How are you balancing the books for a digital future?

#### 

The better the question. The better the answer. The better the world works.



THE

Times Higher Education

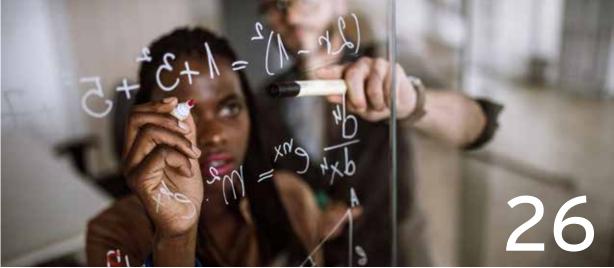
# Contents











#### Foreword

A global financial challenge	.04
requiring more radical responses	.05

#### Chapter 1

#### Mid-tier universities stuck in a vicious cycle of deficit

A growing number of loss-making universities	07
As traditional funding models decline, universities have turned to international students	09
But relying on international students is not sustainable	10
Digital transformation is essential to ensure financial sustainability	11
Limited capital to invest in growth	13

#### Chapter 2

#### What levers are universities pulling to improve financial sustainability?

Growth strategies	15
New offerings	15
Traditional research revenues	16
Commercialization of research	16
Estate management	16
Philanthropy	16
Strategies to manage rising costs	
Reluctance to reduce staff headcount	
Program viability assessments	
Strategies to reduce the quantum and cost of capital	19

#### Chapter 3

#### Which traditional higher education strategies need a radical rethink?

Develop strategic distinctiveness	21
Brand and ranking	. 21
Program portfolio	. 21
Flexibility of delivery	. 22
Student experience	. 22
Deploy technology	. 22
Data-led transformation	. 23
Intelligent operations	. 23
Digital learning	23
Connected university	
Digital organization	24
Create and capture economies of scale	24
How can universities create scale for themselves?	. 24
Build change capacity	. 25
People and organization transformation	25
Back-office transformation	. 25
Conclusions	26

# Foreword

Many of the world's universities face an unsustainable financial future. The sector is plagued by growing systemic issues that are eroding balance sheets. Declining enrolment, rising costs, the imperative to fund digital transformation, reduced government funding and changing student preferences mean the higher education sector is increasingly vulnerable to risk and disruption.

Loss-making and debt-burdened institutions were becoming more common before the pandemic. In many countries, the post-COVID-19 world is proving to be a harsher environment for universities, especially those outside the research elite.

To find out how mid-tier institutions in the sector are responding to their more precarious economic circumstances, Times Higher Education examined the sector's financial data and conducted in-depth interviews with 11 university leaders in Australia, Canada, the UK and the US.

This report summarizes the financial state of play in higher education across the four countries, and the strategies universities are currently employing to grow, streamline costs and improve capital management.

It concludes with EY's advice that these approaches are typically not enough to move the dial on financial sustainability. In Chapter 3, EY examines the hard choices and bold actions university leaders will need to make to help their institutions regain their financial footing. We hope it inspires material changes in higher education business models around the world.



**Catherine Friday** EY Global Education Leader



**Phil Baty** Chief Global Affairs Officer Times Higher Educatin

#### A global financial challenge...

Financial sustainability is rising up the agenda of universities across the globe. Although the exact pattern of revenue and cost pressures varies between countries, the overall picture is remarkably consistent: outside of the research elite, financial sustainability is an increasing challenge. Inside the research elite, the intensity of competition for ranking and reputation (and therefore investment required to play) is growing year on year. And nobody is immune to general wage, energy, and other cost inflation.

In this report, we focus on the financial circumstances of universities outside the elite in Australia, Canada, the UK (primarily England and Wales)<sup>1</sup> and the US, as they are arguably the largest higher education markets. We recognize the global trends are exacerbated by country-specific challenges on the revenue side, including challenging demographics in Australia and the US, stagnant government funding and declining domestic enrolment in Canada, and price capping in England and Wales.

Finally, the competition for students and more market-like higher education systems increase the investment required just to stand still in terms of student experience and rankings performance. Across the globe, universities are selling non-core assets or shrinking their footprints (physical or academic) to fund ongoing costs – an obviously unsustainable position.

As a result, in all four countries, our research found university finances being stretched. An important contributor to this was COVID-19 (at least for some universities, others fared much better during the pandemic) but the underlying trends are still negative.

- In Australia, universities are facing challenges in funding cuts, casualized and mismanaged workforces, and a reduction of international students. Of Australia's 38 public universities, nine recorded a combined deficit of nearly Aus\$850m in 2022.<sup>2</sup>
- In the UK, universities are under pressure with many running deficits. In 2020/21, 33 institutions in England and Wales forecast they would have liquidity below 30 days by the end of the year.<sup>3</sup>
- In Canada, eight universities posted consecutive net losses in the last three years.<sup>4</sup>
- In the US, 20% of US 4-year institutions are at risk and another 20% are in the monitor category, based on EY-Parthenon's analysis of six key metrics which create the compositive Institutional Viability

- 3. Regulating the financial sustainability of higher education providers in England (nao.org.uk)
- 4. Bloated administrations and poor government policy bleeding Ontario's universities | Fraser Institute

The UK has different education systems (funding mechanisms, market structures) and reporting across the four countries of the United Kingdom (England, Northern Ireland, Scotland and Wales). However, financial pressures exist in all countries and so we have used "the UK" throughout this report.

<sup>2. &#</sup>x27;Appallingly unethical': why Australian universities are at breaking point | Australian universities | The Guardian

Metric.<sup>5</sup> Over the last 20 years in the US, around 180 mergers have been executed, and over 300 institutions and 400 branch locations of other institutions have closed. In addition, many individual academic programs<sup>6</sup> have closed in response to shrinking or shifting market demand.

#### ...requiring more radical responses

Prestigious universities, who do not struggle to recruit high volumes of students onto popular programs supported by high brand value, are mostly likely to ride out these challenges.

But for the vast majority occupying the middle ground, competition and challenge will only intensify. These universities will need to address persistent structural issues, including generic and undifferentiated strategies, poor employability outcomes for too many programs and patchy student experience.

They must also find the investment funds to transform so they can meet the needs of students and operate in a digital age. The scale of investment can range widely depending on the ambition of the institution, the digital maturity of the market (what are competitors offering?) and the existing state of digital estate. For example, EY's recent work with an Australian client estimated the total costs of digital transformation to be the equivalent of spend on one new major building every five years. Other clients are making significant strides with smaller but still substantial investments (in the tens of millions of dollars annually), often leveraging third-party partners with established technology platforms.

