VAGO
Victorian Auditor-General's Office

Results of 2022 Audits: Universities

June 2023

Independent assurance report to Parliament
2022–23: 24

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Independent assurance report to Parliament

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June 2023

The Hon Shaun Leane MLC
President
Legislative Council
Parliament House
Melbourne

The Hon Maree Edwards MP
Speaker
Legislative Assembly
Parliament House
Melbourne

Dear Presiding Officers

Under the provisions of the *Audit Act 1994*, I transmit my report *Results of 2022 Audits: Universities*.

Yours faithfully

[redacted]

Andrew Greaves
Auditor-General
30 June 2023

The Victorian Auditor-General's Office (VAGO) acknowledges the Traditional Custodians of the lands and waters throughout Victoria. We pay our respects to Aboriginal and Torres Strait Islander communities, their continuing culture, and to Elders past and present.

Contents

1. Audit outcomes

We gave clear audit opinions for financial reports across the Victorian university sector. Parliament and the community can confidently use these reports.

Financial reports are reliable

The university sector

There are 8 universities and 44 controlled entities* in the Victorian university sector (as at 31 December 2022).

We audit their financial reports. They all prepared a report for 2022.

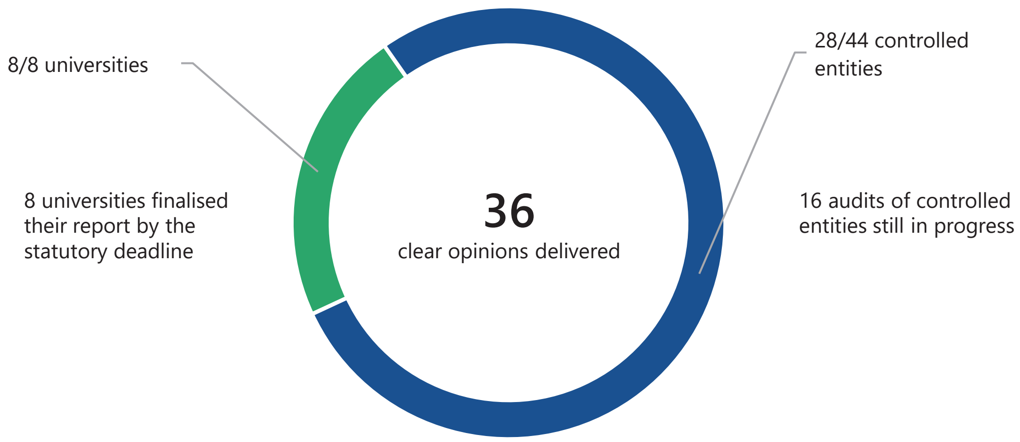
See Appendix B for more information about the sector, including its annual reporting timelines and requirements.

*Refer to the glossary in Appendix D for more information.

Number of clear audit opinions

To date, we have issued 36 clear audit opinions across the sector for 2022, which Figure 1 shows.

Figure 1: Clear audit opinions we issued for 2022



Source: VAGO.

This means Parliament and the community can confidently use these reports.

Clear opinion

A 'clear' or 'unmodified' audit opinion means we have reviewed an entity's financial report and believe it is reliable and complies with relevant reporting requirements.

Audits still in progress

As at 1 June 2023, 16 audits of controlled entities' financial reports are still in progress for 2022.

See Appendix E for more information about these audits.

We have not included these entities in our analysis for 2022.

Universities met their reporting timeframes

Reporting timeframes

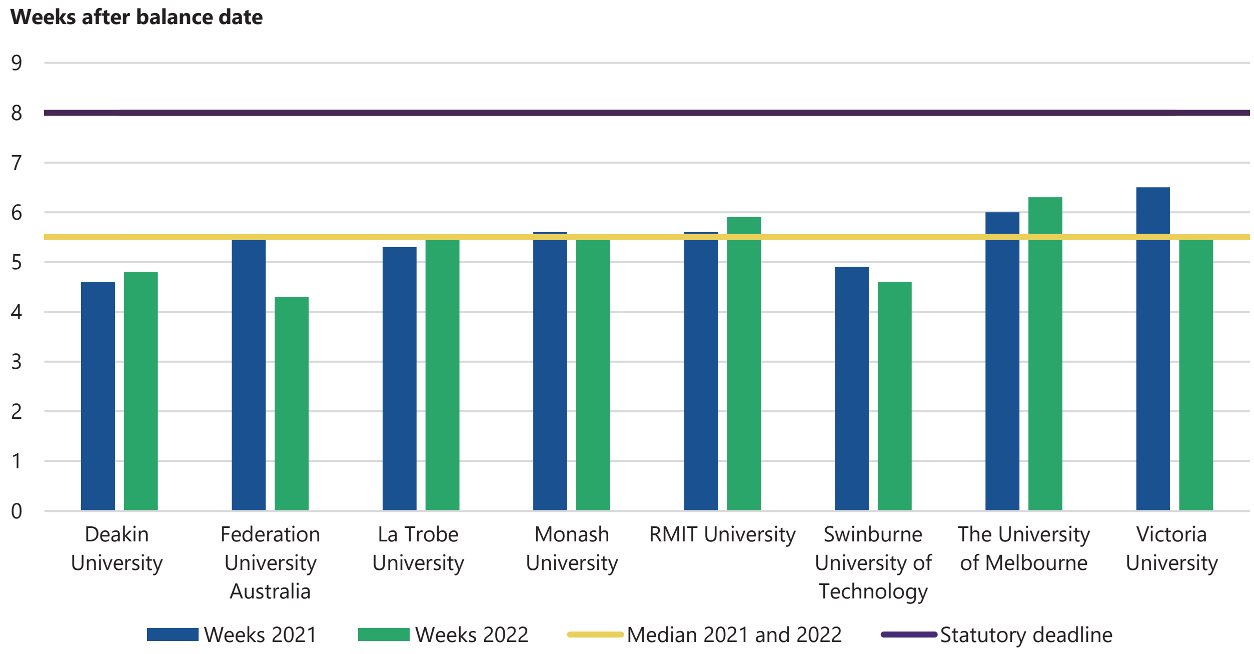
Under the *Financial Management Act 1994*, universities have 8 weeks from the end of the year, or 'balance date', to give us their draft financial report to audit.

Under their universities' enabling legislation, controlled entities need to give us their draft financial report within 3 months of their balance date for audit.

Universities' timeliness

As Figure 2 shows, all universities gave us their 2021 and 2022 draft financial reports within the 8-week deadline.

Figure 2: Timeliness of universities' financial reporting in 2021 and 2022



Note: The medians for 2021 and 2022 were the same, and are presented as one line in the above figure.
Source: VAGO.

Controlled entities' timeliness

Thirty-two out of 44 controlled entities gave us their draft financial reports within the 3-month deadline.

This was partly because universities diverted their resources to make sure the financial reports of the universities were prepared within the deadline, ahead of focusing on the subsidiary entities.

The financial reports of 11 controlled entities are still being prepared and we are still auditing the financial reports of 5 others.

Financial reports were good quality

Material and immaterial errors

The nature, number and size of errors in financial reports submitted for auditing are measures of their quality and the effectiveness of the systems and processes used to compile them. During an audit we sometimes find an item that an entity has not prepared in line with relevant reporting requirements.

We classify these items as either material or immaterial errors.

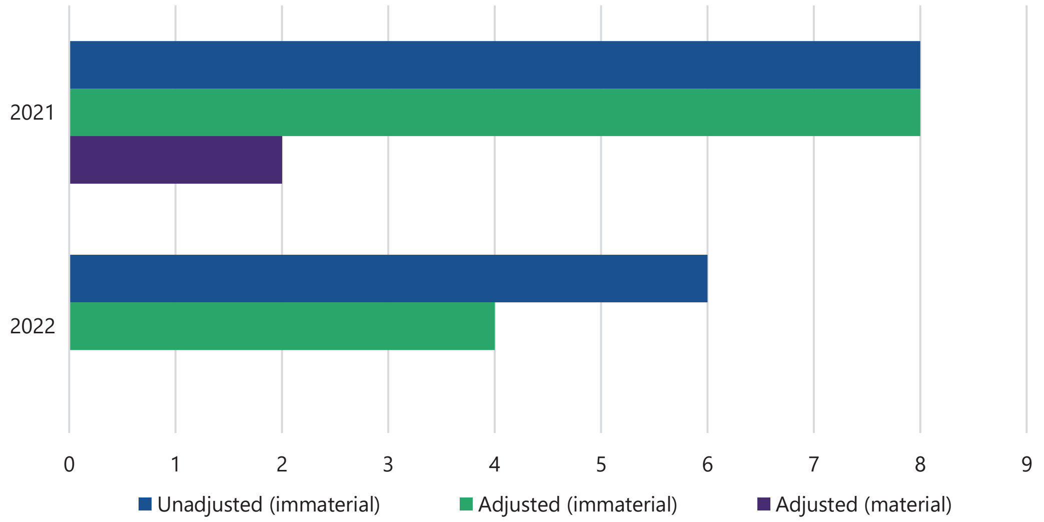
If an error is ...	Then ...
material	the entity needs to adjust, or correct, it before we can issue a clear audit opinion.
immaterial	we recommend the entity corrects it, but we can still issue a clear audit opinion without it being corrected.

We did not find any material errors in 2022.

As Figure 3 shows, this is an improvement from 2021, when we found 2 material errors at Federation University Australia. This shows improvements in how universities prepare and review their draft financial reports, ensuring a higher level of quality before they provide them to audit.

We found only 10 immaterial errors in 2022 compared to 16 in 2021. Of the immaterial errors found in 2022, universities corrected 4 and left 6.

Figure 3: Errors we found in 2021 and 2022



Source: VAGO.

Causes of errors

Figure 4 shows the number of errors we found by category for 2022 and 2021.

As the figure shows, accounting for financial instruments continued to be a common cause of error in universities' financial statements for 2022.

Financial instruments

Financial instruments are assets and liabilities created by contracts or agreements between 2 parties. It represents a form of ownership of a party, or a future cashflow between the 2 parties. Shares, bonds, trade payables, and borrowings are all examples of financial instruments.

Financial assets that are held for income generation or capital gain are commonly called 'investments'.

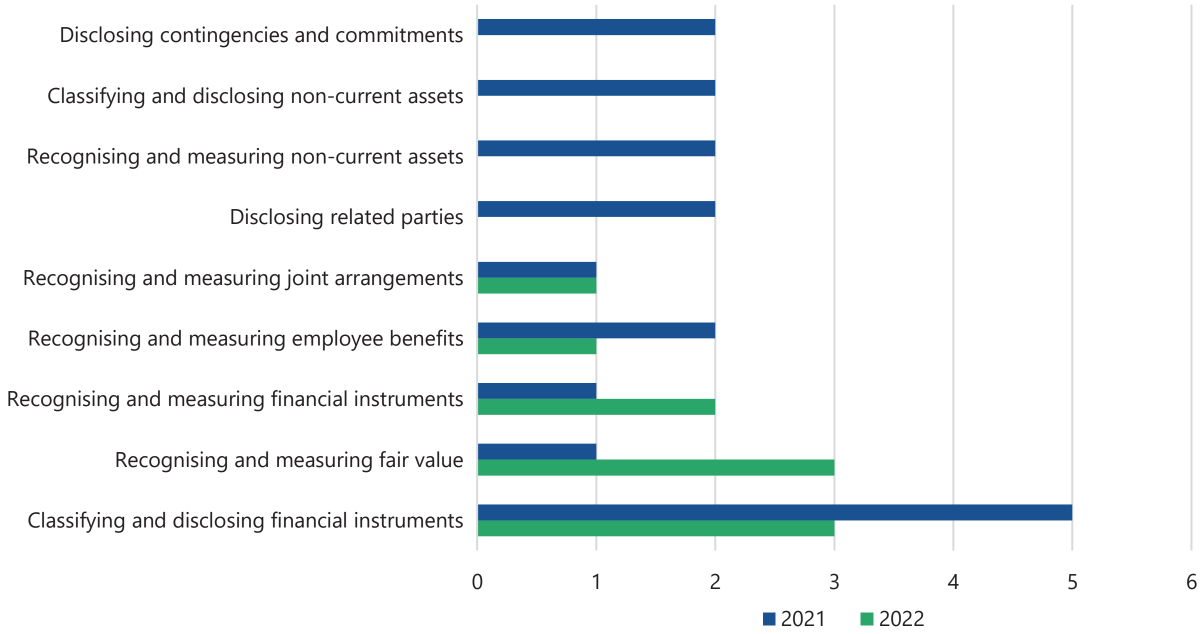
We also found more fair value accounting errors.

