Impact of the Pandemic on the 2020 Financial Health of 37 Australian Universities.

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Summary

The revenue streams that contributed to the 2020 total income receipts of 37 Australian universities have been analysed using data published in university annual reports. The major contributors to the $1.8 billion (5%) decrease in sector revenue from 2019 to 2020 have been a 10% reduction in student fees and charges of $1.15 billion and a very large, 125% decrease in investment returns of $1.28 billion. These shortfalls were marginally offset by increases in funding from grants from governments and student direct and indirect HECS payments of $0.63 billion (3%). As a result in 2020 universities reliance on government support and HECS payments increased from 60% in 2019 to 65% in 2020.

The 2020 financial performance of all 37 universities, in relation to these revenue streams, has been examined to determine the impact of the COVID-19 pandemic. Some 29 universities had less total income in 2020 compared with 2019. From an analysis of the substantial data sets assembled it has been possible to determine that in relative terms the pandemic had a high impact on the financial operations of 10 universities, a medium impact on another 10 universities and a low impact on 17 universities. The overall findings are presented in table 5 in the body of this paper. The universities most impacted are ANU, La Trobe, Federation, CQU, Swinburne, Southern Cross, UWA, Wollongong, Deakin and QUT.

It is concluded that some of the university sector has been remarkably resilient in coping with the challenges of the pandemic in 2020, others have been less so. It is likely that an increased number of universities will experience significant financial challenges in 2021 than in 2020, principally because of a further decrease in international student fee revenues, the need to fund capital and other expenses deferred in 2020 and, for some further expenditure on redundancy payments.

This paper provides a snapshot benchmark as to the financial health of Australian universities at the end of 2020. This will enable greater insight to be gained into the on-going effectiveness of university strategies to deal with the impact of the pandemic when future annual reports are available.

1. Introduction

In a recent paper, we analysed the income, expenditure and surplus financial performances of 37 Australian universities from the continuing operations of their consolidated entities (1). Overall, some 30 universities received $1.8 billion (4.8%) less income in 2020 than in 2019[1]. Last year, some 19 universities increased their expenditure, while the collective expenditure reductions for the sector were small at $0.1 billion (0.3%). Operating surpluses continued to be

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[1] This paper does not include financial data for Bachelor Institute of Indigenous Tertiary Education or The University of Notre Dame Australia. The numbers in aggregate therefore differ slightly from the University 2020 Finance Data Set released by the Department of Education (reference 2) after completion of this paper. The conclusions are not materially impacted.

achieved by 23 universities in 2020, but this number was well down on the 34 institutions achieving a surplus in 2019. Consequently, combined surpluses for the sector were reduced from $2.46 billion in 2019 to $0.74 billion in 2020.

In this paper the various revenue streams contributing to the total 2020 income and the changes from 2019 are examined for all 37 universities. The data reported here are from the annual reports of the consolidated entities[2] and are aggregated sector-wide for some of the analyses. The primary data sets used for this paper are presented in tables A and B of the appendix. Drawing on the data from the annual accounts assembled using standard accounting procedures is a consistent approach for making institutional and state-wide comparisons. The 2019 and 2020 data analyses deliver a reference benchmark at a point in time of the financial health of Australian public universities. This benchmark will enable greater insight to be gained into the on-going effectiveness of university strategies to deal with the impact of the pandemic when future annual reports are available and evaluated.

Predictions are made as to the most financially impacted universities on the basis of the data assembled in this paper and in the previous paper (1).

## 2. 2020 Income Profiles for the Australian University Sector

2.1 Components of the 2020 total income for Australian Universities.

The standard accounting procedures adopted by Australian universities classify the revenue income streams into several categories (see footnote 2). The 2020 sector-wide income of $35.7 billion is distributed as shown in figure 1. The student HECS-HELP and FEE-HELP are combined and reported as a distinct component. In aggregate they represent the level of contributions domestic students make separate from Australian government teaching and research grants. The investment returns and the profit or loss from such investments are also combined as their use is mostly discretionary, including for purposes beyond direct support for educational program delivery. 'Other Revenue' does include a very small profit and loss component from asset sales.

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[2] The Consolidated Financial Performances Statements for Universities at 31 December of each year mostly categorise income and expenditure from continuing operations within the following clusters:
Income: Australian Government Grants, HECS-HELP and FEE-HELP, State Government Funding, Consultancy and contracts, Fees and Charges include international student fees, Net Investment Income and Other Revenue.
Expenditure: Employee Benefits and On costs, Depreciation and amortisation, Repairs and Maintenance, rent leasing and utilities, Scholarships and prizes, Other operating expenses.

Figure 1. Distribution of 2020 Income for the Australian University Sector. $ millions
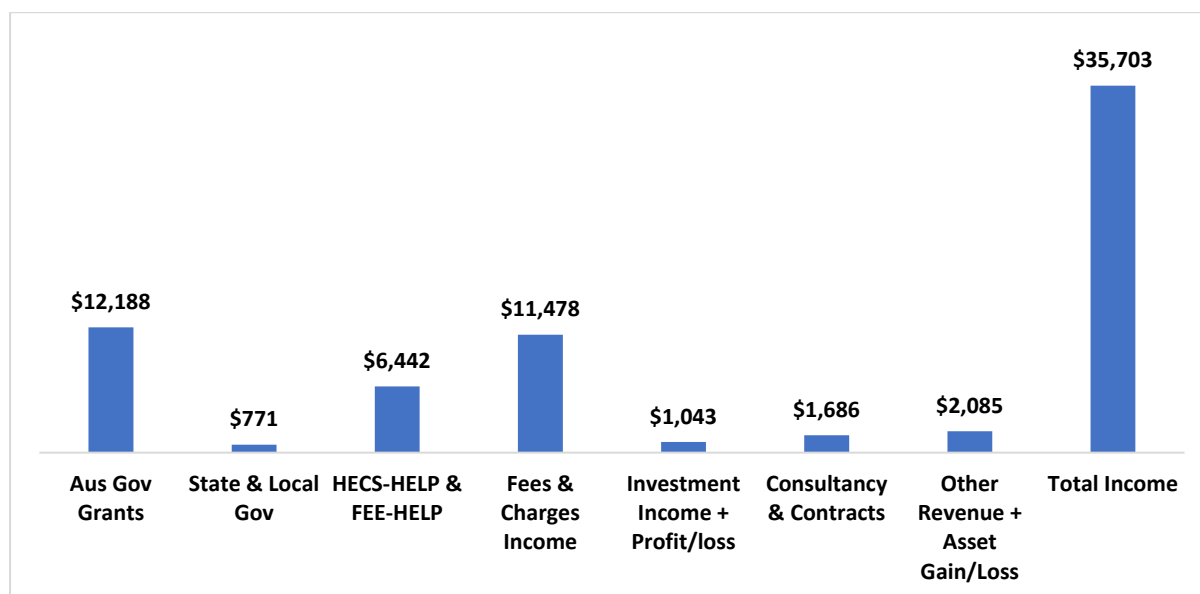
It is evident that three revenue sources are dominant. The percentage total 2020 income distribution among all sources is given in table 1 along with the corresponding percentage distribution for the total 2019 income.

Table 1. Percentage distribution of the 2019 and 2020 total income by broad revenue category.

% Income Distribution	Australian Government Grants	State & Local Gov	HECS-HELP & FEE-HELP	Fees & Charges Income	Investment Income + Profit/loss	Consultancy & Contracts	Other Revenue + Asset Gain/Loss
2019	31.8%	1.8%	16.5%	33.7%	6.2%	4.4%	5.5%
2020	34.2%	2.2%	18.1%	32.2%	2.9%	4.7%	5.8%

The most significant year-on-year shifts in the funding of Australian university funding have been the reductions in Fees and Charges and the significantly smaller Investment income being offset by increases in Australian Government Grants, HECS-HELP and FEE-HELP payments.

The sector-wide dollar revenue changes for the various streams from 2019 to 2020 that reflect the percentage changes in table 1 are shown in figure 2.

Figure 2. Distribution of Sector-Wide Income changes from 2019 to 2020, $ millions.
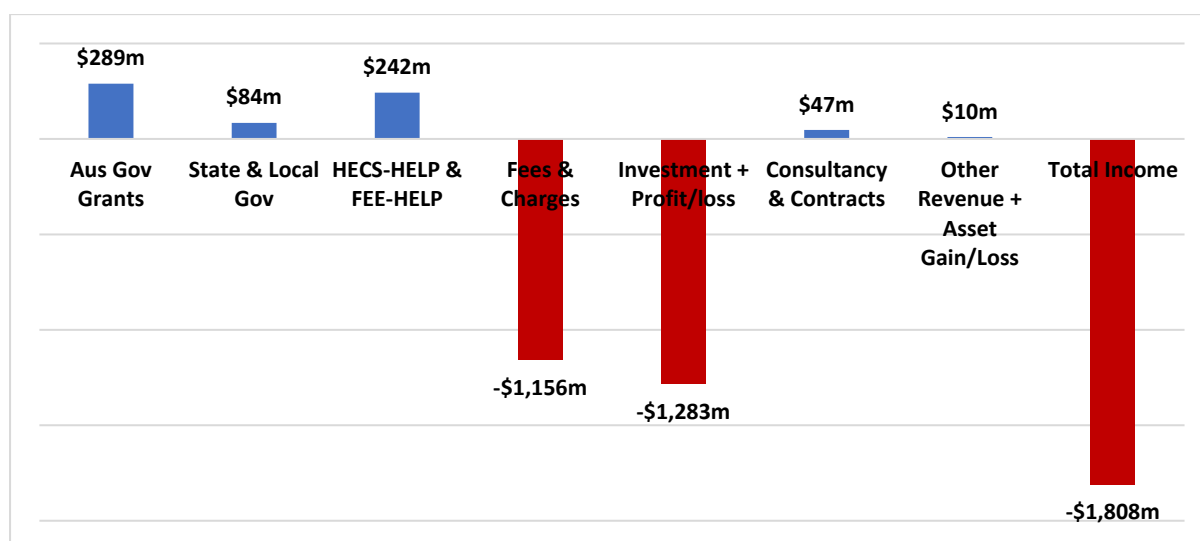
The major increases in 2020 revenues were sourced from government grants ($289m) and HECS-HELP and FEE-HELP student payments ($242m). While total students HECS-related payments are approximately half the value of government grants (figure 1), in response to the pandemic the increases in grant and HECS funding are similar. It is evident that student contributions have provided more of the 'heavy lifting' than government grants to mitigate the pandemic-induced total income decline for 2020. Small increases in State and local government grants, consultancies and contract and other revenue were reported for 2020. The total aggregated revenue increases of $630m were fully eclipsed by major reductions in fees and charges ($1,156m) and investment income ($1,283m). Overall, the total income reduction was $1,808m.

