NAHEFFA Conference 2023
Higher Education Overview

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April 2023

Access is everything™

Expertise
A comprehensive view of the global markets through our ratings and research

Credibility
Over 100 years of experience delivering forward-looking, independent, stable and transparent opinions

Engagement
Meaningful interactions across multiple channels between our analysts and market participants

Moody's INVESTORS SERVICE

FACTS & FIGURES

Full Year 2022

33,900+
Rated Organizations and Structured Deals

5,100+ Non-Financial Corporates	3,400+ Financial Institutions
15,100+ US Public Finance Issuers	8,600+ Structured Finance Deals
1,000+ Infrastructure & Project Finance Issuers	340+ Sub-Sovereigns
144 Sovereigns*	46 Supranational Institutions*

≈$73 trillion
Total rated debt

	AMERICAS	EMEA	ASIA PACIFIC
TOTAL RATED DEBT	$41+ trillion	$19+ trillion	$10+ trillion
RATED ORGANIZATIONS AND STRUCTURED DEALS	27,200+	4,400+	2,200+
PUBLICATIONS	12,300+	4,900+	2,800+

23,600+ Publications globally

16,100+ Issuer Research	2,300+ Sector Research	5,000+ Other Reports	190+ Rating Methodologies

Source: Moody's Investors Service as of 01 January 2023
Research and Events data covers the period 01 January 2022 to 31 December 2022
All numbers are rounded other than those marked *

PEOPLE

12,800+
MCO employees

1,700+
Analysts

40+
Countries/Regions

EVENTS

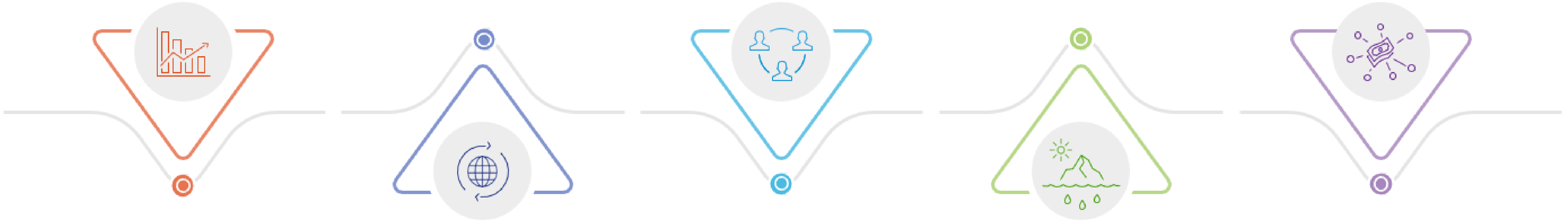
610+
Global events

51,000+
Global participants

AWARDS & RECOGNITION

Award-winning expertise in credit ratings, research and risk analysis. For more information, visit **awards.moodys.io**

Five key credit themes for 2023



Higher rates, slower growth

Elevated inflation and higher interest rates will cut into economic growth; recession risks remain high.

Geopolitical realignments

Geopolitical and trade shifts are prompting a reexamination of energy, technology, supply-chain and cyber defense strategies.

Social challenges

Higher costs for basic needs are exposing societal fissures; political polarization is widening.

Climate exposure & mitigation

Net-zero emissions aspirations are colliding with energy security and economic development goals.

Digital finance

As financial markets head toward greater digitalization, the transformation will affect business models, financial architecture and regulation.

Source: Moody's Investors Service

Risks are rising across the credit spectrum as conditions turn adverse

2023 outlook turns adverse

- Global credit conditions will remain adverse at the start of 2023 as persistent inflation, higher interest rates and bleaker GDP growth prospects cast a cloud over the borrowing environment.
- After more than a decade of benign credit conditions nourished by low interest rates and abundant liquidity, the credit cycle has quickly turned and risks are rising across the credit spectrum, with defaults likely to accelerate and liquidity to remain scarce.

Unusually unpredictable credit cycle, with risks firmly to the downside

- Interest rates have jumped very quickly, and the higher rate environment will coexist with slowing growth for some time.
- The Russia-Ukraine conflict has triggered an energy crisis in Europe that engenders economic, fiscal and social risks, while continued supply-chain disruption remains a legacy of the COVID-19 pandemic.
- As conditions tighten, the biggest negative effects will be on sectors where earnings are sensitive to the economic cycle and on interest-rate sensitive asset classes.

Rising defaults and weaker liquidity will result from tighter conditions

- Corporate default rates will exceed the long-term average by next September under our baseline expectations but should stay well below peak pandemic levels.
- But in the event of a deep global economic slowdown, defaults would intensify, with most of the damage within the rising population of low-rated companies.
- Increased sovereign debt defaults also point to the escalating balance sheet pressure on sovereigns with low credit quality.

Monetary policy tightening will likely pause by midyear

- The financing environment could show signs of stabilization in the second half of 2023 if inflation comes under control and central banks ease off rate hikes, although credit conditions will likely remain challenging.
- The direction of China's zero-COVID policy might also become clearer by that point. But the Russia-Ukraine conflict's trajectory and Europe's adaptation to new energy realities are highly uncertain.
- While we will watch for cyclical troughs, we are also assessing where there are pockets of resilience and opportunity.

Higher rates, slower growth, elevated geopolitical and social risks

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Moody’s approach to ratings

Higher Education

Ratings reflect multiple levels of analysis

Macroeconomic conditions

Macroeconomic conditions impact areas such as demand for specific programs, student's ability to pay, labor costs, etc.

Industry specific factors

Industry specific factors include areas such as student demand for specific types of experiences, governmental funding and oversight, shifting competitive landscape.

