MOODY'S INVESTORS SERVICE

CREDIT OPINION

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Missouri State University

Update following downgrade to A1

Summary

Missouri State University's (MSU; A1 stable) very good credit quality is supported by its important regional role and solid financial position. Serving 17,402 fall 2020 fulltime equivalent students, MSU is the second largest in-state public university and offers comprehensive programming. Financial management is strong, contributing to historically favorable operations. However, due to limited pricing flexibility and modest enrollment softening, ability to grow net student revenue will remain constrained. Long-term net tuition revenue growth will prove challenging due to weak in-state high school demographic trends, heightened competition, and a focus on affordability. Favorably, the university maintains solid liquidity and a manageable direct debt burden, although absolute wealth is relatively modest and financial reserve growth is likely to be tempered in upcoming years due to weaker cash flow generation and capital needs. Further, through participation in a statewide multi-employer pension plan, the university has significant debt-like liabilities, with Moody's adjusted debt to revenue a very high 2.4x.

On June 8, 2021 Moody's downgraded Missouri State University's senior rating to A1 from Aa3 and auxiliary enterprise system revenue bonds to A2 from A1.

Exhibit 1





Source: Moody's Investors Service

Credit strengths

- » Well-regarded regional brand as the second largest Missouri (Aaa stable) public university serving 17,402 fall 2020 full-time equivalent students
- » Very good unrestricted liquidity providing 203 monthly days cash on hand
- » Manageable direct debt burden relative to financial reserves
- » Sound expense management moving forward combined will help offset operating revenue pressures

Credit challenges

- » Multi-year trends of constrained net tuition revenue, resulting in weakened operating performance
- » Heightened student market challenges due to weak in-state high school demographic trends and substantial competition
- » Elevated pension exposure, with Moody's three-year (fiscal 2018-2020) average Moody's adjusted net pension liability is \$583 million, which is 3.3x the university direct debt

Rating outlook

The stable outlook incorporates our expectation that MSU will maintain operating performance stability with cash flow margins above 10%. It also incorporates expectations of no material increase in leverage beyond planned and maintenance of wealth in line with A1-rated peers.

Factors that could lead to an upgrade

- » Sustained stronger revenue growth and cash flow
- » Substantial growth in flexible reserves relative to debt and operations
- » Material and sustained strengthening of pledged revenues

Factors that could lead to a downgrade

- » Sustained deterioration in operating performance and debt service coverage
- » Material use of reserves or long-term declines in cash and investments
- » Inability to hold at least 1x debt service coverage from pledged revenues

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Key indicators

Exhibit 2

MISSOURI STATE UNIVERSITY

	2016	2017	2018	2019	2020	Median: A Rated Public Universities
Total FTE Enrollment	18,146	18,517	18,318	17,625	17,402	9,575
Operating Revenue (\$000)	317,574	314,229	322,983	328,014	322,419	222,237
Annual Change in Operating Revenue (%)	6.1	-1.1	2.8	1.6	-1.7	2.9
Total Cash & Investments (\$000)	259,319	279,069	290,930	311,459	316,015	189,897
Total Debt (\$000)	169,064	172,105	167,916	186,734	178,718	141,550
Spendable Cash & Investments to Total Debt (x)	1.2	1.3	1.4	1.3	1.4	1.1
Spendable Cash & Investments to Operating Expenses (x)	0.7	0.7	0.8	0.8	0.8	0.6
Monthly Days Cash on Hand (x)	207	223	190	207	203	155
EBIDA Margin (%)	15.3	14.0	13.8	12.5	10.4	10.1
Total Debt to EBIDA (x)	3.5	3.9	3.8	4.5	5.3	6.6
Annual Debt Service Coverage (x)	3.3	2.9	3.0	2.7	1.9	2.1

Source: Moody's Investors Service

Profile

Founded in 1905, MSU is the second largest public university in the state, with fiscal 2020 operating revenue of \$322 million and 17,402 full-time equivalent students in fall 2020. The university's enrollment reflects its doctoral/professional four-year campus in Springfield and an open admissions two-year program in West Plains. Business, education, and health sciences are among the most popular areas of study.

