RESPONSES TO QUESTIONS ON NOTICE

ECONOMICS LEGISLATION COMMITTEE
MEDICARE LEVY AMENDMENT (NATIONAL DISABILITY INSURANCE SCHEME FUNDING) BILL 2017
FRIDAY 29 SEPTEMBER 2017

PROPORTION OF UNIVERSITY INFRASTRUCTURE EXPENDITURE THAT HAS COME FROM THE EIF

Senator Hume: The data I have in front of me says that between 2011 and 2013 the EIF revenue constituted only 14 per cent of university infrastructure expenditure and between 2012 and 14 it constituted 10 per cent. So if you have updated data on what proportion of university infrastructure expenditure the EIF actually maintains after that that would be terrific.

UA does not have access to annual outgoings from the EIF so cannot offer further figures in addition to those provided by the Chair.

It is important to note, however, that EIF was never designed to fund anywhere near all of university infrastructure. Its role was to fund major transformational projects. The report of *The Higher Education Infrastructure Working Group* (chaired by Philip Clark and Denise Bradley) found that 19 per cent of university investment in infrastructure came from government capital grants, and that 70 per cent of the $10.6 billion universities invested in the 2011-2013 triennium came from careful management of institutional resources. It found that:

- in nearly every case, universities made significant co-investments in HEEF/EIF projects; and
- the leverage impact of HEEF/EIF investments was very significant."[1]

Australian and international universities, Australian and publicly funded research agencies, international research facilities or collaborators, local and international foundations and philanthropists and multinational corporations all have a track record of co-investing in Australian research infrastructure. The *Research Infrastructure Review Final Report* notes that:

> "If the Government takes the lead and supports the proposed new model, the Review Panel believes this will pave the way for significant co-investment… In the absence of that lead, co-investment prospects are, in the Review Panel's view, much diminished".[2]

[1] *Higher Education Infrastructure Working Group Report 2015,* p21

[2] *Research Infrastructure Review Final Report 2015*, Executive Summary p.ix

There have been no new commitments made from the EIF since 30 July 2013; there is one outstanding payment of $2 million due to the University of Tasmania.

At the same time, surpluses across the sector have declined by 20 per cent since 2009 (in real, constant 2015 dollar terms). Surpluses vary considerably across universities and State Audit Offices have expressed concern.

While UA is pleased that Government has made provision for the operational funding needed to support the National Collaborative Research Infrastructure Strategy (NCRIS) over the next ten years, this commitment does not address capital infrastructure at national or institutional level, and it does not address teaching and student facilities.

Between the first round of HEEF projects in 2008 and the regional priorities EIF funding round of 2012, $4.2 billion was invested in universities and vocational education institutions to fund transformative infrastructure projects.

Without new investment, universities would need to abandon plans for similar projects in the future.

The *Higher Education Infrastructure Working Group Final Report 2015* made clear that universities alone do not have the capacity to make major transformational investments, and that the role of Government in supporting infrastructure is crucial. It stated that:

> "the Working Group is not aware of any other national or state/provincial government having principal responsibility for university funding which does not provide some form of material capital funding".[3]

The *Research Infrastructure Review Final Report* of September 2015 also emphasised the role of Government in providing essential infrastructure for Australian researchers. The first recommendation of the review panel, chaired by Philip Marcus Clark AM, addressed the imperative for the Australian Government to invest the patient capital required to secure Australia's future in research:

> "Public investment is necessary to provide the 'truly patient' capital needed to create *an environment for the inspired risk taking that is essential to technological discovery*. Only governments have the capacity to invest this patient capital into the long timeframes that must apply to research and to research infrastructure"[4]

It is important to remember that the EIF is designed to fund institutional teaching and research infrastructure as well as national and landmark research infrastructure, and is the last available Government fund providing capital for infrastructure at the institutional level. The Capital Development Pool for special capital projects closed in 2012.

Universities are increasingly leveraging the value of existing physical assets for maintenance and new facilities. However, they both need to ensure responsible management of assets and work with State government and other requirements.

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[3] *Higher Education Infrastructure Working Group Report 2015*, p53

[4] *Research Infrastructure Review Final Report September 2015*, p12

LINK BETWEEN INVESTMENT IN HIGHER EDUCATION AND ECONOMIC GROWTH

Senator KETTER: One would have thought it was a bipartisan approach that investment in higher education infrastructure generates economic growth down the track through innovation. It's sad that we have to go to this, but can you point to any studies that go to this nexus and elaborate on the link between investment in higher education and economic growth?