As this report concludes, such significant structural challenges cannot be addressed with the traditional levers for improving performance. Financial sustainability will not be achieved by merely trimming the academic payroll, using contractors, re-organizing internally or paring back on professional services.

Regaining financial strength will require a fundamental re-think of the university business model, requiring bold action along four critical vectors of change:

- 1. Developing **strategic distinctiveness** by backing success – and actively accepting disinvestment in weaker or non-strategic areas.
- 2. Creating and capture the cost and network benefits of **scale**.
- 3. **Deploying digital technology** to enhance teaching and learning and general employee and student satisfaction.
- 4. Investing in **change capacity** across people, processes and technology.



<sup>5.</sup> https://www.ey.com/en\_us/education/institutional-viability, EY LLP

<sup>6.</sup> Programs refers to university courses in the UK





Mid-tier universities stuck in a vicious cycle of deficit To understand how universities are responding to the financial challenges they are facing, we interviewed 11 university leaders in Australia, Canada, the UK and the US. We asked them about their financial positions, the levers they're pulling to improve their finances and how they're planning to fund longer-term digital transformation projects.

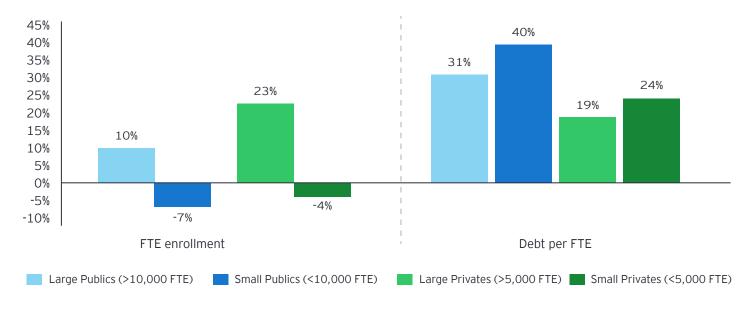
In each of the four markets, university leaders expressed concern about the long-term financial sustainability of their sectors, with expectations that many more institutions may go into deficit in the future. Challenges relating to revenue generation across the four markets were deeply and broadly felt. Many leaders pointed to student recruitment pressures, at home and internationally, the ongoing inflation challenges and cost-of-living crises as current factors that were causing them concern relating to their financial sustainability.

According to university leaders, the sector is caught in a vicious cycle. Financial sustainability is often required to raise revenues and capital but raising revenues and capital is required to achieve financial sustainability.

Although some (notably elite) universities are flourishing, many are not. Some university leaders stated that they had turned to more drastic measures like selling property to be able to balance the books, merging with other institutions, or closing courses<sup>7</sup> and departments to pursue financial sustainability. Other leaders felt in stable positions but without the ability to invest in essential futureproofing like digital transformation.

# A growing number of loss-making universities

In late 2022, Fitch Ratings classified the US higher education sector with a "deteriorating" outlook for 2023. Figure 1 shows how the combination of rising debt and falling enrolment has led to 20-40% in increases in debt per student between 2011-19.



#### Figure 1: Cumulative changes in FTE enrolment and debt per FTE, 2011-2019

7

<sup>7.</sup> Courses refers to programs in the US

In Australia, Canada and the UK, the greater reliance on international students and the complications of COVID-19 and Brexit, mean that the data shows much greater volatility. In addition, in the UK, pension costs remain an increasing challenge for many universities. Figure 2 shows, this volatility for Australia and the UK, although in the UK there is a persistent upward trend of deficits. Australia had a sharp increase in 2020 that was mitigated in 2021. Despite improved financial figures recently reported by a number of Australian universities, many have attributed this to deep cost cutting and asset sales that are not considered sustainable<sup>8</sup>.

Figure 3 shows a consistent picture of 10-12% of Canadian universities showing net losses in recent years. Whilst this appears reasonably stable, it's underpinned by rising numbers of international students. This is a Canadian success story but introduces volatility into university finances.

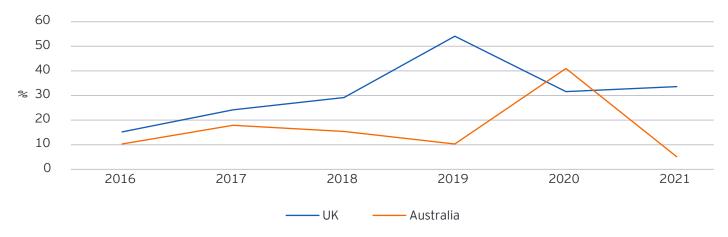
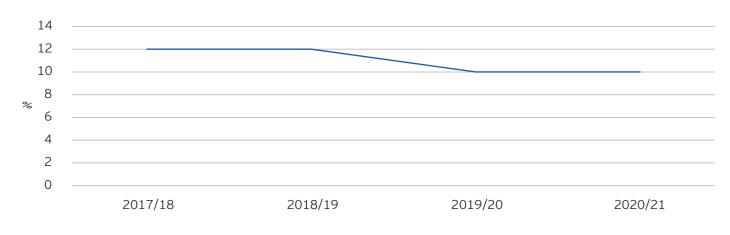


Figure 2. Percent of Australian and UK universities making a net loss, 2016 - 2021\*

**Sources:**Australian Department for Education, Australian Government; UK Higher Education Statistics Agency \*data presented are from national sources, data collection period may differ.

#### Figure 3: Percent of Canadian universities making a net loss, 2017/8 - 2020/1



Source: CAUBO Financial Information of Universities Survey

<sup>8.</sup> Australian university sector makes record \$5.3bn surplus while cutting costs for Covid | Australian universities | The Guardian

#### Traditional funding models are declining

## 66

If un-relentingly we don't get any more income, the quality of what we deliver to students is going to diminish, the breadth of our research is going to diminish... eventually the attractiveness of a university education both to the domestic and international student market... is going to be detrimentally affected.

Professor Jenny Higham Vice-Chancellor of St George's, University of London, UK

Although funding models are different between geographies, common issues include a general decline in government funding for domestic students (all countries), and the impact of student tuition fee caps (in the UK and Canada) and demographic change leading to a decreasing pool of prospective domestic students (iin Australia, the UK, and the US).