Detailed credit considerations

Market: in-state demographics challenge enrollment stability; established brand

Recent enrollment declines in conjunction with the university's affordability mission will be constraining factors for net tuition revenue growth. Effective management of enrollment and pricing remains important to credit quality as the university relies on student charges for over 50% of its operating revenue. Favorably, as the second largest public university in Missouri with a well-established brand across multiple campuses, prospects for enrollment stability are good. demand for MSU should remain. A freshman matriculation yield consistently above 40% and low net price illustrates its attractiveness. However, the number of Missouri high school graduates is projected to marginally decline in upcoming years. This poses a material student market challenge because more than 80% of MSU students hail from Missouri.

Operating performance: weakening margins but debt service coverage still nearly 2x

Sustained pressure on net tuition revenue and stagnant state funding will constrain meaningful improvement in university-wide operating performance. Recent enrollment pressures led to a decline in net tuition revenue of 5.5% in fiscal 2020, and state funding, which represents 25% of operating revenue, remains relatively flat. Collectively, this led to an operating deficit in fiscal 2020. While the deficit was manageable at just a negative 0.7%, it reflects a steady down trend over the last five years with limited prospects for strengthening over the next couple of years.

In response to revenue growth challenges, management will continue to deploy various spending reductions in an effort to maintain fiscal stability. Management expects these actions to help sustain double digit cash flow margins even as revenue challenges intensify. While fiscal 2021 performance will likely be stronger than fiscal 2020 as result of federal relief funding, enrollment challenges persist and will pressure net tuition revenue over the longer term.

The auxiliary system's performance was weaker in fiscal 2020, primarily as a result of the pandemic. Approximately 11% fewer students chose to live on campus in fall 2020 compared to fall 2019. Favorably, the university will be able to use higher education relief funding from the federal government to offset revenue losses in fiscal 2021. The university is instituting a new method for student service fees and the auxiliary system, which is expected to generate additional revenue which will help offset some enrollment losses.

Wealth and liquidity: wealth continues to provide adequate coverage of debt and annual expenses

The university's wealth will continue to provide good coverage of its debt obligations and liquidity is credit supportive. Growth will be tempered in upcoming years as thinner operating performance will limit free cash flow and certain capital projects will be cash funded, including a \$24 million residence hall project. Fiscal 2020 total cash and investments, including wealth at the foundation, amounted to \$316 million and grew an industry comparable 22% over the last five years.

Liquidity

Liquidity will continue to be a credit strength and provide a strong cushion relative to operating expenses. In fiscal 2020, unrestricted monthly liquidity amounted to \$165 million, which provides 203 monthly days cash on hand. This compares favorably to A1-rated peers. Liquidity risks are minimal given the university's favorable still good cash flow, fixed rate debt structure and conservative asset allocation.

Leverage: direct debt remains manageable, but sizeable pension overhand limits flexibility

Direct debt will remain manageable relative to financial reserves and operations. In fiscal 2020, spendable cash and investments provided 1.4x coverage of debt, while debt to revenue was a manageable 0.6x. However, when incorporating the elevated pension liability, the university's leverage profile looks materially weaker. Moody's adjusted debt to operating revenue is a very high 2.4x, which is double the A-rated public university median of 1.1x. Favorably, there are no near-term debt plans.

Legal security

The Educational Facilities Revenue Bonds (\$41 million outstanding at June 30, 2020) are unsecured general obligations of the university, payable from all legally available funds, excluding state appropriated funds, and funds pledged to payment of Auxiliary Enterprise System Revenue Bonds. The Educational Facilities Revenue Bonds have a sum sufficient rate covenant and a negative mortgage pledge.

The Auxiliary Enterprise System Revenue Bonds (\$66 million outstanding at June 30, 2020) are secured by a more limited pledge of the University's net income and revenues from its Auxiliary Enterprise System. The bonds are subject to a 1.1x coverage rate covenant. We expect the university to continue to meet this coverage requirement, with fiscal 2020 pledged revenue providing 1.25x coverage.

Debt structure

Favorably, MSU employs a conservative, entirely fixed rate debt structure with relatively rapid amortization. This capital structure adds predictability to the budget process by providing fixed costs to incorporate into financial plans. In fiscal 2021, the university refinanced over 60 million of its debt into private placements. Over the next decade, the university will retire more than 50% of outstanding principal.

Debt-related derivatives

There are no debt-related derivatives.