In its June 2017 submission to the Senate Education and Employment Legislation Committee's inquiry in the Higher Education Support Legislation Amendment, Universities Australia provided detailed information regarding the return on investment in higher education. It noted that successful nations understand the link between investing in higher education and research, and enduring national prosperity. Countries in our region are investing heavily in their higher education and research systems because they know that this investment yields substantial returns for the nation and for individuals.

The public benefits are significant. Deloitte modelling shows the university sector contributed around $25 billion to the Australian economy in 2013, accounting for over 1.5 per cent of Australia's GDP. Universities directly and indirectly accounted for 160,000 full-time equivalent jobs.[5]

In May this year, the Government cited a new (still unpublished) study by Deloitte which shows that the public benefits of higher education exceed the private benefits. The report shows that, after controlling for students' 'innate ability', 55 per cent of the benefit to the economy from each graduate was a public benefit, compared to a 45 per cent private benefit.[6]

University education added an estimated $140 billion to Australian GDP in 2014, due to higher labour force participation and employment of university graduates and increased productivity of the workforce. Australia's GDP is 8.5 per cent higher due to these impacts.[7] This equates to roughly a sixfold return on $25.3 billion university spend from all sources, and more than a tenfold return on Commonwealth Government investment on universities in 2014.

A recent study estimated that an additional year of higher education undertaken in Australia generated spill-over public benefits worth between $10,635 and $15,952 per year of higher education per student (in 2014 dollars).[8]

Data published by the OECD in 2016 shows that, compared to those without a tertiary education, the net public benefit is US$129,000 per male graduate and US$90,000 per female graduate for Australia. Public benefits included higher tax revenue and lower social security transfer payments.[9]

A highly educated workforce benefits everyone. For every thousand university graduates who enter the Australian workforce, 120 new jobs are created for those without degrees. Wages for

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[5] Deloitte Access Economics 2015, *The importance of universities to Australia's prosperity*, Deloitte Access Economics Pty Ltd, Canberra.

[6] Deloitte Access Economics 2016, *Estimating the public and private benefits of education*, unpublished report to DET, p.47, cited in Australian Government 2016, *The Higher Education Reform Package*, p.9-10

[7] Deloitte Access Economics 2015, *The importance of universities to Australia's prosperity*, Deloitte Access Economics Pty Ltd, Canberra.

[8] Chapman, B. and Lounkaew, K. 2015, 'Measuring the value of externalities from higher education', Higher Education, 70, p. 767–785.

[9] OECD 2016, *Education at a Glance* 2016*: OECD indicators*, OECD Publishing, Paris, Indicator A7.

non-degree holders are boosted by $655 a year—or $12.60 a week—when more graduates join the national workforce.[10]

The benefits for graduates are well known. They are less likely to be unemployed and more likely to participate in the labour market. The latest ABS statistics show the unemployment rate for people with a bachelor degree or higher was 3.2 per cent in 2016, compared with 8.2 per cent for those without a post-school qualification.[11]

Graduates earn more than workers without a degree, on average. According to the 2011 Census, the median male bachelor degree graduate has lifetime additional earnings of $1.4 million, compared to the median male without a post-school qualification. For women, the estimated lifetime earnings premium is just under $1 million.[12]

Studies also show that university graduates are more likely to have better health, more likely to be engaged in civic society, report higher life satisfaction and are more receptive to people from different cultures.[13]

The value of the stock of knowledge generated by university research was estimated at $160 billion in 2014, equivalent to almost 10 per cent of Australia's GDP. Increased investment in university research over the past 30 years has been estimated to account for almost a third of the average growth in living standards over this period.[14]

The importance of R&D to the Australian economy cannot be overstated. A recent report prepared for the Office of the Chief Scientist and the Australian Academy of Science by the Centre for International Economics examined the importance of global advances in specific fields of knowledge over the past 20 to 30 years:

> "Overall, in the middle case, we estimate that recent advances in the mathematical, physical and biological sciences have resulted in the Australian economy being bigger by 25.5% (or by $330 billion GVA in 2012–13) than it would have been without this knowledge."[15]

Individual universities have considerable economic impact in their cities or regions. For example, a study conducted of Monash University's economic impact notes that the University:

- generates $5.10 for every dollar of government funding;
- directly accounts for $3.9 billion worth of economic activity annually;
- contributes $1.5 billion annually from international education to the economy;
- directly employs nearly 18,000 staff;

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[10] Cadence Economics 2016, *The Graduate effect: Higher education spillovers to the Australian workforce,* Cadence Economics Pty Ltd, Canberra.

