cook University | \$241,562 | \$74,071 | 23.5% |
| Queensland University of Technology ⁴ | \$567,060 | \$218,057 | 27.8% |
| The University of Queensland | \$559,918 | \$572,698 | 50.6% |
| University of Southern Queensland | \$225,668 | \$45,223 | 16.7% |
| University of the Sunshine Coast | \$175,792 | \$66,467 | 27.4% |
| Queensland | \$2,555,656 | \$1,302,735 | 33.8% |

⁴ A previous version of this report had underreported the amount of domestic student revenue for Queensland University of Technology

| | | | |
|--|---------------------|--------------------|--------------|
| Curtin University of Technology | \$479,066 | \$164,694 | 25.6% |
| Edith Cowan University | \$262,724 | \$101,270 | 27.8% |
| Murdoch University | \$182,913 | \$58,286 | 24.2% |
| The University of Notre Dame Australia | \$161,881 | \$3,890 | 2.3% |
| The University of Western Australia | \$290,552 | \$152,774 | 34.5% |
| Western Australia | \$1,377,136 | \$480,914 | 25.9% |
| | | | |
| Flinders University | \$274,942 | \$93,723 | 25.4% |
| University of Adelaide | \$309,698 | \$224,511 | 42.0% |
| University of South Australia | \$342,608 | \$123,764 | 26.5% |
| South Australia | \$927,248 | \$441,998 | 32.3% |
| | | | |
| University of Tasmania | \$302,797 | \$117,201 | 27.9% |
| Tasmania | \$302,797 | \$117,201 | 27.9% |
| | | | |
| Batchelor Institute of Indigenous Tertiary Education | \$7,858 | \$- | 0.0% |
| Charles Darwin University | \$94,966 | \$36,420 | 27.7% |
| Northern Territory | \$102,824 | \$36,420 | 26.2% |
| | | | |
| Australian National University | \$386,085 | \$320,871 | 45.4% |
| University of Canberra | \$168,560 | \$56,667 | 25.2% |
| Australian Capital Territory | \$554,645 | \$377,538 | 40.5% |
| | | | |
| Australian Catholic University | \$407,848 | \$70,221 | 14.7% |
| | | | |
| All Institutions | \$14,033,405 | \$8,838,891 | 38.6% |

Source: (Commonwealth DESE, 2020a)⁵

⁵ This table has been updated to reflect data from the Finance Publication series published by the Commonwealth Department of Education, Skills and Employment. Previous version of this report used data from university annual reports.

Appendix B: Notes on the data

All data has been adjusted for inflation using the General Government Final Consumption Expenditure (GGFCE) price deflator published in the Report on Government Services by the Productivity Commission (2019). All figures in this report have been adjusted using the following GGFCE price index below.

Table 1: GGFCE deflator index

| Nominal dollars (year) | GGFCE price deflator (2018 = 100) |
|------------------------|-----------------------------------|
| 2008 | 79.2 |
| 2009 | 83.0 |
| 2010 | 86.3 |
| 2011 | 89.9 |
| 2012 | 92.7 |
| 2013 | 93.9 |
| 2014 | 95.5 |
| 2015 | 96.7 |
| 2016 | 98.0 |
| 2017 | 99.1 |
| 2018 | 100.0 |

Financial figures for this report are drawn from data published by the Commonwealth Department of Education, unpublished figures provided by the Grattan Institute, and university 2018 Annual Reports.

The Financial Reports of Higher Education Providers contain financial information including financial performance, financial position, and cash flows for higher education providers derived from institutional financial statements (Commonwealth DET, 2019a). They are prepared by Australian universities and detail financial data as at 31 December each year.

Data concerning income contingent loans provided to Other Higher Education Providers was provided by the Grattan Institute and drawn from the Higher Education Information Management System (HEIMS) determinations. OHEP figures are calculated by subtracting university FEE-HELP amounts listed in the institutional financial statements from total FEE-HELP figures.

The figures in this report do not include international student revenue at non-university providers, fee for service income at non-university providers, and any other higher education income collected outside of the university system except for FEE-HELP income contingent loans at OHEPs.

Financial activity for the higher education institutions listed in Table 2 is included in the report.

