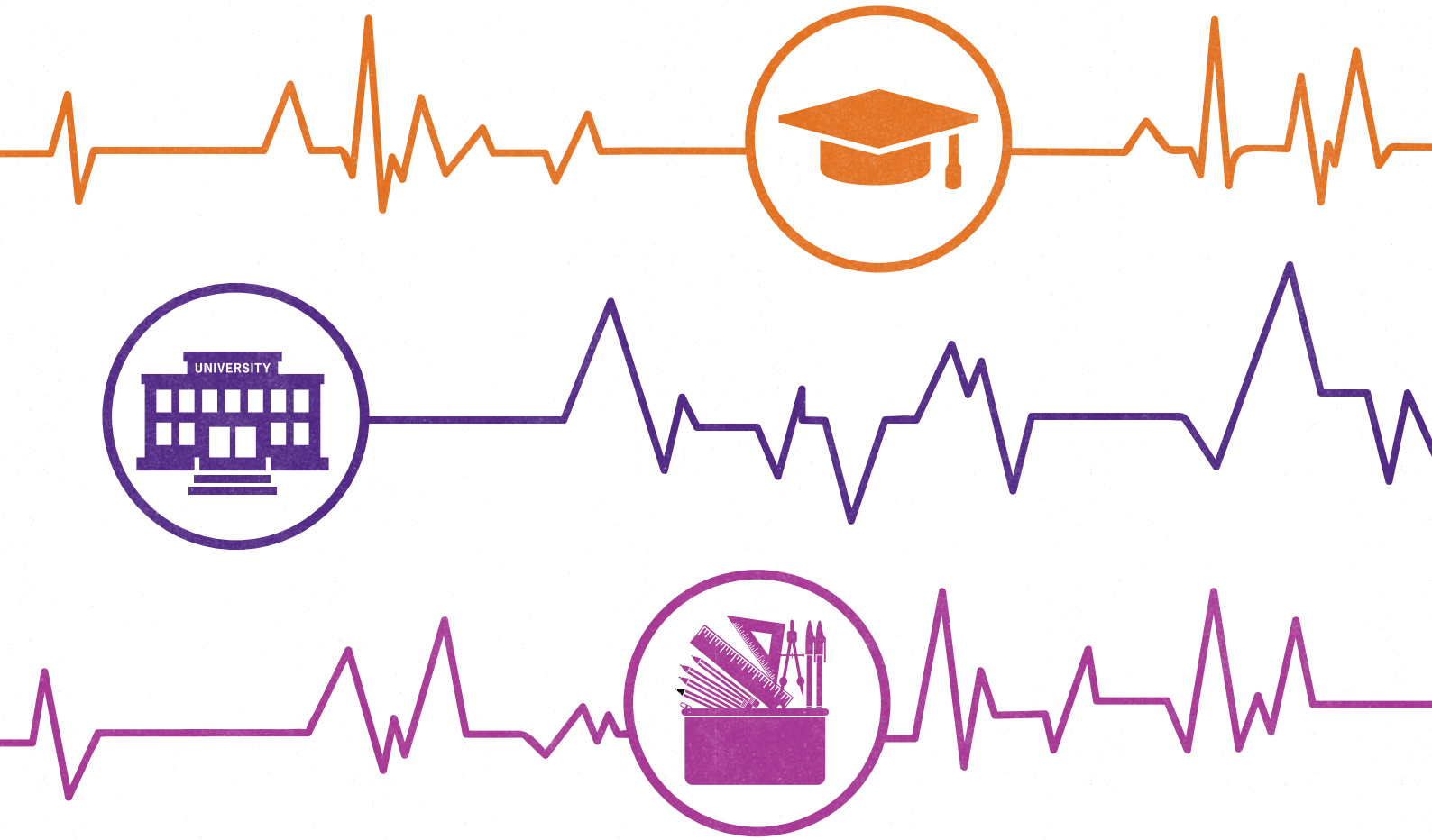
Grant Thornton

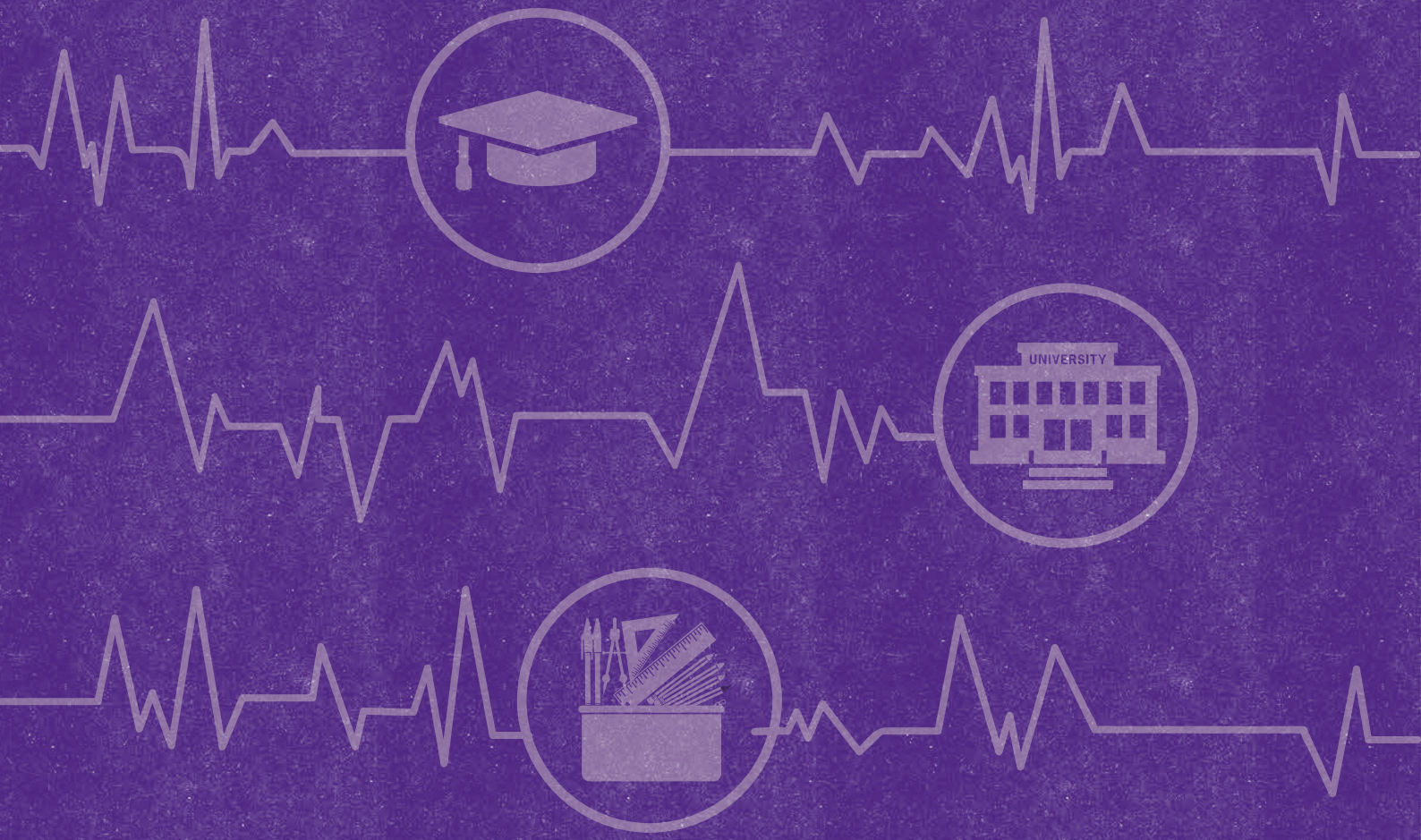
An instinct for growth™

2016

Health check

The financial health of Australian universities




UNIVERSITY

Contents

Acronym	Description
AGFA	Australian Government Financial Assistance
CAGR	Compound Annual Growth Rate
CGS	Commonwealth Grants Scheme
CSP	Commonwealth Supported Place
DoE	Department of Education
EFTSL	Equivalent Full Time Student Load
FTE	Full Time Equivalent
HECS	Higher Education Contribution Scheme
HELP	Higher Education Loan Program
US DoE	United States Department of Education

Foreword 2

Quick facts 3

Responding to market changes 4

Forty Australian universities surveyed 6

Financial health of Australian universities 7

Analysis of income 9

Income sources 11

Surplus 15

Analysis of operational expenditure 18

Workforce 19

Capital expenditure 23

Students 25

Appendices

Appendix 1: Methodology 29

Appendix 2: Endnotes 31

Key contacts 32

About Grant Thornton 33

Foreword

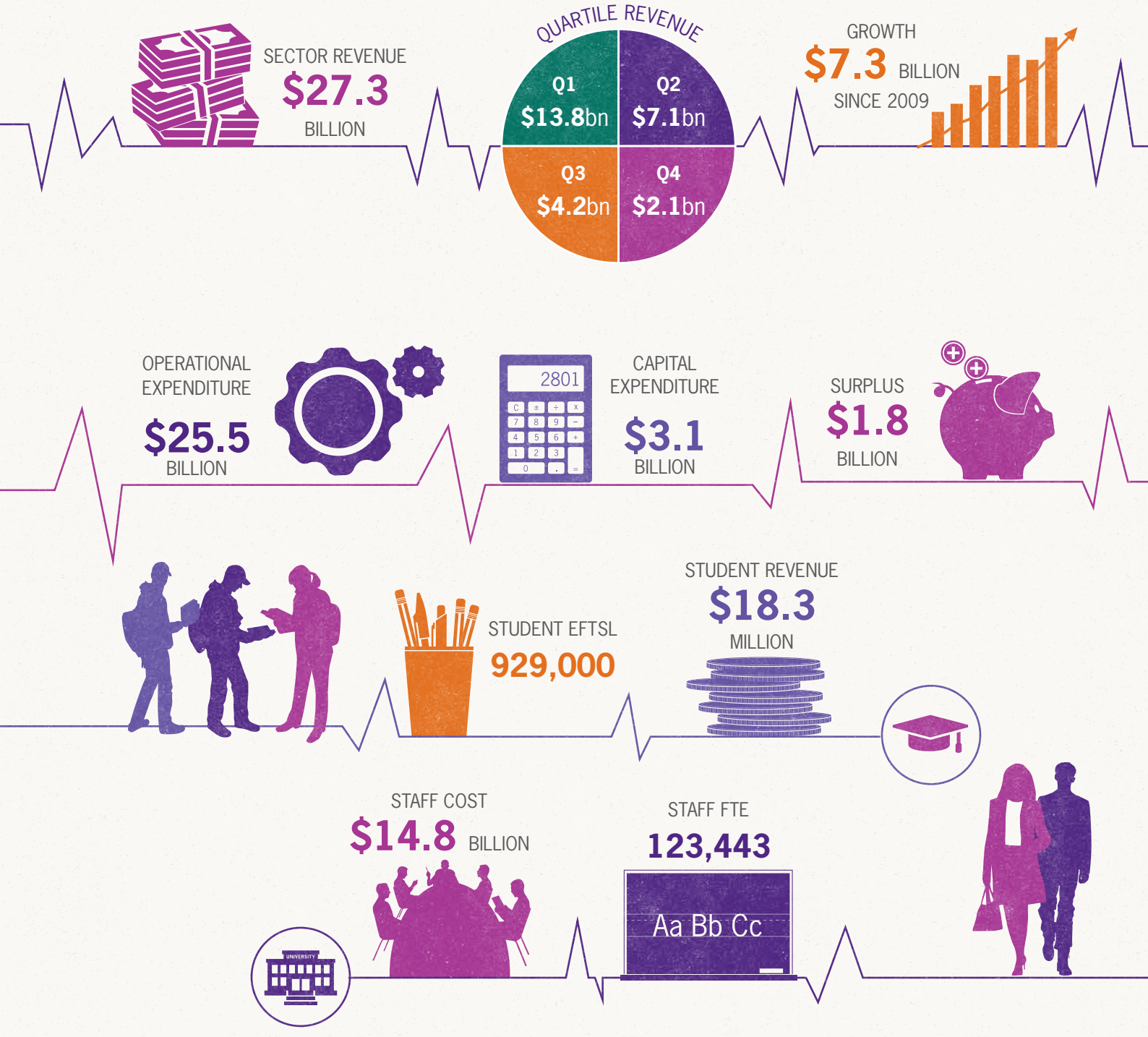
Andrew Trnacek
Partner
Public Sector Advisory

As rich sources of innovation, research, and skill development, Australian universities are invaluable.

While recent years have seen strong growth in student numbers and revenue, challenges lie ahead. Cost pressures are reducing margins, global competition for students is increasing, and the uncertainty generated by government reforms are all factors impacting the modern university. More so than ever, robust financial health is imperative to not only survive the challenges but invest in new opportunities.

Since 2010, Grant Thornton in the UK, the United States and Ireland has been producing a series of annual reports assessing the financial health of their universities. This review, a first for Grant Thornton Australia, provides a local perspective on the financial standing of Australian universities and, in light of recent attempted sector reforms, provides insight into what the future may hold.

