

CREDIT OPINION

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Ohio (State of)

Update to credit analysis following outlook change to positive

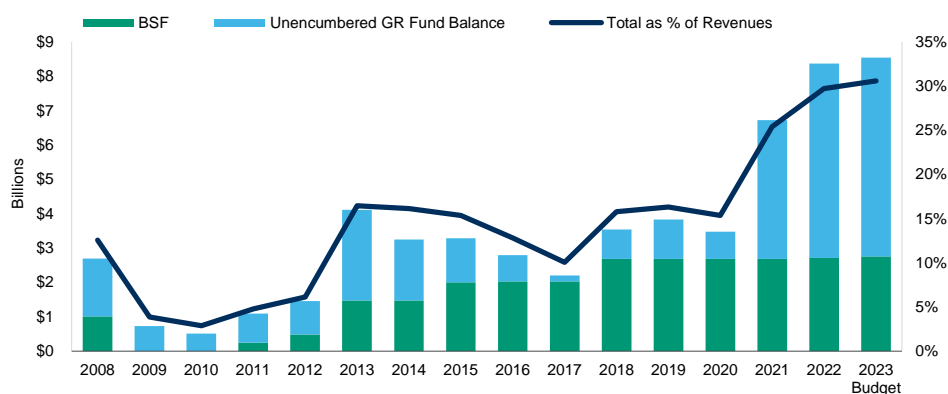
Summary

The State of [Ohio's](#) (Aa1 positive) credit profile incorporates its sound budgetary and financial management, strong reserves and liquidity, and affordable fixed costs associated with below-average long-term debt, pension and retiree healthcare (OPEB) liabilities. Together, these provide strong flexibility to weather moderate economic uncertainty and inflationary pressures. With recent rapid revenue surpluses, the state has set aside reserves to smooth the ramp down of Federal Medicaid support and to fund capital projects and economic development. These investments support budget flexibility, reduce the state's planned borrowing needs, and promote long-term economic growth. However, the state's strengths are partially offset by a history of below-average economic growth, compounded by challenging demographic trends as well as school districts that are pressured by large pension liabilities.

Exhibit 1

Ohio's revenue surpluses increased reserves, allowing for one-time investments and important budget flexibility

Budget basis financials, fiscal year end June 30



BSF is the Budget Stabilization Fund. GRF is the budget-basis general revenue fund that includes own-source revenue but excludes federal grants.

Source: Ohio Official Statements; Moody's Investors Service

Credit strengths

- » Large economic base that is anchored by a rapidly growing metropolitan area
- » Conservative fiscal management including sound budgeting, proactive responses to budgetary shortfalls, and commitment to replenishing budget stabilization funds
- » High levels of internal liquidity and rainy day funds, including available balances outside the general revenue fund
- » Moderate long-term liabilities that are affordable compared to the state's budget and revenue trajectory
- » Demonstrated history of managing pension and OPEB liabilities by adjusting benefits

Credit challenges

- » Below-average demographic and population trends that contribute to relatively slower economic growth
- » State provides significant funding for K-12 school districts that have large unfunded pension liabilities

Rating outlook

The positive outlook is based on growing evidence of new economic development that could diversify the state's economy, improve growth and strengthen demographic trends over the medium term. The outlook also reflects recent improvement in the state's financial position and economic prospects, and our expectation that strong reserves, proactive financial management, and low fixed costs will support budget flexibility during potential economic uncertainty in the next 18-24 months.