Table 2: Higher education institutions included in Financial Reports of Higher Education

| Higher education institutions |
|--|
| <ul style="list-style-type: none">• Australian Catholic University• Australian National University• Batchelor Institute of Indigenous Tertiary Education• Central Queensland University• Charles Darwin University• Charles Sturt University• Curtin University of Technology• Deakin University• Edith Cowan University• Federation University Australia• Flinders University• Griffith University• James Cook University• La Trobe University• Macquarie University• Monash University• Murdoch University• Queensland University of Technology• RMIT University• Southern Cross University• Swinburne University of Technology• The University of Melbourne• The University of New England• The University of New South Wales• The University of Newcastle• The University of Notre Dame Australia• The University of Queensland• The University of Sydney• The University of Western Australia• University of Adelaide• University of Canberra• University of South Australia• University of Southern Queensland• University of Tasmania• University of Technology, Sydney• University of the Sunshine Coast• University of Wollongong• Victoria University• Western Sydney University |

Glossary

| Term | Description |
|---|--|
| Commonwealth Grants Scheme and other grants | <p>The Commonwealth Grant Scheme is Australian government funding to eligible higher education providers, usually universities, for students enrolling in bachelor degrees and other higher education courses of study 'designated' by the Minister for Tertiary Education. This is the main source of grants for education and training in the higher education sector and forms the bulk of funding in this category. There are other forms of grants included in this category, and these grants are included in the figures when payments were provided to universities. These grants included funding for the following programs:</p> <ul style="list-style-type: none"> • National Institutes Funding • Learned Academies • Access and Participation Fund • National Priorities Pool • Promotion of Excellence in Learning and Teaching • Supporting More Women in STEM careers • Academic Centres of Cyber Security Excellence • Higher Education Participation and Partnership Program • Disability Performance Funding • Australian Maths and Science Partnership Program • Improving the Quality of Maths & Science Teaching Programs • Indigenous Student Success Program |
| Domestic per student income | <p>Income on a per student basis from the following categories:</p> <ul style="list-style-type: none"> • Commonwealth Grants Scheme and Other Grants • HECS-HELP - Australian Government Payments • FEE-HELP - Australian Government Payments • Upfront Student Contributions • Fee Paying Non-Overseas Postgraduate Students • Fee Paying Non-Overseas Undergraduate Students • Fee Paying Non-Overseas Non-Award Students • Other Domestic Course Fees and Charges |
| Domestic student revenue | <p>Income reported from the following categories:</p> <ul style="list-style-type: none"> • Commonwealth Grants Scheme and Other Grants • HECS-HELP - Australian Government Payments • FEE-HELP - Australian Government Payments • Upfront Student Contributions • Fee Paying Non-Overseas Postgraduate Students • Fee Paying Non-Overseas Undergraduate Students |
| Education and training - other | <p>Income from the following categories:</p> <ul style="list-style-type: none"> • Upfront Student Contributions • Continuing Education • Fee Paying Non-Overseas Postgraduate Students • Fee Paying Non-Overseas Undergraduate Students • Fee Paying Non-Overseas Non-Award Students |

| | |
|--|---|
| | <ul style="list-style-type: none"> • Other Domestic Course Fees and Charges |
| Education provision in the higher education sector | <p>Revenue from the following categories:</p> <ul style="list-style-type: none"> • Commonwealth Grants Scheme and Other Grants • HECS-HELP - Australian Government Payments • FEE-HELP - Australian Government Payments • Upfront Student Contributions • Continuing Education • Fee Paying Overseas Students • Fee Paying Non-Overseas Postgraduate Students • Fee Paying Non-Overseas Undergraduate Students • Fee Paying Non-Overseas Non-Award Students • Other Domestic Course Fees and Charges • OHEP FEE-HELP |
| Government assistance - education | Federal government assistance for items aligned with government supported education provision. These include Commonwealth Grant Scheme and other grants, HECS-HELP, FEE-HELP, and payments to OHEP through FEE-HELP. |
| Government assistance - other | Federal government assistance for programs such as scholarships, education research grants, education investment fund and one-off capital grants, Australian Research Council funding and activity classified as 'other' Australian Government financial assistance |
| International student income | International student income collected by universities. |
| OHEP government assistance - education | Other Higher Education Provider assistance provided by the Australian government in the form of FEE-HELP loans. |
| Other university revenue | Revenue not displayed elsewhere such as donations and bequests, state government assistance, scholarships and prizes, non-government grants, net gain on disposal of property, plant and equipment, net foreign exchange gains, investment income, consultancy and contracts, and royalties, trademarks and licenses. |
| Research income | Revenue from universities listed under the items Scholarships, Education Research Grants and Australian Research Council |
| Total government assistance | All federal government assistance including payments for HECS, FEE-HELP, SA-HELP, and research grants. |
| Total reported investment | All income for universities and income contingent loans provided to OHEPs. |

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