Quick facts 2014



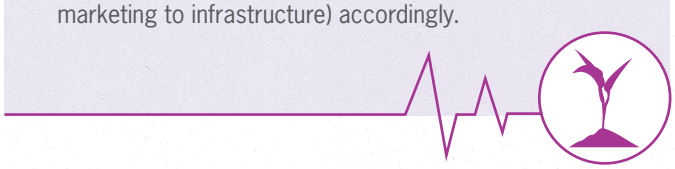
Responding to market changes

As the strategic financial advisor to your university, you need to ensure that your business model is both sustainable and sufficiently robust to respond to the changing regulatory and market environments characteristic of the tertiary education sector today. What follows is a high-level overview of the challenges that abound.

GROWTH

Continuation of strong growth can't be taken for granted. Uncertainty in global markets and increased competition (both domestic and foreign) may see a drop in student numbers for universities that fail to differentiate themselves with clear and strong value propositions. Pre-emptive action to take could include:

- Develop a segmentation model of your student population, and track the growth and performance of each segment.
- Understand the drivers of current growth and where your university is most competitive.
- Develop a differentiated position relevant to your market segments.
- Forecast growth and plan investments (everything from marketing to infrastructure) accordingly.



INVESTMENT

There was a spike in capital expenditure sector-wide in 2012, since then this has slowed; however, new capital investment is needed to fund buildings, new technology and new campuses both in Australia and overseas. To continue attracting and retaining students, universities should:

- Focus on long-term capital plans that align to their overall business strategy.
- Develop financing options and calculate serviceable debt levels under multiple funding scenarios.
- Ensure that the CFO has a strategic advisory role in the organisation.

FUNDING AND REVENUE

Demand-driven funding has stimulated growth; however it exposes the Federal Government to uncertain and increasing levels of outlay. Notwithstanding that current reforms are blocked in the Senate, it's reasonable to expect that change to the funding model is inevitable. Possible actions to take include:

- Perform scenario analyses to understand the potential impact of future reforms and market dynamics.
- Develop alternative pricing and fee options that include income diversification strategies.
- Conduct financial analyses to determine impacts.
- Revisit fee schedules, to ensure they clear and do allow an adequate return on every course.

EFFICIENCY

While the financial health of the sector is currently strong, the long-term trend indicates operational margins will shrink. With a continued need for efficiencies and savings, more needs to be done, such as:

- Develop a program for continuous improvement balanced with long and short-term payoffs.
- Review your program and project delivery capability.
- Follow up initiatives by measuring benefits and conducting post-implementation reviews.

TECHNOLOGY

Digital technologies continue to disrupt the higher education sector. Ubiquitous access to content has led some to predict the demise of the classroom. While this is unlikely, blended modes of instruction will become the norm. Universities will no longer be the gatekeepers of information; however they will continue to control accreditation. Technology is a disruptive and expensive innovation. Ensure this factor is included in the capital planning process by:

- Considering the role of the CIO and reviewing both its status and current capability.
- Developing a long-term architectural blueprint that supports the continued development of capability.

WORKFORCE

Many factors will impact the university workforce. Some, such as the ageing population and increasing casualisation of the workforce are widespread. Others, such as changes in student expectations, disciplines, content and style of instruction, are specific to universities.

- Develop a comprehensive workforce strategy for both academic and non-academic staff.
- Increase workforce skills with higher levels of business and commercial acumen for academic and non-academic staff.
- Consider developing transition pathways for experienced business professionals into academic roles.

Forty Australian universities surveyed

Quartiles based on annual income

'*Health Check: The financial health of Australian universities*' is based on financial information from the Australian Department of Education for the period 2009–2014[1]. Thirty-nine public universities and one private university were analysed. These forty universities were grouped into quartiles based on annual income (for more details see Appendix 1, Methodology).

In 2014, quartile income varied from $15 million – $298 million in the smallest quartile, to between $856 million – $2.12 billion in the largest quartile. This variance provides a differentiating factor that yields more relevant inter- and intra-quartile insights. Where income is used as a proxy measure for size, as in this report, the financial health of universities becomes dependent on size. To overcome this, for each year under review (2009–2014) comparisons of, for example Quartile 1 which looks at the highest earning 25% of institutions in the sector; however, the annual income of individual institutions making up the quartile may vary from year to year. In the table below, universities are listed in order of income for 2014.[2]

Australian Universities categorised in quartiles based on income (2014)

Quartile 1 A$2.12b – A$856m	Quartile 2 A$845m – A$554m	Quartile 3 A$544m – A$298m	Quartile 4 A$298m – A$15m
The University of Melbourne	Griffith University	University of Tasmania	Central Queensland University
The University of Sydney	University of Adelaide	Swinburne University of Technology	The University of New England
Monash University	RMIT University	James Cook University	University of Ballarat
The University of Queensland	Macquarie University	Charles Sturt University	University of Canberra
The University of New South Wales	University of Western Sydney	Flinders University	University of the Sunshine Coast
Australian National University	University of Technology, Sydney	Victoria University	Southern Cross University
The University of Western Australia	The University of Newcastle	Australian Catholic University	Charles Darwin University
Queensland University of Technology	La Trobe University	Edith Cowan University	Bond University[3]
Curtin University of Technology	University of South Australia	Murdoch University	The University of Notre Dame Australia
Deakin University	University of Wollongong	University of Southern Queensland	Batchelor Institute of Indigenous Tertiary Education

Financial health of Australian universities

Check-up: the financial health of Australian universities

This report analyses the Australian university sector's financial profile in some detail. Before unpacking the data, some brief observations follow.

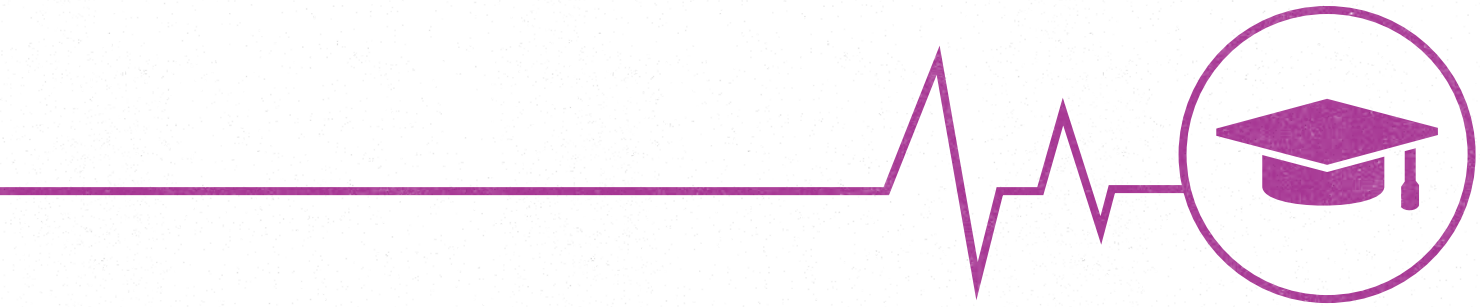
While there was some variability from year to year for individual universities, 90% of Australian universities fell within the United States Department of Education's (US DoE Test of Financial Responsibility) 'successful' sector for the period 2009 to 2014, with composite scores of 1.5 or greater. That method considers an institution's total financial resources and provides a combined measure of those resources along a common scale. The measures include the capacity of the university to cover its future expenses (primary reserve ratio); the ability of the institution to meet its financial liabilities (equity ratio), and the ability of the institution to generate funds (net income ratio).

Total income across the sector increased consistently by a rate of 6.4% compounded annually, or $7.3 million. While the magnitude of growth varied over the six years 2009–2014, total sector income increased by 36%, from $20 billion to $27.7 billion. Quartile 1 saw the highest magnitude of growth and most universities in the sector experienced higher than the median absolute growth over the period. Quartile 4 had the strongest proportional growth, while all universities in this sector saw less than median absolute growth.

The majority of income to the university sector is provided through Australian Government Financial Assistance (AGFA) and the distribution of income sources was similar across all quartiles. Quartile 1 universities draw income from the widest variety of sources – this variety narrows through the quartiles, with Quartile 4 almost entirely dependent on AGFA.

Income growth has not translated into higher surpluses and surplus volatility was evident for all quartiles over the six year period. Operational expenditure had an annual growth rate of 6.9% with staff costs the heaviest impost: $15 billion in 2014, representing 54% of total university income. Capital expenditure in 2014 ($3.1 billion) was 7% higher than expenditure in 2009 ($2.9 billion); however, this is still 15% lower than peak expenditure achieved in 2012 of $3.7 billion.

Our report shows that cost pressures and global competition for students are ever-present for the modern university. Robust financial health is an imperative few institutions can ignore. The following analysis reveals some of the underlying reasons why this is the case.



Over 90% of universities financially responsible

Using US DoE framework, for the period 2009–2014, 37 of 40 Australian universities were found to be financially responsible.

93% of Australian universities fell within the US DoE 'successful' sector, with composite scores of 1.5 or greater. There was, however, some variability from year to year for individual universities. The US method considers an institution's total financial resources and provides a combined measure of those resources along a common scale. This combined view includes the:

- Capacity of the university to cover its future expenses (primary reserve ratio);
- Ability of the institution to meet its financial liabilities (equity ratio); and
- Ability of the institution to generate funds (net income ratio).

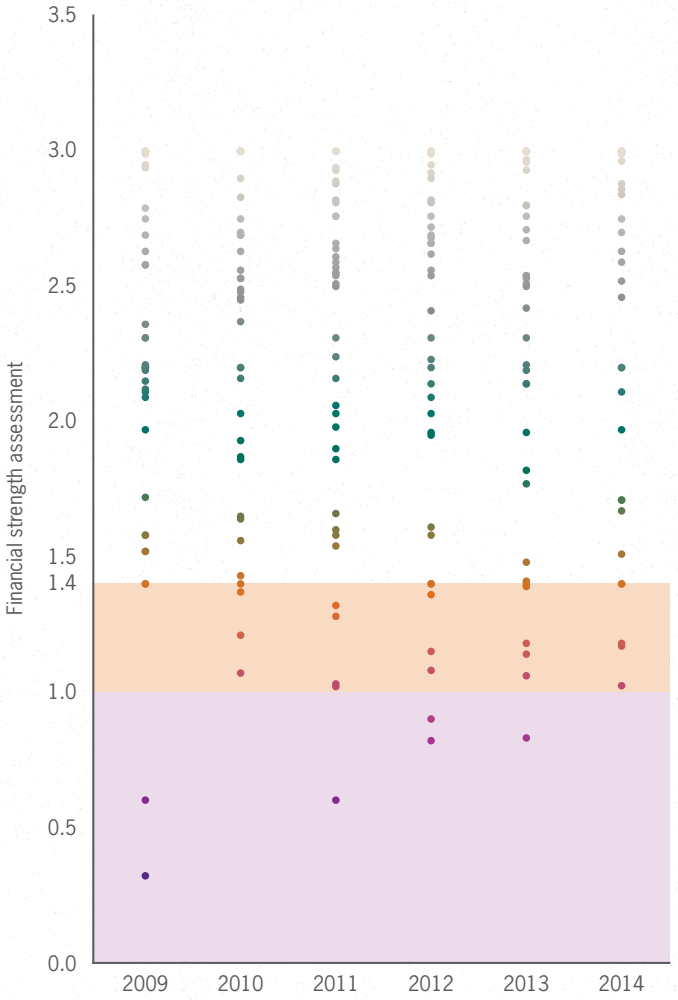
Composite scores between 1.0 and 1.4 represent financially responsible institutions, subject to additional monitoring. A composite score of less than 1.0 does not meet the standards of financial responsibility and, in the US context, may not be permitted to participate in certain Federal funding programs (see Appendix 1).

2014 financial year

- 35 institutions (87.5%) had a composite score of greater than 1.5.
- Five institutions (12.5%) had a composite score between 1.0 and 1.4.
- No university had a composite score less than 1.0.

Despite decreasing surpluses sector wide (see page 15), the majority of Australian universities during the six years analysed were financially responsible.

FINANCIAL SCORES FOR AUSTRALIAN UNIVERSITIES SURVEYED



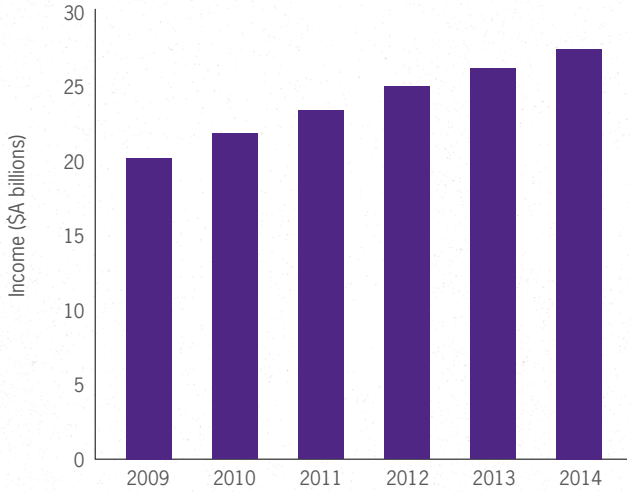
Analysis of income

The sector now generates $27.3 billion, up from $20 billion in 2009.

Across the university sector, total income increased consistently from 2009 to 2014 by 6.4% compounded annually, or $7.3 million.

While the magnitude of income growth varied from year to year over the six years 2009–2014, total sector income increased by 36% from $20 billion to $27.7 billion.

