MOODY'S INVESTORS SERVICE

Access is everything[™]

NAHEFFA Conference 2023 Higher Education Overview

Susan Shaffer, Vice President/Senior Credit Officer

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 is a leading global provider of credit ratings, research, and risk analysis.



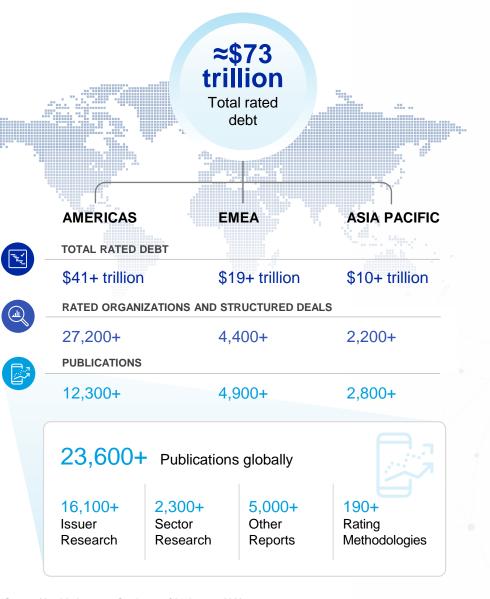


FACTS & FIGURES Full Year 2022

33,900+

Rated Organizations and Structured Deals





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



Analysts

40+ Countries/Regions



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.

Social challenges

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

Digital finance

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

Geopolitical realignments

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

Climate exposure & mitigation

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

Source: Moody's Investors Service

Risks are rising across the credit spectrum as conditions turn adverse

2023 outlook turns adverse

- Blobal 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 interestrate 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

MOODY'S INVESTORS SERVICE

NAHEFFA 2023 – Higher Education Overview, April 2023 5

»



MOODY'S INVESTORS SERVICE

Access is everything™

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.

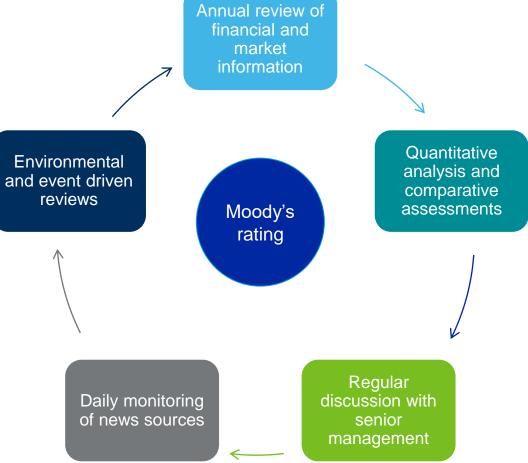
Institution specific analysis

Competitive and financial factors unique to the specific institution.