The percentage change in dollars terms for each of these individual revenue streams relative to the 2020 income value is given in table 2.

Table 2. Sector-wide percentage dollar changes in revenue streams from 2019 to 2020

Reduction as % of 2020 actual income	Australian Government Grants	State & Local Gov	HECS-HELP & FEE-HELP	Fees & Charges Income	Investment Income + Profit/loss	Consultancy & Contracts	Other Revenue + Asset Gain/Loss	Total Income
All Universities	2.4%	10.9%	3.8%	-10.1%	-123.0%	2.8%	0.5%	-5.1%

Four of the 2020 streams that received more revenue in 2020 had percentage increases that were relatively small at between 0.5% and 3.8%. State and local government grants increased by 10.9%, but they represented only 2.2% of 2020 income as identified in table 1. The reduction in 2020 revenue from student fees and charges was equivalent to 10.1% of the 2020 result, while the reduction in investment income was 123% less than the actual 2020 receipts. For a small number of universities investment income had become a substantial revenue stream in the period immediately before 2019, increasing at a sector level from just under $1 billion in 2015 to $2.1 billion in 2019. The overall outcome sector-wide was that the reduction in total income was equivalent to 5.1% of the 2020 actual income receipts. This analysis highlights the critical role student fees and investment returns have played during the pandemic in presenting

financial challenges for several Australian universities. Of course, there has been variations in the income profiles of individual universities. These are analysed in the next section.

3. Income categories for individual universities 2020 and 2019

The primary data in table A of the appendix, are based upon 2020 annual reports of 37 Australian universities. The data for two smaller institutions were not included. Universities are ranked according to the total income for the consolidated entity in 2020. For the purposes of this study the revenue streams are consolidated into three groups:

1. A composite revenue stream consolidating items for which funding increased for the sector from 2019 to 2020, as shown in figure 2 and table 2. The composite includes Australian government grants, student HECS contributions, State and Local Government, Consultancy and contracts and other revenue. These items accounted on-average for 65% of the 2020 income.
2. Fees and Charges income. This stream covers fee-paying domestic and international students. It accounted for 32% of the sector 2020 income.
3. Investment income including any asset profit and losses. This stream accounted for 3% of the sector 2020 income.
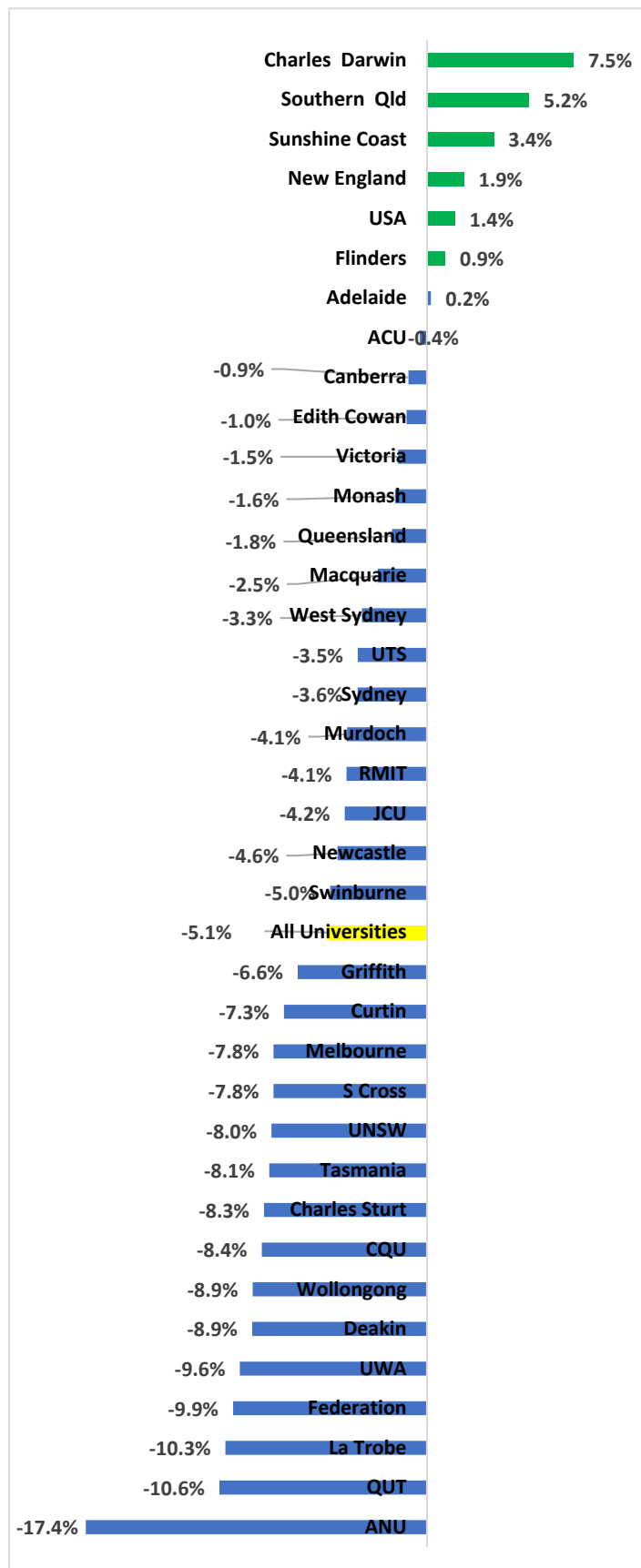
The 2019 and 2020 total income receipts and the change in dollar terms by university are presented in columns 1 to 3 of table A in the appendix. The percentage changes are given in column 4. The corresponding consolidated revenues, mainly for government and domestic student HECS-related sources, are in columns 5 to 8. The student fees and charges revenues are given in columns 9 to 12, and investment returns in columns 13 to 16.

Monash University had the highest income at $2.9 billion in 2020 and Southern Cross the lowest income at $0.3 billion. Eleven universities had a 2020 total income of more than $1.0 billion, fifteen had a total income of between $0.5 billion and $1.0 billion, and eleven universities a total income of less than $0.5 billion. The overall financial strength of each university is relevant when assessing its financial vulnerability, flexibility and resilience to pandemic induced changed.

3.1 Total Income Change for 2019 to 2020 as a percentage of the 2020 receipts

The universities presented in figure 3 are ranked from the one which reported the highest proportional decrease in 2020 income (ANU at 17.4%,) to the university which had the largest increase its 2020 income (Charles Darwin at 7.5%). This figure is similar to figure 13 of our previous paper (1) and is based on the data in column 4 of table A in the appendix. The difference is that for the present discussion the 2020 income has been used as the reference baseline to highlight the revenue changes, whereas in the previous study the 2019 income was used as the reference baseline.

Figure 3. Percentage Total Income Changes from 2019 to 2020 relative to 2020 income

University	% Change
Charles Darwin	7.5%
Southern Qld	5.2%
Sunshine Coast	3.4%
New England	1.9%
USA	1.4%
Flinders	0.9%
Adelaide	0.2%
ACU	-0.4%
Canberra	-0.9%
Edith Cowan	-1.0%
Victoria	-1.5%
Monash	-1.6%
Queensland	-1.8%
Macquarie	-2.5%
West Sydney	-3.3%
UTS	-3.5%
Sydney	-3.6%
Murdoch	-4.1%
RMIT	-4.1%
JCU	-4.2%
Newcastle	-4.6%
Swinburne	-5.0%
All Universities	-5.1%
Griffith	-6.6%
Curtin	-7.3%
Melbourne	-7.8%
S Cross	-7.8%
UNSW	-8.0%
Tasmania	-8.1%
Charles Sturt	-8.3%
CQU	-8.4%
Wollongong	-8.9%
Deakin	-8.9%
UWA	-9.6%
Federation	-9.9%
La Trobe	-10.3%
QUT	-10.6%
ANU	-17.4%

Eight universities either increased or had essentially the same total income in 2020 compared with 2019. The group includes the three South Australian universities, four regional universities and ACU as a multistate university.

The other 29 universities had less total income in 2020 than in 2019. Some 14 universities had a reduction relative to the 2020 income of less than the 5.1% average figure for all universities. The group does include a mix of both metropolitan and regional universities including three of the Go8 universities.

There are 15 universities where the 2020 shortfall in revenue was more than 5.1%. The shortfall ranges from 6.6% for Griffith to more than 10% for La Trobe, QUT and ANU. There is no distinct pattern with respect to location or size among these universities. They are expected to be among the ones most financially challenged. Four are located in Victoria and another four in NSW, three in Queensland, two in WA and one in Tasmania and the ACT.