INCOME – WHOLE OF SECTOR ($A BILLIONS)



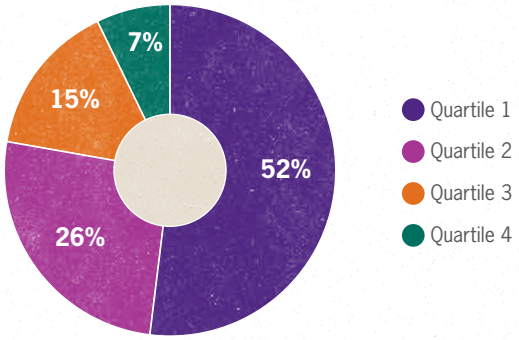
6.4%
Compound Annual Growth Rate

Growth	09-10	10-11	11-12	12-13	13-14
$A billion	1.649	1.525	1.570	1.202	1.319
%	8.2%	7.0%	6.8%	4.8%	5.1%

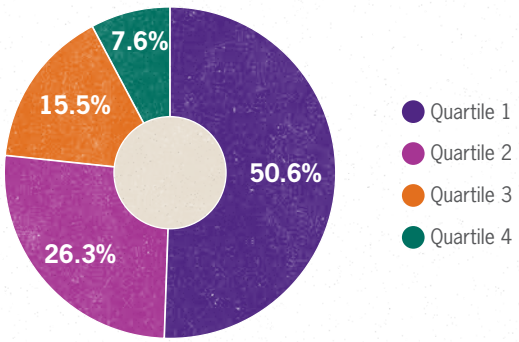
The distribution of income between quartiles was consistent from 2009 to 2014, with Quartile 1 accounting for 50% of total industry income.

In 2014, Quartile 1 universities had a total income of $13.8 billion which represented just over 50% of the total sector income ($27.3 billion). The remaining 50% of sector income was split between the other three quartiles; however, was similarly proportional in magnitude to Quartile 1 income, with Quartile 2 accounting for just over 50% of that remainder. The remaining 23% is split between Quartile 3 (two-thirds) and Quartile 4 (one-third). This proportional income distribution has been consistent since 2009.

QUARTILE SIZE BY INCOME 2009



QUARTILE SIZE BY INCOME 2014



While all universities grew, the magnitude and degree of growth was variable.

Quartile 1 saw the highest magnitude of growth while Quartile 4 had the strongest proportional growth. Most Quartile 1 universities experienced higher than median absolute growth over the period, while all Quartile 4 universities saw less than median absolute growth.

As shown in the table below, the compound annual growth rate (CAGR) within each quartile varied from 5.9% in Quartile 1 to 7.6% in Quartile 4. Average total growth across the sector 2009–2014 was 36.2% with Quartile 4 measuring the highest total growth in income (44.3%).

As the largest quartile by revenue, Quartile 1 experienced the greatest absolute growth, but the proportional growth rate was lower than the average across the sector. Given Quartile 1's high magnitude of growth, this is to be expected.

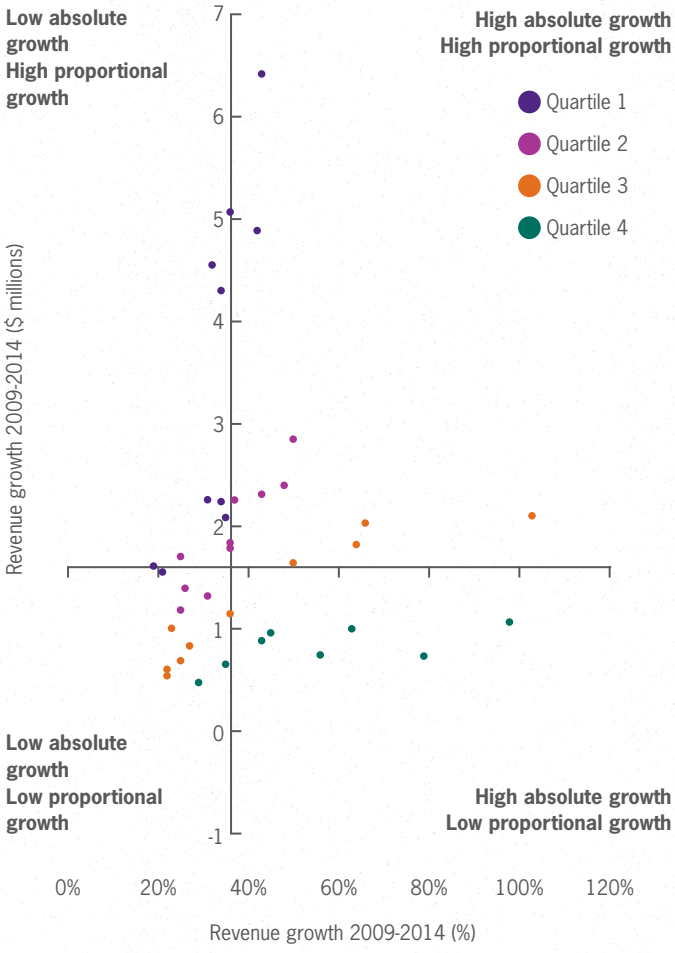
Income growth and CAGR 2009-2014

Total growth	Quartile 1	Quartile 2	Quartile 3	Quartile 4
$A billion	3.461	1.906	1.262	0.636
% (2009-2014)	33.4%	36.2%	42.4%	44.3%
CAGR %	5.9%	6.4%	7.3%	7.6%

The findings of high absolute and low proportional growth for Quartile 1 are reflected in the analysis at right. Here, the axes represent the median result for both proportional and absolute revenue growth across the sector.

Due to the size of Quartile 1 universities, the lower growth rate achieved still translates into high absolute growth. Conversely, smaller universities (Quartiles 3 and 4) appear to be growing quite rapidly with regard to their high proportional growth rate. While all universities are experiencing growth, some are not quite as vigorous as others, with 10 universities across all four quartiles growing below the median for both absolute and proportional growth.

ABSOLUTE AND PROPORTIONAL REVENUE GROWTH 2009-2014



The university sector is growing: Despite the uncertainty generated by proposed federal reforms in late 2014 and ongoing funding pressures, almost all universities (39 out of 40) experienced revenue growth. Average growth across all universities was 38% from 2009–2014.

Income sources

Distribution of income was stable over the six years to 2014.

The majority of income to the university sector is provided through Australian Government Financial Assistance (AGFA).

In 2014, nearly 60% ($16 billion) of university funding was through AGFA. This includes Australian Government grants (33%), the Higher Education Contribution Scheme–Higher Educational Loan Program (HECS HELP), Australian Government payments (18%) and Research funding (8%).

Fees and charges are the second highest source of funds ($6.2 billion), representing nearly one quarter of all funding (23%).

Given the significant proportion of income accounted for by Australian Government Financial Assistance, any change to this scheme has the potential to significantly impact revenue, with flow-on instability likely.

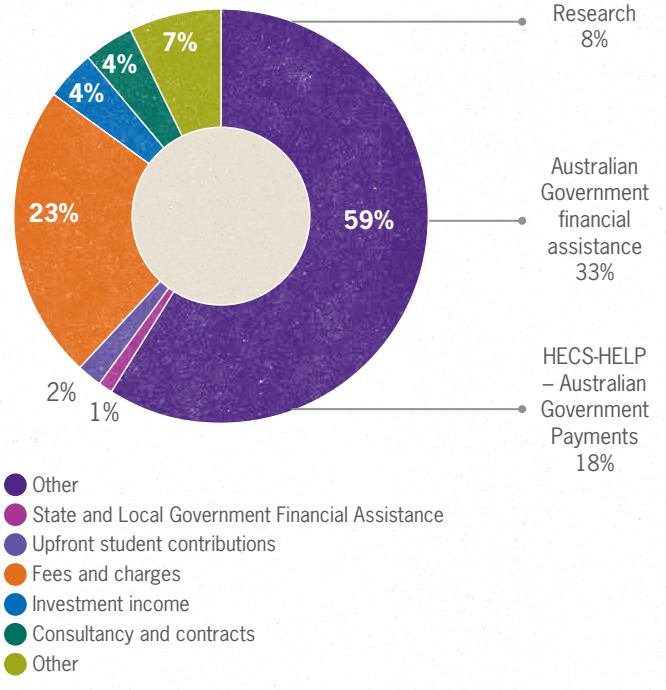
The distribution of income sources was similar across all quartiles, with the majority of funding flowing from AGFA.

The relative weight of different income streams is illustrated in the chart below. AGFA provides the greatest proportion of revenue for the whole university sector. It has been the primary source of income for Australian universities since 2009, and likely long before the data analysed here.

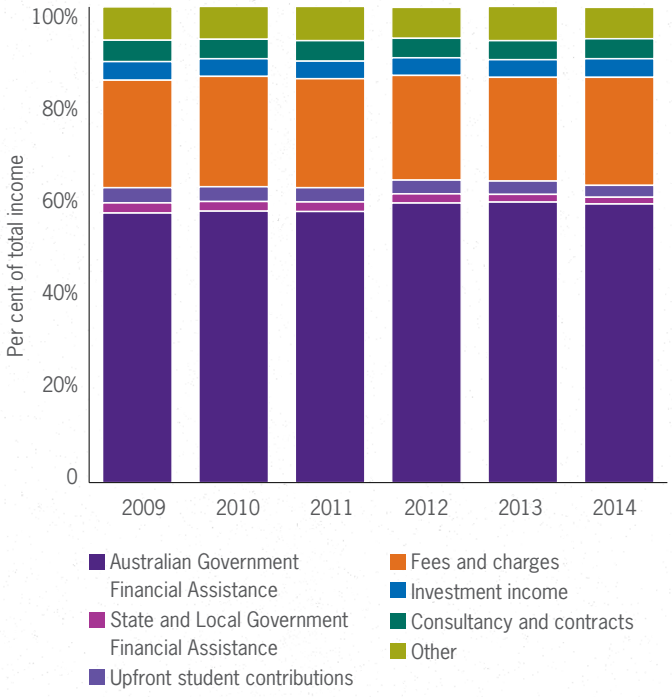
Fees and charges, the second greatest contributor to university income, account for approximately 23% of revenue over the same period. This revenue includes fee-paying international students.

Overall there was little change in the proportional contribution of funding sources to universities in Australia from 2009 to 2014.

DISTRIBUTION OF INCOME SOURCES 2014 (WHOLE SECTOR)



ANALYSIS OF SOURCE OF INCOME (WHOLE SECTOR)



Income sources: AGFA

Quartile 1 the least dependant on AGFA

Analysis of funding within university quartiles highlights a variety of income sources, with Quartile 1 the least dependent on government funding and able to attract significant funds through research grants.

In 2014, the contribution of AGFA varied from 54% of total income in Quartile 1 to 68% in Quartile 3.

The relative contribution of AGFA to Quartiles 3 and 4 has increased by between three and 5% from 2009 to 2014. Meanwhile, the proportional contribution of AGFA to Quartile 1 and 2 incomes has remained consistent over the period.

Quartile 1 has been able to offset Government funding with a significant portion of their income (20%) raised through research grants, compared with other quartiles (5–11%).

AFGA as a proportion of total revenue

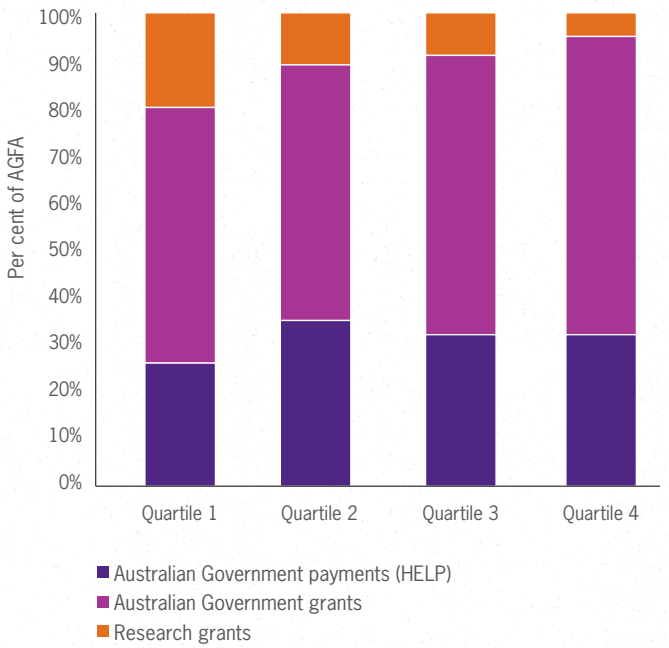
	Quartile 1	Quartile 2	Quartile 3	Quartile 4
2009	55%	59%	59%	57%
2010	55%	58%	62%	60%
2011	55%	58%	62%	60%
2012	56%	60%	64%	61%
2013	55%	62%	65%	63%
2014	54%	61%	68%	61%

On average, universities in Quartiles 2, 3 and 4 receive up to 61% of AGFA from Australian Government grants including the CGS, capital grants and other government grants.

This indicates that Quartiles 2, 3 and 4 are increasingly reliant on AGFA as a source of revenue to support ongoing operations. There is also a high reliance by these three quartiles on the Commonwealth Grants Scheme (CGS) and associated HELP payments.

Changes to the funding structure for the bottom three quartile universities would clearly have a greater impact.