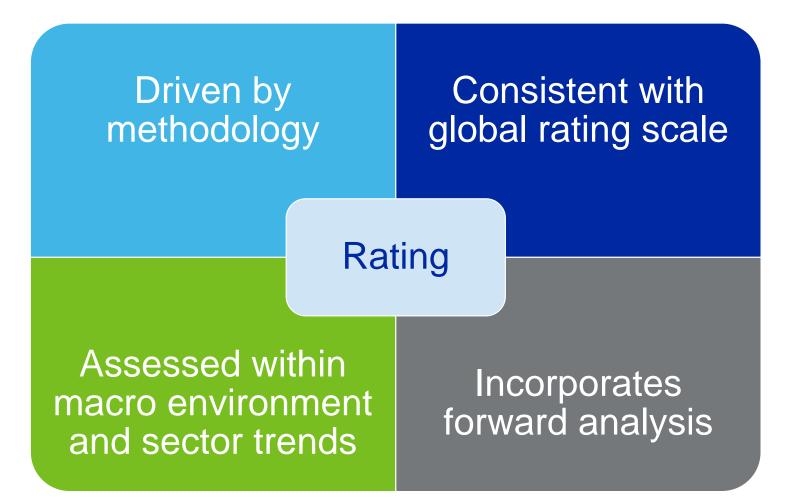
University position relative to peers

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

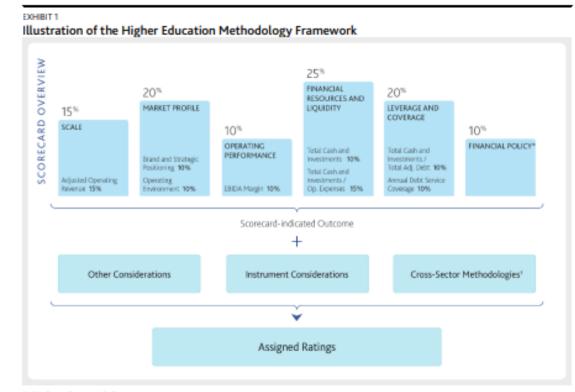


Methodology provides framework for analysis

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

MOODY INVESTORS SI			
RATING METHODOLOGY		Higher Education Methodology	
Table of Contents: NRECOULCTION 1 SECTOR OF THE METHODOLOGY 2 SECTOR OVERVIEW 2 DESCUSSION OF THE SCORECARD FACTORS 3 OTHER CONSERVIEW 2 DESCUSSION OF THE SCORECARD FACTORS 3 OTHER CONSERVIEW 12 ASSICINICISSUER-LIVEL AND 14 DERRIVERT VELOCERADIO FOR THE SCORECARD TO APPENDIX A USING THE SCORECARD TO APPENDIX A USING THE SCORECARD TO APPENDIX & INCHER DUCATION 18 OUPRONDUS INFORMED AND CANDIN SCORECARD 20 APPENDIX C. ASSIGNING ANSTRIMENTI REINTIGGT TO INCHER DUCATION SUBJERS 24 30		This rating methodology combines and replaces the <i>Higher Education</i> methodology published in May 2019 and the <i>Community College Revenue-Backed Debt</i> methodolog 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 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 Cash and Investments to Total Adjusted Debt, the use of an annual debt service coverage ratio 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.	
MOODY'S RELATED PUE		Introduction	
Analyst Contacts: NEW YORK	+1.212.553.1653	In this rating methodology, we explain our general approach to assessing credit risk of public nonprofit private colleges and universities globally, including the qualitative and quantitative	
Christopher Collins Vice President - Senior A christopher collins2@m		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	
Dennis Gephardt +1.212.553.7209 Vice President - Senior Credit Officer dennis gephardt@moodys.com		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 (
Susan Fitzgerald Associate Managing Dir susan fitzgerald@mood		or both. We also discuss other considerations, which are factors that are assessed outside the scorec	
Kendra Smith +1.212.553.4807 Managing Director-Public Finance kendra smith@moodys.com		usually because the factor's credit importance varies widely among the issuers in the sector because the factor may be important only under certain circumstances or for a subset of iss In addition, some of the methodological considerations described in one or more cross-sector and the sector because the sector be	
LONDON	+44.20.7772.5454	rating methodologies may be relevant to ratings in this sector. ² Furthermore, since ratings a	
Jeanne Harrison Vice President -Senior C Jeanne harrison@mood		forward-looking, we often incorporate directional views of risks and mitigants in a qualitativ way.	
 contacts controped on the (second in) set page 		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.	