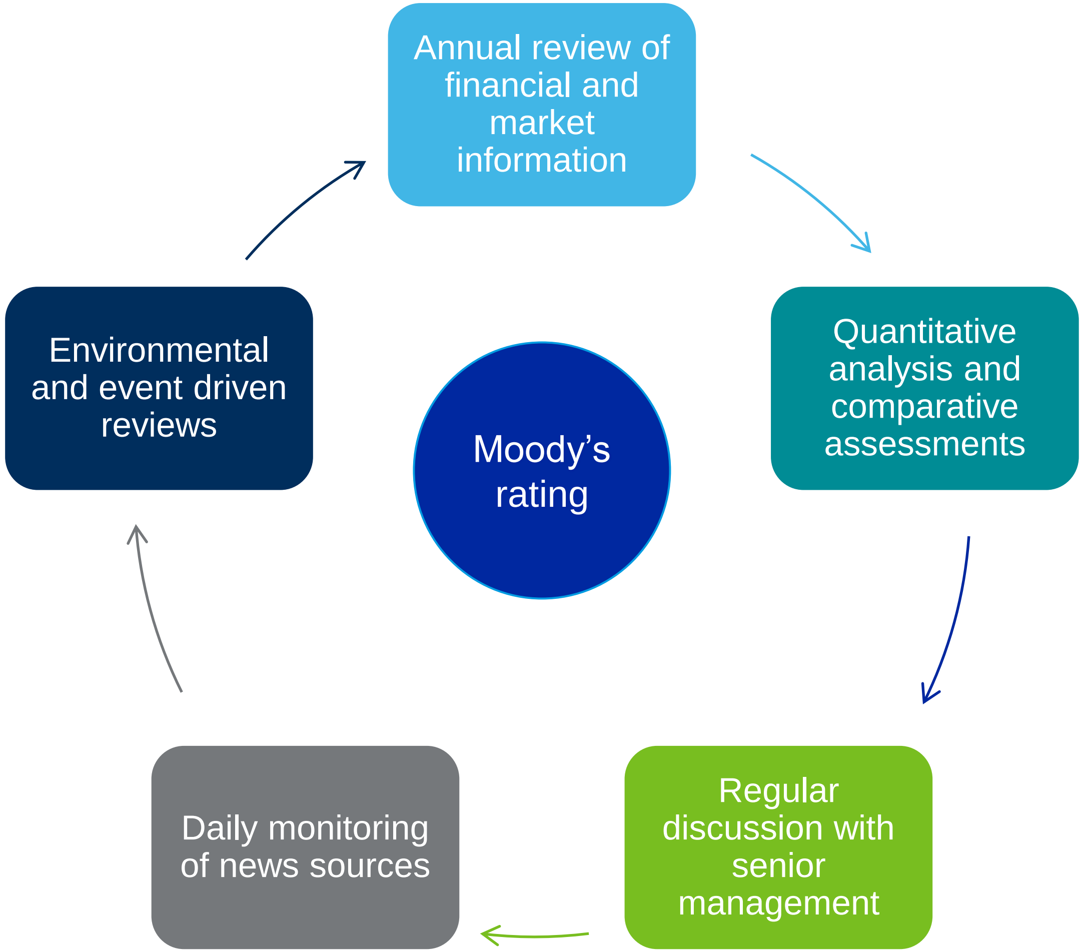
Institution specific analysis

Competitive and financial factors unique to the specific institution.

University position relative to peers

The relative placement of the institution compared to peers and competitors, with rating consistency across sectors.

Long-term rating relationship with regular monitoring



Ratings in context

Driven by methodology

Consistent with global rating scale

Rating

Assessed within macro environment and sector trends

Incorporates forward analysis

Methodology provides framework for analysis

Typically include a scorecard of key considerations, scorecard only a component of methodology

AUGUST 4, 2021

PUBLIC FINANCE

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RATING METHODOLOGY

Higher Education Methodology

Table of Contents:

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This rating methodology combines and replaces the *Higher Education* methodology published in May 2019 and the *Community College Revenue-Backed Debt* methodology published in June 2018. Key revisions include the use of the same methodology and scorecard for debt issued by colleges and universities and revenue-backed debt issued by US community colleges, the replacement of Spendable Cash and Investments to Operating Expenses with Total Cash and Investments to Operating Expenses, the replacement of Spendable Cash and Investments to Total Debt with Total Cash and Investments to Total Adjusted Debt, the use of an annual debt service coverage ratio as a sub-factor of Leverage and Coverage, the expansion of the number of qualitative sub-factors and an increase in their scorecard weights, the elimination of some quantitative sub-factors from the scorecard and the assignment of issuer ratings to US colleges and universities that reflect their fundamental credit quality. We have also made editorial changes to enhance readability.

Introduction

In this rating methodology, we explain our general approach to assessing credit risk of public and nonprofit private colleges and universities globally, including the qualitative and quantitative factors that are likely to affect rating outcomes in this sector.

We discuss the scorecard used for this sector. The scorecard[1] is a relatively simple reference tool that can be used in most cases to approximate credit profiles in this sector and to explain, in summary form, many of the factors that are generally most important in assigning ratings to issuers in this sector. The scorecard factors may be evaluated `historical or forward-looking data or both.

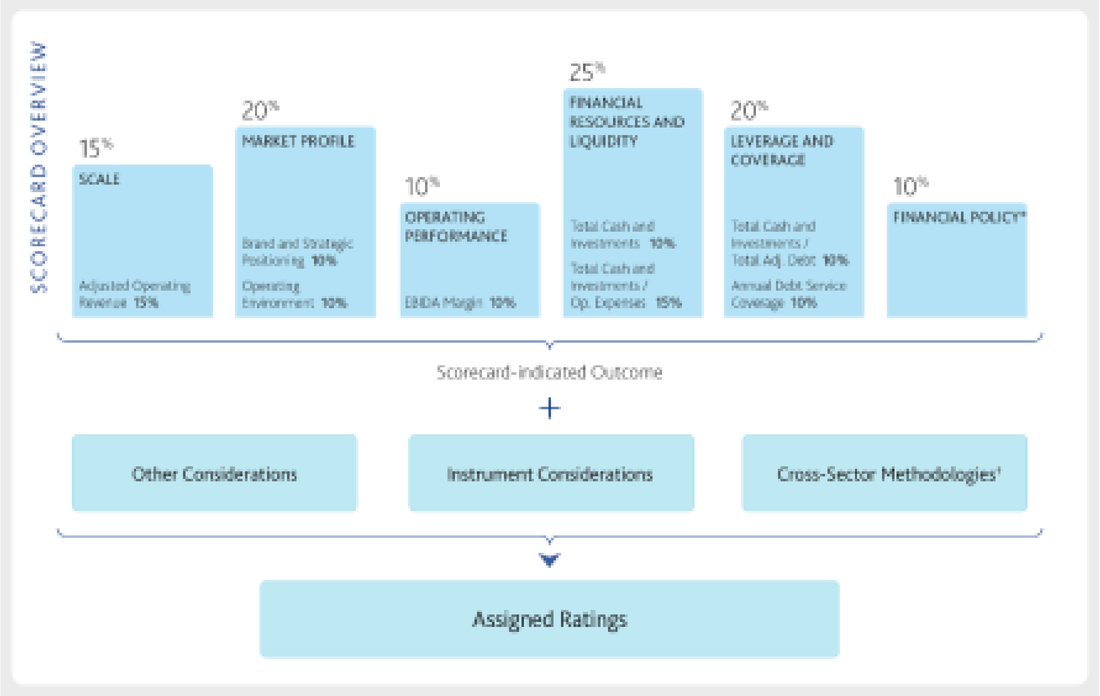
We also discuss other considerations, which are factors that are assessed outside the scorecard, usually because the factor's credit importance varies widely among the issuers in the sector or because the factor may be important only under certain circumstances or for a subset of issuers. In addition, some of the methodological considerations described in one or more cross-sector rating methodologies may be relevant to ratings in this sector.[2] Furthermore, since ratings are forward-looking, we often incorporate directional views of risks and mitigants in a qualitative way.

1 In our methodologies and research, the terms "scorecard" and "grid" are used interchangeably.

2 A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

EXHIBIT 1

Illustration of the Higher Education Methodology Framework



* This factor has no sub-factors.

† Some of the methodological considerations described in one or more cross-sector rating methodologies may be relevant to ratings in this sector. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.

Source: Moody's Investors Service

Methodology includes quantitative & qualitative factors

Scorecard is a tool but not the methodology

Scale	Important indicator of the overall depth of a college's or university's business and its success in attracting students, donors and faculty, as well as its resilience to shocks
Market profile	Core aspects of a college's or university's market profile are its brand and strategic positioning and operating environment
Operating performance	Operating performance is an important indicator of ability to repay debt from operating revenue and invest in academic programs and facilities
Financial resources & liquidity	Indication of ability to withstand periods of volatility. Core aspects include total cash and investments, and total cash and investments to operating expenses
Leverage & coverage	Ability to pay annual fixed costs, including debt service, while still fulfilling mission. Metrics include total cash and investments to total adjusted debt, and annual debt service coverage
Financial policy	Financial strategy and the quality of information available provide important indications of risk appetite, risk management capabilities and ability to execute strategic plans

Certain other considerations remain important drivers of credit quality though they may not be included in the scorecard

- » Multi-year trends
- » Environmental, social, and governance (ESG) considerations
- » Marketable real estate
- » Regulatory considerations
- » Financial controls
- » Liquidity
- » Additional metrics
- » Event risk
- » Health care operations
- » Government and institutional support