We usually find errors in these areas because the sector has $8.1 billion invested in financial instruments – and accounting for financial instruments and their fair values is complex.

Fair value accounting

Fair value accounting is when an entity values an asset based on its current price in the market. The entity also needs to consider how future events and conditions could affect the asset's value.

Figure 4: Errors we found by category for 2021 and 2022



Source: VAGO.

2.
Financial analysis

The sector's financial performance declined in 2022. International student numbers continued to drop and, for the first time since 2019, domestic student numbers followed. On-campus operations opened post pandemic, driving expenditure up.

Student course fees and charges stay well below pre-pandemic levels and expenditure above. Declining investment values also significantly affected financial performance.

Despite these negative trends, universities focused on growing commercial and partnership activity, leading to higher own-sourced revenue.

Strong financial and non-financial asset portfolios remain.

The sector is still recovering from the disruption of the pandemic, with new challenges ahead due to political and economic pressures. Longer-term financial risks will emerge if universities cannot manage these challenges.

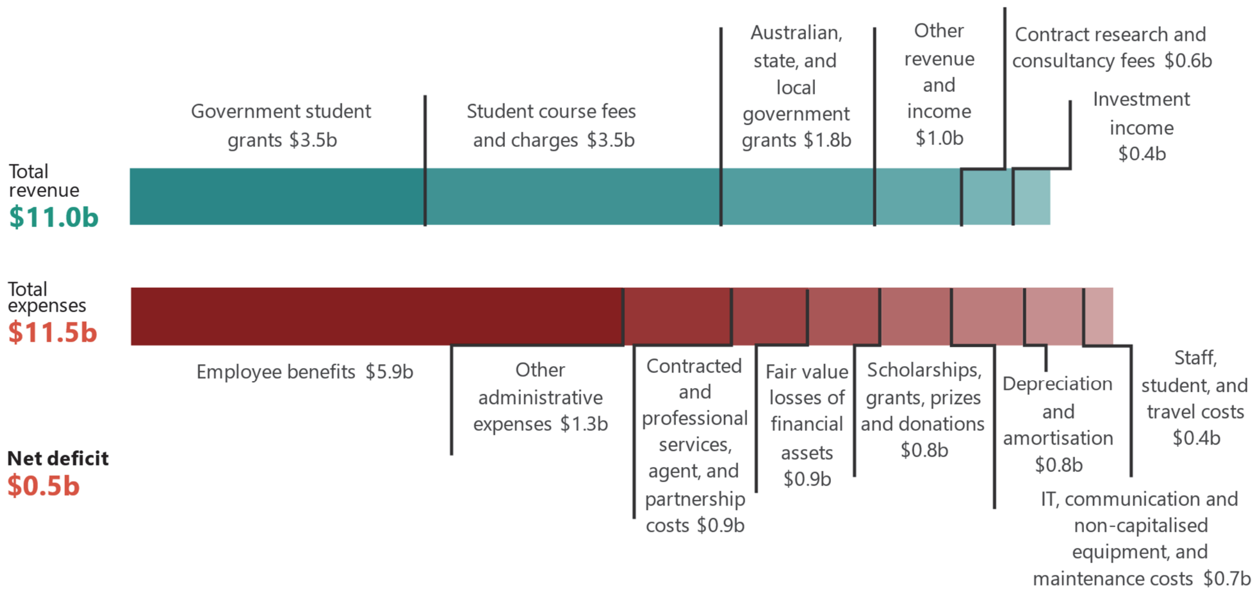
Universities performed worse financially compared to last year

Financial performance snapshot

As Figure 5 shows, universities had a net deficit of $0.52 billion in 2022.

This is a $1.77 billion decline from their $1.25 billion net surplus in 2021.

Figure 5: Universities' total revenue and expenses in 2022



Note: Totals may not add due to rounding.
Source: VAGO.

In 2022 the sector reported …	Which is a …	From …	Because …
$11.0b in revenue and income*	3.5% decrease	$11.4b in 2021	universities had lower student revenue and investment income.
$11.5b in expenses	12.7% increase	$10.2b in 2021	• universities ran more classes and undertook more research activities • universities' investments went down in value.
$1.3b in operating cashflows*	35.0% decrease	$2.0b in 2021	• universities got less Australian Government student grants • universities spent more on suppliers and employees.

*Refer to the glossary in Appendix D for more information.

Net result margin

Figure 6 shows all universities recorded deficits for 2022 except La Trobe University. La Trobe University's surplus can be substantially attributed to a significant philanthropic gift of $42 million it received for autism research.

If we exclude unrealised fair value losses recognised in its income statements, the sector would have had an $84 million surplus, a net result margin of only 1 per cent.

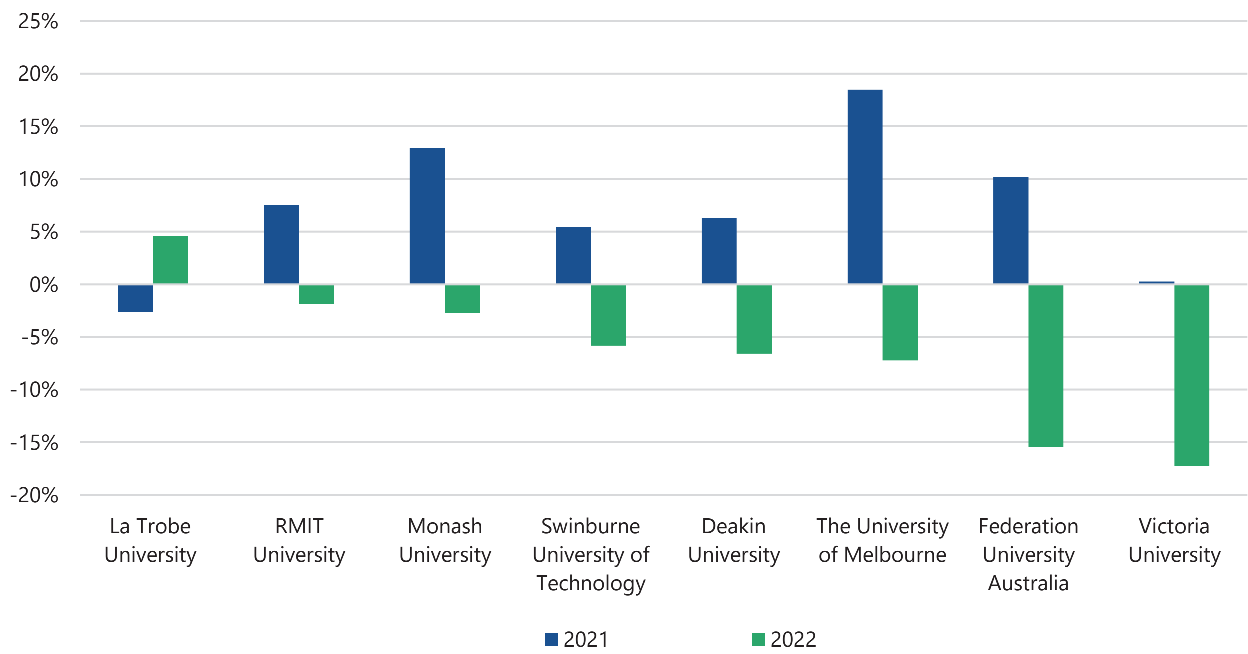
Net result margin

An entity's net result is its revenue and income minus its expenses. The net result margin is the net result divided by total revenue and income.

A positive result shows a surplus, and a negative result shows a deficit. The larger the percentage, the stronger the result.

This measures how efficiently entities earn and spend their revenue and income.

Figure 6: Universities' net result margin indicators for 2021 and 2022

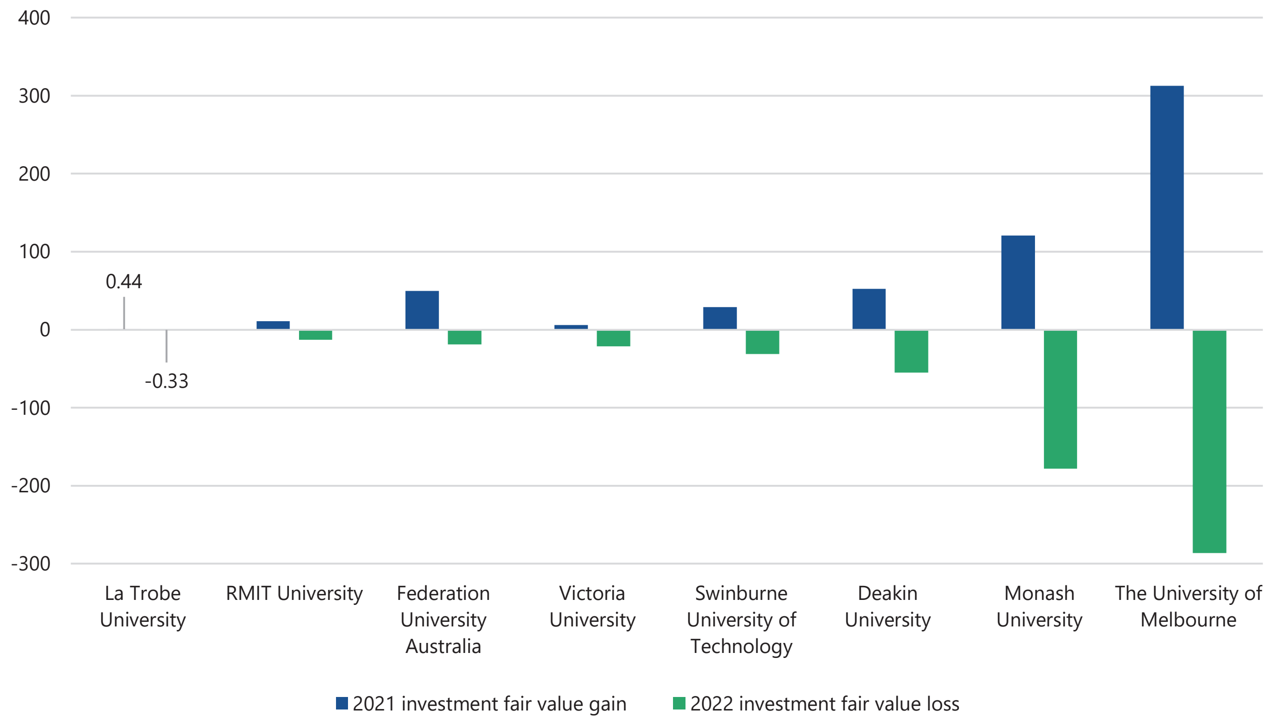


Source: VAGO.

Deficits

The sector recorded a combined deficit of $520 million in 2022. This is mostly because universities' investment portfolios fell in value. The gains-to-loss swing from a $582 million gain in 2021 to $604 million loss in 2022 is a $1.19 billion difference year on year. As Figure 7 shows, this swing was consistent across all universities.

Figure 7: Universities' investment fair value gains and losses for 2021 and 2022 ($ million)



Source: VAGO.

Universities got less revenue and income from students but more from other sources

Overview of revenue and income sources

As Figure 8 shows, universities continued to get most of their revenue and income from student enrolments in 2022. This includes Australian Government student grants and student course fees and charges.