3.2 Total Government Grants, HECS-HELP and FEE-HELP funding, Consultancy Income Change from 2019 to 2020 as a percentage of the 2020 receipts

This composite revenue stream accounted for 65% of the sector total income in 2020. In dollar terms 2020 receipts were 3% higher than the 2019 aggregated figure. The composite percentage change in revenue for all 37 universities is shown in column 8 of table A in the appendix. The outcomes for individual universities are presented in table 3.

Table 3 The Percentage Shortfall or Increase in the Composite 2020 Revenues relative to the 2019 outcomes.

% Change	% Change	% Change	% Change
-3% to 0%	1% to 3%	4% to 6%	> 6%
La Trobe -3%	Murdoch 1%	Western Sydney 4%	UTS 7%
Griffith -3%	QUT 1%	New England 4%	Charles Darwin 7%
Southern Cross -2%	Macquarie 1%	Wollongong 4%	Federation 9%
JCU -2%	USA 1%	Sydney 4%	Sunshine Coast 10%
Canberra -1%	Queensland 2%	Melbourne 4%	
ACU 0%	Deakin 2%	Victoria 4%	
UWA 0%	Curtin 2%	ANU 4%	
Swinburne 0%	Edith Cowan 2%	Tasmania 5%	
	Newcastle 3%	CQU 5%	
	Flinders 3%	Charles Sturt 6%	
	Monash 3%	Adelaide 6%	
	UNSW 3%	Southern Queensland 6%	
	RMIT 3%		

Eight universities received less revenue from government grants, student HECS fees and consultancies in 2020 than in 2019, as indicated in the first column of table 3. Thirteen universities increased their revenue by 1% to 3%, 12 universities by between 4% and 6%, with four universities gaining more than 6%. The sector-wide average was 3%. There is no clear pattern as to the size and location of universities in each of the four clusters. The outcomes are predominantly determined by changes in domestic student enrolments and research income.

Of particular interest is the degree of dependence of universities on these revenue streams in 2020, as shown in figure 4.

Figure 4 Percentage of University 2020 Income sourced from the Predominantly Government Grants and HECS-HELP and FEE-HELP Revenue Streams.
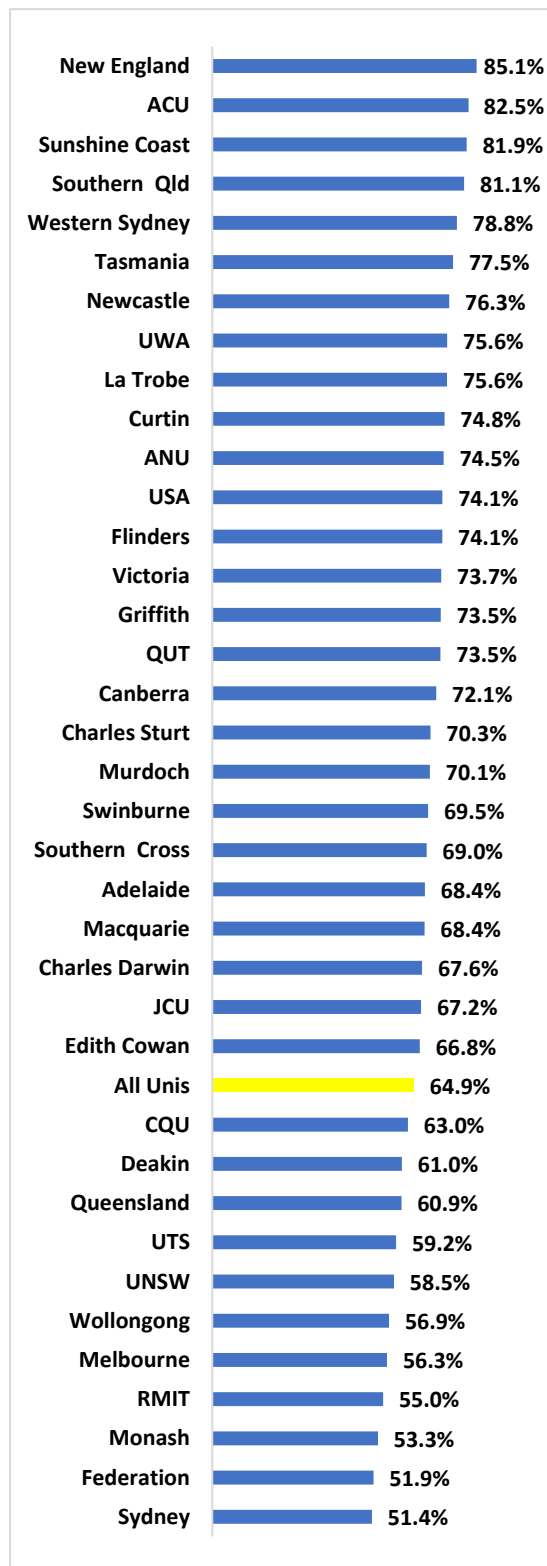
University dependency on these revenue streams covers a wide range from a low of 51.4% for Sydney to a high of 85.1% for New England. The sector average dependence on this combined revenue stream for 2020 income was 64.9%.

All the universities with below average dependency on this revenue stream are those with relatively high levels of international student enrolments. The five major Go8 universities – Sydney (50.1%), Monash (53.3%), Melbourne (56.3%), UNSW (58.5%) and Queensland (60.9%) – are within this group. These five also have above sector average levels of investment income. The low dependence of Federation University at 51.9% highlights the extent of its international student activities.

While it might be anticipated that universities with an above average reliance on Australian government grants and HECS-HELP and FEE-HELP revenues would not have been as vulnerable to declining revenue in 2020, this is not the case for some including, in particular, La Trobe, Griffith and Southern Cross. This suggests that for these universities reductions in Fees and Charges revenue outweighed any increases in Australian Government grants and HECS-HELP and FEE-HELP income.

3.3 Student Fees and Charges Revenue Changes from 2019 to 2020 as a percentage of the 2020 receipts

The dependency of universities on fee-paying student revenue, predominantly sourced from overseas students, is highly variable. For 2020, on average, 32% of total income was from fee-paying students, decreasing from 34% in 2019, but this modest variation disguises considerable variation at the individual institution level, from a modest 13% for New England to 46% for Sydney. The importance of student fee revenue to the total income of each university for 2020 is shown in figure 5.

Figure 5. Percentage of University 2020 Income sourced from Fee-Paying Students.

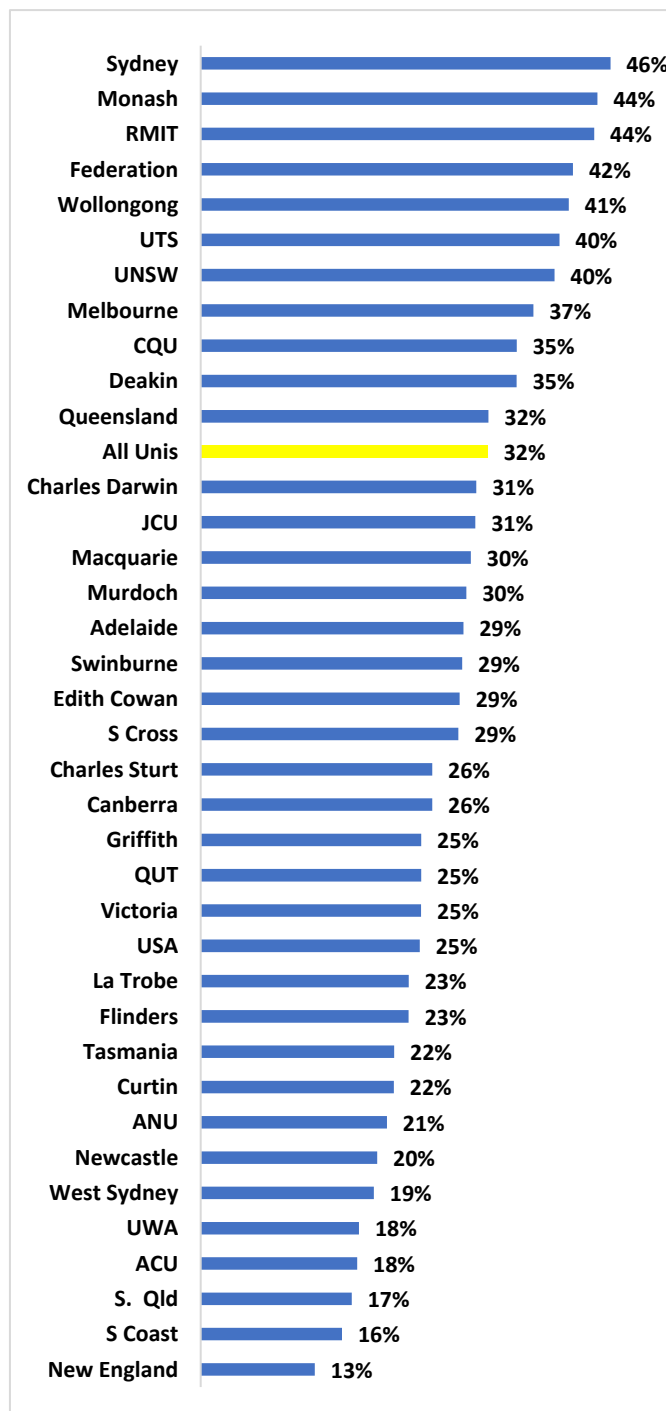| University	Percentage
Sydney	46%
Monash	44%
RMIT	44%
Federation	42%
Wollongong	41%
UTS	40%
UNSW	40%
Melbourne	37%
CQU	35%
Deakin	35%
Queensland	32%
All Unis	32%
Charles Darwin	31%
JCU	31%
Macquarie	30%
Murdoch	30%
Adelaide	29%
Swinburne	29%
Edith Cowan	29%
S Cross	29%
Charles Sturt	26%
Canberra	26%
Griffith	25%
QUT	25%
Victoria	25%
USA	25%
La Trobe	23%
Flinders	23%
Tasmania	22%
Curtin	22%
ANU	21%
Newcastle	20%
West Sydney	19%
UWA	18%
ACU	18%
S. Qld	17%
S Coast	16%
New England	13%

Figure 5 is almost the mirror image of figure 4 because grant related funding and overseas student fees are the two predominant revenue streams.