- Australia: Government expenditure on higher education has increased since 2009/10 but is expected to fall in real terms from 2020/21.<sup>9</sup> In 2019, 48.7% of Australian university income came from Government Financial Assistance and 33.5% from student fees and other contributions. However, government capping of domestic student fees is leading to widespread concern about the potential consequences of demographic pressures when combined with plateauing or falling public and student fee incomes. Until 2017, universities received government funding for as many places as they wished to offer. But total funding was then capped at 2017 levels. In 2023, the cap was boosted by an additional 20,000 Commonwealth supported places in areas of national priority and skills shortages.
- Canada: Public funding of universities has steadily declined since 2008/2009, from 60% to 47% in 2019/2020.
  Domestic university enrolments have also stagnated in recent years while international student numbers have

almost doubled since 2011-12 to around 230,000.<sup>10</sup> While revenues from student fees increased from 20% in 2008/2009 to 34% in 2019/2020, this is in large part driven by the increase in enrolments of international students in colleges across the country. International students pay five times more than Canadian undergraduates, demonstrating the country's reliance on international students, which to date have largely offset increases in operating costs.

- UK: Since 2000, domestic student numbers have increased gradually.<sup>11</sup> However, the Office for Students shows a 14% decline in government funding from 2018/19 to 2022/23, with domestic tuition fees capped at £9,250<sup>12</sup> since 2017, which in real terms has already eroded to £6,585. In parallel, international student numbers have soared, reaching more than 600,000 in 2020/21.<sup>13</sup>
- US: In 2019/20, state and federal governments provided 40% of the total funding for degree-granting postsecondary institutions.<sup>14</sup> Earnings potential is limited in many states by capped in-state and out-of-state tuition fee rates, and local student quotas that limit the potential to attract out-of-state and international students who typically generate higher net tuition revenue. Enrolments in many parts of the country are decreasing,<sup>15</sup> with 63% of US university presidents identifying this as a primary financial risk.<sup>16</sup>

<sup>9.</sup> https://www.aph.gov.au/About\_Parliament/Parliamentary\_Departments/Parliamentary\_Library/pubs/rp/rp2021/GovernmentFundingHigherEducation

<sup>10.</sup> StatCan: Elementary to Postsecondary Student Education Dashboard: Enrolments, Graduations and Tuition Fees

<sup>11.</sup> https://www.hesa.ac.uk/data-and-analysis/students/chart-1

<sup>12.</sup> https://www.officeforstudents.org.uk/advice-and-guidance/funding-for-providers/recurrent-funding/funding-allocations/

<sup>13.</sup> https://www.studying-in-uk.org/international-student-statistics-in-uk/

<sup>14.</sup> https://nces.ed.gov/programs/digest/d21/tables/dt21\_333.10.asp?current=yes

<sup>15.</sup> https://www.forbes.com/sites/davidrosowsky/2023/01/11/four-big-things-we-hope-to-see-from-us-higher-education-in-2023/?sh=55c681db7347

<sup>16.</sup> https://www.forvis.com/news-releases/forvis-releases-2023-higher-education-outlook

#### But relying on international students is not sustainable

Fee income from international students has long been a fundamental pillar of university funding strategies in all four markets. But some leaders fear a future where the only way to support local students is to cross-subsidize from international tuition fees.

The pandemic redirected international student flows and some markets have yet to recover. In the post-COVID-19 world, international student numbers are volatile and falling in some countries. While international student numbers are on the rise in the UK and Canada, they are declining in the US and Australia.

Everywhere, the potential for over-reliance on this group exposes universities to risk. In our four markets, universities are strategizing with caution as overdependence on inbound students from China, in particular, presents an ongoing risk.

The most recent data published by the US Institute of Educations Open Doors suggest that students from China studying in the US fell by 14.8% from 2019/20 to 2020/21 and 8.6% from 2020/2021 to 2021/22. While this trend may have been complicated by the COVID-19 pandemic, it follows a decade of steady decreases in the rate of growth of Chinese student enrolments before the pandemic.

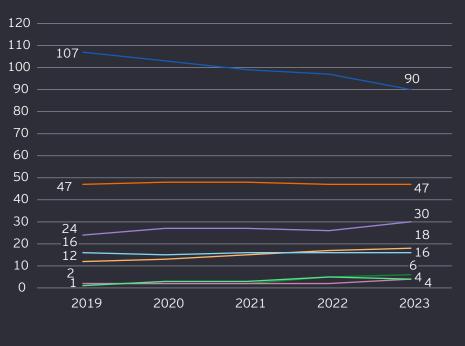
In Canada, the number of students from China declined by 38.6% from a high in 2018. It remains to be seen whether

these data points represent pandemic-related downturns or long-term trends. But some universities are shifting their focus to more diverse, yet price-sensitive source countries for international students.

In addition, traditional markets are seeing increased competition from emerging markets. International student recruitment is growing year-on-year in markets such as Italy (12%), Argentina (7.8%), Poland (3%) and the Philippines (52.7%). At the same time, we are seeing the rise of world-class universities in other regions, particularly in China, which has 18 universities in the Times Higher Education World University Rankings top 400, in 2023 (see Figure 4). In parallel, American universities fell from 107 in 2019, to 90 in 2023. This increased international competition from new entrants like Taiwan, United Arab Emirates and Saudi Arabia is a clear threat to traditional student recruitment bases.

Leaders are acutely aware of these issues. The most keenly felt drawback of relying on international students was that this revenue stream can be subject to the whim of political actors. Immigration and other policies can change so quickly and dramatically that university leaders now expect international student revenues to be volatile. As recent history proves, unexpected government policy changes can remain in place longer than a university can remain solvent.

#### Figure 4: Times Higher Education World University Rankings top 400, 2019-2023



Change in number of universities in the World University Ranking top 400, 2019-2023

US	-17
UK	0
Australia	+6
China	+6
Canada	0
Saudi Arabia	+4
UAE	+2
Taiwan	+3

United States	– United Kingdom – – – –	– Australia	——— China
——— Canada ———	— Saudi Arabia ———	– United Arab Emirates	——— Taiwan

# 66

The resilience of international enrolment is a top priority on our risk register. Our strategic approach focuses on diversifying our student body across multiple countries and expanding our portfolio to a wider range of internationally-oriented programs.

Gillian Heisz

Vice President, Finance and Operations, University of Windsor, Canada



#### Digital transformation is essential to ensure financial sustainability

University leaders uniformly feel that digital transformation is necessary for their institutions to thrive in the future. They appreciate the growing and understandable student expectation of a better, more modern, more digitally enabled experience. They know that digital transformation is critical to compete in an increasingly sophisticated higher education market. But, again, they find themselves in a vicious cycle. Without financial sustainability, universities are unable to engage in this digital transformation. Yet, without digital transformation, they may not achieve financial sustainability.