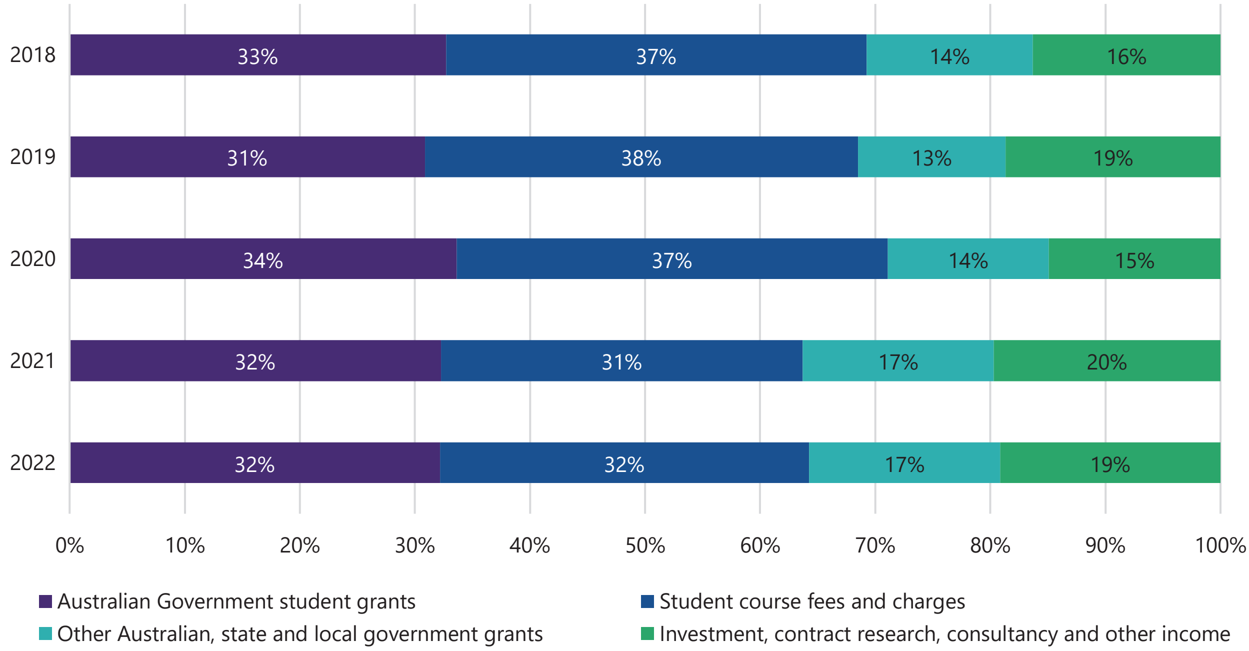
Student revenue

Student revenue is revenue that a university gets from running courses.

Most of this revenue is fees and charges from international students and Australian Government student grants for 'Commonwealth-supported places'.

A Commonwealth-supported place is when the Australian Government pays for part of a student's course fees.

Figure 8: Types of revenue and income universities got from 2018 to 2022 as a percentage of total revenue and income



Note: Percentages may not total 100 due to rounding.
Source: VAGO.

Student revenue

International student numbers have been steadily falling since COVID-19 border closures. But domestic student numbers had been increasing over the same period.

2022 is the first time since 2019 that domestic student numbers have gone down.

In 2022 the equivalent full-time student load (EFTSL) for …	Was …	Which is a decrease of …
domestic students	200,170	18,015, or 8.3%, from 218,185 in 2021.
onshore international students	72,309	1,758, or 2.4%, from 74,067 in 2021.
offshore international students	34,472	1,611, or 4.5%, from 36,083 in 2021.

As a result, student course fees and charges, which universities mainly get from international students, are still well below pre-COVID-19 levels. In 2022 they got $3.40 billion, a decrease of 2 per cent compared to $3.47 billion in 2021. This is a 17 per cent decrease from the $4.11 billion in 2019.

Universities received more Australian Government funding per domestic student in 2022; however, the decrease in revenue was due to the lower number of students.

Other revenue and income sources

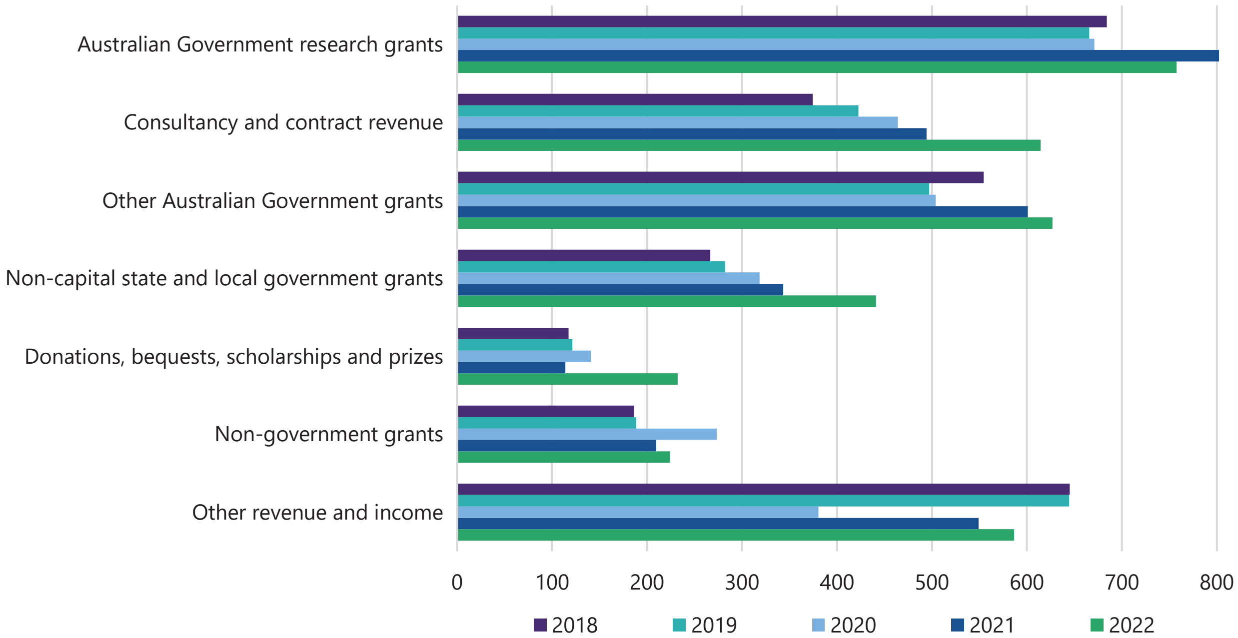
While universities' investments went down in value, the dividends, interest and trust distributions from these investments stayed strong. These returns increased from $306.1 million in 2021 to $448.6 million in 2022. Financial performance over a year affects investment returns, and with strong profits generated by businesses in 2021 and 2022, this led to higher investment returns. However, the economic climate and market attitudes at the end of the year drive the value of the overall investment. With high inflation, higher interest rates and world political conditions, market views were gloomier at the end of 2022 driving the fair value losses previously explained.

Universities also got more revenue from other sources. They received $614 million of funding for consultancy and contract research in 2022 – an increase of $120 million from the $494 million in 2021. This compares to $423 million in 2019, an increase of $191 million, as universities have partnered with industry and governments as part of their broader strategy to diversify revenue streams in managing the impacts of falling student revenue.

As Figure 9 shows, universities got $1.83 billion in non-student related Australian, state and local government grants in 2022. This is $70 million lower than $1.90 billion in 2021. But it is $390 million more than the $1.44 billion they got in 2019 before COVID-19.

Universities also got significant donations, bequests and scholarships. They got more than $232 million in 2022. This is a large increase from the $114 million in 2021.

Figure 9: Universities' non-student-related revenue by category from 2018 to 2022 ($ million)



Source: VAGO.

Revenue received in advance

Despite the declines in revenue, universities received significant up-front funding in 2022 for services they will provide in 2023. At 31 December 2022, universities received $2.42 billion in cash from students and other parties, for which they will provide the service related to that income in 2023 or the years following. Universities recognise this funding as a liability on the balance sheet and they therefore do not reflect it in the revenue received for 2022 and it does not affect their net deficit result. This is a 147 per cent increase from $979 million received in up-front funding in 2019 before COVID-19.

Universities spent more in 2022 returning to in-person teaching and expanding their services

Overview of expense sources

Universities spent more in 2022. This was because:

- they continued to spend a lot on employee benefits
- their investments went down in value
- they reopened fully for in-person teaching, which meant they spent more on utilities and other expenses to run their campuses
- they spent more on contracted and professional services, agent fees and partnership costs to diversify their revenue sources.

Overall, the sector spent $10.91 billion in 2022 (excluding losses from the value of their investments). This is a:

- 7 per cent increase from $10.20 billion in 2021
- 6 per cent increase compared to $10.30 billion of expenses incurred in 2019 before the pandemic.

Employee benefits

Universities continued to spend the most money on employee benefits in 2022.

These costs were higher than their other types of spending combined.

Despite this, universities spent less per full-time equivalent (FTE) employee. In 2022 they spent $153.3 per FTE position, which is 3.3 per cent less than $158.6 spent per FTE position in 2021.

In 2022 the sector …	Compared to …	Which is a …
spent $5.90b on employee wages and other benefits	$5.76b in 2021	$0.1b, or 2.4%, increase.
had 38,468 FTE positions at 31 December 2022	36,319 FTE positions at 31 December 2021	2,149, or 5.9%, increase.

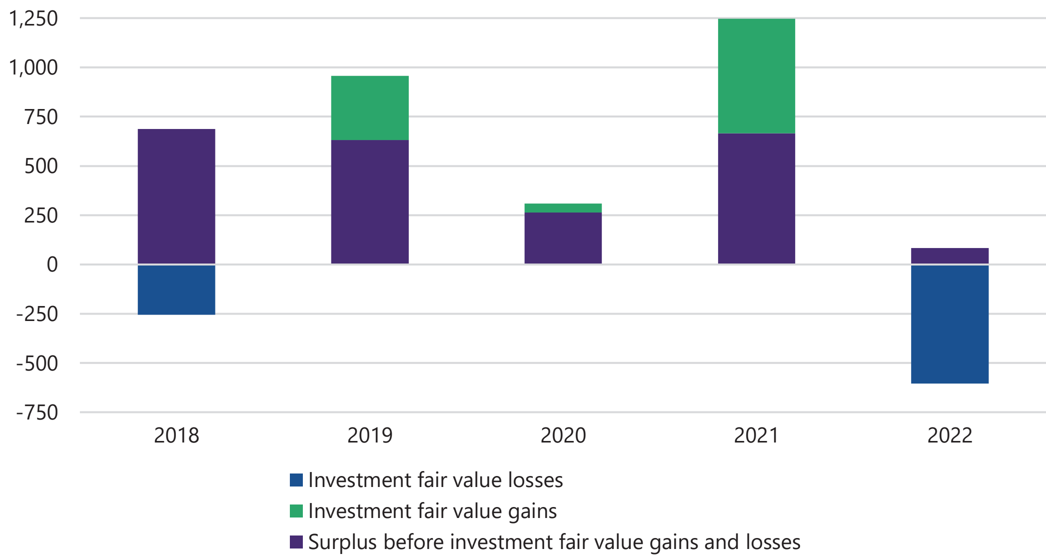
Unrealised fair value losses

Universities have significant investments, such as shares and managed funds, that they recognise in financial reports at fair value.

Universities recorded $603.9 million of unrealised fair value losses on these investments in 2022. This compares to their $581.8 million of unrealised fair value gains in 2021. But if universities keep these investments, they will record any increases in value as income in future years.

Figure 10 shows how unrealised fair value changes affected universities' net results from 2018 to 2022. The volatility of investment markets can significantly affect universities' financial outcomes from year to year due to the unrealised gains and losses being recognised directly within their comprehensive operating statement. In 2022, they were a key driver to the sectors net deficit position.

Figure 10: The sector's net result before and after unrealised fair value gains or losses on investments ($ million)



Source: VAGO.

Unrealised fair value losses

Universities can choose to record fair value changes for some investments in their net result when they happen or when they sell the asset.

Most universities record fair value changes within their net result for the year. They do this even if they have not sold the investment. This means their net result is susceptible to fair value changes each year.

When an investment's fair value goes down, but a university has not sold it, it is called an 'unrealised fair value loss'.