The same 11 universities as in figure 4 with below average dependency on grants/HECS are dependent on fee-paying student revenue for more than the sector-wide average of 32%. Twenty universities were dependent on fee-paying student revenue for between 20% and 31% of their 2020 income, while 6 universities depended for less than 20%. It is notable that UWA is in this group with just 18% of its total income sourced from fee-paying students.

The five major Go8 universities are clustered in their dependency on overseas student fee income with Sydney at 46%, Monash at 44%, UNSW at 40%, Melbourne at 37% and Queensland at 32%.

ANU at 21% and Adelaide at 29% were proportionally less dependent on this revenue source in 2020.

Along with three of the Big Five universities, RMIT, Federation, Wollongong and UTS share a dependency of 40% or more of total income on fee-paying students.

The percentage changes in the funds received by universities from fee-paying students between 2019 and 2020 relative to the 2020 income are shown in figure 6. This data, sourced from column 12 of table A in the appendix, is most revealing to understand the impact of the pandemic on finances. Universities are ranked from Charles Darwin that increased its fee-paying the most in 2020, at 5.8%, to ANU with the highest reduction at 37.5%. The sector average reduction corresponded to 10.1% less student fee-paying income in 2020.

Figure 6. Percentage Fees and Charges Revenue Changes from 2019 to 2020 relative to 2020
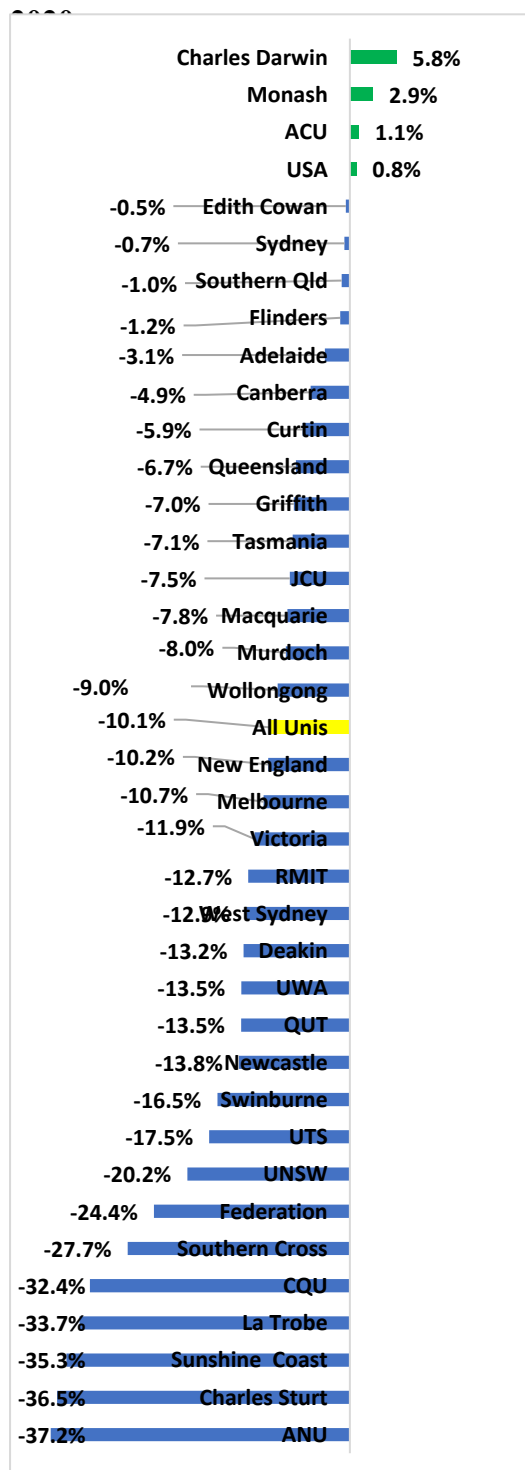
Four of the 37 universities received more student fee income in 2020 than in 2019. Notably, this included Monash at 2.9%.

Among the other universities 14 had revenue reductions of less than 10%. Sydney did well to contain its shortfall to just 0.7% given its high international student numbers. There is no discernible pattern within this group although no Victorian universities are represented. Eleven universities had reductions between 10% and 20%. It is not always the universities with the highest overseas enrolments that have reported the highest percentage revenue reductions. ANU, Charles Sturt, Sunshine Coast and La Trobe are such universities. In some cases these universities have been major providers of student accommodation and a reduction in fee revenue has been compounded by a reduction in accommodation revenue.

Seven universities experienced fee reductions equivalent to more than 20% of the 2020 revenue with ANU the most impacted. UNSW is the other Go8 university in this group. A number of other universities in this group have relatively modest levels of international student enrolment.

The 19 universities with a higher than average fee reduction - from New England to ANU - especially those with relatively large international student programs, are among those facing the most significant financial challenges to restore revenue to at least pre-pandemic levels.

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3.4 Investment Revenue as a Proportion of Total Income in 2020 and Changes from 2019 to 2020.

Overall, sector-wide investment returns provided only a small component of the total income for universities. This source has nevertheless become increasingly vital in recent years to the financial plans and well-being of a few institutions because the revenue provides the flexibility of discretionary expenditure, including additional investment in research. A feature of the financial landscape when years 2019 and 2020 are compared is that investment returns declined proportionally from 6.2% of total income in 2019 to 2.9% in 2020, more than the proportional change for any of the other revenue streams. In dollar terms, the lower investment returns of $1.3 billion was a major contributor to the 2020 sector-wide deficit of $1.8 billion (figure 2). The impact on individual universities is highly variable as for other revenue streams.

Examination of the data in columns 13 and 14 of table A of the appendix reveals that ten universities increased their investment revenue in 2020 compared with 2019, while 26 received lower investment income in 2020 than in 2019. The performance of universities with higher investment returns in 2020 are ranked in figure 7A and those with lower returns are ranked in figure 7B. University rankings in the two figures are ordered according to the proportion of 2020 total income sourced from investments.

The spread in the importance of this revenue stream to 2020 total incomes was significant, varying from 0.2% for Murdoch to 6.8% for Queensland. Some universities increased their investment revenues over 2019 by as much as 1.1% (Southern Cross and Sunshine Coast), while others decreased their investments as a proportion of total income from 2019 to 2020 by as much as 10.3% for ANU and 9.3% for Tasmania. The turnaround for ANU was from 14.9% of total income in 2019 to just 4.6% in 2020.

Figure 7 Proportion of 2020 total income obtained from investments and the change from the proportion of 2019 income.
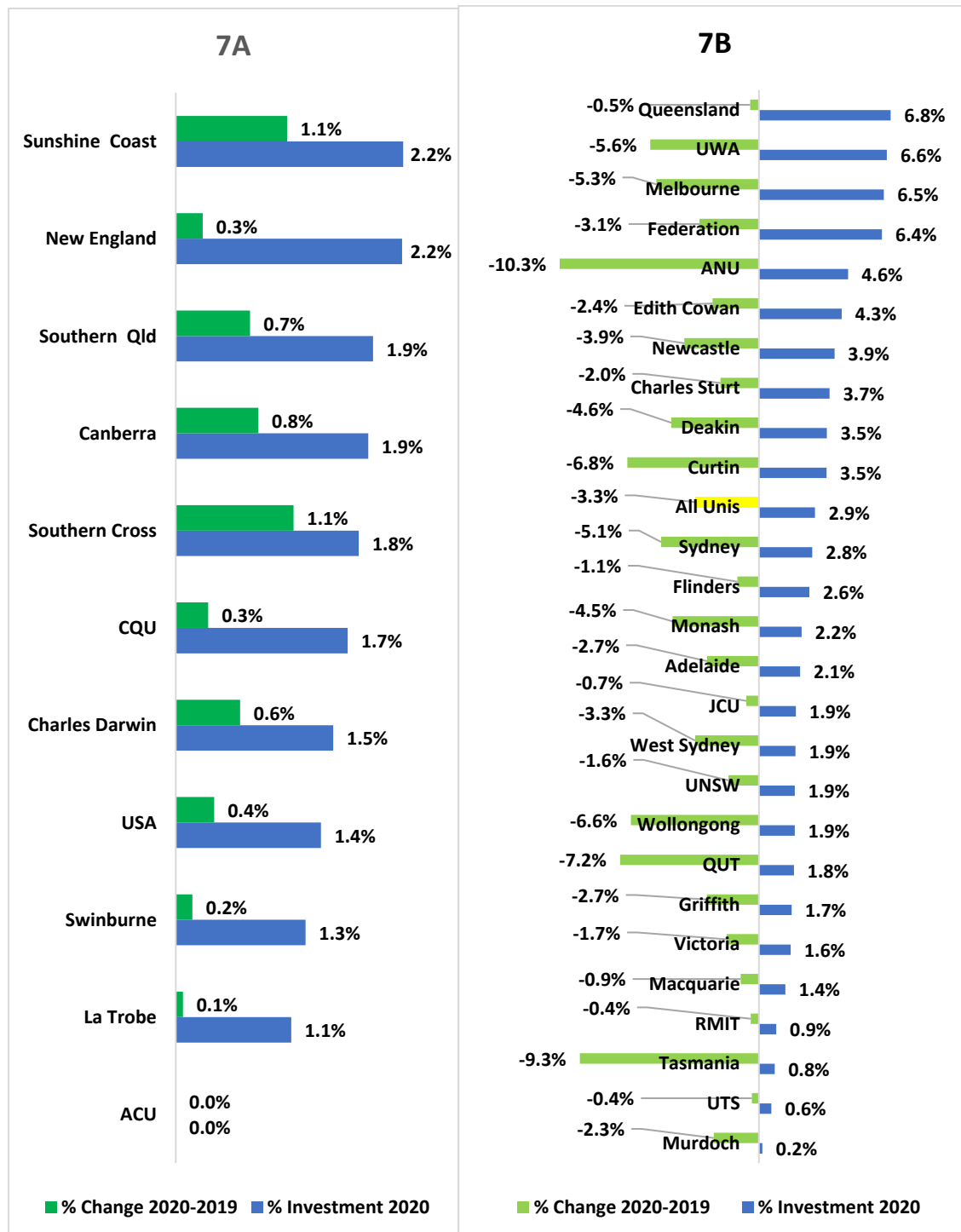
The 11 universities identified in figure 7A had relatively small investment portfolios and increased investment returns in 2020 with a spread ranging from 1.1% for La Trobe to 2.2% for New England and the Sunshine Coast. The increases over 2019 investment returns were in the range 0.1% for La Trobe to 1.1% for Southern Cross and Sunshine Coast. Three of the universities in this 7A group, Charles Darwin, USA and ACU, also increased their student fee income from 2019 to 2020 (see figure 6) and their total 2020 income (figure 3). These are the universities least impacted by the pandemic.