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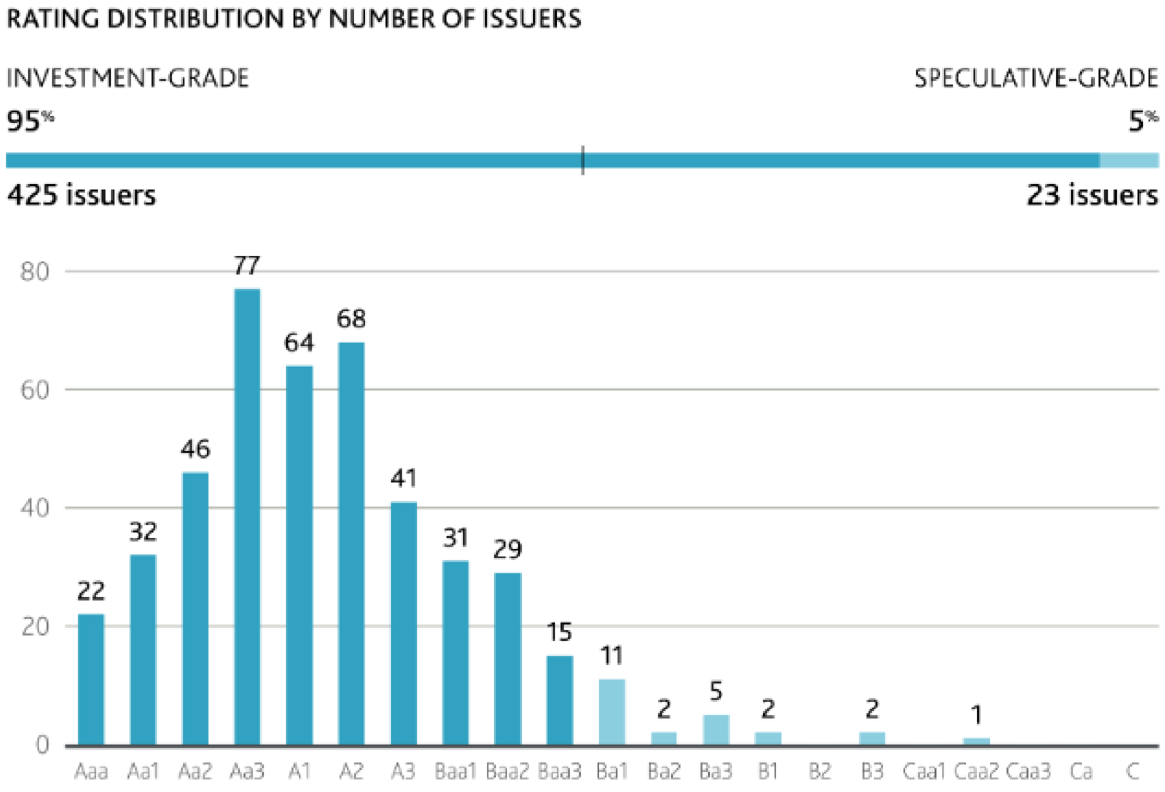
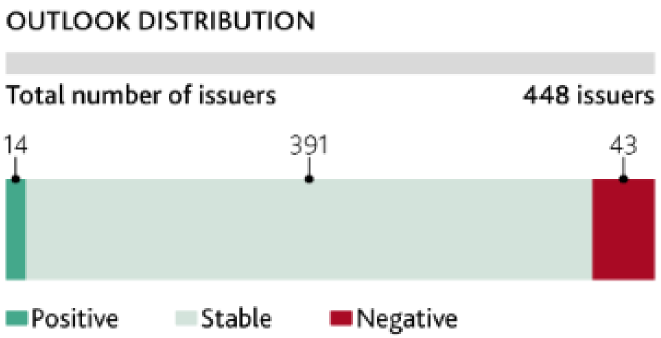
Challenges and trends in higher education

Higher Education

Higher education remains a highly rated sector

- Moody's rates the financially-strongest but pressures building for over a decade
- Strong getting stronger, weak weaker
- Roughly 20% thriving, 50-60% managing with differing degrees of success, 20-30% struggling





Source: Moody's Investors Service, December 2022 data

Global credit themes affecting the sector

Higher rates, slower growth

- High inflation will constrain operating performance for the first six months of 2023 (end of fiscal 2023) and potentially into fiscal 2024 during the latter part of the year.
- Inflation may make it more difficult for prospective students to afford higher education. Colleges and universities, in turn, may offer more financial aid to attract them. A drop in enrollment and/or more financial aid would curb revenue.
- Increasing labor and other costs driven by inflation will squeeze budgets.
- Rising interest rates provide opportunities to lower pension risks through tilting a pension fund's investments more toward fixed-income securities.
- Higher interest rates that drive up borrowing costs will increase capital expenses at a time when deferred maintenance and aging facilities need to be addressed.

Geopolitical realignments

- Lingering tensions with some governments may hamper recovery in the number of international students, a key revenue source.
- Elevated energy costs may add to expenses.

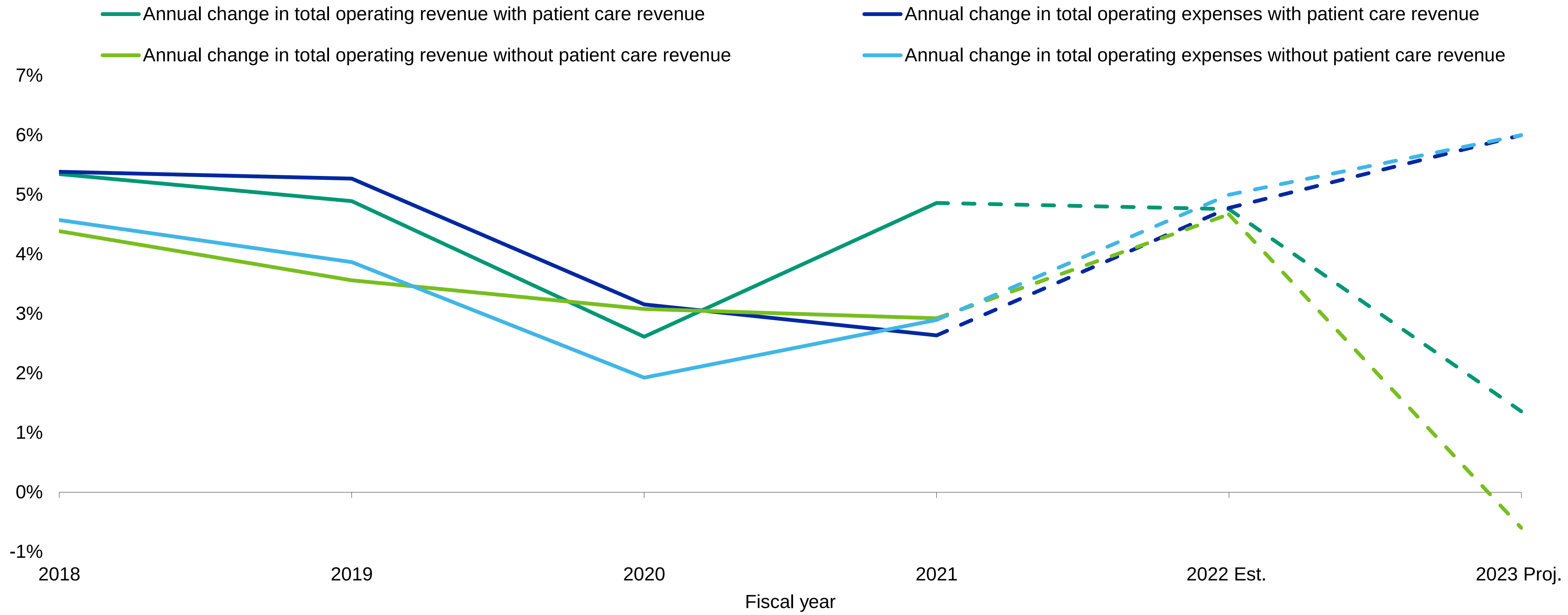
Social challenges

- A focus on affordability and return on investment will limit the ability to raise tuition and drive increased tuition discounting.
- Universities face growing costs to provide student support services, particularly in light of the pandemic.
- Changing consumer preferences may push universities to alter program offerings and course delivery methods, most notably through online and hybrid offerings, to meet student demand and address employer needs.