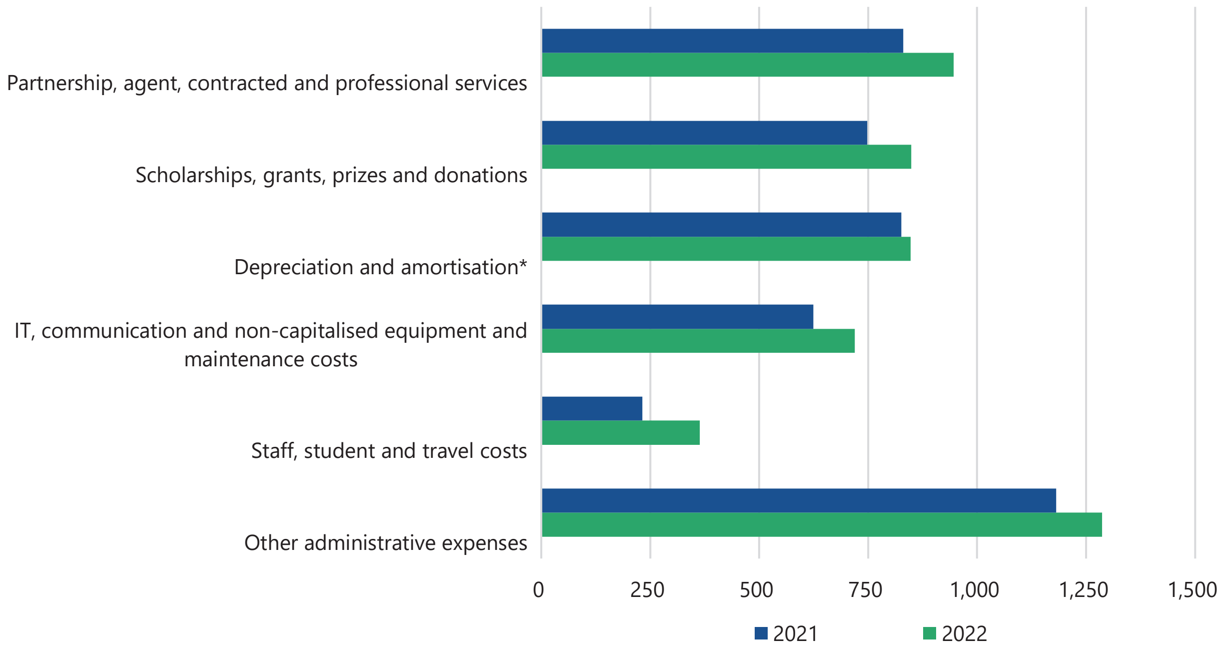
Other types of expenses

Universities partnered with other entities to broaden their services and diversify their revenue sources, such as partnerships with microcredential course providers and online course delivery providers.

As Figure 11 shows, universities spent $946.6 million on partnership, agent, contracted and professional services costs in 2022. This is a $115.9 million, or 14 per cent, increase from $830.7 million in 2021.

In 2022 students returned to campuses, and staff started going to training and conferences in person again. So, universities' costs associated with staff, students and travel increased by $132 million.

Figure 11: Universities' expenses in 2021 and 2022 by type excluding employee benefits ($ million)



Note: *Refer to the glossary in Appendix D for more information.
Source: VAGO.

Universities used cash and debt to buy new assets and make investments

Financial position snapshot

As Figure 12 shows, the sector had $32.7 billion in assets and $10.4 billion in liabilities as at 31 December 2022.

Land and buildings make up a significant part of universities' assets, and the value of their land and buildings went up in 2022.

While the fair value of their investments went down, investments went up overall due to new investments purchased during the year.

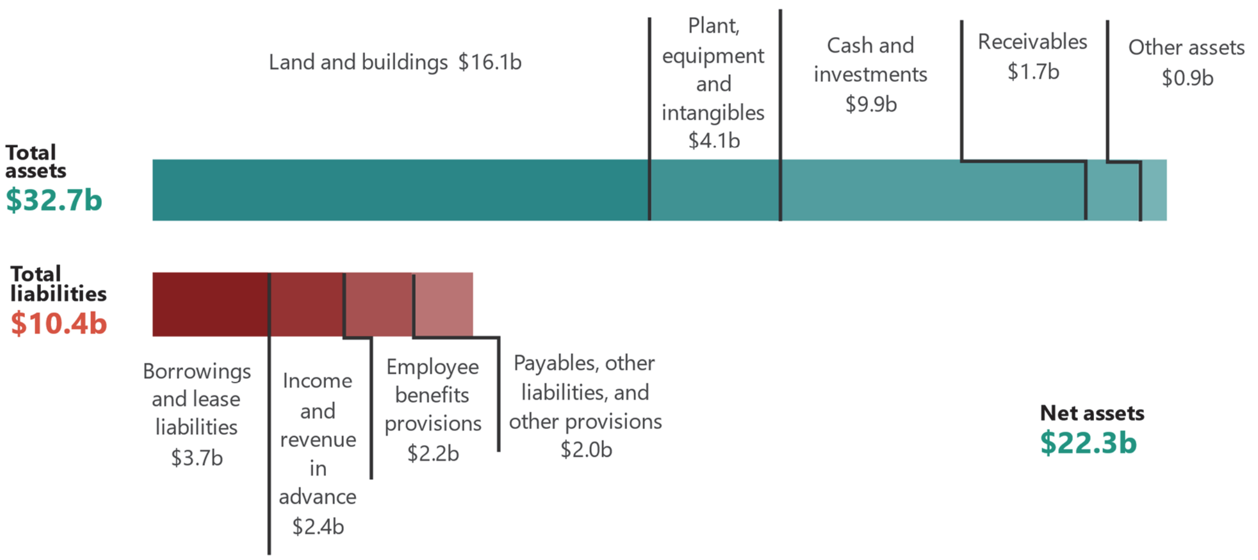
To fund this, universities used cash they had saved, and took on more debt or lease liabilities (for investments into land, buildings and equipment).

Lease liabilities

Leases are contractual arrangements granting the right to use an asset in exchange for payments over an agreed period. The value of payments owed under these arrangements are lease liabilities.

Universities have also been getting more revenue from students and research funding in advance. In 2022 this has become their second largest liability. Universities will record these amounts as revenue when they deliver the tuition in the next year.

Figure 12: Universities' total assets and liabilities in 2022



Note: Totals may not add due to rounding.
Source: VAGO.

In 2022 the sector reported …	Which is a …	From …
$32.7b in assets	4.1% increase	$31.4b in 2021.
$10.4b in liabilities	13.0% increase	$9.2b in 2021.
$2.71b in cash outflow for investing*	176.5% increase	a $0.98b outflow in 2021.
$0.32b in cash inflow from financing*	155.2% increase	a $0.58b outflow in 2021.

Note: Cash inflow means more cash was received than paid, cash outflow means more cash was paid than received.
*Refer to the glossary in Appendix D for more information.

Borrowings and lease liabilities

Universities' total liabilities went up in 2022. The largest increases related to borrowings and lease liabilities.

Some universities paid down existing borrowings. But in total the sector borrowed a further $518 million after making their 2022 repayments. Combined with new leases, the sector's total debt increased by $730 million to $3.74 billion from $3.01 billion in 2021.

Group of Eight (Go8) universities borrowed an additional $700 million in 2022. Their borrowings increased to $1.99 billion from $1.29 billion in 2021. The rest of the sector decreased their borrowings by $190 million, from $564 million in 2021 to $374 million in 2022.

On the other hand, Go8 universities decreased their lease liabilities by $22 million, from $885 million in 2021 to $863 million in 2022. The rest of the sector increased their lease liabilities by $237 million, from $271 million in 2021 to $508 million in 2022.

The Go8 universities can obtain borrowings at lower interest rates, including from foreign markets, due to their stronger credit ratings as compared with smaller universities. The rest of the sector use lease liabilities, as they are guaranteed over the asset obtained, allowing them to access lower interest rates compared with what they would be able to access via borrowings through financial markets. However, leases can only be used to obtain tangible assets such as land, buildings and equipment – this means that Go8 universities have a distinct advantage, as they have more choice when using the cash gained from borrowings (such as buying investments).

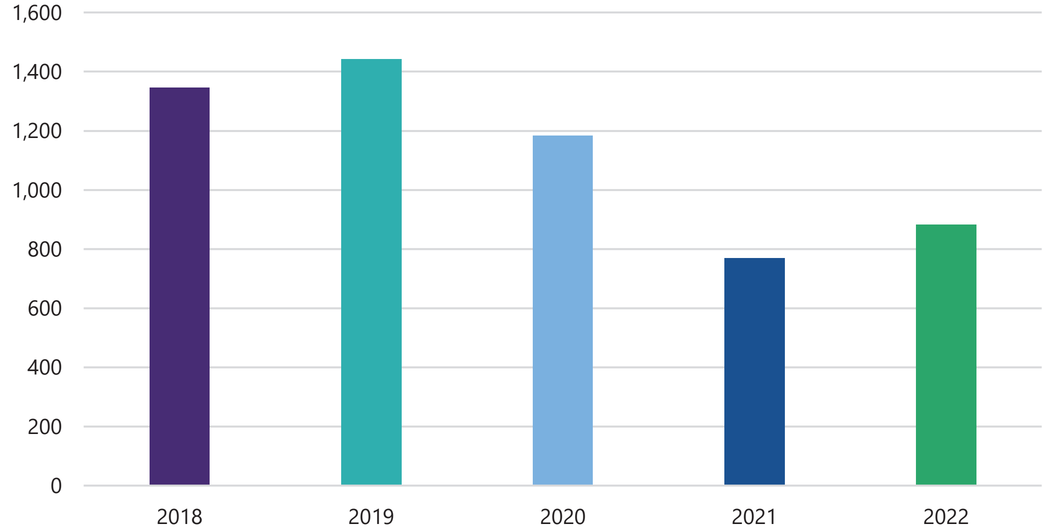
While universities' total borrowings and lease liabilities went up overall, their finance and interest expenses stayed the same at $140 million for 2021 and 2022.

Land, buildings, equipment and intangible assets

In 2022 universities invested in land, buildings, equipment and intangible assets using borrowings, leases, existing cash reserves, and funding from revenue and income received in advance.

As Figure 13 shows, universities spent $881 million on new assets in 2022. This is $114 million more than they spent in 2021. But it is still lower than the $1.44 billion they spent in 2019 before COVID-19.

Figure 13: Universities' cash payments for land, buildings, plant, equipment and intangibles from 2018 to 2022 ($ million)



Source: VAGO.

Universities' existing land and buildings also continued to go up in value in 2022.

After accounting for depreciation and amortisation, universities' overall land, buildings, plant, equipment and intangible assets were worth $820 million more in 2022, increasing to $20.18 billion from $19.36 billion in 2021.

Investments

The sector put $2.08 billion of cash into investments in 2022, such as managed funds and term deposits.

Of this, Go8 universities invested cash of $1.84 billion. Despite the fair value losses, total investments were $6.01 billion, which is a $1.36 billion increase from $4.65 billion in 2021.

Despite spending cash of $237 million on new investments, the total value of the rest of the sector’s investments went down by $17 million. This is because the value of the rest of the sector’s existing investments went down relatively more.

Cash balances

Universities’ cash had been gradually increasing since the start of the pandemic. Their total cash on hand went up from $1.48 billion in 2019 to $2.37 billion in 2021. But it went down to $1.33 billion in 2022.

This is because universities invested existing cash and new cash received in 2022 on $2.71 billion of tangible and intangible assets, and investments. This is more than they spent on investments in 2020 and 2021 combined ($2.32 billion across the 2 years).

Universities had been keeping cash surpluses from previous years. This is because they were expecting lower revenue from falling student enrolments.

With borders reopening, classes returning to in-person and inflation affecting the real value of cash, universities are now using these funds to invest in their own services.

Liquidity

Universities recorded deficits across the sector because the value of their investments went down. But they have enough cash and liquid investments to sustain themselves into the future.

While they spent more of their cash on hand in 2022, they put the most of it into liquid investments.

As Figure 14 shows, all universities except La Trobe University kept their adjusted liquidity ratio above one in 2022.

La Trobe University's ratio was below one because it:

- implemented a liquidity strategy to use any surplus cash to pay down debt
- had some short-term debt maturing within 12 months of balance date.