As a result, current digital initiatives often involve cheap, tactical, point solutions rather than strategic transformation of the student and staff experience. Many universities are only now discovering that they are much further behind the competition than they thought, and they lack the financial wherewithal to catch up. Those that are slightly further ahead, are recognizing the long-term investment that is required. 66

We have established a strategic digital roadmap and are significantly increasing our IT investment over the medium term, as we pursue a student and staff focused digital transformation.

#### Neil Ainsworth

Vice President (Finance) and Chief Financial Officer, Queensland University of Technology, Australia

# Can digital transformation save universities money?

University leaders do not see virtual learning as an area of cost saving. One VC and President of an Australian university stated that "one of the great myths is that digital is cheaper". Virtual learning is not just about putting programs online. It requires a whole set of additional investments and different teaching strategies.

# Digital transformation as a driver of increased revenues

Longer-term, leaders see digital transformation as a potential revenue raiser and a necessary transition to reach financial sustainability. Some leaders think that digital delivery could help to increase access to new markets without bringing students out of their home country. They also believe that digital transformation may help them form financially beneficial partnerships with corporations, such as offering corporatesponsored teaching of core competencies or digital skills.

Digital transformation is expensive but it's a price we have to pay because we have to get into that space.

Joseph J. Helble President of Lehigh University, US



#### Limited capital to invest in growth

Without financial sustainability, universities cannot invest in future growth. Stagnant government funding, falling or insecure international student fees, increasing competition and the inflationary environment are squeezing universities' already limited discretionary spending power. Weak balance sheets and rising interest rates will make it next to impossible to raise capital for campus refurbishments, let alone the quantum of investment linked to digital transformation.

Leaders noted the prospect of running down reserves as particularly dangerous given universities are facing a period where digital transformation will require great investment. Several leaders stated that their reserves were being eroded over time at precisely the point when they wanted to invest in digital transformation projects.

This presents yet another vicious cycle challenge. How do you plan for investments when you need capital reserves to survive? But how do you achieve financial sustainability without these investments?

# 66

If dollars through the door fall then universities start to struggle, their reserves get spent, and then they can't pivot or invest. If you are going to pivot, you want to do it when you have money in the bank.

Daniel Greenstein Chancellor of Pennsylvania's State System of Higher Education, US

To some university leaders, the inability to invest represents a potentially existential threat: if universities diminish their reserves, then they won't be able to invest in the changes they need and they won't be able to offer a quality service to future generations. Successful change requires time, money and stability. If universities are constantly firefighting financial challenges, they won't be able to dedicate enough resources to pursuing change.

Radical steps will be needed to improve financial sustainability and build or raise the capital required for digital transformation. For example, universities may need to be much more ruthless about loss-making activities, focus on what they are good at, find ways to generate economies of scale themselves or with partners, and generally re-write their strategies and business models.



What levers are universities pulling to improve financial sustainability? To date, most of the steps taken by university leaders to improve financial sustainability represent incremental change, rather than revolution. This reflects the history and culture of the sector. But, for many, this will not be enough given the competitive pressures, rising costs and revenue challenges universities are facing.

#### Growth strategies

Universities are finding new programs to respond to the marketplace. This will continue to grow and fill labor market needs.

#### New offerings

Universities are keen to diversify their offerings, whether through digital delivery, new forms of continuing education or trying to reinvent aspects of campus life. Although many universities are doing little more than "dipping their toes", diversification is already well underway in several areas:

- Developing existing degrees as online programs Many universities can use virtual delivery to offer degrees to a broader student base at a lower price point and independent of location, substantially broadening their catchment area.
- Partnering with industry Institutions are looking at building in-demand new programs, developed hand-in-hand with industry, to fill national skills gaps such as cyber and digital media. The best of these programs include work placement opportunities, industry guest lecturers and clear pathways into jobs after graduation.
- Personalizing the student experience Some universities are using data to provide the best possible services to a diverse student population. This approach has the potential to bolster university finances by improving continuation rates and potentially increasing student recruitment numbers. One university leader in Australia emphasized the need to move away from treating students as a "homogenous population" and instead offer services based on the needs of students and staff.

## 66

# The future is already here – it's just not evenly distributed.

William Gibson, Author

Building out continuing education - While continuing education is not new, most universities consider it as either an important growth area or at least an income stream that could be strengthened. Microcredentials, and other non-degree options more suited to the jobs market, could be offered in large numbers to corporate employers and international markets. Continuing education would expand the prospective customer base for universities and possibly bring in "repeat business" as workers need to continually reskill.

## 66

Universities are finding new programs to respond to the marketplace. This will continue to grow and fill labor market needs.

#### Steve Orsini

President and CEO of the Council of Ontario Universities, Canada

#### Traditional research revenues

University leaders are cautious about the idea of research funding as a potential option for growing revenue. Some universities have been positioning themselves to win more of the government funding available for research. While this can help to improve rankings, and attract students and faculty, it is unlikely to directly benefit the bottom line. One university leader highlighted that, when universities receive grants for research, the vast majority, all, or even more than all of that would then be spent on conducting the research.

#### Commercialization of research

Some universities are trying to attract more private investment in research and to generate new revenue streams by commercializing research outputs. A few are pursuing spinouts as potential avenues toward decoupling university financial sustainability from student recruitment, and some are achieving success.

However, this approach will rarely be a silver bullet and is not available to all institutions. Less research-intensive universities have limited research to commercialize. Researchintensive universities have the opportunity to run more like a commercial business, creating profits from the IP, patents, and business spin-outs that come from research. However, while commercializing research is seen as potentially very lucrative, it is also costly and potentially risky. Universities are not guaranteed to receive large returns on these investments and mostly lack the culture, capabilities and governance mechanisms to do so effectively.

# "

Our research funding and performance continues its upward trajectory, ranking as the top university in the Group of Eight for research income. Commercialization enables engagement with industry and government, delivering ongoing benefits to community, research and education.

Leigh Petschel CFO and Senior Vice-President, Monash University, Australia

# 66

The difficulty, of course, is that increasingly, we're losing money on teaching and we're losing money on research. So, you can't cross subsidize.

Professor Steve West CBE Vice-Chancellor of the University of the West of England and President of Universities UK, UK

#### Real estate management

While the idea of universities acting as landlords is not new, this may sometimes be, in the words of a university leader in Canada, an example of "steady cash flows with low risk." Through real estate, universities can generate profits in areas that sit outside of traditional funding models, helping to stabilize their income.