Climate exposure & mitigation

- To address increasing extreme weather events and climate change, universities may need more planning and greater investment to mitigate potentially damaging effects.

Constrained revenue growth well below increasing expenses demonstrates challenges facing higher education



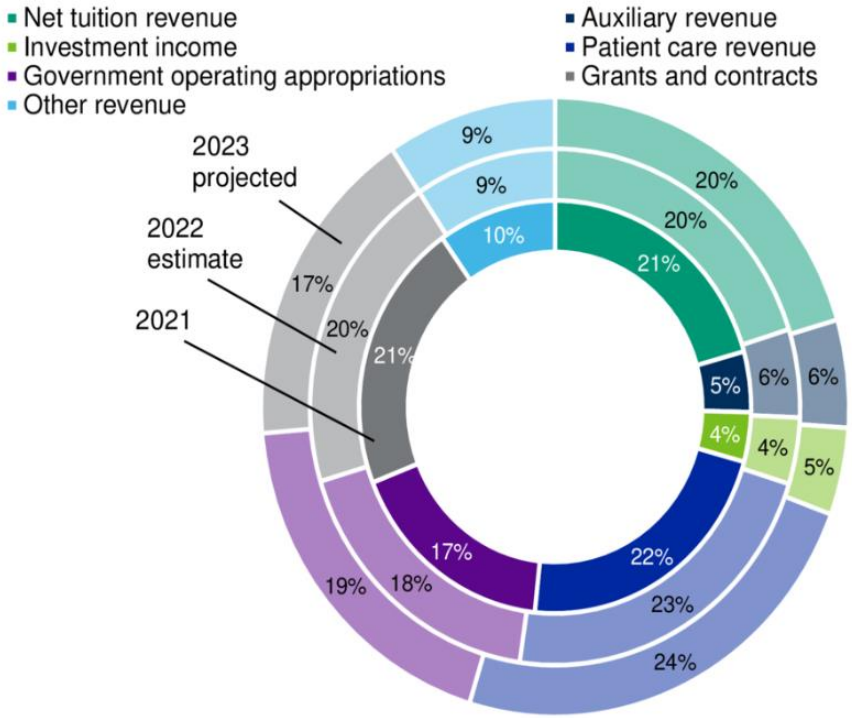
Fiscal years typically end June 30th.

Source: Moody's Investors Service

Muted growth in multiple revenue streams will limit sector-wide revenue growth to below inflation

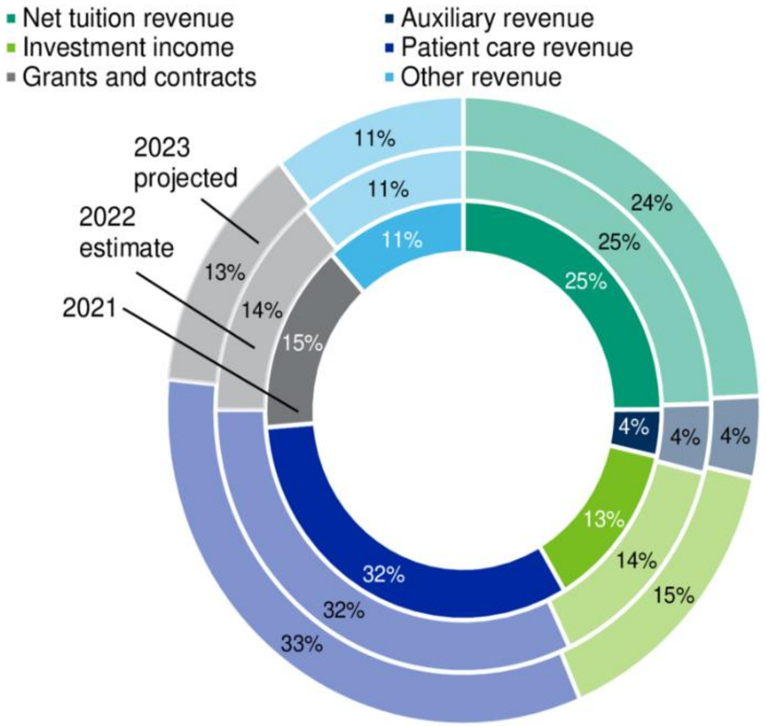
Public universities will endure more revenue strain than privates as federal pandemic aid winds down

% of total revenue by category by fiscal year



Private universities will suffer less than publics from waning federal COVID-19 aid

% of total revenue by category by fiscal year

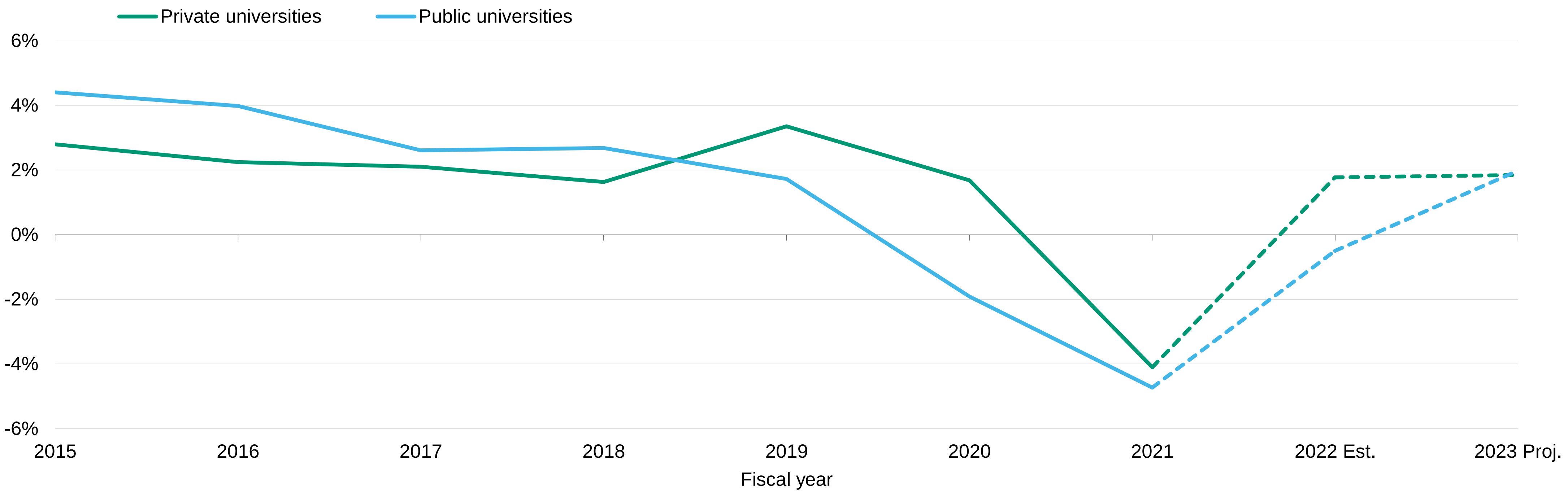


Federal pandemic aid is included in "Grants and contracts." Fiscal years typically end June 30th.