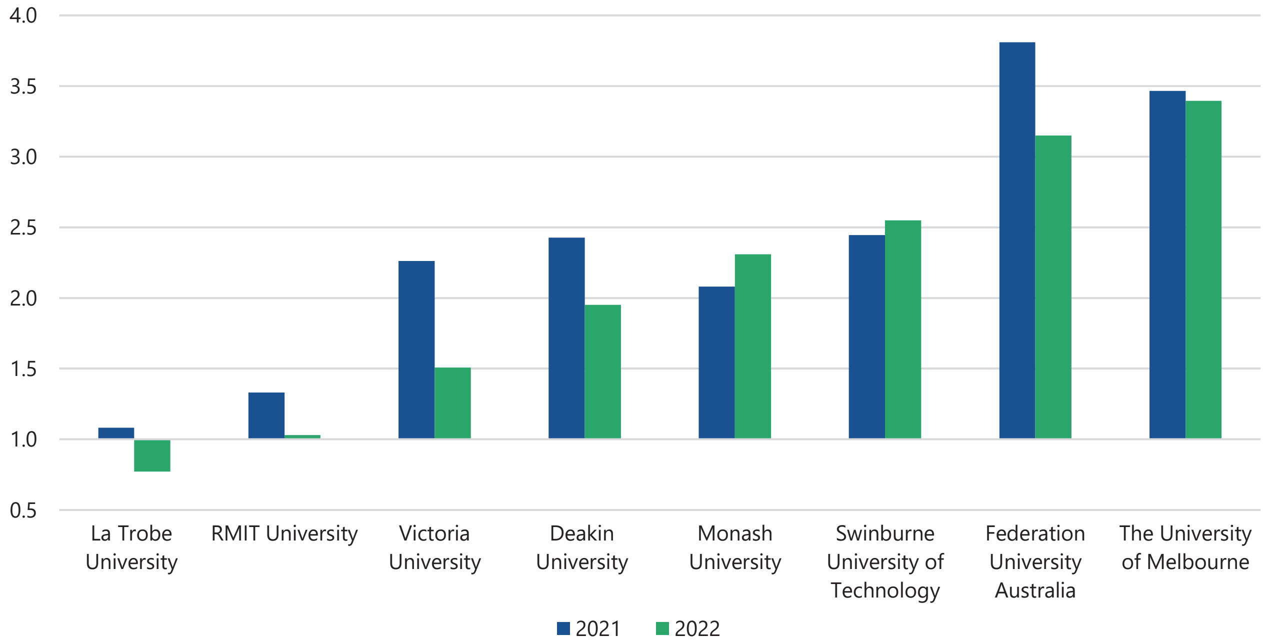
This reduced its cash balance and increased its current liabilities, which impacted the ratio.

Revenue and income in advance affected some universities' liquidity ratios.

Adjusted liquidity ratio

A liquidity ratio measures if an entity can likely pay its liabilities in the immediate future using cash and short-term assets. An entity's adjusted liquidity ratio also includes its non-current investments.

Figure 14: Universities' adjusted liquidity ratios for 2021 and 2022



Source: VAGO.

Universities face challenges to their sustainability, but opportunities exist

Challenges

Universities face challenges that could put their future sustainability at risk, including continued:

- low net result margins
- fair value losses
- falling student numbers.

These challenges limit the accumulation of retained profits that can be used to fund operating and growth activities.

Falling student numbers

In 2022 the sector's student revenue was the lowest it has been in 5 years, with the high point being $7.71 billion in 2019. This is because, as explained previously, there were fewer domestic Australian-Government-supported students and international fee-paying students in 2022.

There are several challenges that continue to put pressure on student enrolments:

- A strong jobs market, combined with the rising cost of living may continue to cause students to move away from enrolling at university:
    - high availability of jobs means would-be students can gain well-paid employment without needing to attend university beforehand
    - increasing cost of living pressures mean the course cost is a much more crucial factor considered when students decide to study. Australia's ongoing rental crisis is adding more focus on these costs, particularly for international students.
- Domestic students are facing increased prices for courses at universities, as the rising consumer price index (CPI) has resulted in larger increases in Higher Education Loan Program (HELP) loans – this may deter would-be students or existing students from university.
- 84.5 per cent of students completed year 12 in 2022 according to the Australian Bureau of Statistics. This is a 5-year low. It means fewer Australian students may be eligible to enrol in university now and into the future.
- Chinese residents make up 36 per cent of all international students according to the Australian Department of Education's 2021 Higher Education Statistics. In the longer term, Chinese residents may become a decreasing source of student revenue for universities into the future as the Chinese government is working to further develop and prioritise the quality of their own higher education system.

Student revenue is crucial to Victorian universities' ongoing sustainability. So, universities need to keep their courses attractive to both domestic and international students. They must focus on relevance, access, price and employment outcomes to maintain and grow their student base.

Opportunities

Despite these challenges, the sector has opportunities to improve its sustainability.

In 2022, universities diversified their revenue streams. They also prepared for the future by investing in either physical infrastructure, which they use to deliver core services, or investments, which significantly supplement their income.

In addition, they successfully managed employee benefits, which is their largest expense. While all their other expenses grew 26.5 per cent in 2022, salaries and wages grew by only 2.4 per cent.

While the sector had fewer international students overall, not all universities recorded a decrease.

In 2022 …	Recorded a …	Which led to a …
Swinburne University of Technology	21.4% increase in international EFTSL	$28.1 million increase in revenue from student course fees and charges.
Victoria University	8.9% increase in international EFTSL	$3.1 million increase in revenue from student course fees and charges.

Whereas China may become a decreasing source of students for Victoria into the future, the World Economic Forum notes that India has become home to the largest population of young adults worldwide, and projects that India will become the world’s largest middle-class market by 2030. Wealthier middle-class students may look to travel abroad for their education and be an increasing source of international student revenue for Victorian universities.

Universities are also working more closely with industries. In 2022 their revenue from consulting, contract research and grants from non-government entities increased by 49.6 per cent compared to 5 years ago, to $839 million in 2022 from $561 million in 2018. Universities can continue to focus on these relationships to further increase revenue from these sources.

Government partnerships and reviews

There are 2 reviews being undertaken in 2023 that may affect the sector's funding and future financial sustainability.

In 2021 the Victorian Government set up partnership agreements with Victorian universities. These agreements reflect their ongoing and evolving approach to working together.

The government plans to revisit these agreements in 2023. It plans to focus on initiatives to:

- improve how universities partner and collaborate with industry
- increase university courses' industry relevance, including through partnerships with TAFEs.

These revised agreements may create new opportunities for universities to partner with other Victorian government entities (such as TAFEs) and create new or broader revenue sources using their access to industry partners.

In 2022, the Australian Minister for Education formally announced a major review of Australia's higher education sector. This review is known as the Australian Universities Accord.

The Accord will assess:

- if universities meet Australia's knowledge and skill needs now and in the future
- access to university and opportunities for potential students
- if universities are affordable and what they are investing in
- universities' governance, accountability and communities
- the connection between the vocational education and training and higher education systems
- universities' quality and sustainability
- how universities are delivering new knowledge, innovation and capability.

The terms of reference for the Accord are broad and the Accord's aim is extensive. The Accord's overall objective is to 'devise recommendations and performance targets that will improve the quality, accessibility, affordability and sustainability of higher education'.

The results of the Accord may have significant impacts on universities' courses, funding and operations in the future. We encourage Victorian universities and the Victorian Government to keep engaging with this process to advocate for themselves and the sector.

3. Internal controls

Universities' internal controls are adequate for them to prepare reliable financial reports. But they have not resolved some key information technology (IT) issues. These issues could prevent universities from preparing reliable financial reports or protecting their sensitive data.

We found fewer new control issues in 2022 but there are still unresolved issues from previous years

Internal control snapshot

Universities must have effective internal controls to keep proper accounts and records. These controls should cover people, systems and processes.

We assess if universities' internal controls allow them to prepare reliable financial reports.

Overall, universities' internal controls are adequate. But there are areas for improvement.

Raising internal control and financial reporting issues

We raise internal control and financial reporting issues to a university's management and audit committee. This includes:

- reporting new issues
- giving updates on unresolved issues we raised in previous years.

Universities can strengthen their internal controls and financial reporting processes by promptly responding to the issues we raise.

While universities need to address all weaknesses, they should prioritise higher-risk and unresolved issues.

New issues we found in 2022

As Figure 15 shows, we found 10 new control issues in 2022 compared to 13 in 2021.

IT control weaknesses continue to be the most common type of issue. We found some weaknesses in the key IT systems that universities use to record accounting information and prepare financial reports.

But universities have been improving in this area. We found 7 new IT control issues in 2022 compared to 12 new issues in 2021.

We also found other financial reporting related issues in 2022, including weaknesses in:

- how universities account for fixed assets
- how universities account for intangible assets
- financial reporting timeliness.

But these issues were relatively minor.

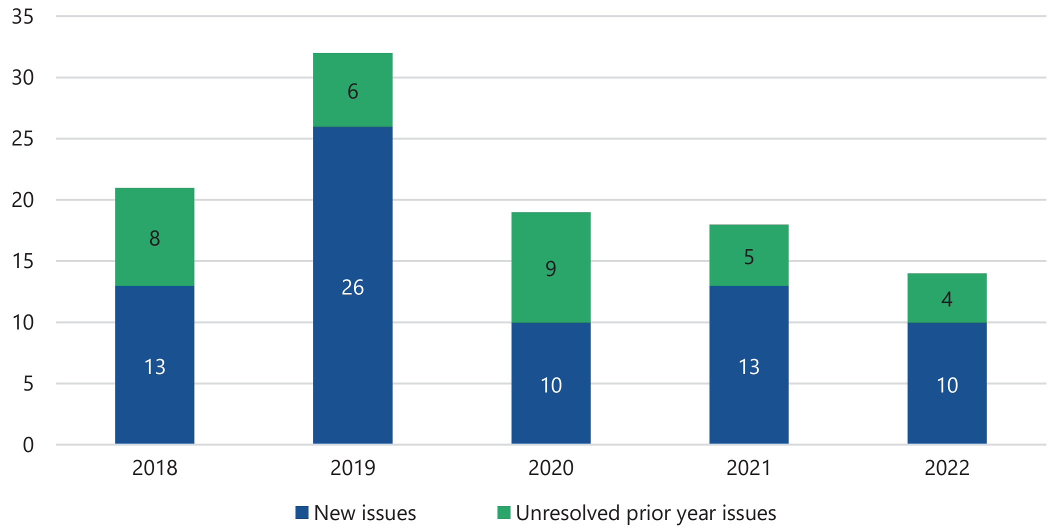
Unresolved issues

As Figure 15 shows, universities had 4 unresolved issues in 2022 compared to 5 in 2021.

We are concerned there are still some longstanding issues that universities had not yet resolved.

IT-related issues can take time to resolve. Especially if a university needs to work with a system's supplier to address them. But it is important that they resolve these issues as soon as possible to ensure the protection and reliability of the data in these systems.

Figure 15: New and unresolved issues from 2018 to 2022



Source: VAGO.

IT control weaknesses

Why IT controls are important

IT controls help prevent and detect errors in financial information. Universities use modern IT systems for many processes such as authorising purchases or paying employees. By having strong IT controls, universities can be sure around the:

- accuracy of transactions recorded in the IT system
- precision of calculations made by the IT system
- reliability of reports created from the IT system
- confidentiality and security of the data stored in the IT system.

In its *Annual Cyber Threat Report July 2021–June 2022,* the Australian Cyber Security Centre (ACSC) said:

- 'the education and training sector reported the most ransomware incidents in 2021–22'
- 'the threat to the education and training sector is significant as its business model favours open collaborative environments'.

So, universities also need strong IT controls to prevent and detect malicious access to their IT systems.

IT issues we found in 2022

When we assess if universities' internal controls allow them to prepare reliable financial reports, we consider IT controls for the key systems they use to store financial information or produce their financial reports.

As Figure 16 shows, in 2022:

The IT control issues we found mainly related to …	Which involves …
managing access for general users and privileged users	universities' policies and processes for which users have access to a system. Universities need strong controls for users with privileged access because they can often make significant changes to a system or database.