Across all four markets, many universities are looking to monetize real estate. This includes plans in the US to turn surplus student accommodation into care homes for elderly people, one university in Canada purchasing new buildings, and using existing real estate, to generate revenue by leasing office space to businesses. A UK university is also expanding its real estate portfolio, buying land on which to build student accommodation. Long-term, it will have the option of selling such assets to a third-party operator, creating significant capital but a loss in revenue.

#### Philanthropy

Philanthropy is an important revenue stream for elite universities, which can receive very large endowments. But it is unlikely to prove a financial lifeline for mid-tier institutions. Many alumni who achieve success will be aware of the benefits of higher education and may be willing to help support the sector. However, the appetite for giving back to higher education institutions varies by geography. As a VC in the UK stated, the US is ahead of the UK in this regard, with a more established culture of fundraising through philanthropic donations. None of these strategies are proving enough to return universities to financial stability. Outside elite universities in the US, very few higher education institutions generate material surpluses from research, short programs, life-long learning or philanthropy. In the experience of EY's Higher Education teams, most universities that look to these levers for growth in the absence of a compelling proposition in their core teaching markets are avoiding hard choices rather than finding innovative solutions.



## Strategies to manage rising costs

In the face of declining revenues and rising input prices, many universities are looking at ways to reduce operating costs. The two biggest cost items for universities are payroll (and pensions liability) and the cost of maintaining and operating campus buildings. Struggling universities need to address how to make cost savings in these two areas.

Getting visibility into key cost drivers is a challenge, leading many institutions to engage in tactical cost-cutting exercises rather than working to transform their cost structures. Some of these tactical initiatives include cutting travel budgets, reducing energy bills and tightening spend on consumables by revisiting procurement processes, switching suppliers or renegotiating contracts.

However, this approach was aptly described by a few university leaders as merely "trimming around the margins". To make a real impact on operating costs, tougher decisions will need to be made, including investing in technology, scaling back or cutting non-core projects, services or support. A few of the universities interviewed had already undergone mergers to achieve economies of scale and reduce duplication.

When considering the best cost reduction strategies, most universities will need to improve their visibility of cost drivers, and in particular to understand which costs are fixed, and which are variable. To streamline cost structures, institutions require access to more granular and up-to-date data on the true costs of running each course and maintaining each center.

#### Reluctance to reduce staff headcount

Leaders are reluctant to include job reductions in cost-cutting measures, but some have been forced to reduce headcount, tenured status and salary costs to lower expenditure. Other approaches to reducing payroll include cutting non-teaching staff through hiring freezes, replacing leavers with more junior staff and merging roles.

However, these initiatives will only get institutions so far. Some universities are thinking more strategically about their workforce strategies to prevent over-hiring, using data to predict demand and hire accordingly.

While headcount reductions save money in the short term, leaders are apprehensive about the longer-term costs associated with these measures. Some noted the cultural cost of redundancies, with a loss of morale as remaining staff fear for the safety of their jobs. One Vice Chancellor in Australia said that reducing staff numbers inevitably removed staff who had just been trained or upskilled, creating zero return on this investment. Leaders are also concerned that reducing headcount could erode the capacity of staff to engage in essential transformation projects.

## 66

Our biggest balance sheet risk is using our reserves for current operational expenses... and with our revenue going down, not generating enough profit to add to our reserves. CFO, Public University, US

## 66

We invest a lot of money and time in developing people, so to get rid of them only to re-hire them in 12 months doesn't make sense.

Professor Patricia M. Davidson Vice Chancellor and President of the University of Wollongong, Australia

#### Program viability assessments

For too long, universities have been willing to subsidize under-subscribed or loss-making programs with the fees they generate from their oversubscribed programs. However, if they are facing financial challenges, they will need to be able to analyze the profitability of their program portfolio, and make tough choices, rationalizing program offerings and focusing resources on their strengths. This may involve cutting either very niche programs, or very generic programs that are duplicated or over-supplied in the local market. In deciding which programs are viable, universities will need to consider the factors that support higher margins, such as larger class sizes, programs where some or all of the teaching can be done online or by students and less lab work.

Institutions should also review long-term enrolment trends. Depending on market projections, some of today's loss-making programs could be refreshed to become revenue neutral or even positive in future.

No university leader enjoys the prospect of cutting programs, mainly because it is likely to involve job losses. Partly because it reduces the university's breadth of offerings and, in some cases, universities worry about access in their local area. But some understand it may be necessary, offering the financial benefit of removing an ongoing drain on the institution's revenue position. In fact, the risk of local students losing access to a program is usually minimal. Consolidating suppliers in low-enrolment programs can capture economies of scale in the local area, potentially creating one viable program from two non-viable ones. Also, almost every program is now available online or in hybrid form.

## 66

# No Vice Chancellor wants to close courses but some will have no choice.

Diana Beech, CEO, London Higher, UK

# Strategies to reduce the quantum and cost of capital

The university leaders we spoke to say that debt and the ability to borrow is a key issue given spend tends not to be linear but "geometric". An Australian Vice Chancellor was concerned that if universities begin to default on debts, this could pose an existential threat during times when borrowing is necessary. However, most universities have historically been conservative with debt. The general view of the university leaders we spoke to is that only a few institutions are too highly leveraged. Several leaders described their debt strategies as "modest". Two US university presidents said that, even with higher interest rates, their institutions still had capacity to take on additional debt in a manageable way if needed. Others reported successfully refinancing both their variable and fixed rate debts to a lower fixed rate.

In terms of capital investment, universities are working on funding an appropriate mix of physical and online projects, and balancing capex and opex. Some are transferring more services into the cloud to lower upfront capex. When it comes to funding real estate, some institutions are choosing to borrow capital, entering public private partnerships or paying rent. For many, selling real estate is an attractive option for generating significant capital. But universities also understand that removing assets from their balance sheets may not always be the best long-term strategy.







Which traditional higher education strategies need a radical rethink? Mid-tier universities have multiple opportunities to improve their financial position. The challenge is not the availability of viable ideas, but the difficulty of implementation. University leaders will need to be bold, embrace new thinking and help their institutions to embrace change.

The approaches in the previous chapter could be characterized as revisions and reforms to existing models rather than more radical measures needed to ensure future financial sustainability of undifferentiated mid-tier universities. Rather than tinkering around the edges, we recommend university leaders consider acting along four critical vectors of university transformation:

- 1. Develop strategic distinctiveness
- 2. Deploy technology

- 3. Create and capture economies of scale
- 4. Build change capacity

## Develop strategic distinctiveness

Longer-term financial sustainability depends on having a distinctive competitive offer for undergraduate and post-graduate students, based on:

- 1. Brand and ranking
- 2. Program portfolio (especially in relation to employability)
- 3. Flexibility of delivery or access
- 4. Student experience

#### Brand and ranking

Global analysis of higher education markets by EY teams suggests that ranking typically matters for a smaller and more elite tier of employers than the sector assumes: most employers will never employ material numbers of elite graduates. For all the sector's effort to "climb the rankings", this is a zero-sum game with very limited impact on financial sustainability for most institutions.