MOODY'S INVESTORS SERVICE



* 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

10

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



MOODY'S INVESTORS SERVICE

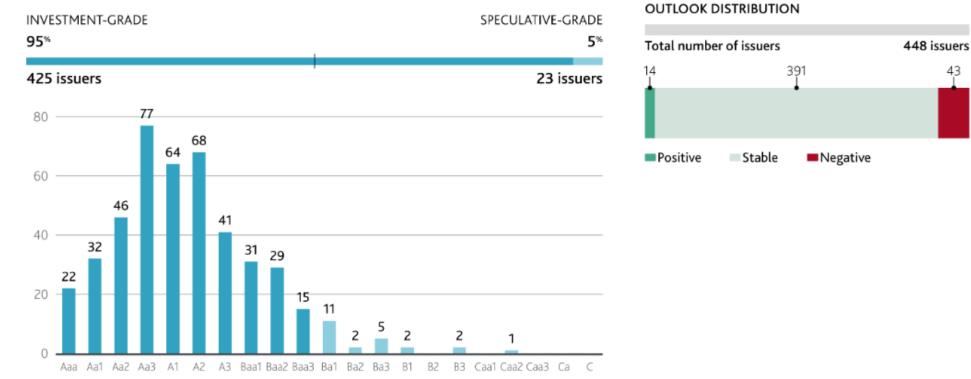
Access is everything™

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 **>>**



RATING DISTRIBUTION BY NUMBER OF ISSUERS

Source: Moody's Investors Service, December 2022 data

43

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.

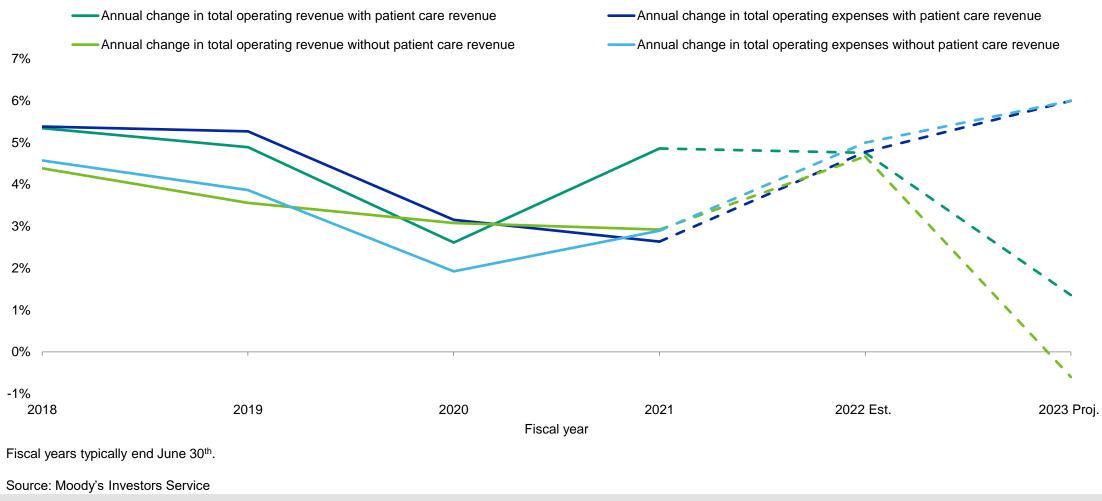
Social challenges

- 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.

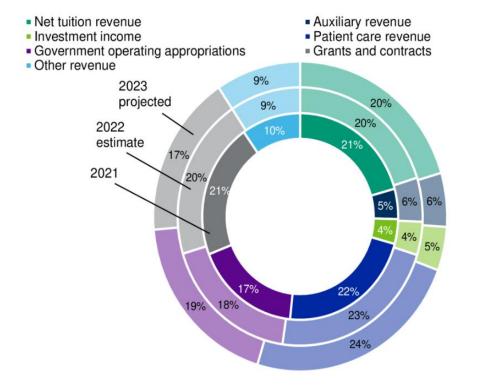
Constrained revenue growth well below increasing expenses demonstrates challenges facing higher education



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



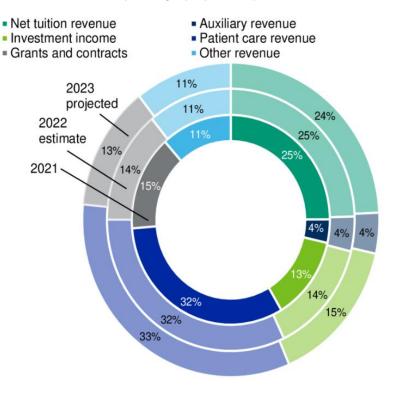
Federal pandemic aid is included in "Grants and contracts." Fiscal years typically end June 30th.