For the universities shown in figure 7B investment returns were less than 2% of 2020 total income for 12 universities with another four below the sector average of 2.9%. Four Go8 universities are in these groupings. Some 10 universities have an above average dependency on investment revenue in 2020, ranging from Curtin and Deakin at 3.5% to Queensland at 6.8%.

The statistic that is most significant in terms of assessing the financial health of universities is the percentage reduction in the contribution of investment revenue to total income from 2019 to 2020. The suite of universities in figure 7B are listed in table 4 using data presented in that figure and column 15 of table A in the appendix. For example, ANU's investment contribution was 14.9% of total income in 2019 with this contribution decreasing to 4.6% in 2020, a reduction of -10.3% in the importance of this revenue stream between the two years

Table 4 Reduction in investment revenue as a percentage of total income for universities from 2019 to 2020 and the size of the reduction in $ millions.

	% Reduction Investment Contribution to Total Income 2020-2019	$ millions		% Reduction Investment Contribution to Total Income 2020-2019	$ millions
ANU	-10.3%	$172	Griffith	-2.7%	$29
Tasmania	-9.3%	$73	Adelaide	-2.7%	$27
QUT	-7.2%	$86	Edith Cowan	-2.4%	$12
Curtin	-6.8%	$69	Murdoch	-2.3%	$10
Wollongong	-6.6%	$58	Charles Sturt	-2.0%	$14
UWA	-5.6%	$68	Victoria	-1.7%	$8
Melbourne	-5.3%	$168	UNSW	-1.6%	$42
Sydney	-5.1%	$142	Flinders	-1.1%	$6
Deakin	-4.6%	$66	Macquarie	-0.9%	$12
Monash	-4.5%	$135	JCU	-0.7%	$4
Newcastle	-3.9%	$34	Queensland	-0.5%	$13
West Sydney	-3.3%	$30	RMIT	-0.4%	$7
Federation	-3.1%	$14	UTS	-0.4%	$5

Some 13 universities saw the contribution of investment returns decline by 3% or more. Four of the five universities most impacted in percentage terms are not Go8 universities. However, the four universities with the highest reductions in dollar terms are Go8 universities, with ANU, Melbourne, Sydney and Monash reporting decreases of more than $100m in investment returns. The sector-wide average reduced investment contribution for all the universities was 3.3%. Interestingly, three Go8 universities –Adelaide, UNSW and Queensland– reported below average reductions in investment earnings.

4. Overview of 2020 Financial Results

The analyses presented in this paper have highlighted the relative importance of year-on-year variations in the three composite revenue streams, viz- government grant and domestic student HECS payments, direct fee-paying student fees and investment returns, for university financial management during the first year of the pandemic. Many universities became more dependent on government grants and domestic student contributions via HECS, with this aggregate component increasing from 60% to 65% of total sector income. Fee-paying student revenue decreased correspondingly from 34% to 32% and investment returns from 6% to 3%, While in

aggregate these changes may appear relatively small, at the individual university level the variations in returns from the various revenue streams were large, as outlined earlier in this paper.

The extremes of these ranges shed some light on the financial diversity of the Australian university system. Using the data in columns 1, 4, and 7 of table B in the appendix, the income distribution for Australian universities has been analysed. Some 19 universities were dependent on government grants and HECS payments for 70% or more of their total 2020 income as shown in figure 8. New England is the most dependent of this group and Murdoch the least. Interestingly, two of the Go8, UWA and ANU, are in this group. The other major revenue stream is fee-paying student fees in the range 30% for Murdoch to 13% for New England. Investment returns as a proportion of all income are less than 3% for 14 universities. UWA at 7%, ANU at 5% and Newcastle, Curtin and Charles Sturt at 4% are the most dependent.

Figure 8 Distribution of 2020 Total Incomes for Universities Dependent on Government Grants and HECS payments for more than 70% of their Income.
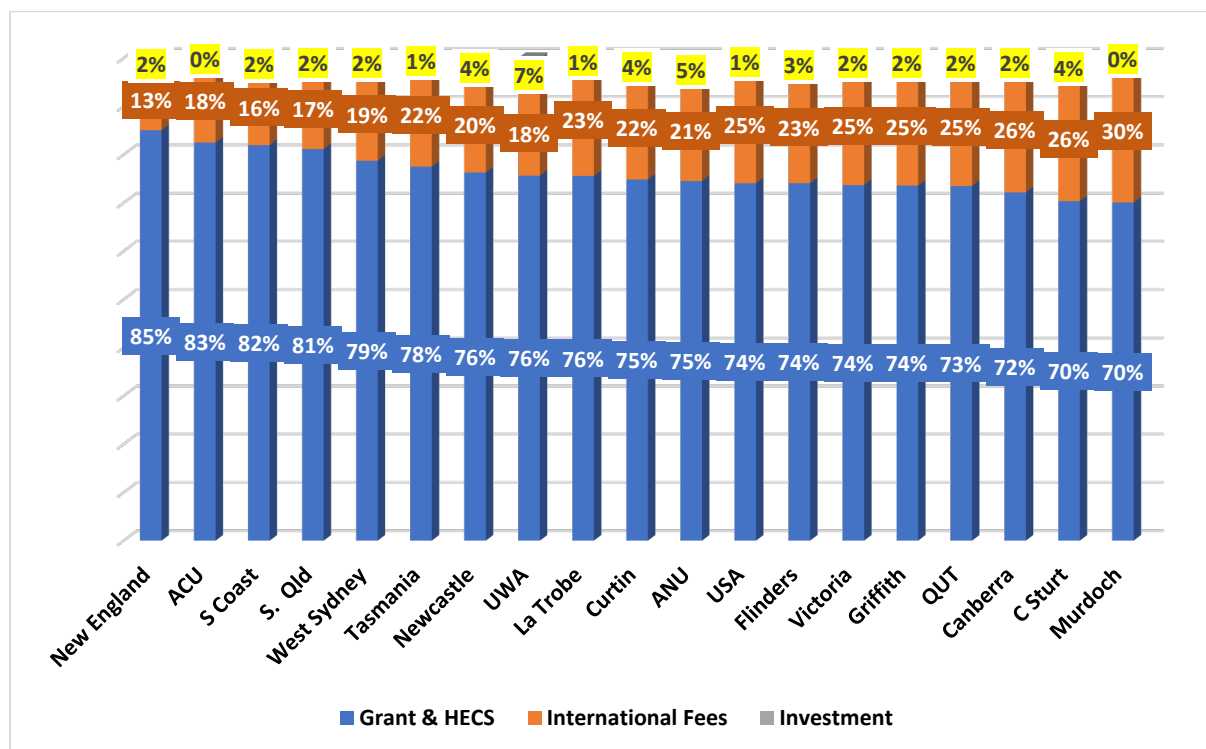
For the other 18 universities, reliance on government grants and HECS payment revenues ranged from 69% of total 2020 income for Swinburne to 51% for Sydney. The sector-wide average was 65%. Five of the eleven with below average reliance on government and HECS revenues are the major research universities. These universities are ranked in figure 9. The fee-paying student revenue is correspondingly a much higher proportion of total 2020 income, ranging from 29% for Swinburne to 46% for Sydney. Interestingly, 13 of these universities depended on investment returns for 3% or less of their total 2020 income. This result is not dissimilar to the dependency of the universities listed in figure 8. Of the universities listed in figure 9, Queensland is the one proportionally most dependent on investment income in 2020 at 7%, with Melbourne and Federation at 6%, Edith Cowan and Deakin at 4%.