ANALYSIS OF AGFA (2014)



Growth	Quartile 1	Quartile 2	Quartile 3	Quartile 4
$A'000	$1,502,623	$477,200	$239,716	$61,599
%	20%	11%	8%	5%

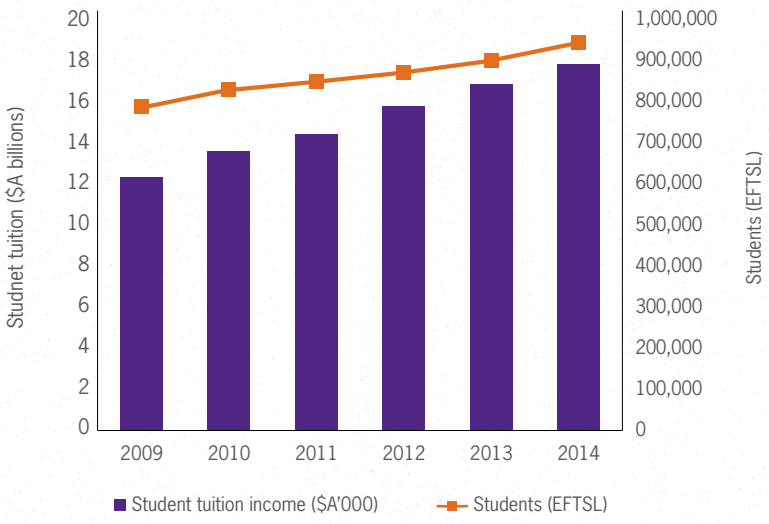
Income sources: Students

Revenue from student fees outstripped all other income streams

In 2014, income generated by student fees totalled $17.6 billion, 45% higher than in 2009. At the same time, student income increased 7.6% year on year, more than twice the growth rate of student EFTSL.

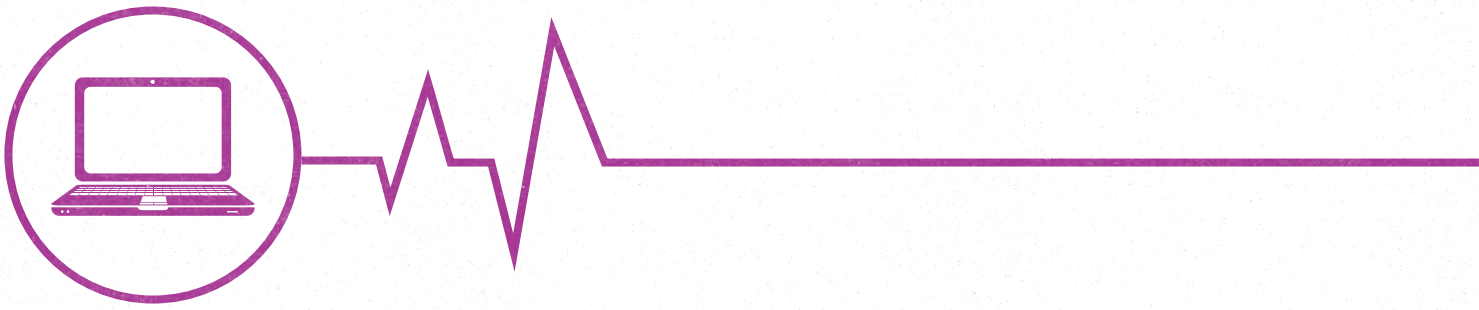
Growth in income from domestic and overseas students has grown exponentially since 2009, increasing from around $12 billion in 2009 to over $17 billion in 2014. The rising revenue can be attributed, in part, to increasing EFTSL. However, income per student (measured as EFTSL) has not increased at the same rate (only 3.7%), which suggests other factors like fee deregulation have influenced the rise.

STUDENT INCOME AND EFTSL 2009–2014



7.6%
CAGR for income raised by student tuition

3.7%
CAGR for EFTSL enrolled in Australian universities



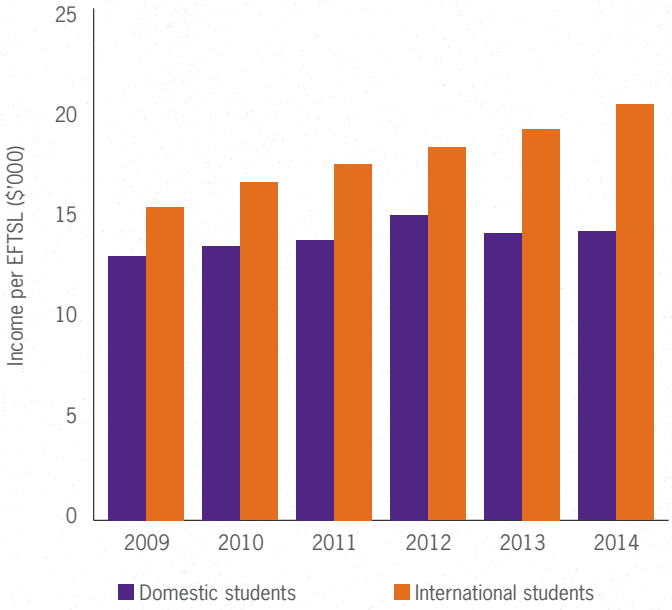
Across the sector international student tuition fees varied depending on the university attended and the discipline studied; however, on average were considerably higher than domestic student tuition fees.

Most domestic students are in Commonwealth Supported Places (CSP) funded through the CGS. Additional private funding comes from a student contribution, set by the universities, up to a ceiling determined by the government. Domestic students can defer payment of this through the HECS-HELP scheme.

University fees for international students are set by the market, with a legal floor price determined by government; however, this floor price is well below the fees actually charged by universities,[4] and income generated from international student fees is a significant revenue stream. Indeed some Australian Universities are charging fees commensurate with top US institutions for some courses.

On average, the income per international student is considerably higher than for domestic students. The gap within international fees and between international and domestic fees is widely variable and influenced by discipline, university and other market factors. Other research indicates that for most disciplines, the lowest international student tuition fees are approximately $12,000 per year. The median fee is between $21,000 and $28,000 per year and maximum fees are between $32,000 and $38,000, depending on the discipline.[5]

INCOME PER STUDENT EFTSL 2009-2014[6,7]



The demand-driven system fuels growth: The implementation of a contestable system in 2012 has resulted in strong growth in student numbers for most universities, with some experiencing EFTSL growth of up to 47.5%. This increase in student participation has placed pressure on the Federal Government to curb university sector spending, which is often achieved through a reduction in student fees or other grants to the sector, which in turn impacts the number and quality of services provided.

Surplus

Income growth has not translated into higher surpluses

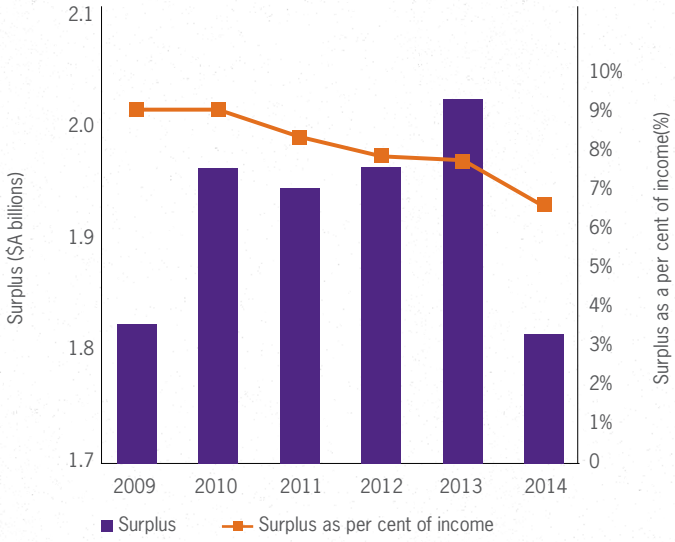
The surplus generated by the university sector in 2014 was considerably lower than 2013. This decrease follows a period of relative stability in surplus figures from 2010 to 2013.

In 2014, the sector-wide surplus of $1.8 billion represented 6.6% of total income. This is a decrease on the 2013 surplus of $2.0 billion, and represents a 1.2% reduction in the proportion of total income from 2012 (7.8%).

The total of universities in surplus has been consistent 2009–2014, with no more than three institutions reporting a deficit for any year during this period (from Quartiles 3 and 4).

The decrease in surplus as a percentage of income has been largely driven by an increase in employee benefits and on-costs which outstripped revenue growth in 2014 (6.6% growth in expenditure; 5.1% growth in revenue) compared with 2013 (4.8% growth in both expenditure and revenue).

SURPLUS WHOLE SECTOR



Growth	09-10	10-11	11-12	12-13	13-14
$A millions	140.5	(17.8)	18.6	61.6	(212.2)
%	7.7%	(0.9%)	1.0%	3.1%	(10.5%)

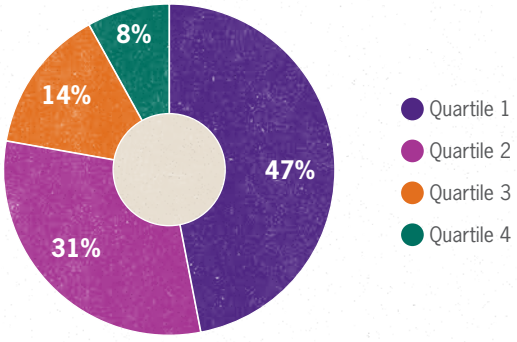
The distribution of surplus between quartiles was consistent 2009 –2014 for Quartiles 3 and 4; however, Quartile 1 gained in its share of surplus compared with Quartile 2.

The distribution of surplus has changed more than for income. In 2009, Quartile 1 universities had a total surplus of $854 million reflecting 47% of total university surplus. In 2014, this increased to 51% or $926 million.

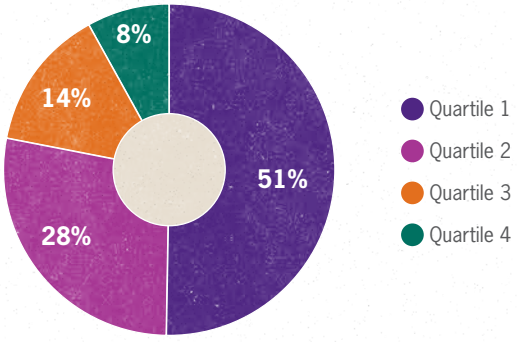
Conversely, from 2009–2014, the proportion of surplus held by Quartile 2 decreased from 31% to 28%, reflecting an absolute reduction in surplus of $69 million, from $573 million in 2009 to $505 million in 2014.

For Quartiles 3 and 4, the proportional distribution as well as the total magnitude of surplus remained consistent.

QUARTILE SIZE BY SURPLUS 2009



QUARTILE SIZE BY SURPLUS 2014



Surplus volatility was evident in all quartiles over the period.

While there was some initial consistency in sector surplus figures, surplus as a per cent of revenue decreased.

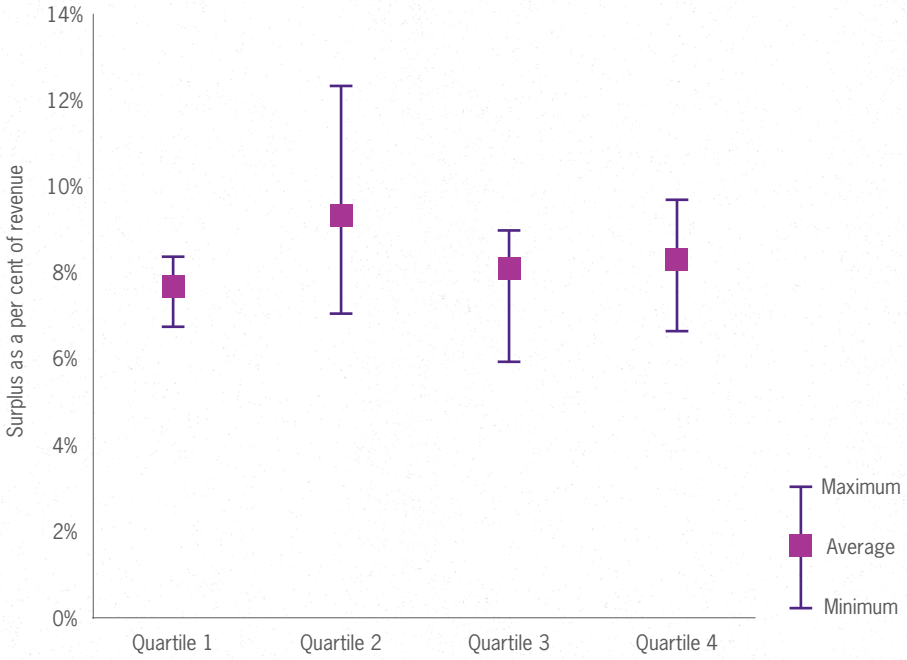
Analysis of the surplus as a percentage of income by quartile shows considerable variability. This was most evident in Quartile 2, where the surplus fell sharply following a 12% peak in 2010.

This variability indicates that change in surplus quantum is unrelated to the consistent increase in income seen across all quartiles. It is increased expenditure that is more likely to significantly impact surplus figures.

While some consistency was evident, particularly in the early years under analysis, from 2012–2014 the surplus decreased across the board, and in 2014 all quartiles recorded comparatively low surplus results.