Source: Moody's Investors Service

MOODY'S INVESTORS SERVICE

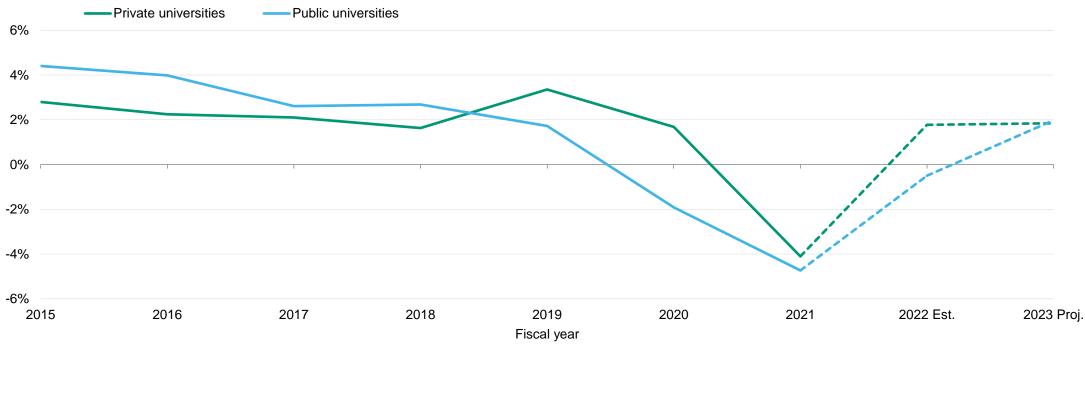
Private universities will suffer less than publics from waning federal COVID-19 aid

% of total revenue by category by fiscal year



Net tuition revenue rebounding from 2021 but well below inflation

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

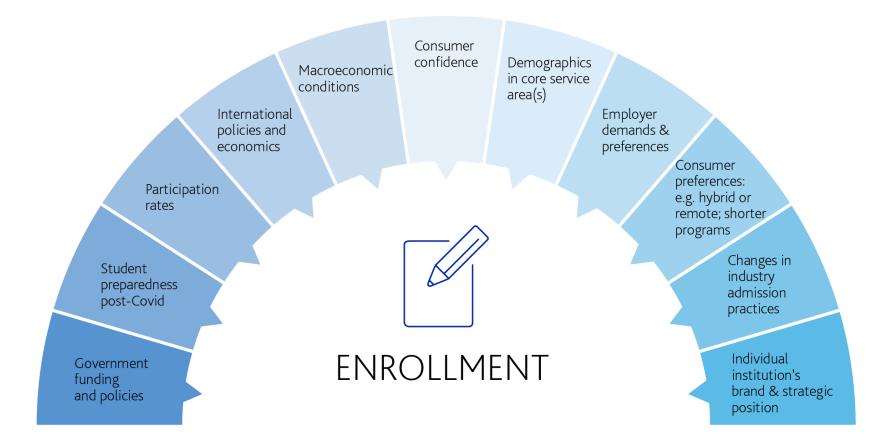


Fiscal years typically end June 30th.