Figure 9. Distribution of 2020 Total Incomes for Universities Dependent of Government Grants and HECS payments for less than 70% of their Income.
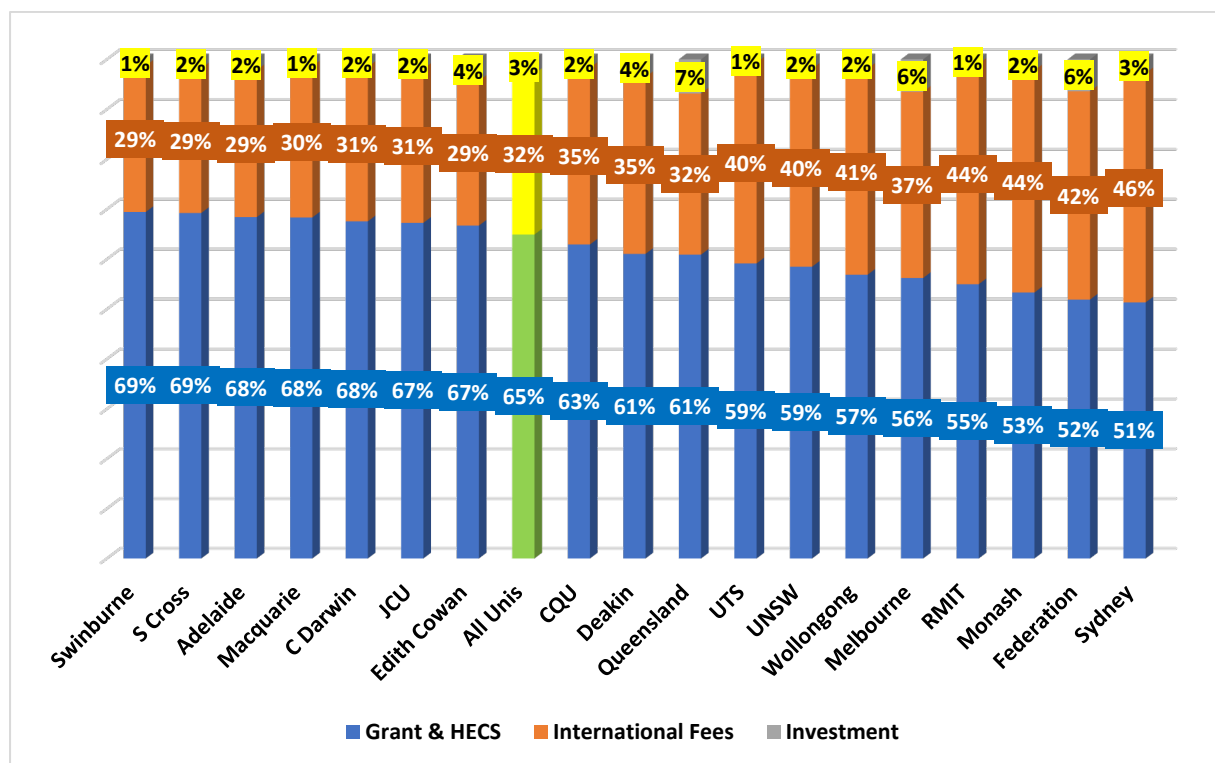
The income distribution outcome for 2020 provides a valuable reference benchmark to assess the future financial performance of universities. As noted in previous sections there were significant changes in income distribution from 2019 to 2020 for some universities. The changes in income distribution from 2019 to 2020 are given in columns 3, 6 and 9 of table B of the appendix. As noted above, on average, Australian universities were less dependent in 2019 on government grants and HECS payments at 60% than in 2020 at 65%.

The change in the increased dependency of universities on government grants and HECS from 2019 to 2020 as a proportion of total income is shown in figure 10 based on the data in column 3 of table B in the appendix.

Figure 10 Increased Dependency of Universities on Government Grants and HECS Funding as a Proportion of Total Income from 2019 to 2020.
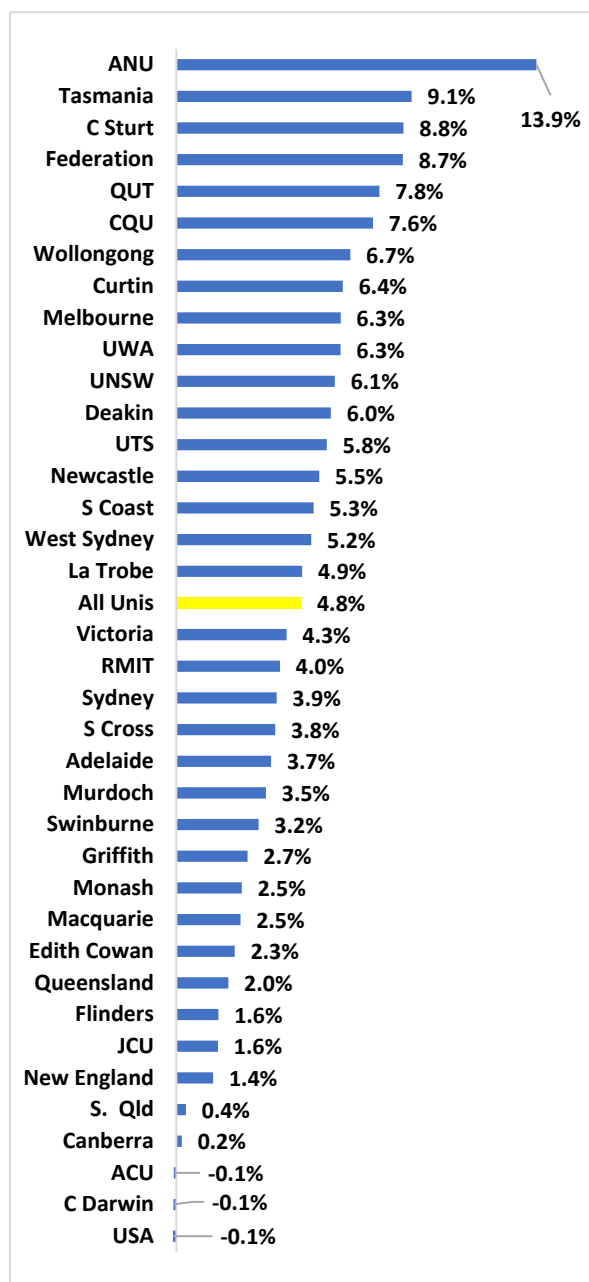
This analysis reveals that some 34 of 37 universities were more dependent on grants from governments and student HECS for a higher proportion of their total income in 2020 than in 2019. Alternatively expressed, these universities obtained a lower proportion of their 2020 income from student fees and charges and investment returns in 2020 than in 2019. These are the revenue streams most impacted by the COVID-19 pandemic.

ANU (13.9%) is the university that proportionally increased its dependence on government funding and HECS payments in 2020 compared with 2019. This was because, proportionally, ANU had the highest reduction in student fees and charges (figure 6) and in investment returns (table 4).

The sector average for increased dependence on this source of income was 4.8%. Some 17 universities had a dependency greater than the sector average. Three universities – ACU, Charles Darwin and USA - were marginally less dependent on government support in 2020 than in 2019.

Interestingly, the Go8 universit**es** are spread throughout the range with four more dependent than the average and four less dependent.

5. Impact of the Pandemic on the 2020 Financial Operations of Australian Universities.

Based on the analyses reported in this paper and in the previous paper (1), evidence has been assembled to assess the impact of the pandemic on the financial operations of Australian universities in 2020. Universities have been ranked in this paper according to the percentage revenue changes from 2019 to 2020 in total income (figure 3), government grants and HECS payments (figure 9), fee-paying students (figure 6) and investment returns (figure 7). In the

earlier paper (1), universities were also ranked according to the percentage changes in their expenditure (figure 14) and net change in financial position (figure 15).

In figure 15 of the previous paper the percentage income change was combined with the percentage expenditure change to yield the 2020 net change in a financial position. This figure is reproduced here as figure 11. Universities are ranked from the one that experienced the largest operational decrease – ANU at -22.9% – relative to 2019 to the university with the most improvement in its 2020 net financial position -Charles Darwin at 15.7%.