A challenge for the sector is to ensure that future revenue growth is captured as surplus and reinvested. However, with uncertainty surrounding funding reforms, universities need to ensure they maintain sustainable margins.

SURPLUS AS A PER CENT OF REVENUE (2009-2014)



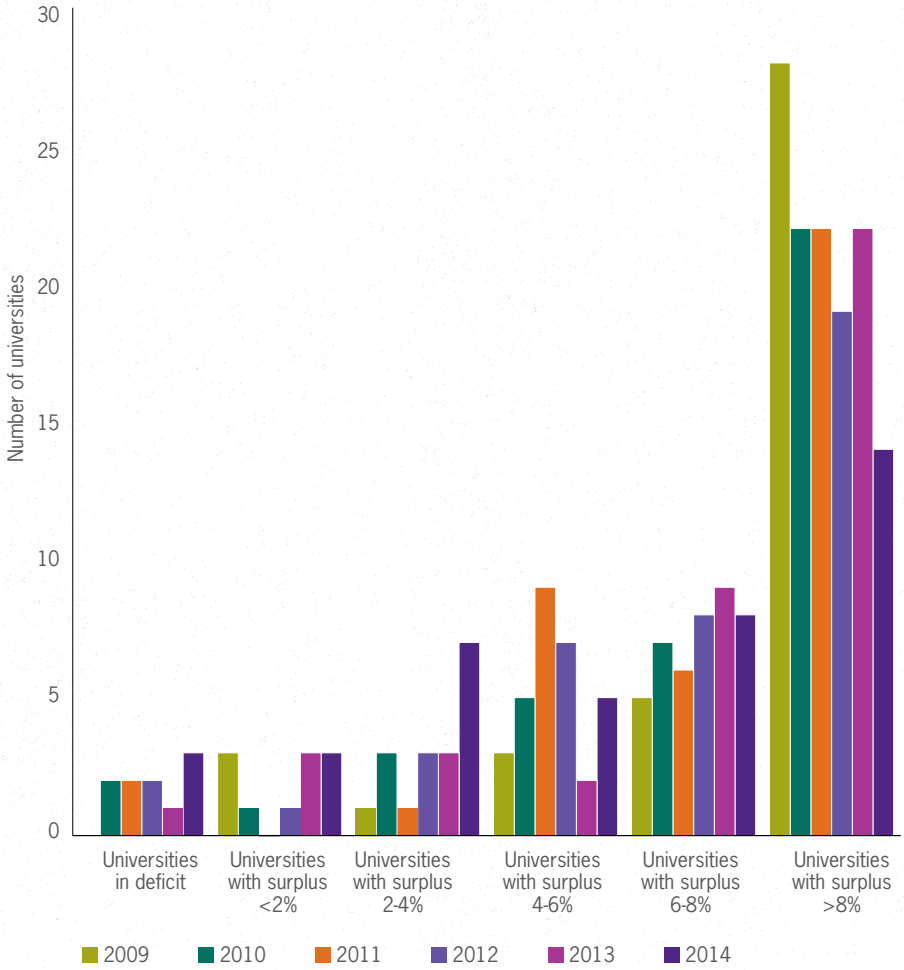
Universities with a high proportional surplus (>8%) have decreased by 50%, from 28 universities in 2009 to 14 universities in 2014.

Each year, three or less universities operated in deficit over the period 2009 –2014. Additionally, different institutions experienced deficit results from year to year.

More than 50% of Australian universities were operating with more than 8% surplus as a per cent of revenue 2009–2011. However, over the period 2009 to 2014 this number decreased considerably, from 28 (70%) in 2009 to 14 (35%) in 2014. While the magnitude of the proportional surplus decreased, this change did not resulted in more universities with low (two to 4%) or very low (< 2%) surplus as a per cent of revenue.

The majority of Australian universities (55%) are currently achieving a surplus of more than 6%; however, the trend in declining surplus as a per cent of income (see page 13 Student income and EFTSL 2009-2014) suggests that the number of universities achieving such surpluses greater than 6% will continue to decrease.

NUMBER OF UNIVERSITIES BY SURPLUS AS PER CENT OF REVENUE



Despite growth, sector surplus is at a five year low:
In 2014, across all quartiles, surpluses decreased to below 2009 levels notwithstanding various cost reduction strategies such as shared services to consolidate back office functions. Yet despite this, Australian universities remain financially viable.

Analysis of operational expenditure

Operational expenditure has grown consistently at 6.9% per annum

Sector-wide, total operational expenditure grew 6.9% (annual rate) over the period, from $18.2 billion in 2009 to $25.5 billion in 2014.

The magnitude of growth was relatively consistent from 2009 to 2012, increasing by approximately $1.5 billion per year. Incremental growth in expenditure from 2012–2013 ($1.1 billion) was followed by growth from 2013–2014 ($1.6 billion).

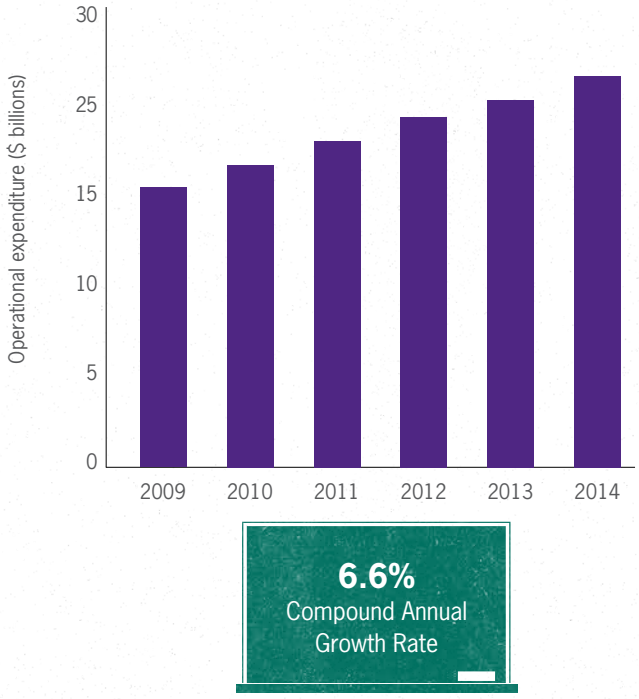
In the six years 2009–2014, total sector expenditure increased by 40% from $18.2 billion to $25.5 billion. This is higher than the related increase in sector revenue of 36% (see page 9). The impact of this growth in operational expenditure compared with income can be seen in the analysis of surplus (see page 15).

Employee benefits and on-costs were consistently the most significant source of university expenditure from 2009 to 2014.

The main source of operational expenditure for universities over the period was, and remains, the cost of staff (58%). As a proportion of total expenditure this figure has remained constant. Other expenses accounts for just over 30% of all expenditure, and include scholarships, non-capitalised equipment, advertising, net losses on property, plant and equipment, and other expenditure.

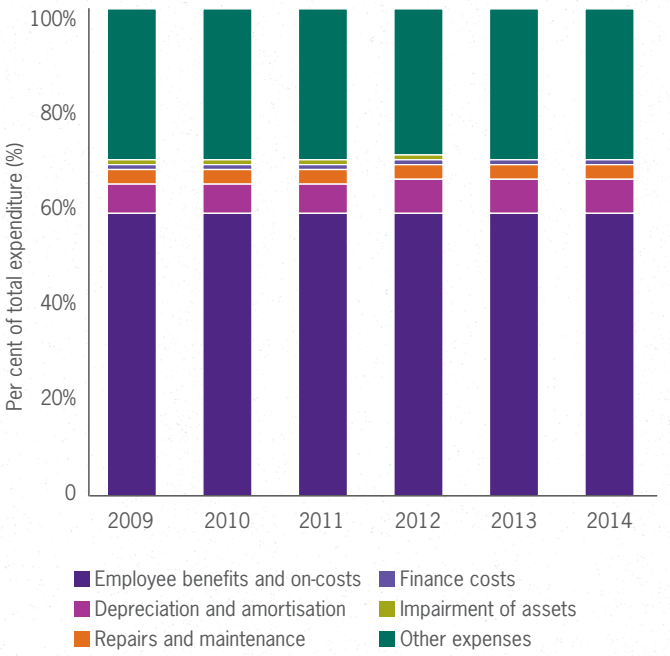
The distribution of all sources of expenditure has remained relatively consistent over the period, suggesting that the increase in absolute expenditure has been proportional across all sources.

OPERATIONAL EXPENDITURE – WHOLE OF SECTOR ($'000)



Growth	09-10	10-11	11-12	12-13	13-14
$A billions	1.5	1.6	1.5	1.1	1.6
%	8.1%	8.0%	7.3%	4.8%	6.6%

ANALYSIS OF SOURCES OF EXPENDITURE (WHOLE SECTOR)



Workforce

Staff costs in 2014 totalled $15 billion, 54% of total university income

Staff costs represent the largest expenditure for universities. From 2009 to 2014 total staff expenditure increased by $4.5 billion, a growth rate of 7.4%.

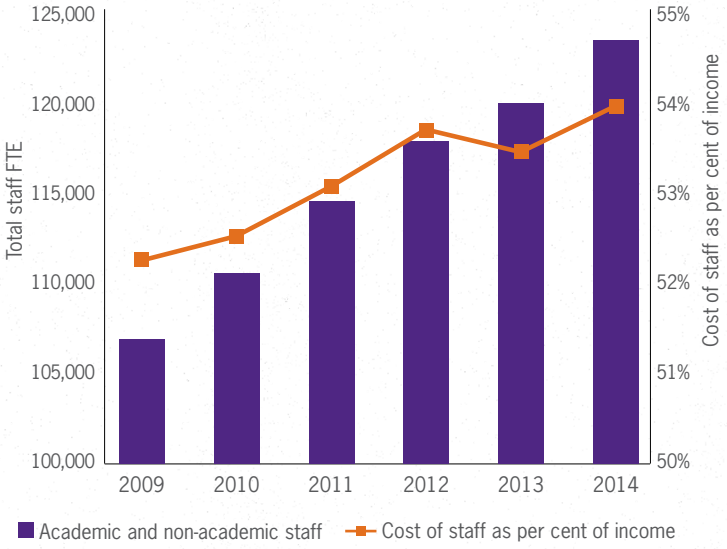
Staff FTE increased consistently from 2009 to 2014 (2.9%). Over the same period, student EFTSL increased by an annual growth rate of 3.7%, illustrating slower growth in staff than that experienced in the student cohort. Similarly, the total growth over the period for staff was approximately 15% compared with 20% growth achieved in student EFTSL (20%) over the same period (see page 13, Income per student EFTSL 2009-2014).

Staff costs for the whole university sector as a percentage of total income have remained consistently above 50% from 2009 to 2014. Total staff costs increased by 40.7% across the entire sector over the period 2009–2014 with a slightly larger increase in the period 2009 – 2011 (17.6%) compared with 2011 – 2013 (12.8%).

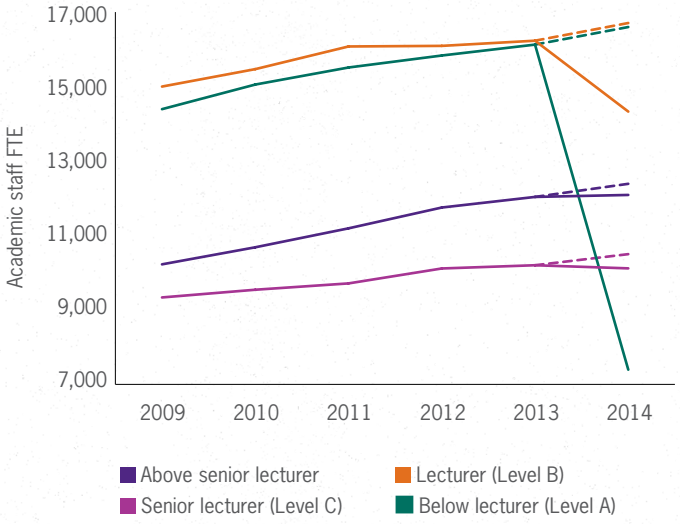
Furthermore, while staff FTE increased by 15% over the period, total staff costs far outstripped this growth, increasing by 40.7% over the period (2009–2014). This suggests a greater cost per staff FTE which may be the result of changes to the composition of the university workforce. Data illustrates an increasingly senior academic workforce, whereby Above Senior level academic staff have increased by 21% compared with only 15% for Below Lecturer level staff.

There has been an increasing trend in the casualisation of the academic workforce in Australian universities.[8] This is mirrored internationally, where North American universities are seeing a decline in the number of tenured positions[9]. Increasing teaching-only or research-only positions show diversification in academic opportunities; however, there has been virtually no expansion of academic appointments in the lower ranks[10]. The impact of this is likely to be an ageing, senior academic workforce with limited career opportunities for junior academics.