Source: Moody's Investors Service

Predicting demand increasingly complex

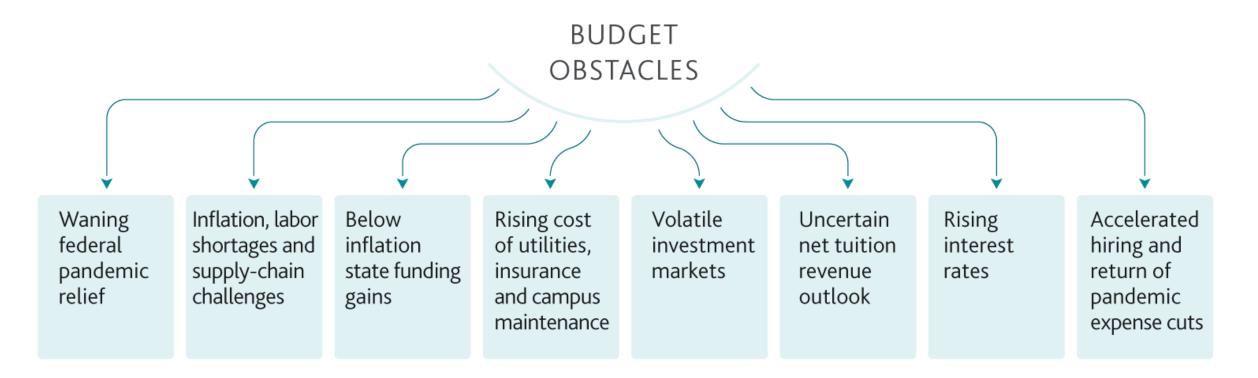
Multiple external factors drive sector trends, individual performance impacted by brand and strategic position



Source: Moody's Investors Service

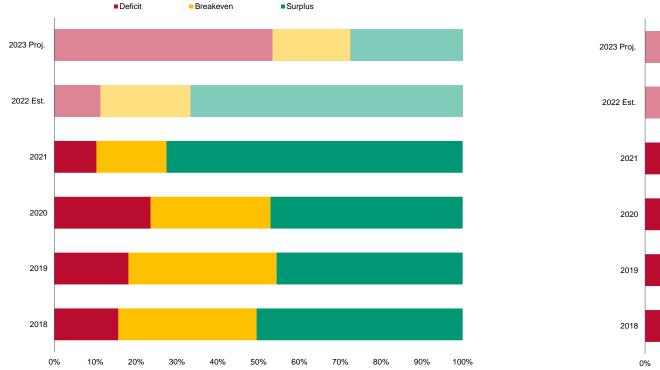
Budget obstacles lay path of uncertainty

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

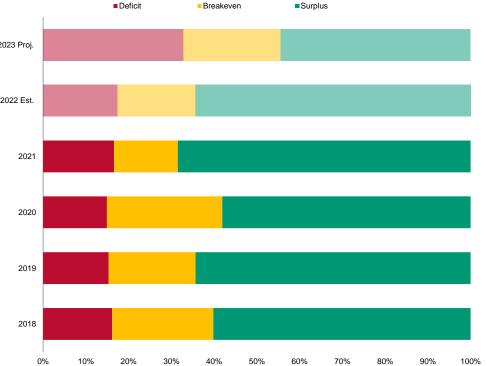


More universities likely to run deficits in fiscal 2023

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

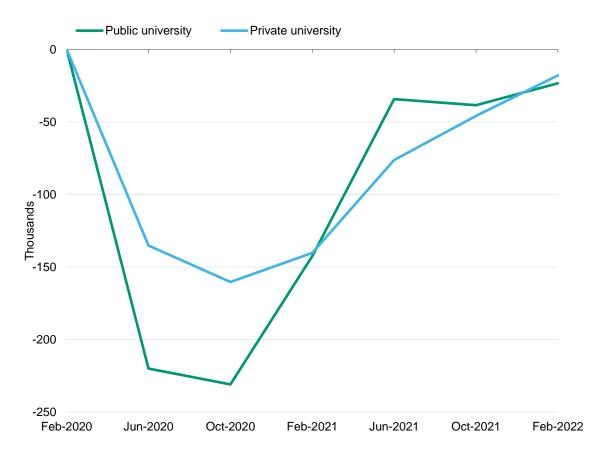


Deficit refers to an operating margin of less than negative 2%. Breakeven refers to an operating margin between negative 2% and 2%. Surplus refers to an operating margin greater than 2%. Fiscal years typically end on June 30.