Source: Moody's Investors Service

Net tuition revenue rebounding from 2021 but well below inflation

% change in net tuition revenue; function of both enrollment and price

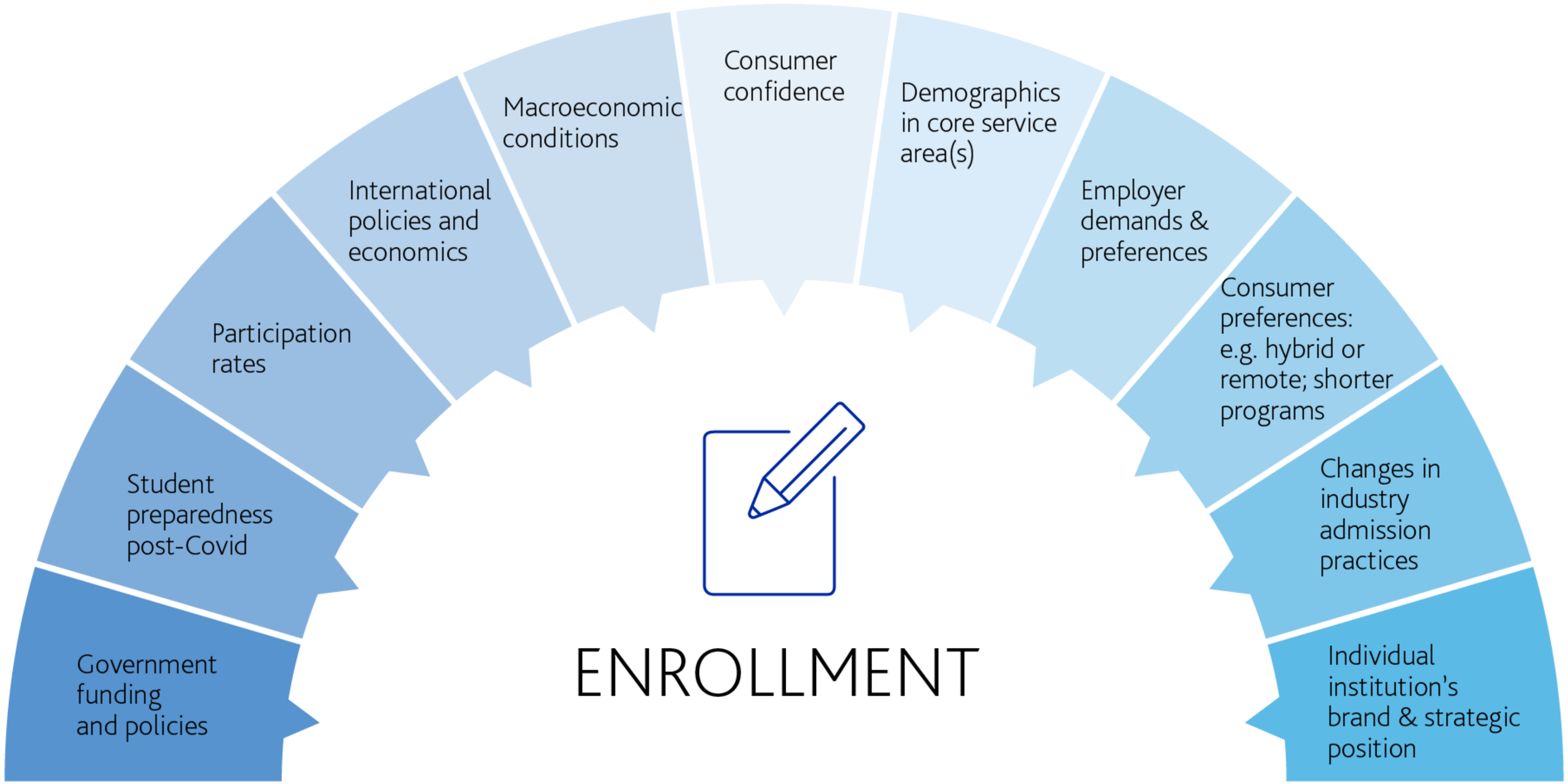


Fiscal years typically end June 30th.

Source: Moody's Investors Service

Predicting demand increasingly complex

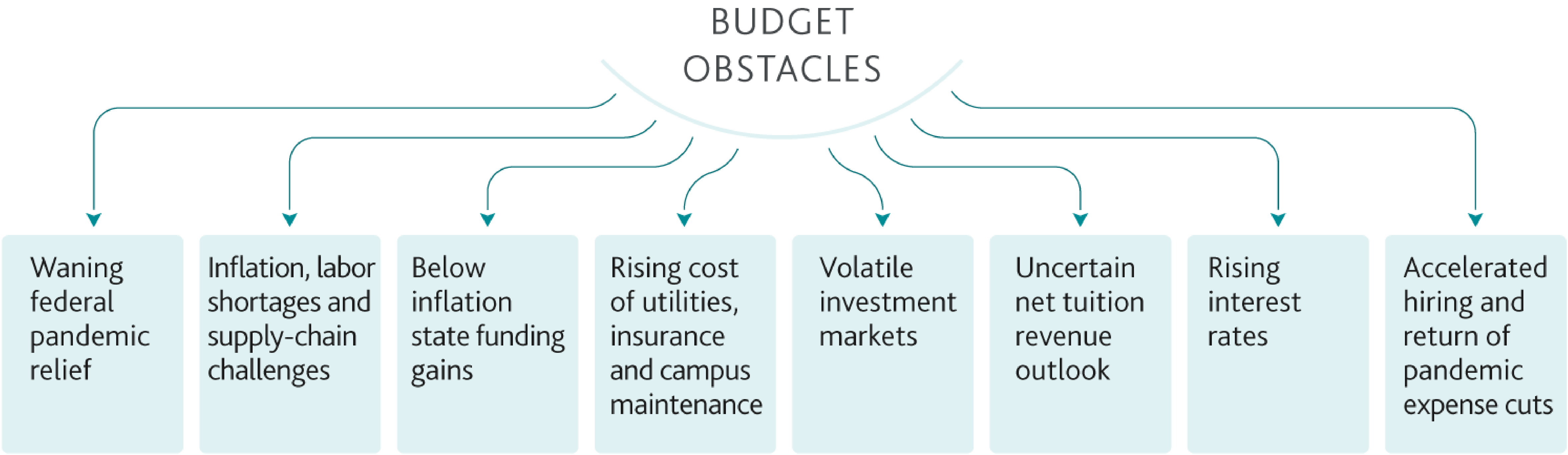
Multiple external factors drive sector trends, individual performance impacted by brand and strategic position