For example, the UK market suggests that universities ranked above ~15-20 have a genuine brand premium that provides graduates access to elite employers. Below this, university brands rapidly lose relevance for most employers and the brand carries little or no employment benefit for students. A similar phenomenon applies in international recruitment: universities ranked outside the global 200 have materially lower appeal to international students. Hence, for universities unable to break into the top 200, investing heavily in ranking has a low return on investment for students and employers, and therefore for the university.

#### Program portfolio

Redesigning the program portfolio has a much bigger impact. In a typical university, surpluses are generated in the business school and professional programs (e.g., law) while much of the rest of the portfolio loses money. From a financial perspective, cutting smaller and loss-making programs is an obvious first step. In our experience, universities fail to do this for two reasons.

 Cutting programs without cutting the costs associated with them often reduces revenue and surplus in the first year, especially as some of the costs may be indirect and overheads. As identifying the costs associated with a program can be difficult due to relatively weak financial systems, the temptation is to "leave it alone". 2. This commercial perspective on portfolio is increasingly important in a world in which private and for-profit universities can simply cherry-pick the profitable program areas and avoid the loss-making ones. Over time, they are investing more and strengthening their position and market share in the programs that underpin the financial sustainability of not-for-profits.

#### Flexibility of delivery

Universities understand the importance of flexible delivery, but generally under-exploit this lever. Institutions that have heavily adopted online or hybrid learning have been able to access profitable new student segments. Success stories include Southern New Hampshire University, Western Governors, Arizona State University, University of Maryland Global Campus, University of Canterbury New Zealand. Offering multiple start dates has been especially effective for mature students.

#### Student success

Student success – enabled by portfolio, flexibility and the student experience – improves retention, sustains revenue and drives up rankings. At Humber College, Canada, attrition in its 2014 cohort cost the institution Can\$15m<sup>17</sup>. When Georgia State University took a detailed analytic approach

to retention, revenue increased by US\$3.2m for every percentage point of retention.<sup>18</sup>

Making a difference to student experience typically requires adopting a customer-first and operational mindset. This means relying less on "a silver bullet" or unique selling point and much more on painstaking diagnostics to improve processes and interactions. Priority should be given to:

- Removing bureaucracy
- Simplifying how students can access learning and get things done
- Creating a more seamless and fun experience

For example, to improve student satisfaction, a network of private universities streamlined every touch point in the student journey from point of acceptance to completing their academic program. This exercise also reduced the workload for staff and faculty by reducing student questions and having set ways of working.

Automation and digital tools are likely to be part of this solution. For example, the award-winning Deakin Genie digital student assistant helps students to navigate and organize their university experience. A good starting point is to listen to students and draw inspiration from non-higher education client service businesses.

### Deploy technology

The technology agenda in higher education is as large as it is in any sector, encompassing digital channels, integrating and protecting data, and transforming middle and back-office operations. The impact on financial sustainability is very material: get this right and you drive flexibility of delivery, improve your student experience and improve efficiency. Get it wrong, and you're investing in technology with limited return, distracting staff and students with change that isn't helping them learn, teach or research.

Some universities have focused on digitizing their campus. Others are taking their education online. Advanced institutions are piloting asynchronous digital learning to improve the learning experience, deliver new skills industry and offer superior accessibility to learning for the underserved learner, the career progressor and the hybrid learner.

We believe that, for most universities, financial sustainability depends on focusing technology investments on five interdependent pillars over a 3-5-year period.

- 1. Data-led transformation
- 2. Intelligent operations
- 3. Digital learning
- 4. Connected university
- 5. Digital organization

<sup>17.</sup> https://humber.ca/strategicplanning/sites/default/files/FullReportTheInstitutionalCostOfAttrition.pdf 18. https://success.gsu.edu/approach/

#### Data-led transformation

Data should be at the forefront of decision-making, in every institution. EY's Tech Horizon research<sup>19</sup> shows that successful organizations are accelerating growth to create a data-centric organization to improve every decision, process and interaction.

Data-led transformation will enable a 360° view of student, staff, faculty and university operations by bringing together many fragmented data sources into a centralized repository. Then universities can use the power of analytics to:

- Support the university's evidence-based decision making with timely insights
- Increase administrative efficiency through automated processing and queries at scale
- Provide highly customized student learning pathways and experiences
- Enable evidence-based decision making around teaching and learning outcomes

The BI Norwegian Business School, Norway, uses machine learning to identify students at high risk of dropping out. Using a wide range of features, such as high school grade point average, study activity, application data and demographic information, BI can identify first year Bachelor students with a high probability of discontinuing their studies. The university is also using more than 20 study quality dashboards to identify and deal with service glitches before they become issues and continually improve quality.

#### Intelligent operations

Technologies from chatbots to RPA and Generative AI/ Machine Learning are helping universities to create smarter administrative processes that can think, learn and adapt on their own. These intelligent workflows can:

- Reduce repetitive and manual back-office administrative or teaching tasks
- Help staff be more focused on value-add and student-centric activities
- Support higher student personalization and focus on individual learning needs

A leading Australian university implemented Intelligent Automation to improve service quality across the institution. University leadership sought to improve the student experience while increasing effectiveness and efficiency. As part of the effort, the leadership team set up an innovation unit within the finance office. EY teams worked with campus infrastructure, finance, human resources, research and student administration to identify and prioritize more than 100 potential automations. Within six months, 33 automations were developed and implemented across the back-office hybrid, and fully in student-facing functions. The university is now scaling and augmenting Intelligent Operations with Generative AI. The result is a better experience for students and staff and improved financial sustainability.

#### Digital learning

Post-COVID-19, the synchronous online learning adopted during the pandemic is moving swiftly to asynchronous digital learning. Asynchronous digital learning meets the learner where they are at, creating multi-faceted, richer and more engaging learning experiences. It enables students to be recognized as individuals whatever channel they use, focusing on unique student needs to personalize the learning experience.

At Bolton College, UK, teachers create content through a virtual learning environment. However, in contrast to the typical homogeneous content to all students, they use analytics to provide a personalized pathway through the content. Students are differentiated according to the dataset about them and presented with targeted content and assessment materials.