Factors that could lead to an upgrade

- » Continued improvement in demographic trends, particularly in working age population growth, net migration, and age distribution, that contribute to stronger economic growth relative to peers
- » Maintenance of a budget in structural surplus, and/or quick response and recovery from an economically-driven budget shock
- » Evidence that economic development is diversifying the state economy and improving growth and demographic trends

Factors that could lead to a downgrade

- » Lack of improvement in employment, personal income or demographic trends relative to the US average
- » Reduced liquidity and materially lower reserve levels, other than for strategic one-time purposes
- » Financial deterioration including a return to budgetary structural imbalance and/or protracted response and recovery to budget gaps
- » Unanticipated rise in long-term liabilities and an increase in fixed costs

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moodys.com> for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2

	2020	2021	State Medians (2020)
Economy			
Nominal GDP (\$billions)	677.6	736.4	243.8
Real GDP, annual growth	-3.5%	4.3%	-3.0%
RPP-adjusted per capita income as % of US	98.3%	NA	96.7%
Nonfarm employment, annual growth	-5.9%	2.1%	-5.5%
Financial performance			
Available balance as % of own-source revenue	22.1%	30.5%	20.2%
Net unrestricted cash as % of own-source revenue	48.0%	62.2%	48.1%
Leverage			
Total long-term liabilities as % of own-source revenue	117.1%	110.7%	164.5%
Adjusted fixed costs as % of own-source revenue	6.0%	5.0%	7.3%
Other Scorecard Factor			
Economic Growth (5-year CAGR real GDP - 5-year CAGR US real GDP)	-0.7%	-0.8%	

Source: US Bureau of Economic Analysis; US Bureau of Labor Statistics; Ohio audited financial reports; Moody's Investors Service

Profile

Ohio has a population of 11.7 million, located in the Midwest region of the US with 312 miles of shoreline along Lake Erie, according to NOAA. The state is the seventh-largest US state by population, and has a large, diverse economy (2021 nominal GDP of \$736 billion) that is the seventh largest among the states.

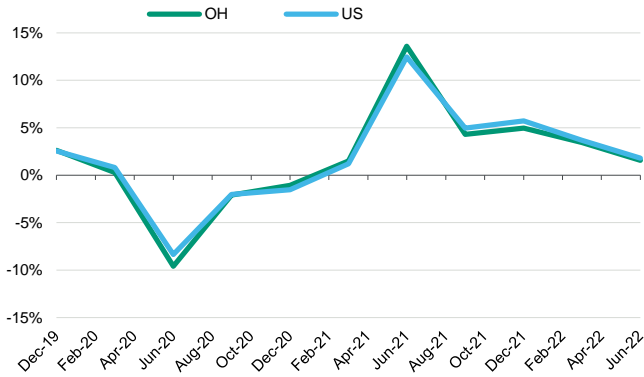
Detailed credit considerations

Economy

Ohio's post-COVID economic recovery has been somewhat mixed, with overall productivity and wage growth keeping pace with the US, somewhat offset by a slower job recovery in the past year. While challenging demographic trends will continue to weigh on the state's growth, the state's lower cost of living and skilled workforce are encouraging economic diversification. Growth will also be supported by continued expansion in the Columbus (Aaa stable) area, and recent large economic development announcements may stabilize demographic trends if they materialize as promised.

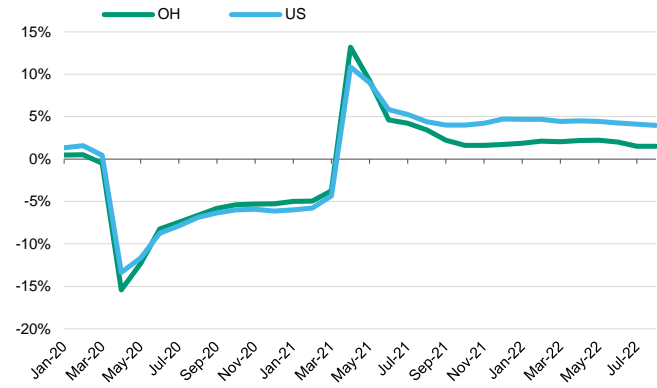
Ohio's GDP trends have tracked closely with the US through the pandemic and recovery to date, and the state's quarterly GDP is 103.1% of its pre-COVID levels compared to a 50-state median of 103.3%. The Moody's Investors Service macroeconomic forecast projects that the US real GDP growth will slow significantly from 5.7% in 2021 to 1.9% and 1.3% in 2022 and 2023, respectively. Ohio's FY2023 revenue forecast is built on similar assumptions.