ALL STAFF FTE AND COST OF STAFF AS PER CENT OF INCOME[11]



ACADEMIC STAFF FTE BY REMUNERATION LEVEL[11]



*Dotted line represents estimated total including casual/ contract staff

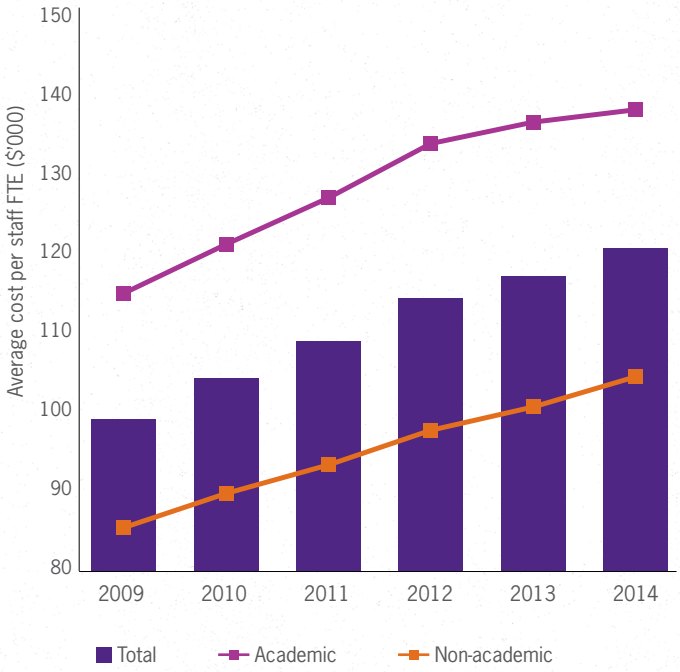
Cost per staff FTE has increased at a higher rate than national growth rates for employee costs.

There is increasing pressure on staffing costs, which increased by 21.7% per FTE over the period 2009-2014 in contrast with staff FTE growth which increased 15% over the same period.

Average costs per staff FTE were $120,477 in 2014. This represents an increase of $3,569 (3.1%) from 2013, which reflects an increase in growth compared with the 2012-2013 which indicated growth of only 2.4%. Despite this slowing from 2012-2013, sustained growth of approximately 4.9% per annum was achieved from 2009 to 2012, thus this recent growth indicates a return to previous growth rates. Total expenditure on employees increased by 21.7% over the period. Academic staff costs increased by 37.9%, while academic staff FTE increased by 14.9%. Similarly, average non-academic staff costs increased by 41.8% while non-academic staff FTE increased by 16.1%.

On average, growth in staff costs per FTE increased by more than the average consumer price index annually. The average salary growth in Australia in 2014 was 3.6%.[12] The considerable increase, particularly in academic staff costs, is likely to be due to an increasing seniority of academic staff (see page 19).

AVERAGE STAFF COST PER MEMBER OF STAFF[11]



30%
Total growth in cost per staff member

5.4%
Compound Annual Growth Rate

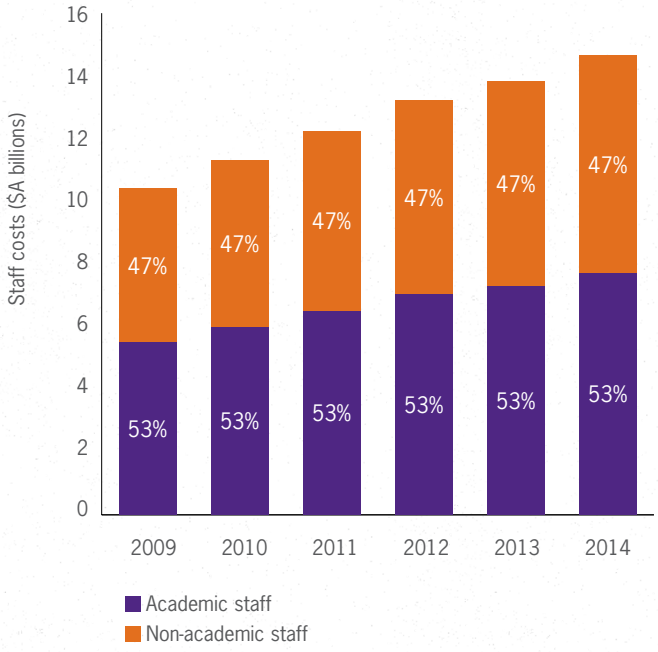
Growth %	09-10	10-11	11-12	12-13	13-14
	5.2%	4.4%	5.0%	2.4%	4.7%

Total staffing costs increased by 40.7% over the period from 2009–2014. This increase was driven equally by increases in academic and non-academic staff costs.

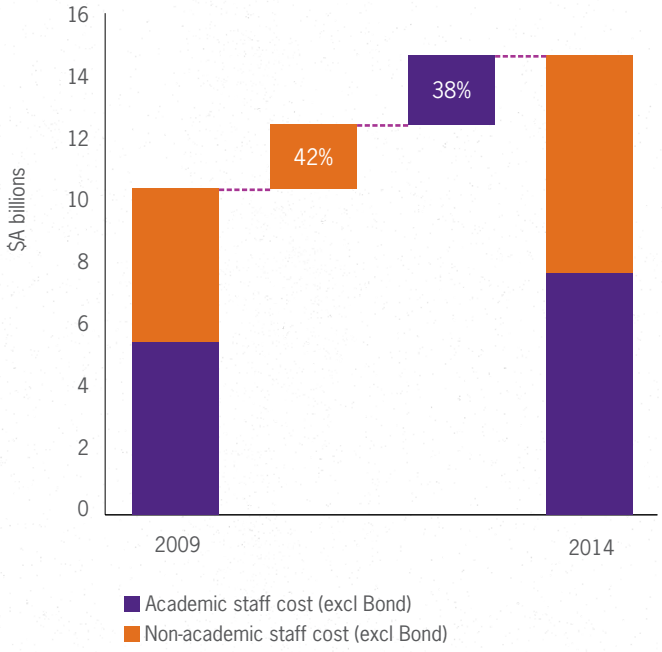
The consistent distribution of both academic (47%) and non-academic (53%) staff is reflected across the entire university sector from 2009 to 2014.

Growth in expenditure for both academic and non-academic staff from 2009 to 2014 was 38% and 42% respectively. The absolute growth was greater for academic staff ($2.1 billion compared with $2.05 billion for non-academic staff), however, proportionally it was consistent across both staffing types.

TOTAL STAFF EXPENDITURE BY STAFF TYPE[13]



GROWTH IN STAFF EXPENDITURE BY STAFF TYPE[13]



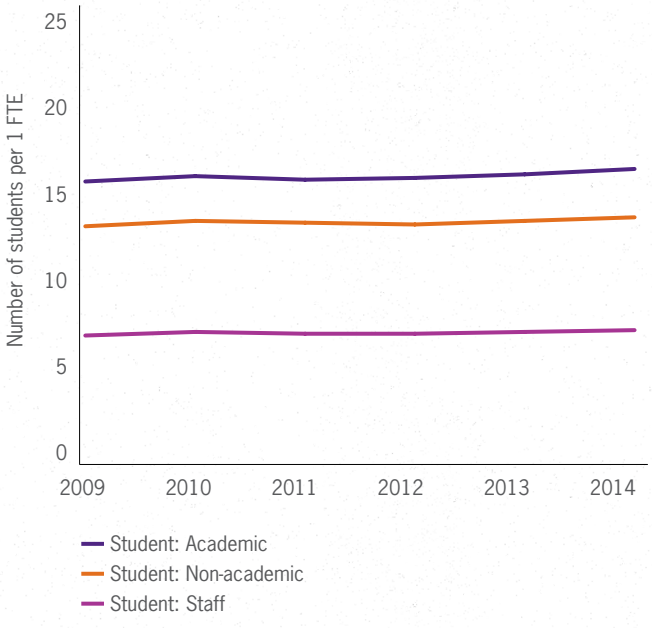
We see a recent rising of the ratio of students to academic staff across the sector.

Across all universities, the ratio of staff to students remained consistent from 2009 to 2014 across academic and non-academic staff.

The ratio of students to staff has not changed significantly from 2009 to 2014; however, it is beginning to trend upwards. This is particularly evident for the ratio of students to academic staff which increases from 15.8 in 2009 to 16.5 in 2014. This can be related to the higher growth in student EFTSL compared with staff FTE (see page 28). The same increase is evident for non-academic staff, however, to a much lesser degree, increasing from 13.3 in 2009 to 13.8 in 2014.

Whilst student to staff ratios are not a reliable measure of education quality, these ratios do offer some insight into the potential impact of the changing academic workforce on students in the future. The true impact of an increasing number of students per academic staff FTE will not be known until the trend has had time to develop.

RATIO OF STUDENT EFTSL TO STAFF FTE

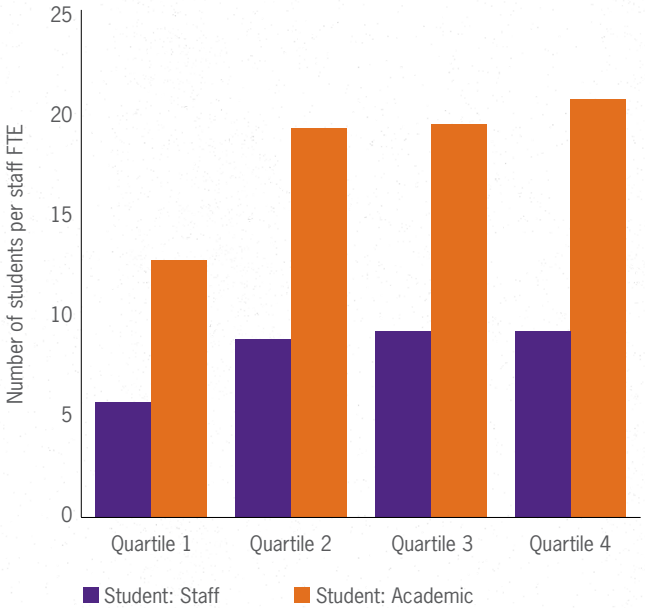


Quartile 1 had a lower ratio of students to staff(both total staff and academic staff) than the other three quartiles.

Within the quartiles the ratio of students to total staff is broadly similar, ranging from 5.7 students per staff FTE in Quartile 1 to 9.2 students per staff FTE in Quartile 4.

The gap between quartiles widens significantly when investigating the ratio of students to academic staff. On average, Quartile 1 universities have 12.7 students per staff FTE whereas Quartiles 2, 3 and 4 have a ratio of between 19.2 and 20.6 students per staff FTE. This reflects a higher proportion of academic staff at Quartile 1 universities compared with the other quartiles, further differentiating these universities.

RATIO OF STUDENT EFTSL TO STAFF FTE (2013)



Increasing pressure on staff costs: The total number of academic and non-academic FTE has increased consistently with the average seniority of academic staff increasing markedly. Staffing costs are also increasing, in part due to the increasing casualisation of the junior academic workforce and contracting of non-academic staff.

Capital expenditure

Capital expenditure peaked in 2012 at $3.7 billion – currently at $3.1 billion.

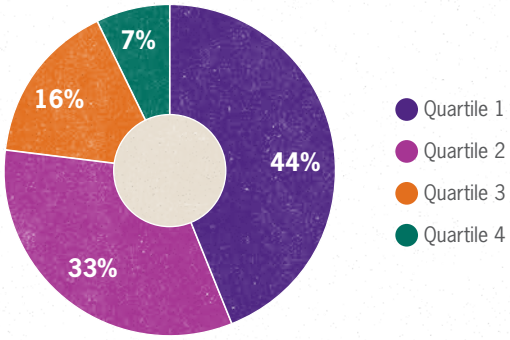
Capital expenditure in 2014 ($3.1 billion) was 7% higher than expenditure in 2009 ($2.9 billion); however, this is still 15% lower than peak expenditure achieved in 2012 of $3.7 billion.

Over the 2009–2014 period the sector saw a considerable increase in capital expenditure to 2012, followed by a decline which reflects the level of capital expenditure of five years ago (2010).

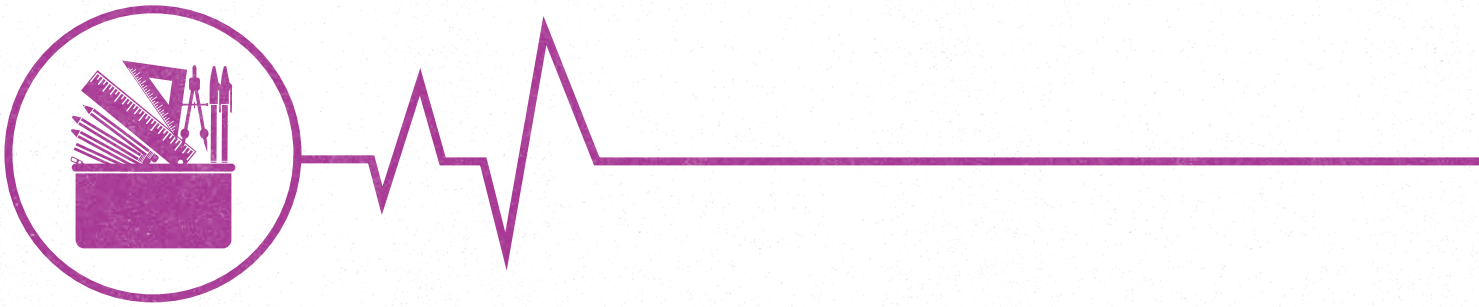
While overall sector revenue increased steadily, capital expenditure showed a more varied trend, increasing at the beginning of the period then decreasing at the end to almost baseline values.