Figure 15. Net Change in Financial Position of Universities from 2019 to 2020
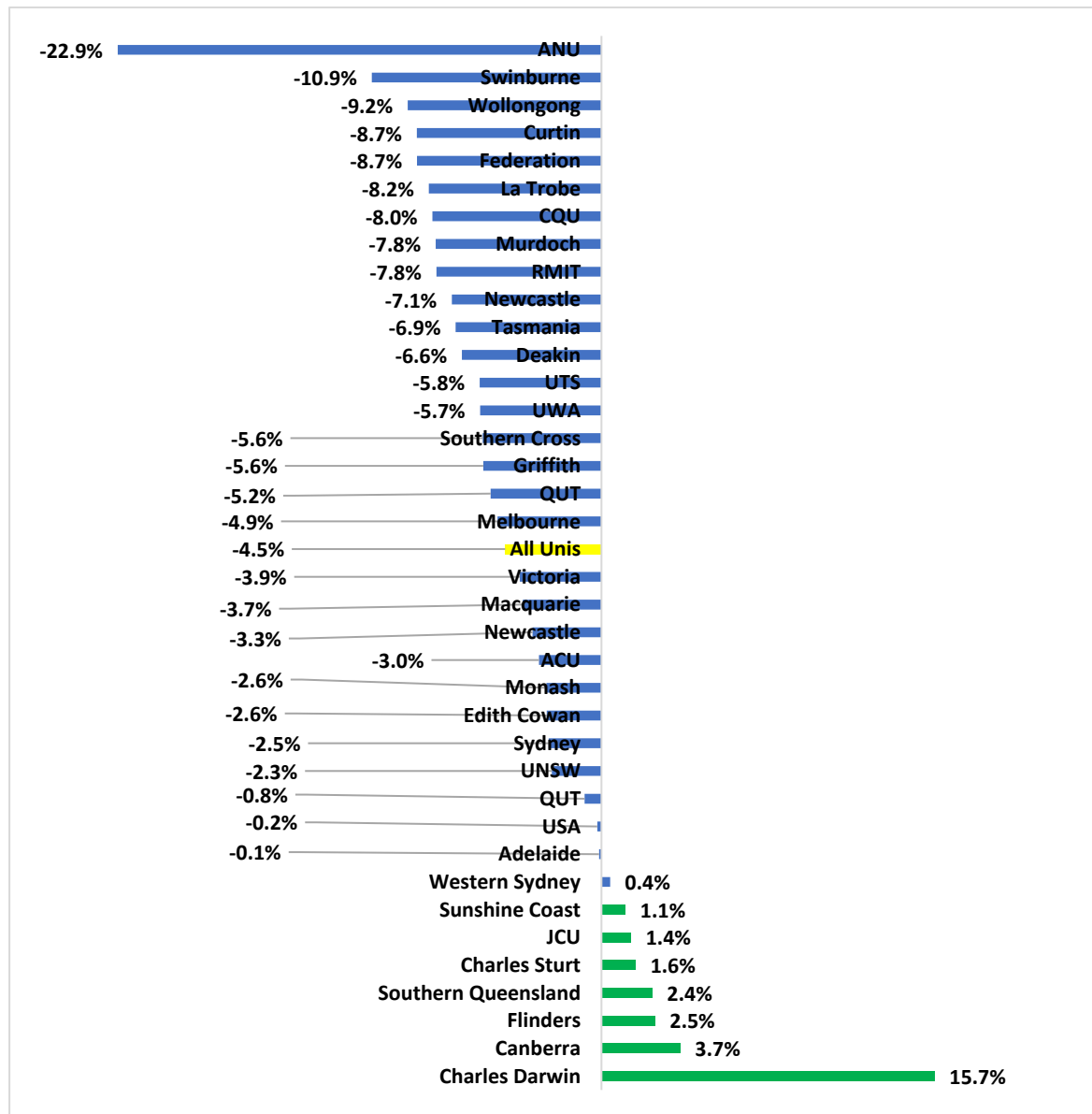
These data, obtained directly from annual reports, provide a reliable basis to rank universities according to the impact of the pandemic on their 2020 financial operations. The task of ranking universities is over determined by using all the above data sets. It is sufficient to use the following three data sets as the criteria to achieve a reliable outcome.

1. The size of the proportional change in the total income from 2019 to 2020.
   - *Some 30 universities had lower total income in 2020 than in 2019, ranging from 1% to 17% lower (see figure 3)*
2. The size in the proportional change in student fees and charges in 2020 compared with 2019.
   - *Student fees and charges revenue changes ranged from an increase of 5.8% to a reduction of 37.2% (see figure 6).*
3. The net change in financial position from 2019 to 2020
   - *This combination provides an insight into the 2020 financial outcomes for universities. Some 29 of 37 universities experienced a deterioration in this parameter, ranging from 1% to 23%. (see figure 11).*

The relative rankings in aggregate from these data sets provide a framework to assess the impact of the pandemic on the financial performance of each university. All universities have experienced some adverse effects from the pandemic with there being a wide variation in the level of severity. Australian universities have been assigned to one of three levels of severity: high impact: medium impact and low impact. High impact universities are those that have financial vulnerability on each of the three criteria above. Medium impact universities are those that are vulnerable on two of the criteria. Low impact universities have either improved their overall financial position in 2020 or have only highly marginal vulnerability on any of the above criteria. The outcome is that the effects of the pandemic are assessed to have a high impact on 10 universities, a medium impact on another 10 universities and a low impact on 17 universities. They are listed in rank order in table 5.

Table 5. Ranking of Australian Universities based on the Severity of the COVID-19 Pandemic on their 2020 Financial Health.

Ranking of Universities By the Severity of the Pandemic on Financial Operations							
	High		**Medium**		**Low**		**Low**
1	ANU	11	Newcastle	21	Macquarie	31	ACU
2	La Trobe	12	UTS	22	Victoria	32	Canberra
3	Federation	13	UNSW	23	Sunshine Coast	33	USA
4	CQU	14	Melbourne	24	West Sydney	34	Adelaide
5	Swinburne	15	Curtin	25	JCU	35	Flinders
6	Southern Cross	16	Charles Sturt	26	New England	36	Southern Qld
7	UWA	17	RMIT	27	Sydney	37	C Darwin
8	Wollongong	18	Tasmania	28	Queensland		
9	Deakin	19	Murdoch	29	Edith Cowan		
10	QUT	20	Griffith	30	Monash		

5.1 High Impacted Universities

Ten universities rank as the most impacted group in terms of financial vulnerability for each of total income, student fee income and net financial outcome. ANU is the standout university being ranked as the one with the highest percentage change of all universities on all three criteria. These ten universities appear to face the greatest challenges to restore their financial strengths. There will be a variety of reasons why each of these universities appear to be highly impacted and for some the impact might be one-off rather than continuing. For some, an early

response to the pandemic in terms of reducing staff numbers may have resulted in significant increases in redundancy costs. On the other hand, universities that have lost significant numbers of international students and are struggling to offset this shortfall through increased domestic student enrolments are likely to experience a financial decline over the longer term.

Four of the ten universities that appear most challenged are in Victoria, two are in New South Wales, two in Queensland, one in Western Australia and one in the Australian Capital Territory. Only two Go8 universities are in this group. Some universities are classified because of the high exposure to particular segments of the international student market most affected by the pandemic and closure of boarders; some to relatively weak financial position prior to the onset of the pandemic; and others to the extent that financial expenditure already includes provision for staff redundancy costs as part of cost containment measures already in train. Some special and time-limited circumstances seem to apply in relation to ANU.

5.2 Medium Impacted Universities

Ten universities are assessed as having medium impact because of their vulnerability on two of the three financial criteria. Some universities are less vulnerable on their net financial position and others on their student fee income. They are all vulnerable on their total income decrease. There is no discernible pattern within this group, although several have high exposure to the international student market. Four of these universities are in New South Wales, two in Victoria and Western Australia and one in Queensland and Tasmania. Two Go8 universities are in this group principally because of the size of the decrease in total income and student fee reductions.

Six of the eight Victorian universities have been highly or moderately impacted by the pandemic (the exceptions are Monash and Victoria universities). Six of the ten New South Wales universities are also in these categories along with three of the four Western Australia universities. Hence, 15 of the 20 universities (75%) most impacted are from these three states. For the eastern states the outcome is a reflection of the importance of international student fee revenue to these universities, while for WA universities it is the deterioration of their net financial position.

5.3 Low Impacted Universities

Seventeen universities are assessed as having low impact as a result of the pandemic. Several have reported increased income for 2020 and strengthened their net financial positions. Others experienced less than a five percent decrease on any of the three criteria. Nevertheless, they all do face financial challenges to varying degrees this year and beyond. Notably, all three South Australian and four of the six Queensland universities are in this group. They all finished 2020 in a relatively strong financial position compared with more highly impacted universities.

Interestingly, four Go8 universities – Sydney, Queensland, Monash and Adelaide are included in the low impact group because of their relative financial strength and the lower impact of any changes in student fees and charges. Monash in particular, appears to have been able to mobilise its network of overseas campuses in order to retain current international enrolments and continue to admit new international students and thereby to continue minimise the adverse impact of Australian border closures on student fee revenue during the first year of the pandemic.

Several small institutions while less exposed to the international student market appear to have been able to respond nimbly to meet the challenges posed by the pandemic principally because most have been able to increase 2020 total income and their net financial position.

6   Conclusion

The relative strength of university leadership, institutional strategies, and skills in risk management were all very important in differentiating university 2020 responses and their financial health in the first year of the pandemic. The financial challenges for many universities are likely to have been even greater in 2021 because their international student enrolments will be lower than in 2020. On the other hand, year to date performance of the financial markets indicate the potential for a significant turnaround in investment income for 2021.

The effectiveness of institutional strategies and management actions will again be critical in determining how a university recovers in 2021 and beyond from the financial setbacks experienced since the start of the pandemic. Minimising further decline in international student fee revenue, continuing to build domestic student demand and restoring the returns from investments to at least 2019 levels will be the key factors in rebuilding the financial health of the Australian higher education sector and its constituent public universities.