Exhibit 3
Ohio's GDP trends have tracked closely with the US
YOY % change in quarterly GDP



Source: US Bureau of Economic Analysis

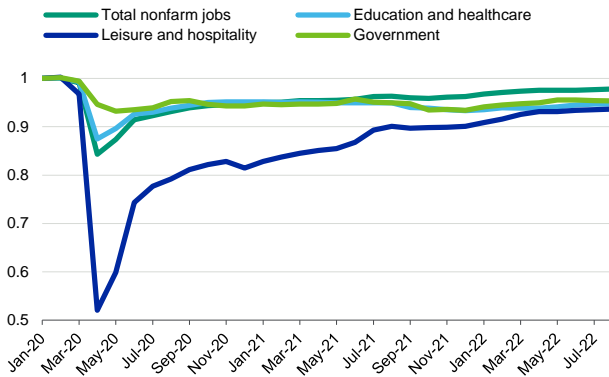
Exhibit 4
Ohio's job recovery has not kept pace with the US over the past year
YOY % change in monthly non-farm employment



Source: US Bureau of Labor Statistics

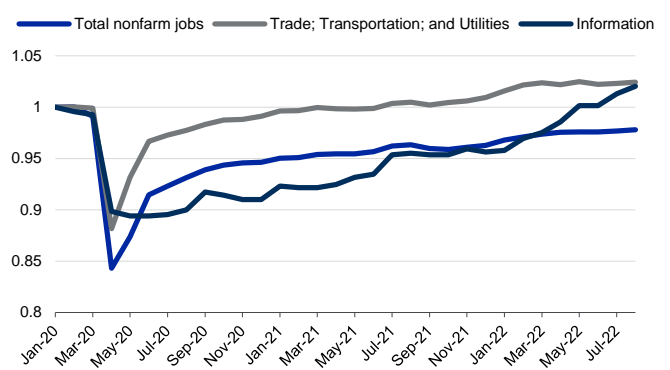
Ohio's employment recovery has lost ground to the US over the past year; the state has recovered 86% of jobs lost in the first two months of the pandemic, compared to 101% for the US. Ohio's main lagging sectors including leisure and hospitality, education and healthcare, and government, which together comprise 40% of employment (see exhibit 5). However, strong growth in trade, transportation and utilities and information jobs, demonstrate the state's future growth prospects; both sectors are over 102% of pre-COVID levels. In addition, despite the somewhat weak employment recovery, Ohio's total wages have grown steadily. As of March 2022, the state's total wages were 109% of pre-COVID levels, compared to 113% for the US.

Exhibit 5
Key employment sectors have hampered OH's job recovery
Indexed to January 2020



Source: US Bureau of Labor Statistics

Exhibit 6
Information sector is a small but rapidly growing source of jobs



Source: US Bureau of Labor Statistics

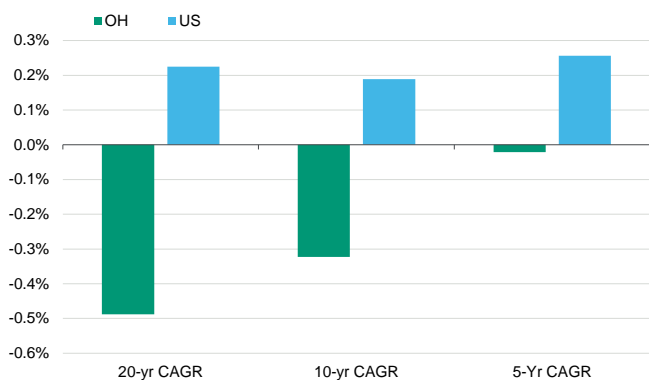
Ohio's August unemployment rate was 4% compared to 3.7% for the US, amid some labor force constraints. Ohio's August 2022 labor force remains 2.2% below pre-pandemic levels whereas the size of the US labor force has fully recovered.