From 2009 to 2014, Quartile 1 universities accounted for 44% of total sector capital expenditure. This profile of capital expenditure is very different to that of both total revenue and total operating expenditure, where Quartile 1 accounts for more than half of each category. This suggests that the smaller quartiles are investing more in capital projects, which may indicate a strategy to improve competitiveness with the dominant Quartile 1 universities.

CAPITAL EXPENDITURE FROM 2019-2014



44%
of capital expenditure was by Quartile 1 universities



While capital expenditure increased by $199 million across the sector from 2009–2014, capital spending by Quartile 1 actually decreased by $257 million.

This decrease contrasts with large increases in capital spending by Quartile 2 ($105 million), Quartile 3 ($112 million) and Quartile 4 ($239 million) institutions.

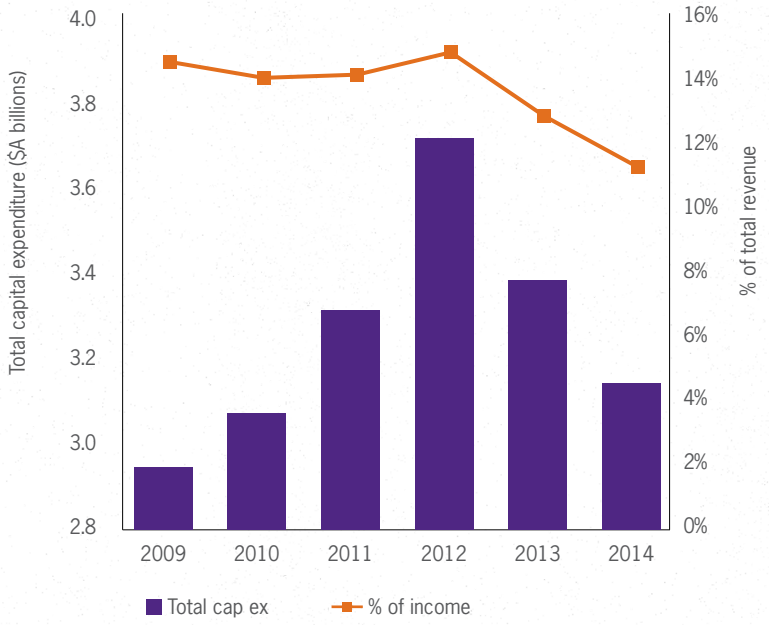
Capital spending was relatively consistent from 2009 to 2012, growing by approximately 8% compounded annually; however, there was a decrease from 2012 to 2014, compounded annually of 5%.

The spike in expenditure in 2012 was driven by significant capital investment through government grants which were available at the time,[14] including the Australian Government's Capital Development Pool.

Given that long-term borrowings would ordinarily fund capital projects where government funding is not available, a decrease in capital expenditure may reflect a rising cost of these funds and therefore drive lower capital spending.

Compared with capital expenditure in the UK which has been, on average, 12% of total revenue, capital expenditure in Australia has been considerably higher with a 14% average over the period 2009–2014.

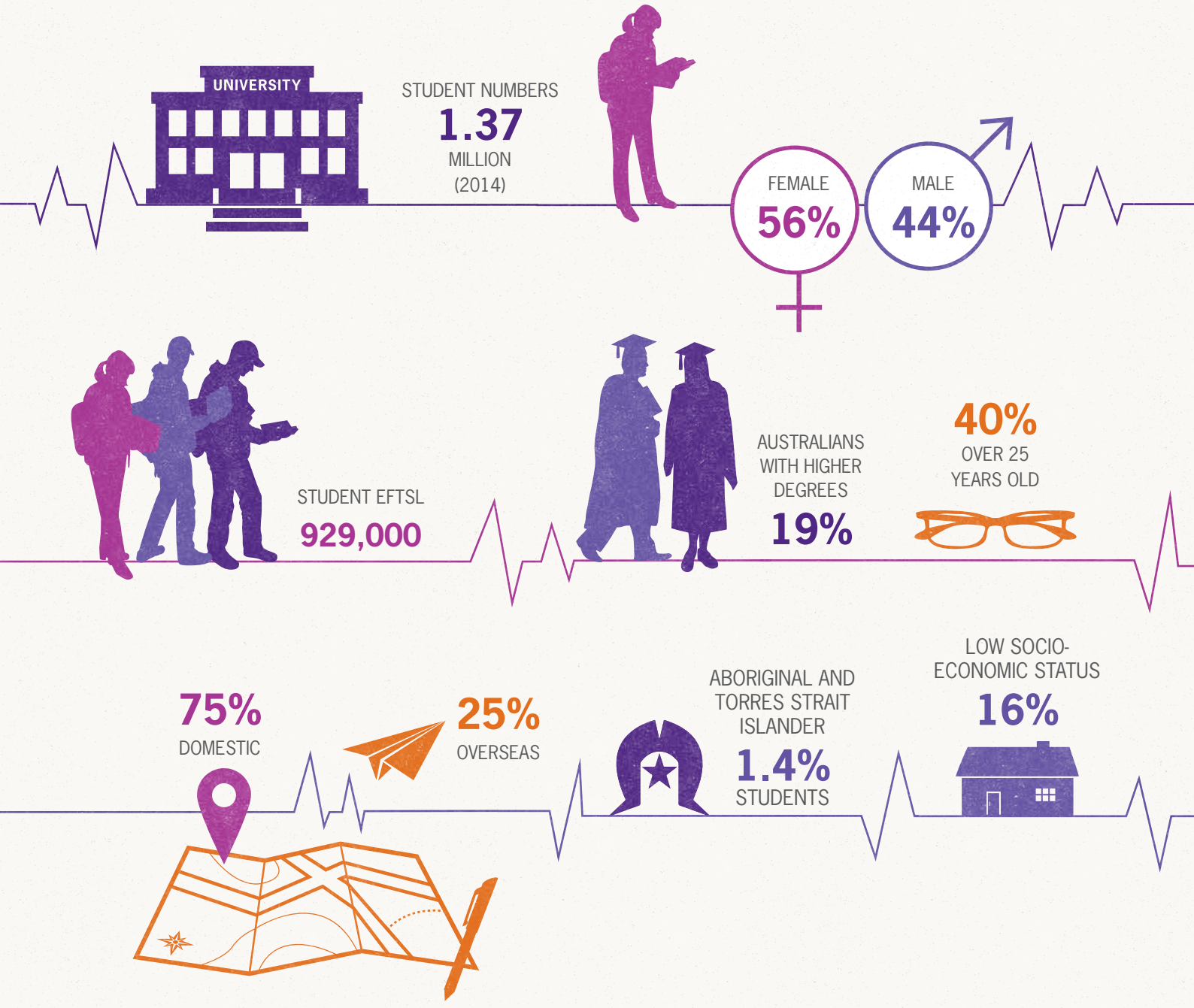
CAPITAL EXPENDITURE WHOLE SECTOR



Growth requires investment: Investment is necessary for universities to achieve differentiation and growth in an increasingly competitive market. Uncertainty in the sector regarding funding and previously proposed reforms should not stop investment. In an age where content is freely accessible, universities need to find unique selling points and invest in order to pursue system and capacity-related efficiencies.

Students

STUDENT DEMOGRAPHIC[15,16]



Students: Changing demographics

Sector reforms have historically resulted in changes to the student profile

Over recent decades the demographic profile of university students has undergone significant change, most significantly in the participation rates of women and people from lower socio-economic areas.

The number of students enrolled in university degrees has increased more than six-fold since the early 1970s, when there were less than 200,000 students. At the same time, the proportion of the population aged over 15 with a Bachelor degree or higher was 18.8% in 2011 compared with only 2% in 1971. This illustrates the increased accessibility of university places made possible by the abolition of student fees in 1974, and a corresponding overall increase in the level of education attained by the population.[17,18]

Since the late 1980s females have held the majority of university places compared with males. This is a significant change since the establishment of the university system, where males held up to 80% of places. In 2013, females held 56% of university places compared with 44% held by males. This is not only reflective of increased access, but changing social and political expectations that have occurred over this period.

The partial uncapping of student places for universities in 2010, followed by their complete uncapping and a demand-driven funding system has increased accessibility to university degrees more than ever before. While a causal relationship cannot be drawn, there has been a simultaneous increase in demand for university places.

Disadvantaged students have historically been underrepresented in the university sector. Despite increased participation over the past decades, people from lower socio-economic backgrounds remain in the minority of university enrolments. However, since the implementation of demand-driven funding, a gradual increase in the representation of disadvantaged students can be identified.

Modest increases in participation by Indigenous students are also clear since demand driven funding was introduced. As a proportion of their total population, however, Indigenous students remain underrepresented (1.75% of the total Indigenous population in 2011) compared with domestic students (3.9% of total Australian population in 2011).

The choice of university is becoming increasingly influential for students when considering the longer term consequences of university attended.

Increasing access to information about post-university outcomes is indirectly impacting students' consideration of which university to attend. The *My University* website publishes some university-specific information, while the Australian Graduate Survey reports employment and salary achieved by graduates four months post-completion.

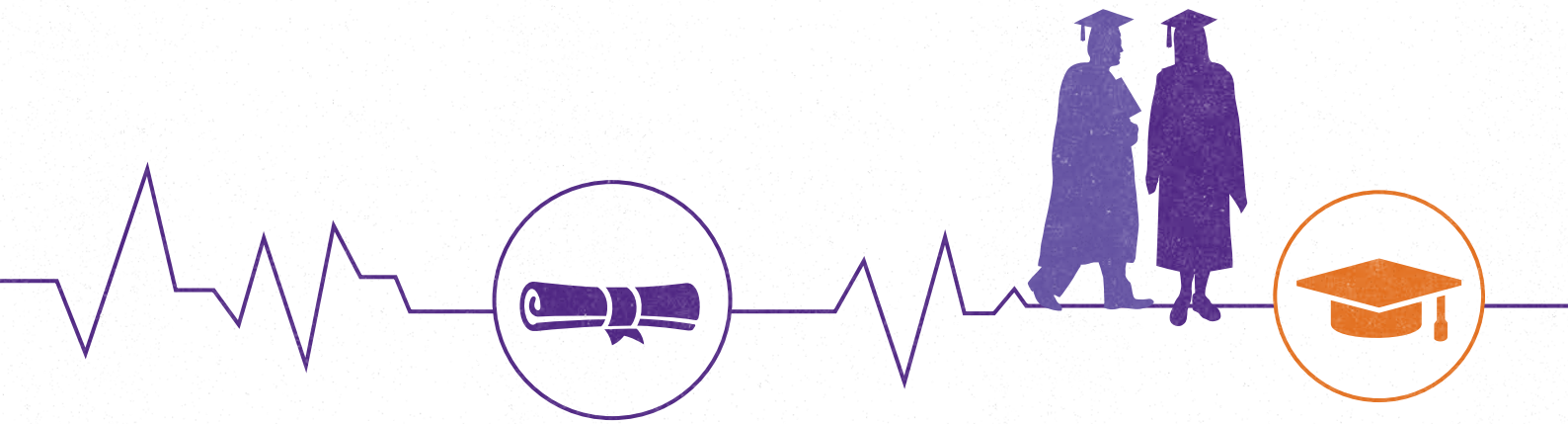
Depending on the level of analytics and variables considered, attending some universities may result in higher salaries. When controlled for variables such as the Australian Tertiary Admissions Rank, gender and course studied, choice of university does not have a significant impact on graduate level earnings. However, a University of Melbourne and Australian Government survey (the 'Household, Income and Labour Dynamics in Australia' survey), while suggesting that employment rates are similar across university groups, shows a lifetime income advantage (6%) was achieved through attending either a Group of Eight[19] or a Technology University[20] compared with other universities.

Students are encouraged to consider all aspects on offer by universities and to get information from websites, government sources (*My University*), campus visits and open days. Whether increased knowledge and access to information will result in a change to the buying power of students is yet to be seen.

The ability of universities to differentiate from each other and offer unique selling points to potential students will become increasingly important in an age where students are more educated about the potential outcomes of their choices. An increasing proportion of mature age students (40% of students aged over 25 years in 2011) also introduces a new element in the choice of university.

Investment in differentiation will become a necessity for universities in the future.

The nature of student demographics is changing:
The number of students enrolled in universities has increased dramatically since the implementation of contestability. The majority of change, however, has occurred since the 1970s rather than in the last five years. During this time the gender balance shifted toward more female students (56%), more mature-aged students (40%) and more people with degrees. Additionally, one in four enrolments is now for international students.



Students: EFTSL

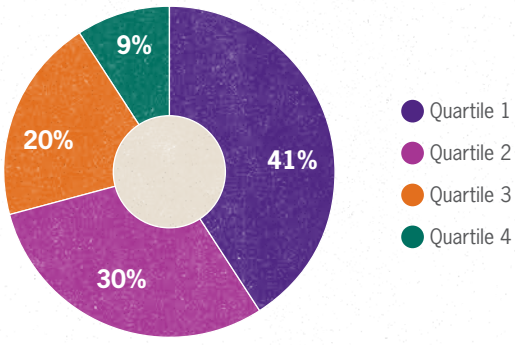
Distribution of students between and within quartiles has remained consistent since 2009.

Quartile 1 universities consistently account for more than 40% of all students studying in Australia.