Adaptive algorithms mean that every student sees something different. A wide set of variables can be accounted for, such as how they performed in previous tutorials. Those who did well receive stretch challenges. Those who struggled receive less complex questions. The environment also tailors content based on student needs, their current performance, learning style preferences, and career goals. A key interface to students and staff is the online digital assistant, Ada<sup>20</sup>, which provides updates, notifications and responses to queries, drawing from the same data set(s). For example, teachers often ask Ada for a list of students who are falling behind.

<sup>19.</sup> The CIO Imperative: Is your technology moving fast enough to realize your ambitions?, EY LLP

<sup>20.</sup> Education Secretary praises Ada, Bolton College's AI chatbot » Bolton College

#### Connected university

Universities should aim to become multi-sided digital institutions, creating new models of collaboration between students, researchers, research partners, university ventures, communities and industry.

Universities can play a key role in connecting students and industry. Industry recognizes that current skills in their workforce lag behind what they need to grow in a digital world and want closer relationships with education providers for staff who may be career starters, career switchers, career progressors and lifelong learners, not simply graduates.

#### Digital organization

Education in a digital world requires operating models that are aligned to omni-channel delivery – taking the best from the heritage organization and blending it with new models that flex and adapt. Fully embedding digital as part of everything the university does can:

- Support higher levels of digital competency and confidence across the university
- Embed innovative thinking and mindset, allowing faster time to market
- Improve effectiveness of operations, organizational responsiveness and agility

The cost of these investments is substantial and ongoing. In our work with one ambitious institution that wanted a full digital transformation roadmap we estimated it to be in the range of US\$150m-US\$330m over 5 years:

Timing	Investment targets
Years 1-2	Create digital platforms critical to digital acceleration Improve operational excellence, including data management architecture, predictive analytics and strategic sourcing.
Years 3-5	Adopt innovative and emerging technologies

If this was purely incremental cost, this quantum of investment would be difficult to bear. But much of this spend will pay back by reducing existing technology spend, cutting people-related costs as processes streamline and in improved student attraction and retention thanks to a superior campus and online experience.

#### Create and capture economies of scale

The cartoon model of higher education is that of individuals or small teams of academics working in libraries or under apple trees. However, the reality of modern higher education more often reflects the need for scale, or at least the advantages of having more scale than your competition.

One reason for this is that investments in technology scale very well. A unified data platform for 150 students is not hugely different than that for 15,000. And the returns to technology investment also scale: using robotic process automation for admissions in a 25,000-student university saves far more than in a 2,500-student organization.

Other cost areas, including finance, HR and real estate, also benefit significantly from economies of scale. This is easiest to see in the private sector where the largest private sector university groups now generate more than US\$500m annual revenue and the margins generated typically scale well. Investments in student recruitment and experience, which created common platforms, can now be leveraged in new institutions and campuses.

# How can universities create scale for themselves?

Mergers and consolidations can work effectively, both in the traditional and for-profit sectors. They are becoming more common, most obviously in the US where 180 mergers have taken place since 2000. In the first decade, the number averaged 3-5 per year. In the second decade, annual acquisitions grew to double digits, hitting a high of 25 mergers in 2018. While that seems like a sizable number, it is still small in the context of 4,000+ institutions in the US. For example, to counter multiple financial challenges, Wheelock College, US, explored its strategic options to secure long-term viability and growth. Through a merger with Boston University's School of Education, Wheelock College was able to combat declining enrolments while Boston University gained Wheelock's excellent reputation for early childhood education, teacher education and immersive field education. The move was seen as mutually beneficial on both sides.

Typically, we would target cost savings in a merger at around half the back-office cost of the smaller institution.

#### Build change capacity

University leaders appreciate the need for change, but some feel that doing so erodes the most precious resource that they had: the expertise and enthusiasm of their research staff.

For universities to successfully navigate complex and continuous transformation, they need to bring along both faculty and students. It's a myth that people will just come along - that the carrot or the stick will motivate them to move. Leaders must consider the real needs of the people affected by transformation, the complexity of making change happen and the multi-dimensional impacts on operating models and operating environments.

#### People and organization transformation

As universities implement change, they need to understand their current and future state and the roadmap for moving between them. This is not just about implementing new technology or restructuring but paying attention to the cultural changes required to make transformation successful.

A UK university launched a major transformation program to respond to falling student numbers and new competition. The aim was to drive up student retention while reducing the cost base and transforming a resistant workforce to achieve this. Success factors in moving to its target operating model, included a:

- Redesigned end-to-end organizational structure
- New student support centre
- New job family framework
- Refreshed behavioral competency framework
- New governance and controls

These can be huge: our work on two US\$300m revenue universities merging identified between US\$25m and US\$75m of cost savings – sums that would be impossible to find in any other way.

Traditionally, mergers have been relatively rare in higher education outside of "rescues", where a strong institution effectively takes over a smaller or more vulnerable one. Chief executives and boards rarely want to give up their positions or a cherished brand. However, M&A is now much more present as part of strategy discussions on campus among boards and leaders instead of being a taboo topic.

Through this work, the university was able to get its leadership team behind the future operating model, reduce costs and mobilize faculty to support the change.

#### Back-office transformation

University back-office functions often work with outdated processes and technology. By transforming these functions to be more responsive and insightful, institutions can both reduce costs and improve performance.

For example, Gallaudet University had long struggled with manual processes and a clunky legacy system in its HR function. It redesigned its processes to support standardization across departments, including new process flows, and change management practices. The institution implemented a new HR system across recruitment, Core HCM, payroll, time, benefits, talent and learning. This reduced process turnaround time, increased staff capacity to focus on higher value interactions, lowered costs and improved the quality of transactions.