[11] *ABS 2016, Education and Work, Australia, May 2016, Cat. No. 6227.0, Commonwealth of Australia, Canberra.*

[12] Norton, A. and Cakitaki, B. 2016, *Mapping Australian higher education 2016,* Grattan Institute, Melbourne, p. 80.

[13] Savage, J. and Norton, A. 2012, *Non-financial benefits of higher education: Analysis supporting Grattan's graduate winners report,* Grattan Institute, Melbourne.

[14] Deloitte Access Economics 2015, *The importance of universities to Australia's prosperity*, Deloitte Access Economics Pty Ltd, Canberra.

[15] Australian Academy of Science 2016, *The Important of Advanced Physical, Mathematical and Biological Sciences to the Australian Economy,* p2

- spends over $640m per year in external works from food trucks to construction firms; and
- contributes indirectly to some 2,800 jobs through its capital expenditure.[16]

IDENTIFICATION OF CAPITAL FUNDING AS FINANCIAL RISK FOR QUEENSLAND UNIVERSITIES

Senator KETTER: Ms Jackson, are you in a position to tell me if Queensland is particularly impacted by this compared to other states? Or is it across the board?

The Universities Australia submission to the Committee reported that State Auditors-General have noted universities' declining operating margins with concern. The Queensland Audit Office reports that universities' capital spending has fallen by 48 per cent over five years, mainly because of reduced capital funding. It identified capital funding as the greatest financial risk for Queensland universities.

The trendline for universities in Queensland is concerning, as four of the seven universities have experienced declines in their surplus margins (surplus as a per cent of revenue) between 2008 and 2015.

The NSW and Victorian State Audit Offices have also expressed concern.

The NSW Audit Office's 2017 report on universities noted that half of the universities in NSW (five institutions) experienced faster growth in operating expenditures than in revenue in the previous year. The Audit Office noted a risk that '*There may not be sufficient resources to fund normal operations and maintain existing assets over the medium to longer term' as a result.*[17]

The Audit Office also noted that '*Universities are constraining expenses and streamlining activities to ensure financial sustainability.*'[18]

The report discusses various strategic risks to universities and their possible impacts. Top of the Audit Office's list of strategic risks is '*Potential impact of government policy changes*'.[19] The report notes that—for the first time—fee income from international students exceeds fee income from domestic students at NSW universities. In a context of flat growth in domestic enrolments and proposed cuts to Government funding, universities' reliance on international students' fees is likely to increase.

The Victorian Auditor-General's Office (VAGO) has also recently released its annual report on universities. While VAGO found that Victorian universities were in a sound financial position, the report noted some negative trends and risks.[20]

Over the past five years, net surplus margins for Victorian universities have fallen from 7.65 per cent to 4.24 per cent.

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[16] As quoted in the Group of Eight Newsletter, May 2017.

[17] NSW Auditor-General's Report to Parliament | Universities 2017, p.10

[18] Ibid

[19] Ibid, p.29

[20] Victorian Auditor-General's Office 2017, *Universities: 2016 Audit Snapshot*, Melbourne

VAGO's report notes increases in enrolments have helped to keep (most) universities' operating margins positive. Since domestic enrolment growth has now plateaued, there may be a further negative impact on operating margins.

Universities' capacity to meet their short-term financial obligations has declined since 2015. This indicates that 'universities are using any available cash to purchase longer term investments [and] increasing borrowings'.

Across all Victorian universities, the capital replacement ratio remains good, indicating that universities are replacing assets faster than they depreciate. However, three of the eight universities spent less on asset replacement than their assets' decline in value through use. Asset replacement ratios are a long-term measure of sustainability. VAGO warns that:

> *'…inadequate expenditure on asset renewal and maintenance may to lead to assets, including equipment and infrastructure, deteriorating to a point where they are unsuitable for use.'*[21]

In terms of capital spending and costs, universities' net assets have increased, but growth has been consistent with increases in the size of the sector (Figure 3). Between 2008 and 2015, net assets increased by 30 per cent in real terms, averaging 3.9 per cent per year. Over the same period, growth in total enrolments was slightly higher at 32 per cent, or 4.1 per cent per year.[22]

Across the sector, the trend is clear.