References

1. Frank Larkins and Ian Marshman, *The 2020 Financial Outcomes of Australian Universities within the COVID-19 Pandemic Environment.* Published 28 September 2021. The 2020 financial outcomes of Australian universities within the COVID-19 pandemic environment (unimelb.edu.au)
2. Commonwealth Department of Education 2020 Finance Statistics, Published October 2021. https://www.dese.gov.au/higher-education-publications/resources/2020-higher-education-providers-finance-tables

Appendix Table A Australian Universities Income Data for 2019 and 2020 $m

Income $ m	Total Income 2020 $m	Total Income 2019 $ m	Change Total Income2020-2019	% change as proportion of 2020 income	All Income Except Fees & Investment 2020	All Income Except Fees & Investment 2019	Change 2020-19	% change as proportion of 2020 income	Fees & Charges Income 2020 $m	Fees & Charges Income 2019 $m	Change Fees 2020-2019	% change as proportion of 2020 income	Investment+ Profit/Loss Income 2020 $m	Investment+ Profit/Loss Income 2019 $m	Change Investments 2020-2091	% change as proportion of 2020 income
Column	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Monash	2932	2980	-48	-2%	1564	1514	50	3%	1304	1266	38	3%	65	199	-135	-207%
Melbourne	2688	2899	-211	-8%	1512	1447	65	4%	1002	1110	-108	-11%	174	342	-168	-96%
Sydney	2647	2741	-94	-4%	1361	1303	58	4%	1216	1224	-8	-1%	73	215	-142	-193%
UNSW	2263	2443	-180	-8%	1324	1280	44	3%	897	1079	-182	-20%	42	84	-42	-100%
Queensland	2181	2220	-39	-2%	1328	1308	21	2%	704	751	-47	-7%	149	162	-13	-9%
RMIT	1459	1519	-60	-4%	802	774	28	3%	644	725	-82	-13%	13	20	-7	-53%
ANU	1330	1562	-232	-17%	991	947	44	4%	278	381	-103	-37%	62	234	-172	-280%
Deakin	1242	1353	-111	-9%	758	745	13	2%	440	498	-58	-13%	44	109	-66	-150%
Macquarie	1152	1181	-29	-3%	787	778	9	1%	349	376	-27	-8%	16	27	-12	-73%
UTS	1130	1170	-40	-4%	669	624	44	7%	454	534	-80	-18%	7	12	-5	-63%
QUT	1055	1167	-112	-11%	775	766	9	1%	261	296	-35	-14%	19	105	-86	-449%
UWA	993	1088	-95	-10%	751	754	-3	0%	176	200	-24	-14%	66	134	-68	-103%
Adelaide	993	991	2	0%	680	642	38	6%	292	302	-9	-3%	21	48	-27	-125%
Griffith	968	1032	-64	-7%	712	731	-19	-3%	239	256	-17	-7%	16	45	-29	-177%
Curtin	903	969	-66	-7%	675	663	13	2%	196	207	-12	-6%	32	100	-69	-216%
West Sydney	872	901	-29	-3%	687	663	24	4%	169	191	-22	-13%	17	47	-30	-184%
Newcastle	808	845	-37	-5%	616	598	18	3%	160	182	-22	-14%	32	66	-34	-108%
La Trobe	786	867	-81	-10%	594	613	-19	-3%	183	245	-62	-34%	9	9	0	-3%
Wollongong	785	855	-70	-9%	447	429	18	4%	324	353	-29	-9%	15	73	-58	-398%
Swinburne	747	784	-37	-5%	519	520	-1	0%	219	255	-36	-16%	9	9	1	9%
Tasmania	719	777	-58	-8%	557	532	26	5%	156	167	-11	-7%	6	79	-73	-1232%
USA	696	686	10	1%	516	509	7	1%	171	170	1	1%	10	7	3	28%

Charles Sturt	576	624	-48	-8%	405	384	21	5%	150	204	-55	-36%	21	35	-14	-67%
ACU	548	550	-2	0%	452	454	-2	0%	96	95	1	1%	0	0	0	#DIV/0!
JCU	547	570	-23	-4%	368	374	-6	-2%	168	181	-13	-7%	11	15	-4	-40%
Flinders	535	530	5	1%	396	384	12	3%	125	126	-2	-1%	14	20	-6	-41%
Edith Cowan	480	485	-5	-1%	321	313	8	2%	139	140	-1	-1%	21	33	-12	-58%
Victoria	474	481	-7	-1%	349	334	15	4%	117	131	-14	-12%	8	16	-8	-105%
CQU	450	488	-38	-8%	284	270	13	5%	159	211	-52	-32%	8	7	1	12%
Murdoch	392	408	-16	-4%	275	272	3	1%	117	126	-9	-8%	1	10	-10	-1371%
New England	369	362	7	2%	314	303	11	4%	47	52	-5	-10%	8	7	1	14%
Charles Darwin	347	321	26	7%	234	217	17	7%	107	101	6	6%	5	3	2	45%
S. Qld	345	327	18	5%	280	264	16	6%	58	59	-1	-1%	7	4	3	41%
Federation	343	377	-34	-10%	178	163	15	9%	143	178	-35	-24%	22	36	-14	-63%
S Coast	322	311	11	3%	264	238	25	10%	51	69	-18	-35%	7	4	4	51%
Canberra	316	319	-3	-1%	228	229	-1	-1%	82	86	-4	-5%	6	3	3	42%
S Cross	293	316	-23	-8%	202	206	-4	-2%	85	108	-23	-28%	5	2	3	62%

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Table B. Percent Income Distribution 2020 and 2019 with the Annual change

% Income Distribution 2020 & 2019	All Income Except Fees & Investment 2020	All Income Except Fees & Investment 2019	Change in Distribution 2020 - 2019	Fees & Charges Income 2020 $m	Fees & Charges Income 2019 $m	Change in Distribution 2020 - 2019	Investment+ Profit/Loss Income 2020 $m	Investment+ Profit/Loss Income 2019 $m	Change in Distribution 2020 - 2019
Column	1	2	3	4	5	6	7	8	9
New England	85.1%	83.7%	1.4%	12.8%	14.4%	-1.6%	2.2%	1.9%	0.3%
ACU	82.5%	82.6%	-0.1%	17.5%	17.3%	0.3%	0.0%	0.0%	0.0%
S Coast	81.9%	76.6%	5.3%	15.8%	22.2%	-6.3%	2.2%	1.1%	1.1%
S. Qld	81.1%	80.7%	0.4%	16.9%	18.0%	-1.1%	1.9%	1.2%	0.7%
West Sydney	78.8%	73.6%	5.2%	19.4%	21.2%	-1.8%	1.9%	5.2%	-3.3%
Tasmania	77.5%	68.4%	9.1%	21.7%	21.5%	0.2%	0.8%	10.1%	-9.3%
Newcastle	76.3%	70.7%	5.5%	19.8%	21.5%	-1.7%	3.9%	7.8%	-3.9%
UWA	75.6%	69.3%	6.3%	17.7%	18.4%	-0.6%	6.6%	12.3%	-5.6%
La Trobe	75.6%	70.7%	4.9%	23.3%	28.3%	-4.9%	1.1%	1.0%	0.1%
Curtin	74.8%	68.4%	6.4%	21.7%	21.4%	0.3%	3.5%	10.3%	-6.8%
ANU	74.5%	60.6%	13.9%	20.9%	24.4%	-3.5%	4.6%	15.0%	-10.3%
USA	74.1%	74.2%	-0.1%	24.6%	24.7%	-0.2%	1.4%	1.0%	0.4%
Flinders	74.1%	72.4%	1.6%	23.3%	23.8%	-0.5%	2.6%	3.7%	-1.1%
Victoria	73.7%	69.5%	4.3%	24.7%	27.2%	-2.5%	1.6%	3.3%	-1.7%
Griffith	73.5%	70.8%	2.7%	24.7%	24.8%	-0.1%	1.7%	4.4%	-2.7%
QUT	73.5%	65.6%	7.8%	24.7%	25.4%	-0.7%	1.8%	9.0%	-7.2%
Canberra	72.1%	71.9%	0.2%	25.9%	27.0%	-1.0%	1.9%	1.1%	0.8%
Charles Sturt	70.3%	61.5%	8.8%	26.0%	32.7%	-6.7%	3.7%	5.7%	-2.0%
Murdoch	70.1%	66.6%	3.5%	29.8%	30.9%	-1.1%	0.2%	2.5%	-2.3%
Swinburne	69.5%	66.3%	3.2%	29.3%	32.5%	-3.2%	1.3%	1.1%	0.2%
S Cross	69.0%	65.2%	3.8%	28.9%	34.2%	-5.3%	1.8%	0.6%	1.1%
Adelaide	68.4%	64.8%	3.7%	29.4%	30.4%	-1.0%	2.1%	4.8%	-2.7%

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Macquarie	68.4%	65.9%	2.5%	30.3%	31.8%	-1.6%	1.4%	2.3%	-0.9%
Charles Darwin	67.6%	67.7%	-0.1%	30.9%	31.5%	-0.6%	1.5%	0.9%	0.6%
JCU	67.2%	65.6%	1.6%	30.8%	31.8%	-1.0%	1.9%	2.6%	-0.7%
Edith Cowan	66.8%	64.5%	2.3%	29.0%	28.9%	0.2%	4.3%	6.7%	-2.4%
All Unis	64.9%	60.1%	4.8%	32.2%	33.7%	-1.5%	2.9%	6.2%	-3.3%
CQU	63.0%	55.4%	7.6%	35.4%	43.2%	-7.8%	1.7%	1.4%	0.3%
Deakin	61.0%	55.1%	6.0%	35.4%	36.8%	-1.4%	3.5%	8.1%	-4.6%
Queensland	60.9%	58.9%	2.0%	32.3%	33.8%	-1.6%	6.8%	7.3%	-0.5%
UTS	59.2%	53.4%	5.8%	40.2%	45.6%	-5.4%	0.6%	1.0%	-0.4%
UNSW	58.5%	52.4%	6.1%	39.7%	44.2%	-4.5%	1.9%	3.4%	-1.6%
Wollongong	56.9%	50.2%	6.7%	41.3%	41.3%	0.0%	1.9%	8.5%	-6.6%
Melbourne	56.3%	49.9%	6.3%	37.3%	38.3%	-1.0%	6.5%	11.8%	-5.3%
RMIT	55.0%	51.0%	4.0%	44.1%	47.7%	-3.6%	0.9%	1.3%	-0.4%
Monash	53.3%	50.8%	2.5%	44.5%	42.5%	2.0%	2.2%	6.7%	-4.5%
Federation	51.9%	43.2%	8.7%	41.7%	47.2%	-5.5%	6.4%	9.5%	-3.1%
Sydney	51.4%	47.5%	3.9%	45.9%	44.7%	1.3%	2.8%	7.8%	-5.1%

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