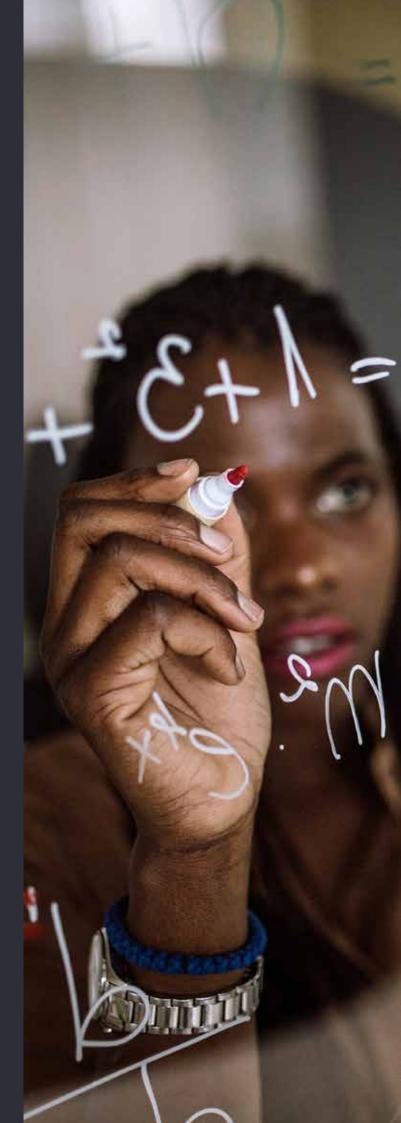
# 66

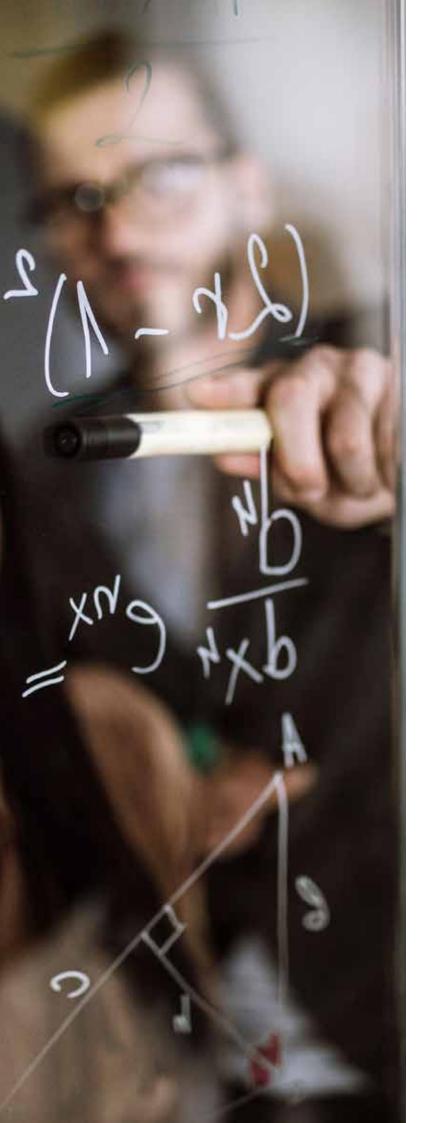
You need to have two strong organizations to make them stronger. Not merge two weaker ones and hope they improve to create a good one.

Professor Steve West CBE Vice-Chancellor of the University of the West of England and President of Universities UK

# Conclusion

Improving financial health will require universities to consider previously unthinkable options, including developing commercially focused portfolios, merging to achieve scale or building multiple revenue streams outside of traditional funding models. As they take their institutions on this journey, university leaders must help faculty and staff to see a different, but better, future. Solving for financial sustainability will stop the sector from further hollowing out. This is the light on the hill leaders can offer their institutions to inspire them to innovate, embrace change and venture into the unknown.





#### Acknowledgments

This report has been co-authored by EY and Times Higher Education. We would like to thank the following contributors from both organizations:

- Catherine Friday, EY Global Education Leader
- Alison Cairns, Partner, EY LLP Australia
- Scott Murray, Senior Manager, EY LLP Canada
- Matt Robb, Partner, EY Parthenon
- Kasia Lundy, Partner, EY Parthenon
- Phil Baty, Chief Global Affairs Officer, Times Higher Education
- Elizabeth Shepherd, Managing Director, Times Higher Education Consultancy
- Sam Whittaker, Senior Higher Education Consultant, Times Higher Education Consultancy
- Fiona Collins-Taylor, Senior Research Executive, Times Higher Education Consultancy

We would also like to thank the following university leaders who kindly provided their time and thoughts:

- Patricia Davidson, Vice President (Finance) and Chief Financial Officer, Queensland University of Technology, Australia
- Neil Ainsworth, Deputy Vice-Chancellor, Queensland University of Technology, Australia
- Leigh Petschel, CFO and Senior Vice-President, Monash University, Australia
- Steve Orsini, President and CEO, Council of Ontario, Canada
- Gillian Heisz, Vice President, Finance and Operations, University of Windsor, Canada
- Steve West, Vice-Chancellor, UWE (and President of Universities UK), UK
- ▶ Diana Beech, CEO, London Higher, UK
- Professor Jenny Higham, Vice-Chancellor, St George's, University of London, UK
- Dan Greenstein, Chancellor, Pennsylvania's State System of Higher Education, US
- CFO, Public University, US
- Joseph J Helble, President, Lehigh University, US

## **EY** contacts

If you would like to speak to anyone at EY about the issues covered in the paper, please contact one the leaders below.

Global

Catherine Friday catherine.friday@au.ey.com

Australia and New Zealand Alison Cairns alison.cairns@au.ey.com

Canada Scott Murray scott.murray@ca.ey.com

Europe (East) Zane Martinsone zane.martinsone@lv.ey.com

Europe (West) Jerome Fabry jerome.fabry@parthenon.ey.com

India Amitabh Jhingan amitabh.jhingan@parthenon.ey.com

Ireland Mark Glynn mark.glynn@ie.ey.com

**Japan** Kenji Izawa kenji.izawa@jp.ey.com

Latin America Viviane Eschner viviane.eschner@br.ey.com

Nordics Sara Shamekhi sara.shamekhi@se.ey.com

Singapore Samir Bedi samir.bedi@sg.ey.com

Middle East Vanina Torlo vanina.torlo@parthenon.ey.com

UK Matt Robb mrobb@parthenon.ey.com

**US** Kasia Lundy kasia.lundy@parthenon.ey.com

#### EY | Building a better working world

EY exists to build a better working world, helping to create long-term value for clients, people and society and build trust in the capital markets.

Enabled by data and technology, diverse EY teams in over 150 countries provide trust through assurance and help clients grow, transform and operate.

Working across assurance, consulting, law, strategy, tax and transactions, EY teams ask better questions to find new answers for the complex issues facing our world today.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation are available via ey.com/privacy. EY member firms do not practice law where prohibited by local laws. For more information about our organization, please visit ey.com.

© 2023 EYGM Limited. All Rights Reserved.

EYG no. 003987-23Gbl

BMC Agency GA 14569182 ED None

In line with EY's commitment to minimize its impact on the environment, this document has been printed on paper with a high recycled content.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, legal or other professional advice. Please refer to your advisors for specific advice.

ey.com