- The total sector surplus in absolute nominal dollar terms has declined by around 8 per cent compared to 2009. In real, constant 2015 dollar terms, surpluses have declined by 20 per cent since 2009.

- As a percentage of total revenue, surplus margins for the whole sector have declined from around 9 per cent in 2009 and 2010 to 5.8 per cent in 2015.

An average figure for university surpluses conceals the spread of university operating results. In 2015, four universities reported a deficit. If one-off capital grants are excluded, that number is eight. A further nine universities had (adjusted) operating results below five per cent, three of which were below three per cent.

In dollar terms, six universities reported (adjusted) surpluses of less than $20 million. Proposed cuts to university funding will have a significant impact especially on these smaller surpluses.

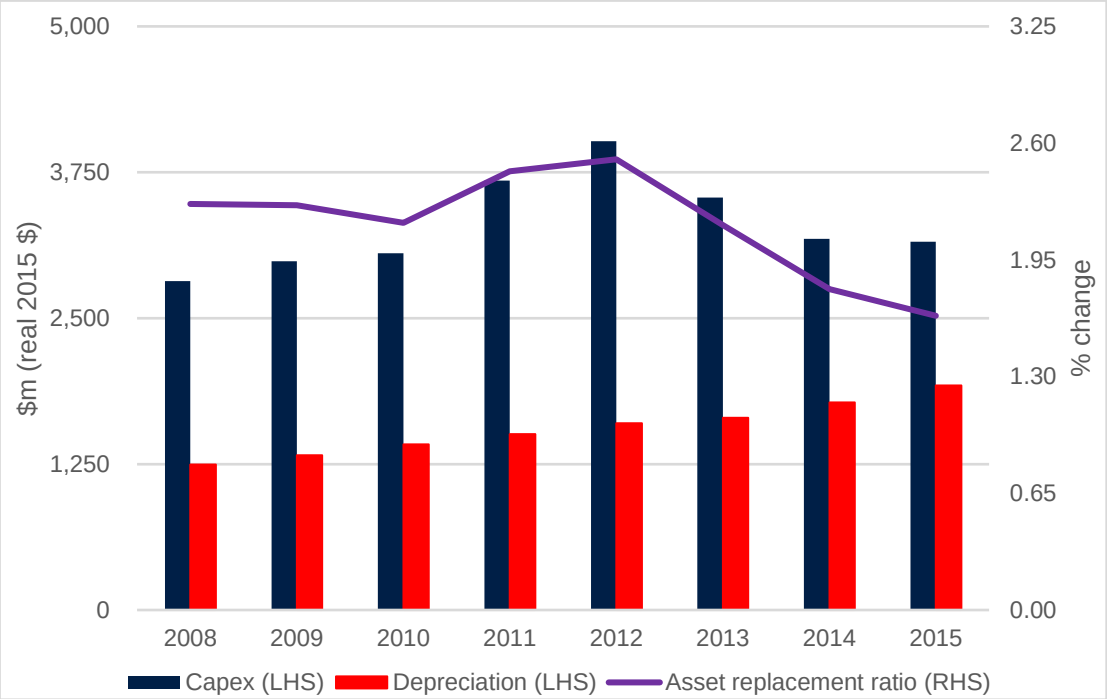
[21] Ibid., p.18

[22] UA analysis of DET *Higher Education Finance Statistics*, various years

State auditors take a close interest in universities' asset (or capital) replacement ratios. A recent report on Victorian universities by the Victorian Auditor-General's Office (VAGO) outlined the reasons for this:

> *'We consider the capital replacement ratio to be a long-term indicator of sustainability, given that capital replacement can be deferred in the short term. Inadequate expenditure on asset renewal and maintenance may lead to assets, including equipment and infrastructure, deteriorating to a point where they are unsuitable for use.'*[23]

Figure 1. Spending on property, plant and equipment (PPE) and depreciation, all universities, 2008-15