Source: Moody's Investors Service

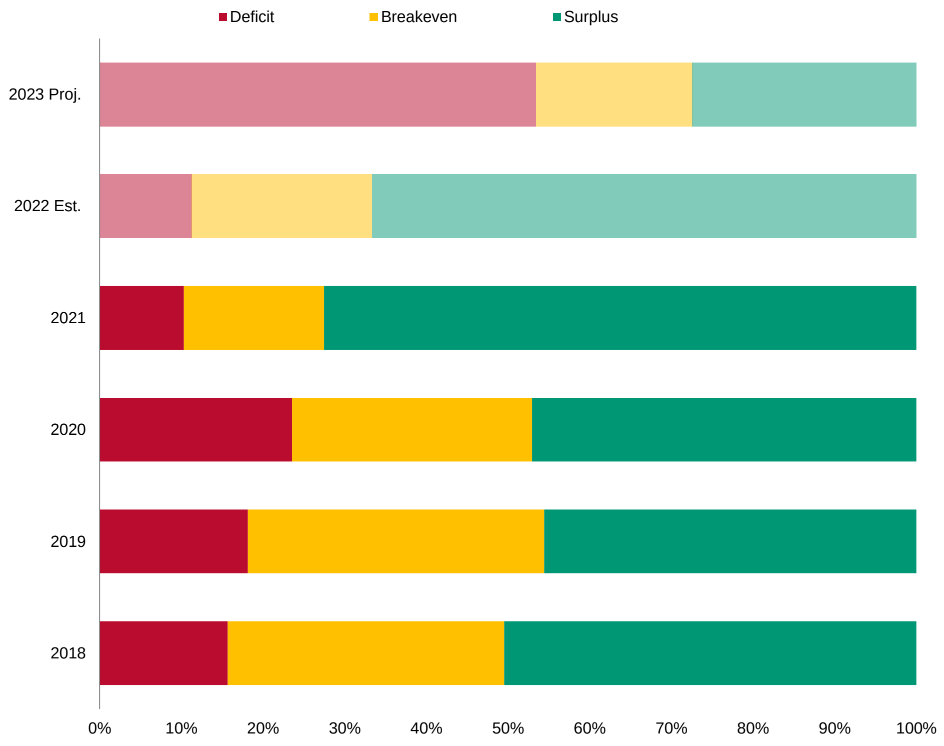
Budget obstacles lay path of uncertainty

Converging revenue and expense difficulties drive looming budget stress in fiscal 2023

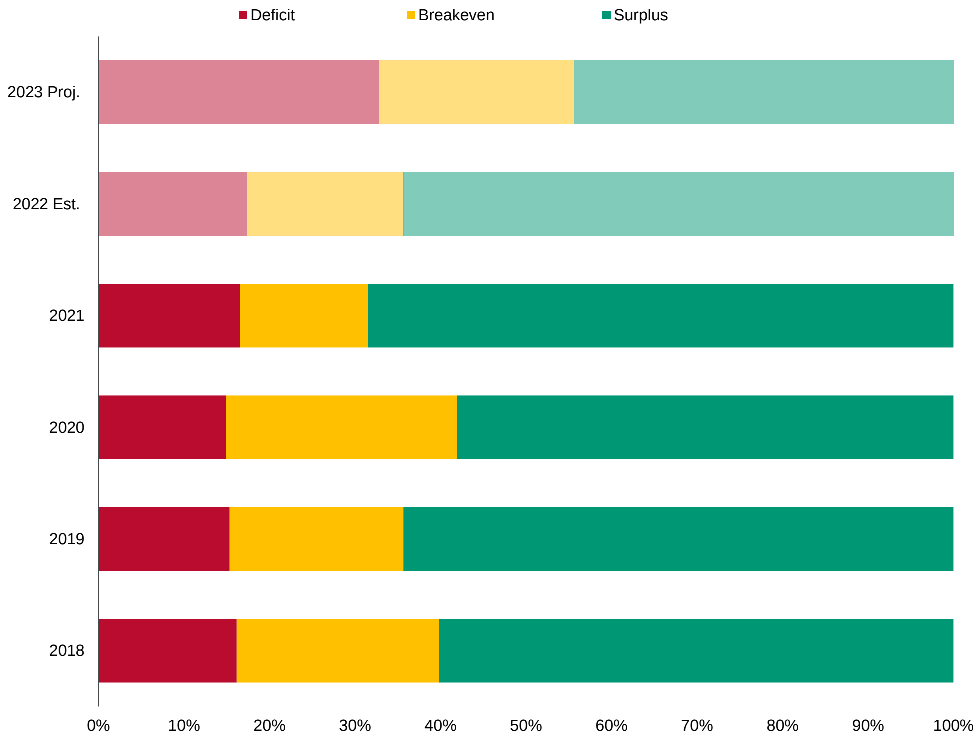


More universities likely to run deficits in fiscal 2023

Without strong cost control, a majority of public universities will post deficits in fiscal 2023



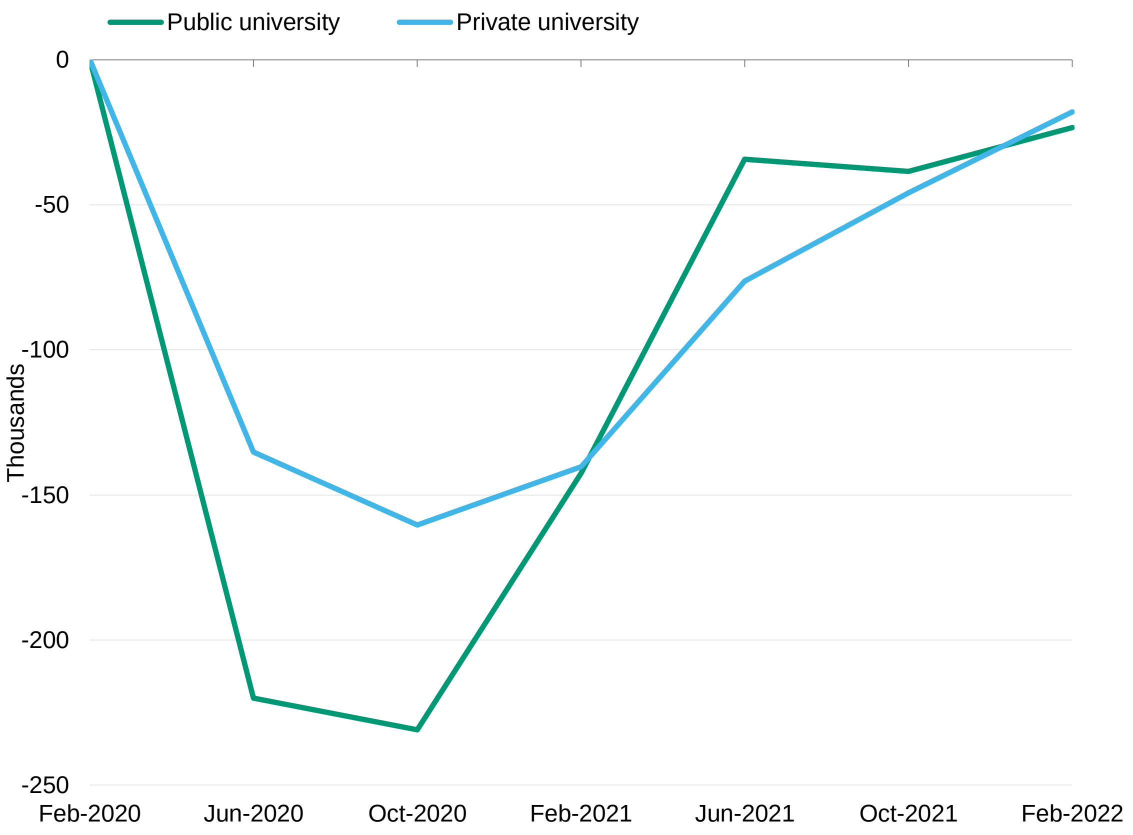
Private universities will fare better, though still a growing number will post deficits



Deficit refers to an operating margin of less than negative 2%. Breakeven refers to an operating margin between negative 2% and 2%. Surplus refers to an operating margin greater than 2%. Fiscal years typically end on June 30.
Source: Moody's Investors Service

College and university hiring has accelerated

- Hiring has accelerated since the start of calendar year 2021
- Increased hiring factoring into an escalation in labor costs
- Budget implications to extend well beyond fiscal 2022