Ohio's challenging demographics will continue to constrain economic growth, however trends have improved over the past decade and recent economic development announcements, may stabilize population growth and age distribution. Declines in the state's prime working age population have decelerated over time, and the number of younger workers is growing.

Exhibit 7

Prime working age population trends remain slightly negative but have improved over time

Population age 25-54

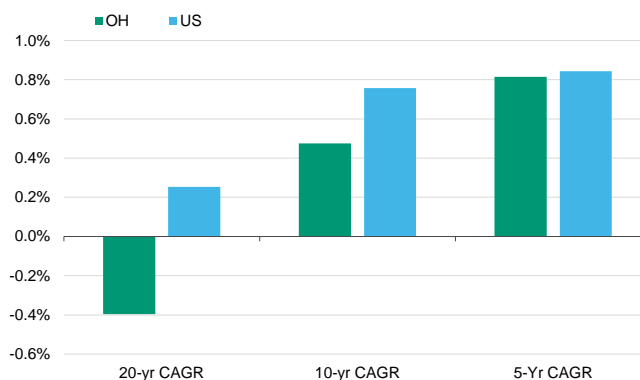


Source: US Census Bureau

Exhibit 8

Growth in younger workers is stabilizing Ohio's population trends

Population age 25-44



Source: US Census Bureau

Ohio's total population growth remains slow but positive. The state's five-year CAGR in population was 0.2%, compared to 0.5% for the US.

Ohio has several large economic development announcements, ranging from office expansions ([JP Morgan](#); Aa1 stable), to electric vehicle battery manufacturing (including over \$1 billion investments each from Ford, Semcorp and Ultium Cells) to data centers ([Amazon](#); A1 stable). The largest new economic development in Ohio's recent history will be [Intel Corporation's](#) (A1 negative) new [\\$20 billion semiconductor manufacturing plant](#) in New Albany, OH (Aaa), 15 miles northeast of Columbus. This project will introduce a new, high paying economic and employment sector to the state's important manufacturing base. While some large announcements fail to materialize as planned, this project is essential given the national importance of increased chip manufacturing. In July 2022, US Congress approved the Chips Act which provides \$52 billion in funding to support semiconductor research and production, including the new Intel facility.

Intel broke ground on the project in September 2022 with expected completion in 2025. If the facility is completed as proposed, the state will provide to Intel a \$1.3 billion incentive package and, in return, benefit from economic diversification, job growth, workforce development investments, and substantial ancillary industry growth.

Finances and liquidity

After two consecutive years of record budget surpluses and building reserves, Ohio is on sound footing to manage budget challenges during a potential period of economic uncertainty and inflationary pressures on consumption and state spending. Ohio's budget flexibility will also be supported by an established track record of conservative budget management, below-average fixed costs, the governor's strong powers to reduce spending, and a fiscal 2022-23 biennial budget that is in structural surplus.

High inflation has not meaningfully increased the state's budget to date, due to existing labor agreements and savings from above-average vacancies. However, spending pressures will likely increase in the next biennium as bargaining unit contracts expire in June 2024, and steady funding demands from schools, health care service providers and public safety employees will put pressure on the state to raise spending targets. However, the recent budget surpluses and available fund balances will provide headroom for such fiscal policies.

The state estimates that fiscal 2022 revenues exceeded the adopted budget by \$2.7 billion (10.8%) and, when combined with budget savings, resulted in a \$5.7 billion (20% of general fund tax receipts) unencumbered fund balance. Total taxes (excluding federal revenues) grew 9% YOY, partially due to strong sales tax growth (6.9% YOY) from federal aid-spurred consumption. In addition, personal income tax revenues increased 5.4% YOY. The state has used recent surpluses to fund one-time investments, smooth future fiscal cliffs and avoid debt (exhibit 9). From FY2021 through FY2023, the state plans \$4.2 billion of one-time spending for student

wellness and success, Medicaid costs stabilization, capital projects, and various economic development incentives. In addition, the state has authorized the use of up to \$2.8 billion of unencumbered fund balance to replace borrowing for future capital projects.