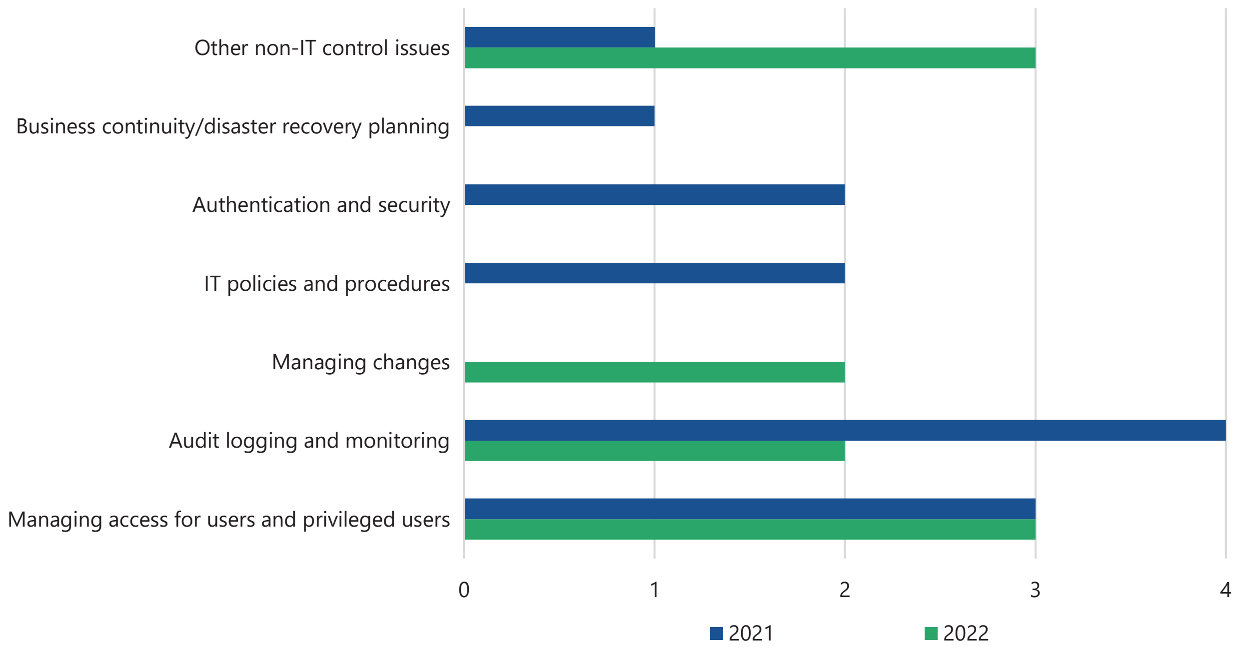
managing changes to the configuration of systems	how a university manages changes to a system. This includes:
	• its processes for testing changes
	• separating the duties of users who:
	  • make changes
	  • authorise changes.

audit logging and monitoring	how a university records changes to key parts of a system. For example, changes to a dataset or vendor's details. It also involves checking these records, or 'logs'. Monitoring logs can help a university identify: • potential security breaches • unauthorised access • users within the organisation who are not complying with policies and procedures.

ACSC's report said that 'inadequate patching' caused 'the majority of significant incidents ACSC responded to in 2021–22'.

Pleasingly, we found no new or unresolved patching issues at universities in 2022.

Figure 16: Medium and high-risk IT and other control issues we identified by type in 2021 and 2022



Note: We excluded low-risk issues because we consider them as minor or opportunities to improve controls.
Source: VAGO.

Essential Eight strategies

According to ACSC's website, 'no set of mitigation strategies are guaranteed to protect against all cyber threats'.

But ACSC recommends that organisations implement 8 essential IT security strategies as a baseline. We have made similar recommendations in our Results of Audits reports for other sectors, and we support the position of the ACSC on this matter.

This baseline, which is known as the Essential Eight, makes it much harder for people to compromise a system.

The Essential Eight strategies are:

- application control
- patch applications
- configure Microsoft Office macro settings
- user application hardening
- restrict administrative privileges
- patch operating systems
- multi-factor authentication
- regular backups.

Using the Essential Eight strategies can help universities protect staff, student and other sensitive data better.

We did not find any weakness that directly related to most of the Essential Eight strategies listed above; however, we did find 3 issues related to users' and privileged users' access in both 2022 and 2021. We encourage universities to address these issues as priority and continue to assess their maturity against the Essential Eight Maturity Model.

Recommendation

All universities

1. We recommend that all universities:

- with reported issues relating to users and privileged users access work to implement agreed management actions as soon as practical
- continue to assess against the Essential Eight Maturity Model for their key finance and other information technology systems.

Appendices

Appendix A:
Submissions and comments

We have consulted with the Department of Jobs, Skills, Industry and Regions, the Department of Treasury and Finance and the 8 public universities in Victoria, and we considered their views when reaching our audit conclusions. As required by the *Audit Act 1994*, we gave a draft copy of this report, or relevant extracts, to those agencies and asked for their submissions and comments.

Responsibility for the accuracy, fairness and balance of those comments rests solely with the agency head.

Responses received

Agency	Page
Department of Jobs, Skills, Industry and Regions	A–2
La Trobe University	A–3

Response provided by the Secretary, Department of Jobs, Skills, Industry and Regions

Department of Jobs, Skills, Industry and Regions

GPO Box 4509
Melbourne ,Victoria 3001 Australia
Telephone: +61 3 9651 9999

Ref: CSEC-2-23-19990
File:

Mr Andrew Greaves
Auditor General
Victorian Auditor-General's Office
[redacted]

Dear Auditor-General

DEPARTMENT RESPONSE TO DRAFT VAGO REPORT - RESULTS OF 2022 AUDITS: UNIVERSITIES

Thank you for your correspondence of 2 June 2023 inviting the Department of Jobs, Skills, Industry and Regions (the department) to provide submissions or comments on the proposed report on *Results of 2022 Audits: Universities*.

The department welcomes the report and its findings. I note your conclusion that the financial reports of the universities and their controlled entities are reliable, and I support the recommendation made.

The eight university Acts contain no general Ministerial power of direction over universities. The legislative responsibilities of the Minister for Training and Skills and Minister for Higher Education under the Acts are limited to making some Council appointments, approving the acquisition, disposal and leasing of some land, approving certain commercial activities, and approving the amendment of university statutes. I therefore support, rather than formally accept, the recommendation in the report.

I would like to take this opportunity to recognise the work of VAGO and the Victorian universities that has led to the clear audit opinions for all Victorian universities this year.

If your team would like to discuss this matter further, you may contact Ms Jeanette Nagorcka, A/Executive Director, Higher Education and Workforce, Department of Jobs, Skills, Industry and Regions, on [redacted] or by email: [redacted].

Yours sincerely

[redacted]

Tim Ada
Secretary

Date: 08/06/2023

VICTORIA State Government

Response provided by the Vice-Chancellor, La Trobe University

LA TROBE UNIVERSITY

Professor John Dewar AO BCL. MA (Oxon). PhD (Griff).
Vice-Chancellor and President

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Shepparton

15 June 2023

Mr Andrew Greaves
Auditor-General
Victorian Auditor-General's Office

Via email: [redacted]

Dr Mr Greaves

Further to our 7 June correspondence responding to the Victorian Auditor-General's Office (VAGO) Proposed Report on the 'Results of 2022 Audits: Universities', I write to acknowledge VAGO's revision to the report regarding La Trobe University's liquidity ratio.

La Trobe Response

As you will recall, La Trobe was concerned about the Proposed Report's description of university liquidity and, specifically, its description of La Trobe's liquidity ratio (which was below one in 2022).

We sought the addition of further information to contextualise this result.

Over the past two years and in a fiscal environment of increasing interest rates, La Trobe implemented a deliberate strategy to reduce debt, paying off $153 million in debt. This has produced a lower cash balance and, as a consequence, negatively impacted our liquidity ratio.

The other reason relates to the timing of the expiry of our debts. Approximately $60 million of loans are due to expire this year, meaning they are correctly characterised in our 2022 financial report as 'current liabilities.' However, upon executing the debt renewal in July this year, the loans will automatically move to 'non-current' liabilities and in turn improve the University's liquidity ratio.

We were concerned that – in the absence of any explanation - readers would be left with an inaccurate and misleading impression that La Trobe's financial position is suboptimal or at risk. For the reasons stated above, this is certainly not the case. Rather, the liquidity ratio is the result of prudent financial management and a deliberate fiscal strategy.

I acknowledge that your office has subsequently incorporated an additional note in the report that helps to contextualise La Trobe's 2022 liquidity ratio.

Thank you again for the opportunity to comment.

Yours sincerely

[redacted]

Professor John Dewar AO
Vice-Chancellor

ABN 64 804 735 113
CRICOS Provider 00115M

Appendix B:
Sector context

The sector at a glance

Public universities in Victoria

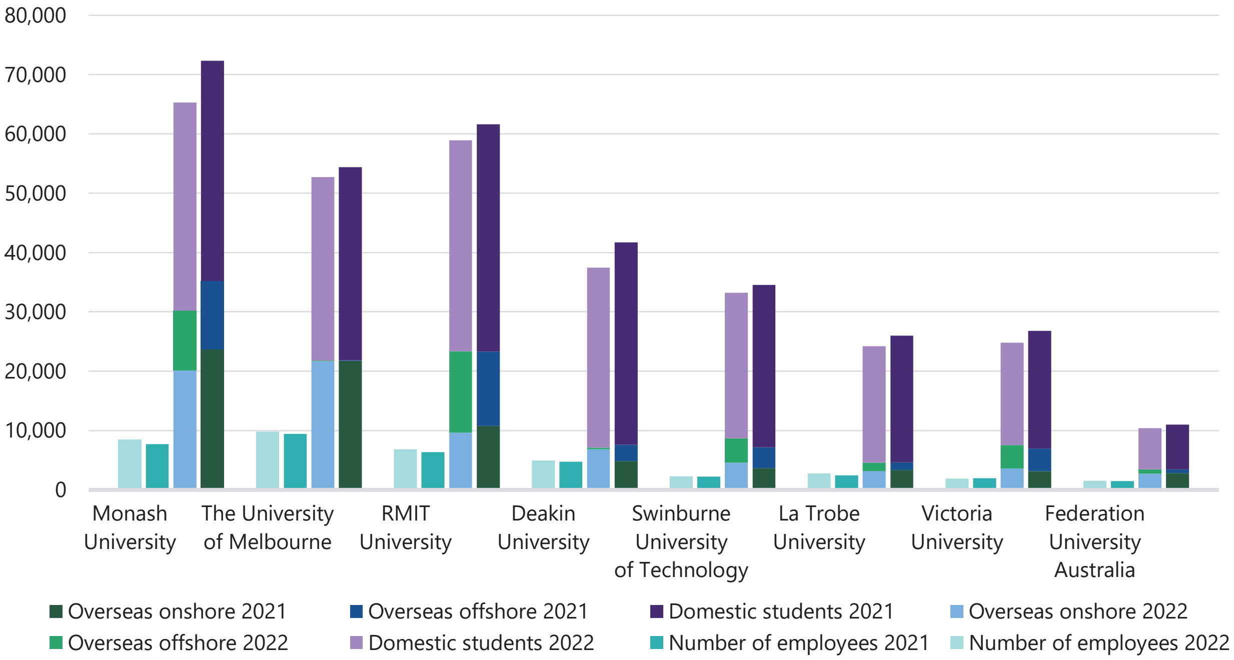
Victoria's public university sector is made up of 8 universities and the 44 entities they control. They deliver higher education and do research at a range of campuses across the state.

Victoria's 2 largest universities – Monash University and The University of Melbourne – are members of the Go8.

This report excludes private universities (such as the Australian Catholic University, the University of Divinity, the Australian National University and Torrens University), and other universities that the Australian Government or other states control.

Figure B1 shows Victorian public universities by student and staff numbers.