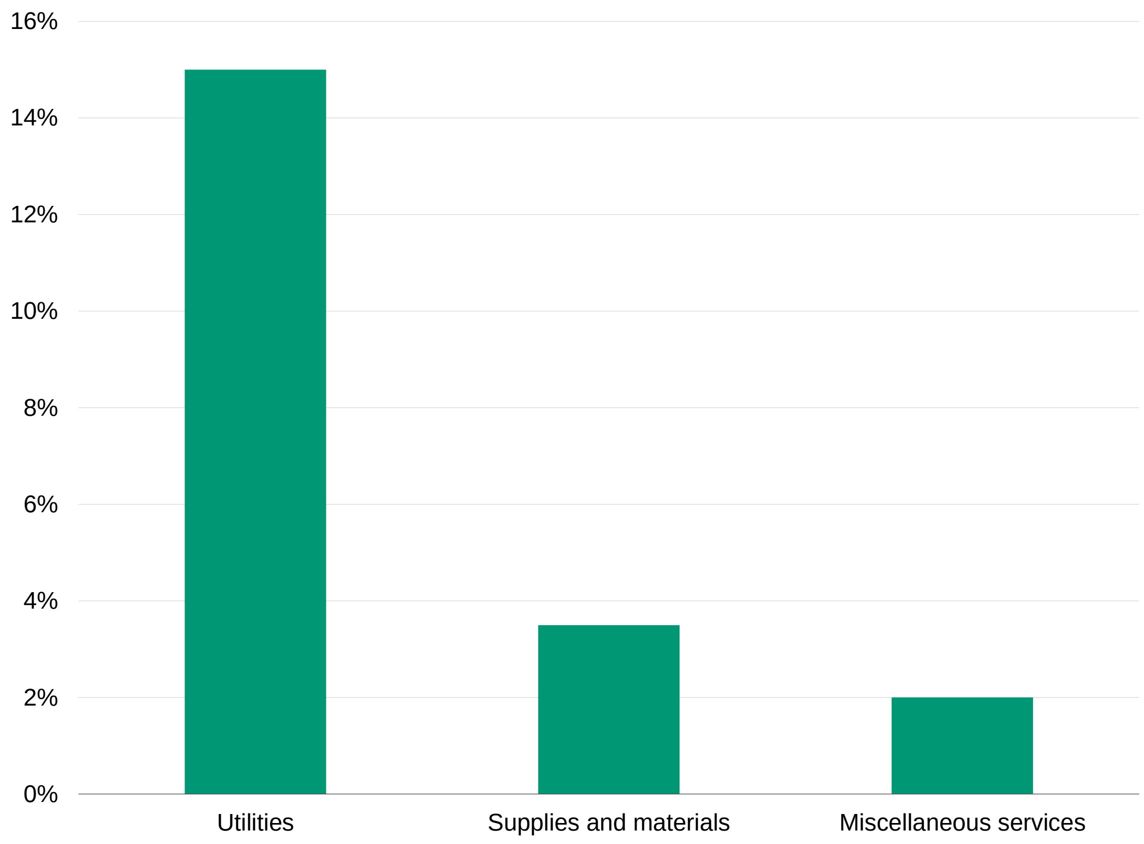


Source: Bureau of Labor Statistics

Price increases across multiple business lines

Annual higher education price increases in fiscal 2021

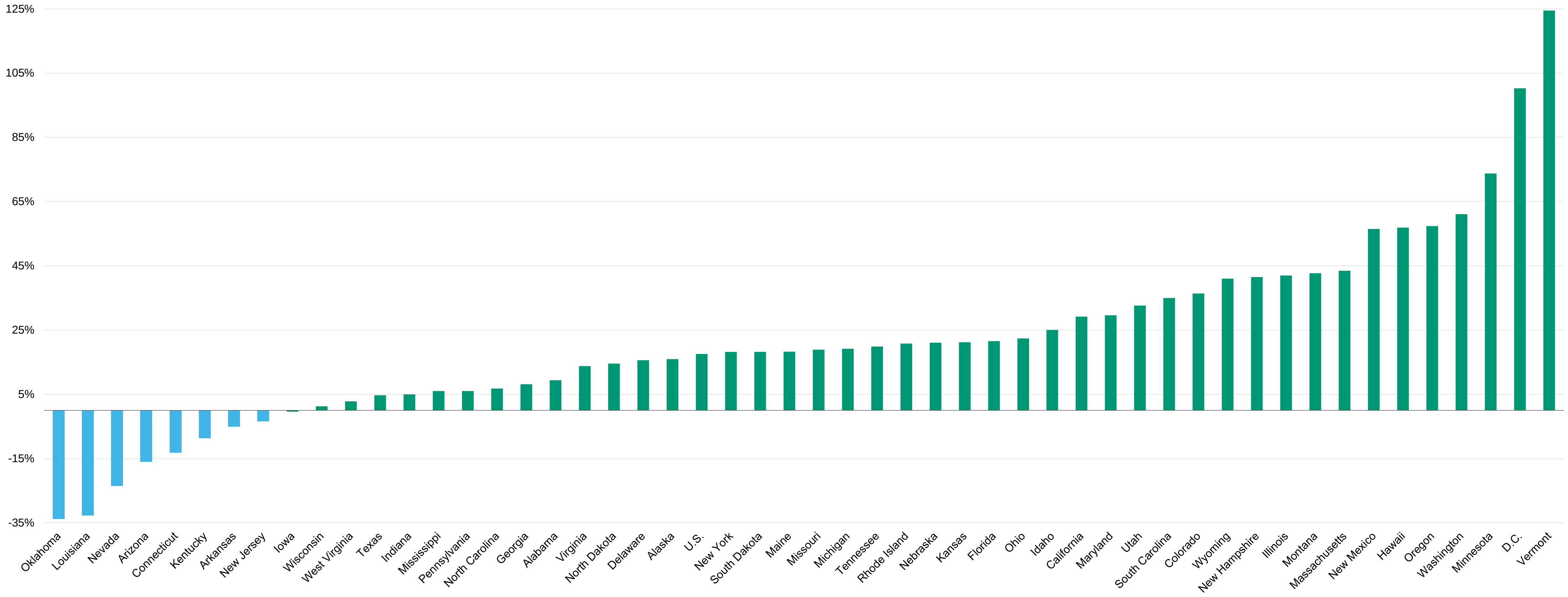
- Besides labor expenses, utility costs continue to climb more than other expense lines due to large recent volatility in commodity prices
- Inflation and supply-chain issues drive up costs of supplies, food and various discretionary expenses
- Escalating construction costs also disrupting capital budgets and plans