Source: *DET Higher Education Finance Statistics*, various years

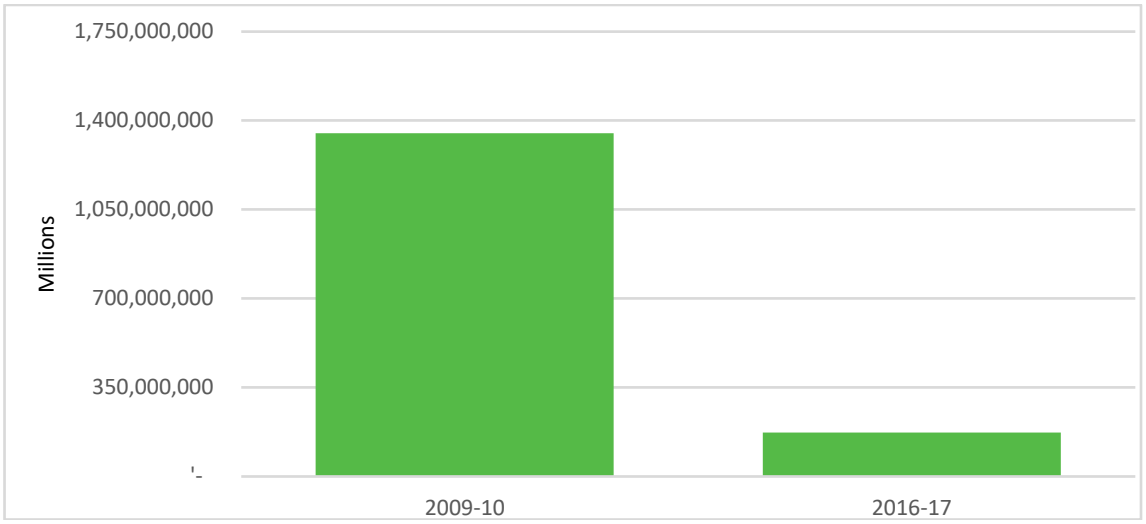
[23] VAGO 2017. *Universities: 2016 Audit Snapshot*, Victorian Government, Melbourne; p.18

As the Queensland Audit Office has recently pointed out, a key factor in universities' increasing challenges in funding infrastructure is the drastic reduction in dedicated Commonwealth funding for capital.[24]

The two programs that previously funded university infrastructure are no longer active. The Capital Development Pool for special capital projects closed in 2012 and the Education Investment Fund (EIF) has not funded any projects since 2013. The remaining EIF balance ($3.7 billion) has been earmarked for repurposing for other non-education purposes.

Figure 2 shows the decline in public investment in university infrastructure, down from almost $1.4 billion in 2009–10 to around $170 million in 2016–17.

Figure 2. Australian Government funding for teaching and research infrastructure, 2009–10 compared to 2016–17

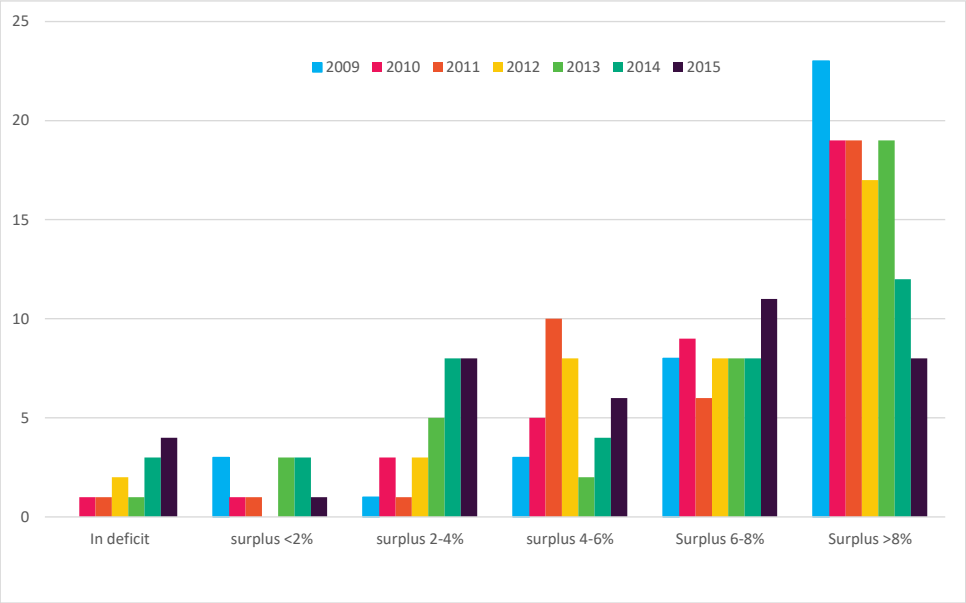


Note: Includes funding for EIF and National Collaborative Research Infrastructure Strategy (NCRIS). The 2016–17 figures include $150 million funding for operating NCRIS facilities.
Source: Based on the *2016-17 DET Portfolio Budget Statements; 2009-10 DEEWR Portfolio Budget Statements; 2009–10 DIISR Portfolio Budget Statements*; Australian Government 2011, *Higher Education Report 2009*.