Figure B1: Universities' student and staff numbers by FTE and EFTSL for 2021 and 2022

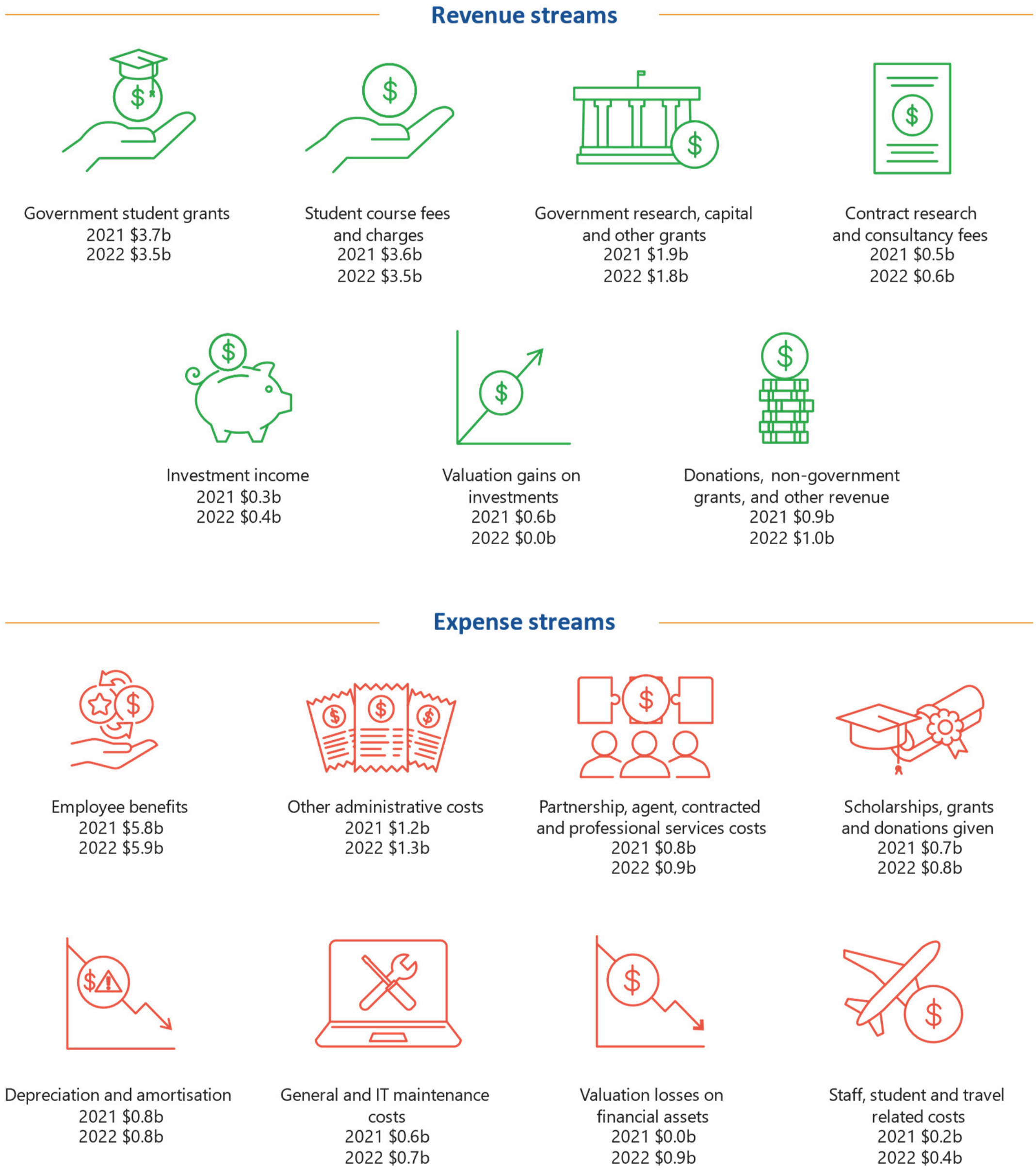


Note: Number of employees includes full-time, part-time and casual academic and non-academic staff.
Source: VAGO.

The university sector’s financial model

Revenue and expense streams

Figure B2: Universities' key revenue and expense streams for 2021 and 2022



Source: VAGO.

Universities' revenue sources and assets

The university sector's revenue comes from:

- Australian Government student funding (based on student numbers)
- student fees and charges
- other grants, including government research and capital grants
- fees for contract research and consultancy
- investment income from its cash and investments
- other revenue, such as donations, bequests and non-government grants.

Most of the sector's assets are the property, plant and equipment it needs to deliver its services, followed by its cash and investments.

Universities' spending and liabilities

The sector spends most of its money on:

- employee salaries, wages and other benefits
- contracted and professional services, agent costs and partnership costs
- scholarships, grants, prizes and donations
- depreciation and amortisation
- IT, communication, non-capitalised equipment and maintenance costs
- other administrative expenses, including staff, students and travel expenses
- fair value losses of investments (for 2022).

Borrowings and lease liabilities are the sector's largest liabilities. Income and revenue in advance, employee benefits provisions, and accounts payable equally make up the rest.

Legislative and financial reporting framework

Applicable Victorian Acts

In Victoria, public universities are established by their own legislation. The *Financial Management Act 1994* defines them as public bodies, and they must follow its requirements for preparing financial reports. This includes the requirement to give us their draft financial reports within 8 weeks after the end of the year.

However, since the State of Victoria does not control universities, the state's annual financial report does not include their financial results.

Australian Government Acts

Universities are registered with the Tertiary Education Quality and Standards Agency. This means the *Tertiary Education Quality and Standards Agency Act 2011* regulates them.

Universities get most of their grant funding from the Australian Government. This means that any Acts associated with this funding apply to them, including the *Higher Education Support Act 2003*.

Universities must follow the financial reporting requirements that underpin these Acts and the financial reporting requirements of their funding agreements for research and other purposes, together with their Victorian requirements.

The *Financial Statement Guidelines for Australian Higher Education Providers*, which all universities follow, outlines the requirements that these 2 Acts prescribe.

The Australian Government instructs universities to include some of these reporting requirements in their financial reports. This means universities' financial reports contain disclosures that are not usually found in general-purpose financial reports.

Universities with charity status

Many universities and their controlled entities are registered charities with the Australian Charities and Not-for-profits Commission. This means they have further financial reporting obligations under the *Australian Charities and Not-for-profits Commission Act 2012*.

Controlled entities

University-controlled entities do not automatically fall within the scope of the *Financial Management Act 1994*. But their parent entity’s legislation may require them to prepare financial reports in a manner and form approved by the Assistant Treasurer.

The parent entity’s legislation typically requires their controlled entities to submit to us their draft financial reports within 3 months of the end of the year.

Appendix C:
Our audit approach

Our method

We conduct our financial audits of the university sector in accordance with the *Audit Act 1994* and the Australian Auditing Standards. As part of an audit, we:

- identify and assess the financial report's risks of material misstatement (whether due to error or fraud)
- design and perform audit procedures to respond to those risks
- obtain sufficient and appropriate audit evidence to provide a basis for an opinion.

We also:

- investigate internal controls relevant to the audit so we can design appropriate audit procedures for the circumstances
- evaluate whether the entity's accounting policies are appropriate
- evaluate whether the accounting estimates and related disclosures in the entity's financial report are reasonable
- decide if it is appropriate to use the going concern basis of accounting
- evaluate the overall presentation, structure and content of the financial report, including its disclosures
- assess whether the financial report represents the underlying transactions and events in a way that achieves fair presentation.

Going concern

Going concern means that an entity is expected to be able to pay its debts when they fall due and continue to operate without any intention or need to liquidate or otherwise wind-up its operations.

Our independence

The Auditor-General is:

- an independent officer of the Parliament of Victoria
- appointed under legislation to examine, on behalf of Parliament and taxpayers, how the public sector manages resources
- not subject to control or direction of either Parliament or the government.

Our ethical obligations

The Auditor-General and staff of VAGO must meet the ethical requirements of the:

- Australian Auditing Standards
- Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants*
- *Code of Conduct for Victorian Public Sector Employees of Special Bodies*
- *Public Administration Act 2004*.

We also provided a copy of the report to the Department of Premier and Cabinet.

Our costs This report and its supporting dashboard cost $130,000 and were funded by parliamentary appropriation.

Appendix D:
Abbreviations, acronyms and glossary

Acronyms

We use the following acronyms in this report:

Acronym	
ACSC	Australian Cyber Security Centre
CPI	consumer price index
EFTSL	equivalent full-time student load
FTE	full-time equivalent
Go8	Group of Eight
HELP	Higher Education Loan Programme
IT	information technology
VAGO	Victorian Auditor-General's Office

Glossary

This glossary includes an explanation of the types of engagements we perform:

Term	
Reasonable assurance	We achieve reasonable assurance by obtaining and verifying direct evidence from a variety of internal and external sources about an agency's performance. This enables us to express an opinion or draw a conclusion against an audit objective with a high level of assurance. We call these audit engagements. See our assurance services fact sheet for more information.
Limited assurance	We obtain less assurance when we rely primarily on an agency's representations and other evidence generated by that agency. However, we aim to have enough confidence in our conclusion for it to be meaningful. We call these types of engagements assurance reviews and typically express our opinions in negative terms. For example, that nothing has come to our attention to indicate there is a problem. See our assurance services fact sheet for more information.
Clear opinion	A 'clear' or 'unmodified' audit opinion means we have reviewed an entity's financial report and believe it is reliable and complies with relevant reporting requirements.
Consumer price index	The CPI is a measure of the change over time in prices paid for goods and services. It reflects inflation and provides an indication of changes in the cost of living. The Australian Tax Office uses CPI figures as produced by the Australian Bureau of Statistics in March of each year for calculating the increase on HELP debts.
Controlled entity	A controlled entity is an entity that another party has the power to govern and make financial and operating decisions about.
Depreciation and amortisation	Depreciation and amortisation are when an entity spreads the cost of a long-term asset (either tangible or intangible) over the period of time that it plans to use it.

Term	
Equivalent full-time student load	One EFTSL represents one full-time study load for one year. Universities calculate EFTSL as per the *Higher Education Support (Administration) Guidelines 2022*.
Fair value or Fair value accounting	Fair value accounting is when an entity values an asset based on its current price in the market. The entity also needs to consider how future events and conditions could affect the asset's value.
Financial instruments	Financial instruments are assets and liabilities created by contracts or agreements between 2 parties. It represents a form of ownership of a party, or a future cashflow between the 2 parties. Shares, bonds, trade payables, and borrowings are all examples of financial instruments. Financial assets that are held for income generation or capital gain are commonly called 'investments'.
Going concern	Going concern means that an entity is expected to be able to pay its debts when they fall due and continue to operate without any intention or need to liquidate or otherwise wind-up its operations.
Group of Eight	According to its website, the Go8 'comprises Australia's leading research-intensive universities – the University of Melbourne, the Australian National University, the University of Sydney, the University of Queensland, the University of Western Australia, the University of Adelaide, Monash University and UNSW Sydney'. It further states the Go8 is 'focussed on, and is a leader in, influencing the development and delivery of long-term sustainable national higher education and research policy, and in developing elite international alliances and research partnerships'.
Higher Education Loan Programme	HELP is an Australian Government initiative that provides a loan to eligible students in Australia to pay for their tuition fees. Repayment is deferred until their income reaches certain thresholds.
Intangible asset	An intangible asset is a non-financial asset without physical substance. It is controlled by an entity and is expected to generate future economic benefits. Examples includes software and patents.
Investing and financing cashflows	Investing cashflows are an entity's cash receipts and payments from purchasing or disposing of long-term assets and investments. Financing cashflows are an entity's cash receipts and payments from getting or repaying funds from lenders or owners.
Lease liabilities	Leases are contractual arrangements granting the right to use an asset in exchange for payments over an agreed period. The value of payments owed under these arrangements are lease liabilities.
Liquid assets	A liquid asset is an asset that an entity can easily change to cash. It includes cash equivalents such as term deposits, current assets, and non-current investments such as listed shares and managed funds redeemable at call.
Material	We consider an error material if misstating it or not including it could influence a user's decision or understanding.
Microcredential course	Microcredential courses are short courses that allow a student to learn new skills relevant to their job quickly, and at a TAFE or university level. According to the National Microcredentials Framework, they 'must be outcome-based, responsive to industry-need, tailored to support lifelong learning, and transparent and accessible'.
Operating cashflows	Operating cashflows include cash that an entity gets from its core business activities, such as receipts from students and the Australian Government, and payments it makes to run these activities, such as payments to suppliers and employees.
Patches	Patches are changes to a piece of software (including operating systems) or ICT equipment to remedy security vulnerabilities, improve usability, or improve performance.
Revenue and income	Revenue is money or a benefit that an entity gets through a contract with another party. The entity records revenue when it fulfils its commitments in the contract. For example, when a university has delivered tuition to a student. Income is money or a benefit that an entity gets from any other source. In most cases, the entity records income immediately when it receives it. For example, when a university gets a cash donation or when one of its investments goes up in value.