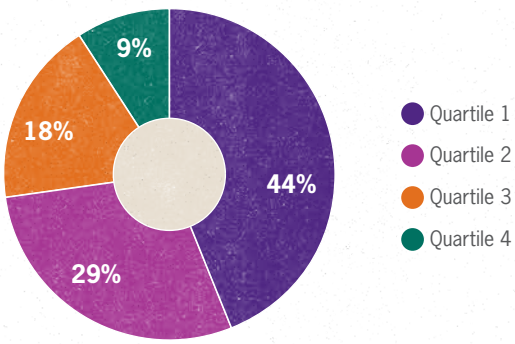
More than 70% of all students studying in Australia are enrolled in Quartile 1 (41%) and Quartile 2 (31%) universities. This fuels the dominance of these institutions regarding commonwealth supported places, allowing more students to attend and therefore more AGFA to be attributed to these universities. The distribution of EFTSL across quartiles has not changed significantly over the 6 year period.

Student income is distributed among quartiles proportionate to the student EFTSL. This is further evidence that university revenue is heavily reliant upon students.

DISTRIBUTION OF EFTSL ACROSS QUARTILES (2014)



DISTRIBUTION OF STUDENT INCOME ACROSS QUARTILES (2014)



The proportion of overseas and domestic students has remained relatively constant since 2009, with a ratio of approximately one overseas student to three domestic students.

Over the period 2009–2014, the student cohort of Australian universities comprised, on average, 73% domestic students and 27% overseas students. This ratio has been relatively stable since 2009; however, from 2012 to 2013 there was a decrease in the proportion of overseas students from a peak of 28.7% in 2010, to 25.3% in 2013.

73%

AVERAGE PROPORTION OF DOMESTIC STUDENTS ENROLLED AT AUSTRALIAN UNIVERSITIES

27%

AVERAGE PROPORTION OF OVERSEAS STUDENTS ENROLLED AT AUSTRALIAN UNIVERSITIES

Appendix 1
Methodology

Australian Department of Education financial information was analysed for the period 2009 to 2014. Data from 39 public universities and 1 private university were included.

This report is based on quantitative analysis of available data from the university sector. Data were analysed retrospectively and any identified trends reflect the period under analysis. The survey uses US DoE methodology, the details of which are overleaf.

Data source

- Financial information used in this analysis was obtained from the Australian Department of Education (DoE) for the period 2009 to 2014. This dataset uses information extracted from the consolidated reports presented by DoE for each Australian public university. The public universities which have been included in the analysis have likewise been derived from the original DoE data source.
- Financial information for Bond University was derived from publicly available sources, including its Annual Reports from 2014, 2013 and 2011, which reported current and previous year data.
- Staff and student data were also sourced from the Australian Department of Education for the period 2009–2014. Data from 2009 – 2013 data included permanent, casual and contract staff. Data from 2014 excludes casual and contract staff. In order to ascertain an estimated 2014 total result for permanent, casual and contract staff, previous years' proportional size of the casual workforce was included to offer a full 2014 approximate result.
- Student data counts combined courses as two fields of education; therefore, the totals of some fields may be less than the sum of all broad fields of education. This was not considered to significantly impact the outcome of the analyses.
- The student data from 2014 are based on half-year results. Equivalent fulltime student load has been estimated for 2014 by doubling the current published results.

Universities

- In line with DoE reporting, 39 public universities were included in the analyses. This reflects all public Australian universities that receive Commonwealth Grant Scheme funding.
- One private university was included in the analyses. While there are four private universities currently operating in Australia, Bond University was the only institution with data available for the period under analysis. Future analyses may include other private universities as data becomes available.

Methodology – US Department of Education Test of Financial Responsibility

This Test of Financial Responsibility developed by the US Department of Education[21] is designed to take into account an institution's total financial resources and provide a combined score of the measures of those resources along a common scale. The combined view of different aspects of an institution's financial health includes capacity to cover future expenses (primary reserve ratio), the ability to meet financial liabilities (equity ratio) and the ability to generate funds (net income ratio). Its primary purpose is to identify institutions that are at financial risk, using a scale from -1 to 3.

The US DoE considers that any institution with a composite score of 1.5 or greater is financially responsible and requires no additional oversight. An institution that scores between 1.0 and 1.4 is deemed to be financially responsible subject to additional monitoring. Any institution with a composite score of less than 1.0 does not meet the standards of financial responsibility and may not be permitted to participate in certain Federal US funding programs.

Methodology to calculate the composite ratio[22]

Stage	Description
STAGE 1 Computation of ratios	Primary reserve ratio = expendable net assets ÷ total expenses
	Equity ratio = modified net assets ÷ modified assets
	Net income ratio = change in unrestricted net assets ÷ total unrestricted revenue
	Primary reserve strength factor score = primary reserve ratio x 10
	Equity strength factor score = equity ratio x 6
STAGE 2 Computation of strength factors	Net income strength factor score = 1 + (net income ratio x 25) (if ratio is negative)
	Net income strength factor score = 1 + (net income ratio x 50) (if ratio is positive)
	(Note that any strength factor >3 is capped at 3; any strength factor <-1 is limited to -1)
STAGE 3 Computation of composite score	Composite score = primary reserve strength factor x 40% + equity strength factor score x 40% + net income strength factor score x 20%

**Notes:

- Expendable net assets = total net assets (net of pension liability) – endowments – fixed assets (including intangibles) + pension liabilities + long term borrowing
- Modified net assets = total net assets (net of pension liability)
- Modified assets = fixed assets + current assets
- Some adjustments have been made to make relevant to the Australian context
- Scores are rounded to one decimal place

Appendix 2
Endnotes

1	Department of Education and Training, Australian Government.
2	2014 data has been obtained through the consolidated financial records of the Australian Government Department of Education.
3	Bond University is the only Australian private university offering undergraduate and postgraduate courses, for which financial data could be obtained for the 2009-2014 period under analysis.
4	Department of Education and Training 2012 Higher Education Provider Guidelines, ch. 6.The floor price is intended to prevent Commonwealth funding being used for international students.
5	Norton, A. & Cherastidtham, I. 2015 University fees: what students pay in deregulated markets, The Grattan Institute, Melbourne
6	Full year EFTSL results are not available for 2014, thus 2014 data have been based on half-year results extrapolated to a full year equivalent.
7	Domestic income is derived from Commonwealth Grants and other grants, plus HECS HELP contributions.
8	Leung, C. 2015, 'Casualisation of the academic workforce in tertiary education: Time to rethink your engagement strategy for sessional academics', The Voice Project, accessed 27 November 2015 <http://www.voiceproject.com/articles/323/casualisation-academic-workforce-tertiary-education-time-rethink-your-engagement>
9	Kaplan, K. 2010, Academia: The changing face of tenure, Nature, 468, 123-125
10	Group of Eight Australia 2014 'Policy Note Changes in the composition of Australia's higher education workforce,' Policy Paper, The Group of Eight Ltd.
11	Staff FTE 2009-2013 includes both permanent and casual or contract staff. 2014 data from DoE excludes casuals; thus, an estimation of casual workforce has been used based on previous years' proportional workforce.
12	Australian Institute of Management 2014 National Salary Survey, Australian Institute of Management, Sydney.
13	Bond University does not separate income by staff type thus was excluded from these analyses.
14	These grants were replaced by the Higher Education Infrastructure Working Group in 2015 which will identify requirements for institutions to create high quality infrastructure in the future.
15	Australian Bureau of Statistics, 2011 Census of Population and Housing, Australian Bureau of Statistics, Australia.
16	Parr, N. 2015 'Who goes to university? The changing profile of our students', The Conversation, accessed 18 September 2015, <www.theconversation.com>
17	Department of Education and Training, Australian Government.
18	Australian Bureau of Statistics, Australian Government.
19	Group of Eight Universities: Australian National University, Monash University, The University of Adelaide, The University of Melbourne, The University of New South Wales, The University of Sydney, The University of Western Australia, The University of Queensland.
20	Technology Universities: Curtin University, Queensland University of Technology, RMIT, University of South Australia, University of Technology, Sydney.
21	Calculations for US DoE methodology have been based on Grant Thornton UK LLP Financial Health of the Higher Education Sector report, 2014.
22	Grant Thornton UK LLP, 2014, 'Managing through uncertainty; Financial Health of the Higher Education Sector 2014', accessed 27 November 2015 <http://www.grant-thornton.co.uk/Global/Lenders-%20ReportsandPresentations/1/Managing%20through%20uncertainty.pdf>

Key contacts

Andrew Trnacek
Partner – Public Sector Education lead
Growth Advisory

T +61 3 8663 6121
E Andrew.trnacek@au.gt.com

Scott Hartley
Partner – Head of Public Sector Advisory
Growth Advisory

T + 61 8663 6143
E scott.hartley@au.gt.com

Ian Brooks
Partner – Queensland Public Sector Lead

T +61 7 3222 0310
E ian.brooks.gregg@au.gt.com

Rory Gregg
Partner – NSW Public Sector Lead

T +61 2 8297 2531
E rory.gregg@au.gt.com

Michael Hillgrove
Partner – W.A. Public Sector Lead

T +61 8 9480 2150
E michael.hillgrove@au.gt.com

About Grant Thornton

40,000+
people globally

130+
countries

$4.7BN
worldwide revenue 2014 (USD)

1,200+
people nationally

Grant Thornton is one of the world's leading organisations of independent assurance, tax and advisory firms.

These firms help dynamic organisations unlock their potential for growth by providing meaningful, forward looking advice. Proactive teams, led by approachable partners in these firms, use insights, experience and instinct to understand complex issues for privately owned, publicly listed and public sector clients and help them to find solutions.

Grant Thornton Australia has more than 1,200 people working in offices in Adelaide, Brisbane, Cairns, Melbourne, Perth and Sydney. We combine service breadth, depth of expertise and industry insight with an approachable "client first" mindset and a broad commercial perspective.

More than 40,000 Grant Thornton people, across over 130 countries, are focused on making a difference to clients, colleagues and the communities in which we live and work. Through this membership, we access global resources and methodologies that enable us to deliver consistently high quality outcomes for owners and key executives in our clients.

Industry specialisations

- Automotive Dealerships
- Energy & Resources
- Financial Services
- Food & Beverage
- Health & Aged Care
- Hospitality & Tourism
- Life Sciences
- Major Projects & Infrastructure
- Manufacturing
- Not-for-Profit
- Professional Services
- Public Sector
- Real Estate & Construction
- Retail
- Technology & Media

Our services to dynamic businesses

Tax

- Business planning tax advice
- Corporate tax risk management
- GST & indirect taxes including fuel tax credits
- Fringe benefits tax
- Employment taxes
- International tax
- Transfer pricing
- Expatriate taxes
- Research & development
- Corporate advisory services

Audit & assurance

- External audits
- Internal audits
- Reviews of financial reports
- Technical IFRS & accounting advice
- IFRS training
- Expert accounting & audit opinions
- Systems & controls reviews
- Compliance audits & reviews

Private advisory

- Business & strategic planning
- Compliance services
- Tax advisory services
- Private wealth advisory
- Outsourced accounting solutions

Financial advisory

- Capital markets
- Complex & international insolvency
- Corporate insolvency
- Corporate simplification
- Debt advisory
- Due diligence
- Expert witness
- Family law
- Financial modelling
- Initial Public Offerings
- Investigations
- IT forensics
- Mergers & acquisitions
- Personal insolvency
- Raising finance
- Restructuring & turnaround
- Risk management
- Transaction advisory
- Valuations
- Corporate governance
- Risk management
- Project governance & review

Growth advisory

- Performance improvement
- Business & growth strategy
- Operational improvement & effectiveness
- Supply chain improvement
- Finance function transformation
- Implementation strategies for M&A
- Business risk services
- Internal audit
- Corporate governance
- Risk management
- Project governance & review
- Leadership talent & culture
- Leadership assessment & development
- Culture risk assessment
- Talent & succession planning
- Diversity & inclusion solutions
- Organisational optimisation & redesign
- Operational excellence
- High performance solutions
- Technology advisory
- Technology strategy & optimisation
- Technology audit & reviews
- Technology project governance
- ITIL enablement
- IT security
- Project scoping & management
- Technology solutions
- ERP/CRM/eCommerce
- Corporate performance management
- Process automation
- Mobile enterprise applications & document management
- Data analytics
- Public sector advisory
- Policy strategy governance
- Organisational design & implementation
- Regulations

www.grantthornton.com.au

Grant Thornton Australia Limited ABN 41 127 556 389

'Grant Thornton' refers to the brand under which the Grant Thornton member firms provide assurance, tax and advisory services to their clients and/or refers to one or more member firms, as the context requires. Grant Thornton Australia Ltd is a member firm of Grant Thornton International Ltd (GTIL). GTIL and the member firms are not a worldwide partnership. GTIL and each member firm is a separate legal entity. Services are delivered by the member firms. GTIL does not provide services to clients. GTIL and its member firms are not agents of, and do not obligate one another and are not liable for one another's acts or omissions. In the Australian context only, the use of the term 'Grant Thornton' may refer to Grant Thornton Australia Limited ABN 41 127 556 389 and its Australian subsidiaries and related entities. GTIL is not an Australian related entity to Grant Thornton Australia Limited.

Liability limited by a scheme approved under Professional Standards Legislation. Liability is limited in those States where a current scheme applies.

EPI064