Source: Moody's Investors Service

College and university hiring has accelerated

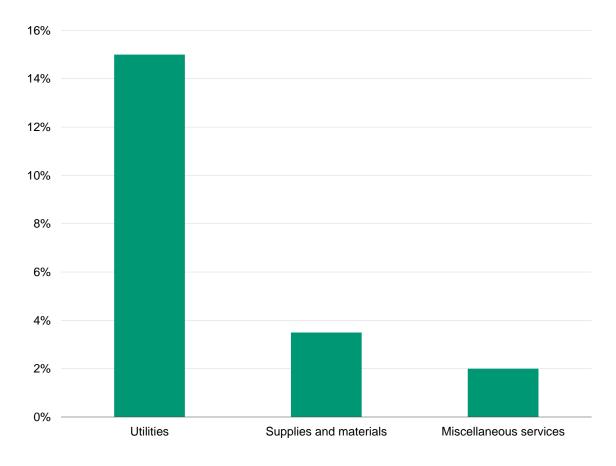
- Hiring has accelerated since the start of calendar year 2021
- Increased hiring factoring into an escalation in labor costs
- Budget implications to extend well beyond fiscal 2022



Source: Bureau of Labor Statistics

Price increases across multiple business lines Annual higher education price increases in fiscal 2021

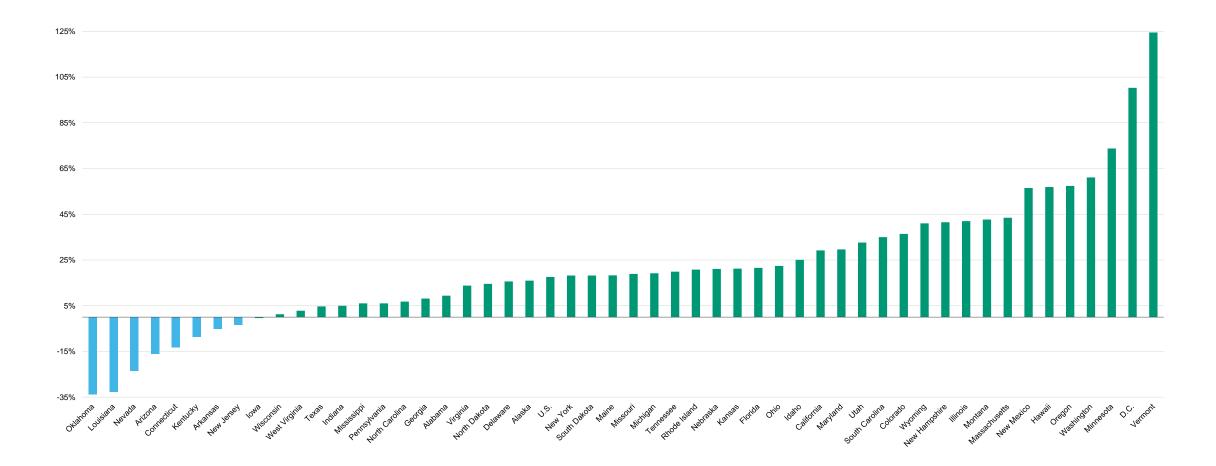
- Besides labor expenses, utility costs continue to climb more than other expense lines due to large recent volatility in commodity prices
- Inflation and supply-chain issues drive up costs of supplies, food and various discretionary expenses
- Escalating construction costs also disrupting capital budgets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