Term	
Student revenue	Student revenue is revenue that a university gets from running courses. Most of this revenue is fees and charges from international students and Australian Government student grants for 'Commonwealth-supported places'. A Commonwealth-supported place is when the Australian Government pays for part of a student's course fees.
Unrealised fair value losses	Universities can choose to record fair value changes for some investments in their net result when they happen or when they sell the asset. Most universities record fair value changes within their net result for the year. They do this even if they have not sold the investment. This means their net result is susceptible to fair value changes each year. When an investment's fair value goes down, but a university has not sold it, it is called an 'unrealised fair value loss'.

Appendix E:
Audit opinions

Figure E1 lists the entities we included in this report. It details the type of audit opinions for their 2022 financial reports and the date we issued it to them.

Figure E1: Audit opinions issued for the university sector (year ended 31 December 2022) as at 1 June 2023

	Financial report	
Entity	**Clear audit opinion issued**	**Audit opinion signed date**
Deakin University	✓	27 March 2023
Deakin Residential Services Pty Ltd	✓	16 March 2023
Unilink Limited	✓	16 March 2023
Universal Motion Simulator Pty Ltd	✓	16 March 2023
Federation University Australia	✓	08 March 2023
Brisbane Education Services Pty Ltd	✓	01 March 2023
The School of Mines and Industries Ballarat Limited	✓	01 March 2023
La Trobe University	✓	29 March 2023
LA TROBE LTD (formerly Unitemps La Trobe Ltd)	N/A	N/A
Monash University	✓	29 March 2023
Flex Immunotherapeutics Pty Ltd	N/A	N/A
Monash Accommodation Services Pty Ltd	✓	22 March 2023
Monash College Pty Ltd	✓	16 March 2023
Monash Commercial Pty Ltd	✓	20 March 2023
Monash Investment Holdings Pty Ltd	✓	06 April 2023
Monash Investment Trust	✓	06 April 2023
Monash University Foundation	✓	23 March 2023
Monash University Foundation Pty Ltd	✓	23 March 2023
Monash University Indonesia Limited	N/A	N/A
Myostellar Pty Ltd	N/A	N/A
OmegaOne Therapeutics Pty Ltd	N/A	N/A
Phrenix Therapeutics Pty Ltd	N/A	N/A
World Mosquito Program Ltd	✓	03 April 2023
RMIT University	✓	17 March 2023
RMIT Holdings Pty Ltd	✓	15 March 2023

Entity	Financial report: Clear audit opinion issued	Financial report: Audit opinion signed date
RMIT Online Pty Ltd	✓	15 March 2023
RMIT Spain SL	N/A	N/A
RMIT Training Pty Ltd	✓	15 March 2023
RMIT University Indonesia Pty Ltd	N/A	N/A
Swinburne University of Technology	✓	30 March 2023
Capsular Technologies Pty Ltd	✓	21 April 2023
National Institute of Circus Arts Limited	✓	03 May 2023
Swinburne College Pty Ltd	✓	17 April 2023
Swinburne Intellectual Property Trust	✓	26 April 2023
Swinburne International (Holdings) Pty Ltd	✓	26 April 2023
Swinburne Student Amenities Association Ltd	✓	17 April 2023
Swinburne Ventures Ltd	✓	19 April 2023
The University of Melbourne	✓	27 March 2023
Australian Music Examinations Board (Victoria) Limited	✓	26 April 2023
Goulburn Valley Equine Hospital Pty Ltd	N/A	N/A
Melbourne Business School Limited	N/A	N/A
Melbourne Teaching Health Clinics Ltd	N/A	N/A
Melbourne University Publishing Limited	✓	15 May 2023
Mt Eliza Graduate School of Business and Government Limited	N/A	N/A
Nossal Institute Limited	✓	26 April 2023
UM Commercialisation Pty Ltd	N/A	N/A
UM Commercialisation Trust	N/A	N/A
UOM Commercial Ltd	N/A	N/A
UOM International Holdings Limited	N/A	N/A
Victoria University	✓	30 March 2023
Victoria University Enterprises Pty Ltd	✓	31 March 2023
VU Online Pty Ltd	✓	17 April 2023

Note: N/A = not applicable, audit still in progress.
Source: VAGO.

Appendix F:
Control issue risk ratings

Figure F1 shows the risk ratings we apply to issues. We raise these issues with entities in management letters. The figure also explains what these ratings represent and the timeframe we expect entities to resolve issues within.

Figure F1: Risk definitions we apply to issues we raise in audit management letters

Rating	Definition	Management action required
High	The issue represents: • a **material misstatement** in the financial report that has occurred, or an issue that could potentially result in a modified audit opinion if not addressed as a matter of urgency by the entity, or • a control weakness that could cause or is causing a **major** disruption of the process or the entity's ability to achieve process objectives in relation to financial reporting and comply with relevant legislation.	Requires executive management to correct the misstatement in the financial report, or address the issue, as a matter of urgency to avoid a modified audit opinion. Requires immediate management intervention with a detailed action plan to be implemented within one month.
Medium	The issue represents: • a misstatement in the financial report that is not material and has occurred, or that may occur, the impact of which has the possibility to be material, or • a control weakness that could have or is having a **moderate** adverse effect on the ability to achieve process objectives and comply with relevant legislation.	Requires management intervention with a detailed action plan implemented within 3 to 6 months.
Low	The issue represents: • a misstatement in the financial report that is likely to occur but is not expected to be material, or • a **minor** control weakness with minimal but reportable impact on the ability to achieve process objectives and comply with relevant legislation, or • an opportunity to improve an existing process or internal control.	Requires management intervention with a detailed action plan implemented within 6 to 12 months.

Source: VAGO.

Appendix G: Financial and non-financial sustainability indicators

Figure G1 shows the financial and non-financial indicators used to assess the financial sustainability risks of universities. These indicators should be considered collectively and are more useful when assessed over time as part of a trend analysis.

Our analysis of financial sustainability risk in this report reflects on the position of each university and its controlled entities (each consolidated university).

We have published the underlying raw data and each universities' results for each indicator from 2018 to 2022 as part of our interactive data dashboard on our website (https://www.audit.vic.gov.au/report/results-2022-audits-universities).

Figure G1: Financial sustainability indicators, formulas and descriptions

Indicator	Formula	Description
Net result margin (%)	Net result/total revenue and income	A positive result indicates a surplus, and the larger the percentage, the stronger the result. A negative result indicates a deficit. Operating deficits cannot be sustained in the long term. The net result and total revenue are obtained from the comprehensive operating statement.
Liquidity (ratio)	Current assets/current liabilities	This measures the ability to pay existing liabilities in the next 12 months. A ratio of 1 or more means that an entity has more cash and short-term assets than short-term liabilities.
Adjusted liquidity (ratio)	Current assets + non-current financial assets/current liabilities	Liquidity ratio adjusted to include non-current financial assets. Non-current financial assets are typically liquid, meaning universities can convert most of these into cash at short notice, and use them to meet any liabilities if needed. The ratio should ideally be above 1, indicating that there are sufficient liquid assets to meet short-term liabilities.
Capital replacement (ratio)	Cash outflows on tangible and intangible assets/depreciation and amortisation (excluding right of use assets)	This compares the rate of spending on property, plant and equipment with its depreciation. Ratios higher than 1:1 indicate that spending is faster than the depreciating rate. Leases are typically non-cash transactions, so are excluded from the calculation. This is a long-term indicator, as capital expenditure can be deferred in the short term if there are insufficient funds available from operations and borrowings is not an option. We obtain the cash outflows on tangible and intangible assets amount from the cashflow statement. We obtain the depreciation and amortisation amount from the comprehensive operating statement.

Indicator	Formula	Description
Internal financing (%)	Net operating cashflow/net cash outflow on tangible and intangible assets	This measures the ability of an entity to finance capital works from generated cashflow. The higher the percentage, the greater the ability for the entity to finance capital works from its own funds. We obtain the net operating cashflows and net cash outflow on tangible and intangible assets (that is, capital expenditure after factoring in cash received on sales of capital assets) from the cashflow statement. Note: The internal financing ratio cannot be less than zero. Where a calculation has produced a negative result, this has been rounded up to 0%.
Debt to equity (%)	Total debt (borrowings and leases)/equity	This measures the reliance on debt as a source of funding. A higher ratio indicates greater reliance on debt and an increased risk of insolvency.
Cost of debt (%)	Finance costs on borrowings and leases/total borrowings and leases	This measures the effective rate of interest and other costs paid on borrowings, including those obtained via leases. This shows how much it costs the university to service its debt.
Return on investment (%)	Income from investments/total cash and financial assets	This measures the performance of financial investments and shows the income earned for each dollar invested. Note: this excludes any gains or losses on valuation.
Employee benefits ratio (%)	Employee expenses/total revenue and income	This measures of how efficiently each university uses its staff to deliver revenue and income generating services. A smaller ratio shows a more efficient and sustainable workforce.
Repairs and maintenance to depreciation (%)	Repairs and maintenance expense/depreciation	This compares the rate of spending on repairing and maintaining existing assets with the amount they are recording as depreciation. Depreciating assets degrade over time and need to be repaired to maintain their operating effectiveness.
EFTSL to Employee FTE (ratio)	Total EFTSL/total FTE employees	This measures the adequacy of available resources per student load. This shows how many staff FTE, both academic and otherwise, a university employs for each EFTSL student it teaches.
Employee expenses per EFTSL (ratio)	Employee expenses/total EFTSL	This measures how much the university spends on employees, both academic and otherwise, for each EFTSL student it teaches. A smaller ratio shows greater cost efficiency.
Operating expenses per EFTSL (ratio)	Operating expenses/total EFTSL	This measures how much the university spends overall for each EFTSL student it teaches. Operating expenses exclude things such as depreciation, finance costs, and valuation losses. A smaller ratio shows greater cost efficiency.

Source: VAGO.

Auditor-General's reports tabled during 2022–23

Report title	Tabled
Results of 2021 Audits: Technical and Further Education Institutes (2022–23: 1)	July 2022
Results of 2021 Audits: Universities (2022–23: 2)	July 2022
Follow-up of Protecting Victoria's Coastal Assets (2022–23: 3)	August 2022
The Effectiveness of Victoria Police's Staff Allocation (2022–23: 4)	September 2022
Quality of Major Transport Infrastructure Project Business Cases (2022–23: 5)	September 2022
Major Projects Performance Reporting 2022 (2022–23: 6)	September 2022
Quality of Child Protection Data (2022–23: 7)	September 2022
Follow-up of Maintaining the Mental Health of Child Protection Practitioners (2022–23: 8)	September 2022
Regulating Victoria's Native Forests (2022–23: 9)	October 2022
Victoria's Alcohol and Other Drug Treatment Data (2022–23: 10)	October 2022
Auditor-General's Report on the Annual Financial Report of the State of Victoria: 2021–22 (2022–23: 11)	October 2022
Regulating Private Pool and Spa Safety (2022–23: 12)	February 2023
Results of 2021–22 Audits: Local Government (2022–23: 13)	February 2023
Maintaining Railway Assets Across Metropolitan Melbourne (2022–23: 14)	March 2023
Fair Presentation of Service Delivery Performance 2022 (2022–23: 15)	March 2023
Understanding Victoria's Contaminated Land (2022–23: 16)	March 2023
Supporting Sexual and Reproductive Health (2022–23: 17)	May 2023
Regulating Food Safety (2022–23: 18)	June 2023
Collecting State-based Tax Revenue (2022–23: 19)	June 2023
Supporting Students with Disability (2022–23: 20)	June 2023
Principal Health and Wellbeing (2022–23: 21)	June 2023
Correctional Services for People with Intellectual Disability or an Acquired Brain Injury (2022–23: 22)	June 2023
Effectiveness of Rail Freight Support Programs (2022–23: 23)	June 2023
Results of 2022 Audits: Universities (2022–23: 24)	June 2023
Results of 2022 Audits: TAFEs (2022–23: 25)	June 2023

All reports are available for download in PDF and HTML format on our website at https://www.audit.vic.gov.au

Our role and contact details

The Auditor-General's role

For information about the Auditor-General's role and VAGO's work, please see our online fact sheet About VAGO.

Our assurance services

Our online fact sheet Our assurance services details the nature and levels of assurance that we provide to Parliament and public sector agencies through our work program.

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