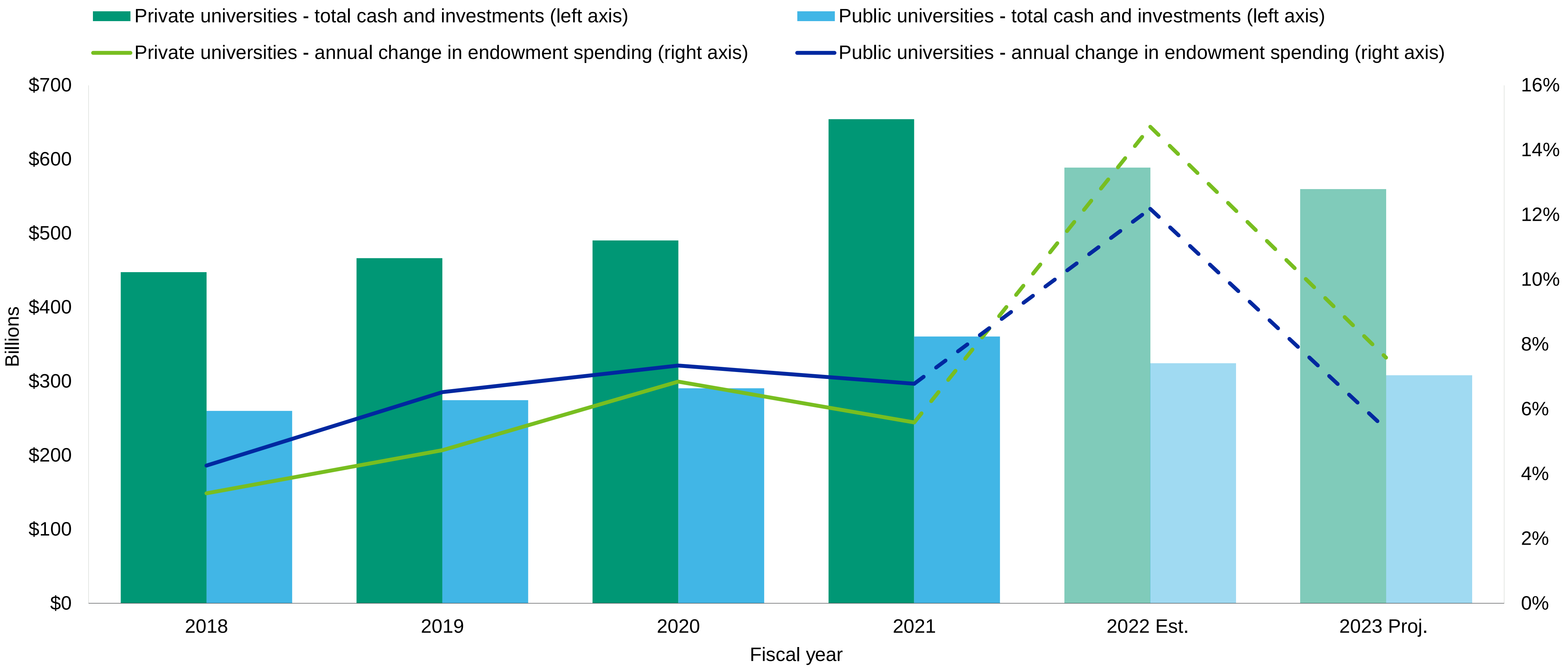
Source: Bureau of Labor Statistics

State funding rebounding after long term decline

Change in public higher ed appropriation per FTE since 2011, constant adjusted dollars



Financial reserves will continue to provide a cushion for many

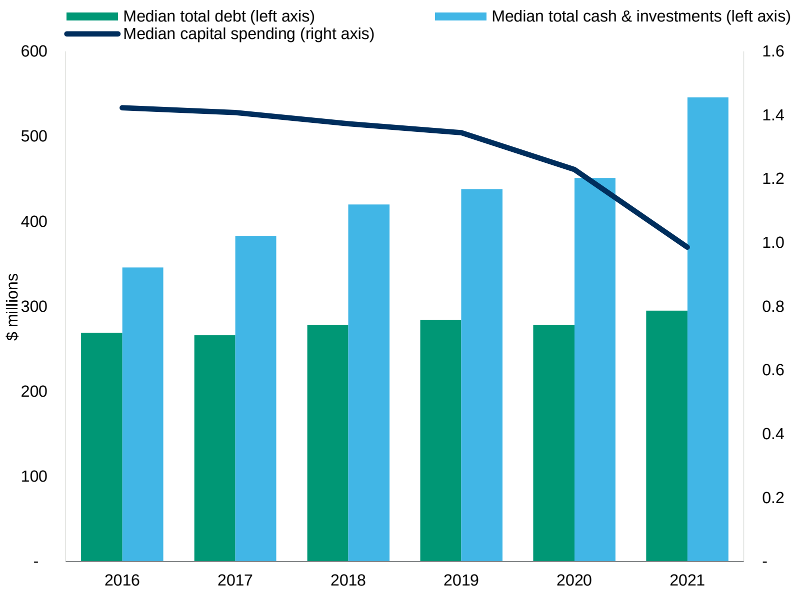


Source: Moody's Investors Service

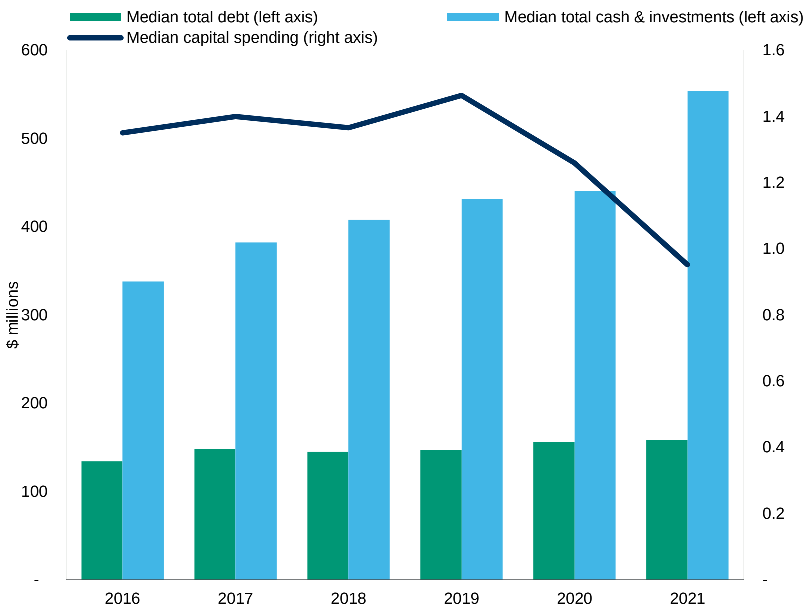
Potential pent-up demand for capital investment

The pandemic initiated a capital diet for universities and not-for-profits while balance sheets strengthened

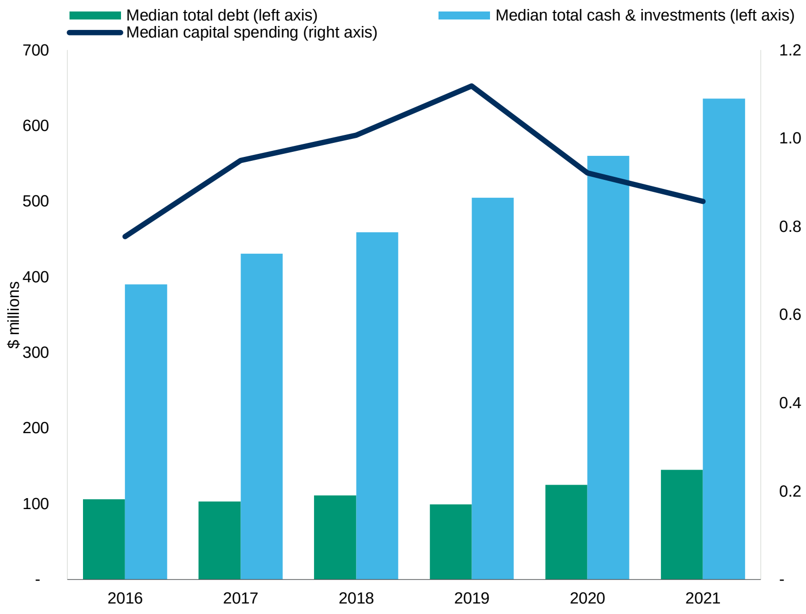
Public universities



Private universities



Not-for-profits



Source: Moody's Investors Service

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Questions and answers

Higher Education

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