[24] Queensland Audit Office 2017, *Universities and Grammar Schools: 2016 – Results of Financial Audits*, www.qao.qld.gov.au; p.42;

There is a clear negative trend over time in the number of universities with healthy surpluses (Figure 3). The number of universities with a surplus margin greater than 8 per cent has declined from 23 universities (or 3 in 5 universities) in 2009 to 8 universities in 2015 (or 1 in 5 universities).

Figure 3: Universities by size of surplus, 2009-15

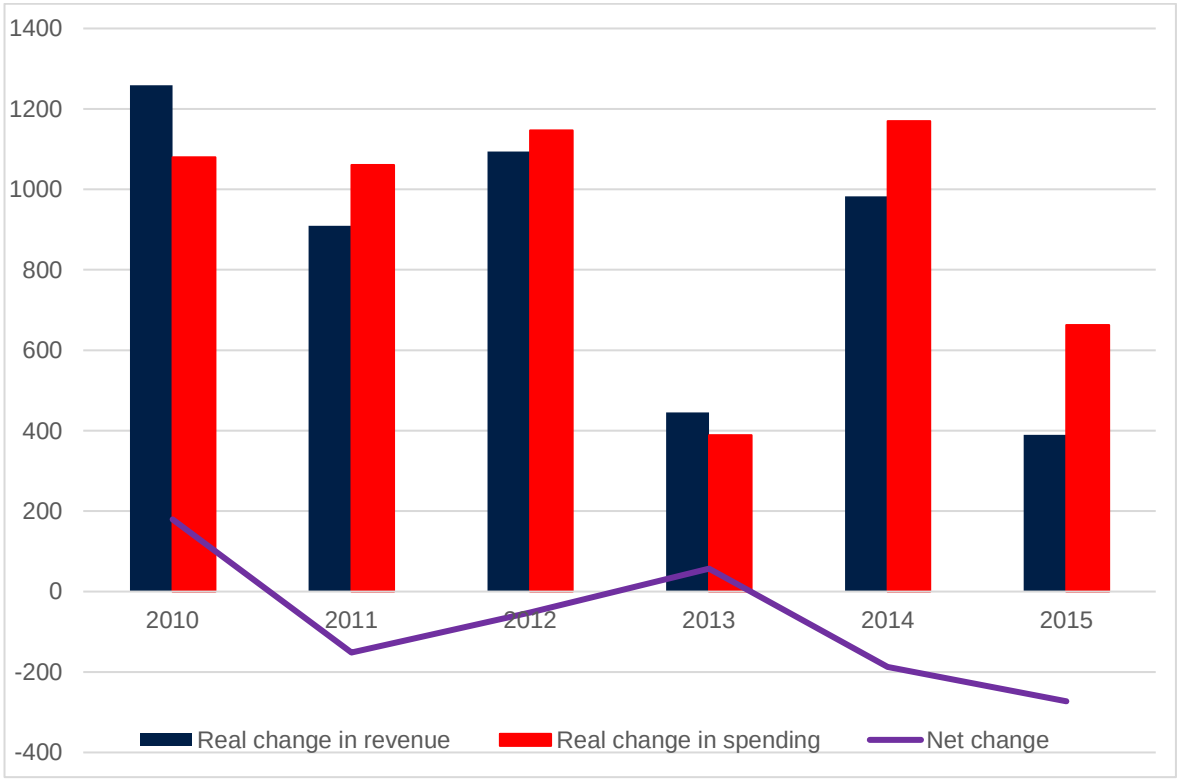


Source: Department of Education and Training, *Higher Education Finance Statistics*, various years.

Regulatory authorities, including State Auditors-General and TEQSA, are taking a close interest in universities' operating results and their implications for institutions' financial risk.

Data on university finances shows that the real costs of operations— including rising utility bills—has grown faster than revenue in four of the last five years. The exception (2013) saw revenue increase outstrip expenditure growth by 0.1 percentage points. Revenue growth was only 1.7 per cent, and the net positive change was only $57 million (Figure 4).[25]

Figure 4. Real annual change in revenue and expenditure, all universities, 2010-15, ($m)



Source: *DET Higher Education Finance Statistics*, various years

[25] UA analysis of DET *Higher Education Finance Statistics*, various years