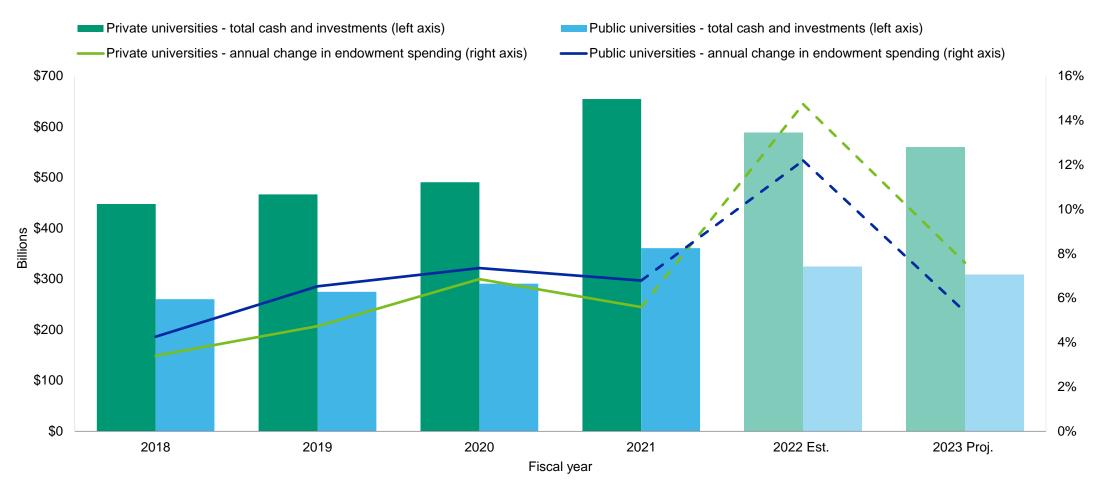
Source: Bureau of Labor Statistics

State funding rebounding after long term decline

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

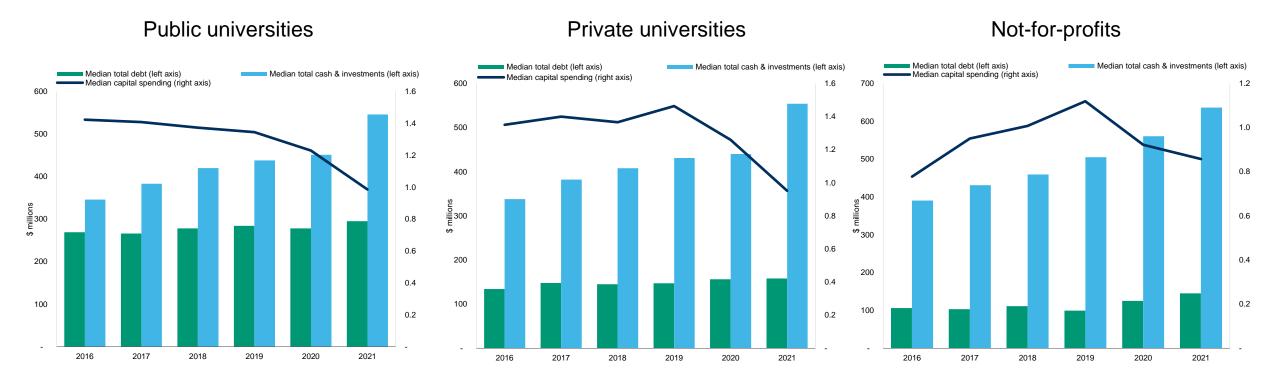


Financial reserves will continue to provide a cushion for many



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



Source: Moody's Investors Service



MOODY'S INVESTORS SERVICE

Access is everything™

Questions and answers

Higher Education

MOODY'S INVESTORS SERVICE

Access is everything[™]

Susan Shaffer VP–Senior Credit Officer susan.shaffer@moodys.com 212-553-4132 Susan Fitzgerald Managing Director <u>Susan.Fitzgerald@moodys.com</u> 212-553-6832

moodys.com

© 2023 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY, CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Charter Documents - Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 338569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings). No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.