Pensions and OPEB

Exposure to post-employment benefits is elevated relative to operations, with pension costs representing a very high 14% of fiscal 2018 operating expenses. University employees participate in either a state-administered, cost sharing, defined benefit plan, Missouri State Employees' Retirement System (MOSERS), or College and University Retirement Plan (CURP), a defined contribution plan.

MSU's contribution rates into its state run pension systems are very high and rising. MSU's required contributions into the plans have been fixed at just below 17% of covered payroll. The potential for pension contributions to increase remains a long-term credit risk, particularly given that the pension plan is funded at just 56.7% on an as reported basis, or 38.6% on a Moody's adjusted basis. Moody's three-year (fiscal 2018-2020) average Moody's adjusted net pension liability is \$583 million, which is 3.3x the university direct debt.

Relative to pensions, exposure to post-retirement health (OPEB) benefits is modest. The university's reported fiscal 2020 OPEB liability was just over \$11 million, or 2% of total liabilities.

ESG considerations

Environmental

Environmental considerations are not a key credit driver for Missouri State University. Its location in the Midwest exposes it to some risk of severe weather events, which could have a budgetary impact. However, sound liquidity serves as a mitigant.

Social

MSU's location in an area with challenging demographics pressures net tuition revenue. Like other universities that recruit heavily from the Midwest, weak regional population growth is a significant social consideration and a credit challenge.

We regard the coronavirus outbreak as a social risk under our ESG framework. As a result of the pandemic related expenses and auxiliary refunds, the university experienced a year of weaker operations in fiscal 2020 and will likely carry through fiscal 2021. Multiple rounds of federal support and cost-cutting measures will continue to help mitigate much of the financial impact. The university is well positioned to withstand near-term financial variability due to its very good liquidity.

Governance

MSU's very good strategic positioning is supported by its sound financial management and important role within the state. Financial planning is conservative, with budgets incorporating reasonable assumptions that allow for comfortable absorption of any unexpected funding or expense uncertainty. Management regularly evaluates the university's competitive position and invests strategically in programs and capital to position it for long term success. The university leverages multiple funding sources to invest in facilities, including internal reserves, state dollars, donor support, and capital markets.

The University is governed by a ten-member Board of Governors that meets approximately seven times per year. The Board of Governors has general control of the management and affairs of the University. The nine voting members of the Board of Governors are appointed by the Governor with the advice and consent of the Missouri Senate for six-year terms, representing each of Missouri's eight congressional districts.

Rating methodology and scorecard factors

The <u>Higher Education rating methodology</u> includes a scorecard that summarizes the factors that are generally most important to higher education credit profiles. Because the scorecard is a summary and may not include every consideration in the credit analysis for a specific issuer, a scorecard-indicated outcome may or may not match an assigned rating. We assess strategic positioning on a qualitative basis, as described in the methodology.

Exhibit 3

Missouri State University, MO

Scorecard	d Factors and Sub-factors	Value	Score
Factor 1:	Market Profile (30%)		
	Scope of Operations (Operating Revenue) (\$000)	322,419	A1
	Reputation and Pricing Power (Annual Change in Operating Revenue) (%)	(1.7)	B1
	Strategic Positioning	А	А
Factor 2:	Operating Performance (25%)		
	Operating Results (Operating Cash Flow Margin) (%)	10.4	A1
	Revenue Diversity (Maximum Single Contribution) (%)	51.6	A1
Factor 3:	Wealth & Liquidity (25%)		
	Total Wealth (Total Cash & Investments) (\$000)	316,015	Aa3
	Operating Reserve (Spendable Cash & Investments to Operating Expenses) (x)	0.8	Aa1
	Liquidity (Monthly Days Cash on Hand)	203	Aa2
Factor 4:	Leverage (20%)		
	Financial Leverage (Spendable Cash & Investments to Total Debt) (x)	1.4	Aa2
	Debt Affordability (Total Debt to Cash Flow) (x)	5.3	Aa1
	Scorecard-Indicated Outcome		Aa3
	Assigned Rating		A1
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Data is based on most recent fiscal year available. Debt may include pro forma data for new debt issued or proposed to be issued after the close of the fiscal year.

For non-US issuers, nominal figures are in US dollars consistent with the Higher Education Methodology.

Source: Moody's Investors Service

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