Exhibit 9

Ohio has used surpluses to offset the risk of a future federal aid fiscal cliff and support capital projects

	FY 2021	FY2022	FY2023 budget	FY21-FY23 Total
Operating surplus	\$3,450	\$4,639	\$1,377	\$9,466
Uses of surplus				
Set aside for Medicaid stabilization fund	\$1,200			
Broadband Expansion Program		\$230		
Brownfield remediation & building demolition		\$500		
Investing in Ohio Fund	\$100	\$85		
Economic development and incentives [1]		\$95	\$600	
State Road Improvements			\$110	
Transfers for capital projects			\$1,100	
Other transfers [2]	\$198	\$197		
Total planned uses	\$1,498	\$1,107	\$1,810	
Authorized but uncheduled use of fund balance for capital projects			\$1,700	\$6,115

[1] In FY2022, includes \$95M appropriation for Local Roads associated with Intel. In FY2023, includes an incentive payment to Intel Corp for new chip manufacturing plant

[2] - In FY2021, includes transfer to H2Ohio (\$132M) and disaster and emergency services. In FY2022, includes transfers to numerous program areas.

Source: State of Ohio; Moody's Investors Service

The revised budget for FY2023 is in structural surplus and incorporates conservative revised revenue assumptions, a 3% income tax cut, and maintenance of ample fund balances. In addition, the budget accounts for the end of enhanced Medicaid reimbursements that have supported finances from FY2020 through FY2022. In its mid-biennium revision, the state increased assumed FY2023 tax receipts by \$1.6 billion (6.3%), however this is 0.8% below FY2022 actual collections (see exhibit 10). Conservatively, Ohio assumes that some of the FY2022 income tax collections were one-time in nature and that GDP growth, job growth and personal consumption growth will decelerate in FY2023, leading to flat revenue growth.

Exhibit 10

Budget includes reasonable GRF revenue forecasts

FYE 6/30

	FY 2019 Actual	FY 2020 Actual	FY 2021 Actual	FY 2022 Budget	FY 2022 Estimate	FY 2023 Revised Budget
Personal Income Tax	8,910	7,881	10,201	8,899	10,752	10,152
Sales and Use Tax	10,573	10,686	12,191	12,315	13,030	13,334
Commercial Activity Tax	1,630	1,672	1,667	1,799	1,996	2,069
Net Tax Receipts, reported	23,490	22,623	26,467	25,414	28,153	27,921
YOY % growth	4.8%	-3.7%	17.0%	-4.0%	6.4%	-0.8%
Personal Income Tax, adjusted for July 2020 timing shift		8,600	9,482			
Net Tax Receipts, adjusted for PIT shift	23,490	23,342	25,748	25,414	28,153	27,921
YOY % growth, adjusted	4.8%	-0.6%	10.3%	-1.3%	9.3%	-0.8%

Source: State of Ohio Official Statements; State of Ohio Adopted Budget FY2022-23; Moody's Investors Service

In its mid-biennium revision, the state increased FY2023 appropriations \$263 million (0.7%) to accommodate a \$246 million investment in development of the new Intel microchip manufacturing plant, and accelerate COLA salary adjustments in health and human services and in public safety. The state reduced Medicaid appropriations by \$246 million (1.2%) to reflect the extension of enhanced FMAP. Total FY2023 general revenue fund (GRF) appropriations will increase 10.7% (\$3.8 billion) over FY2022 primarily due to significant Medicaid cost increases as eFMAP ends after December 2022.

In the current biennium, Medicaid growth has accounted for nearly 46% of new general revenue fund spending due to the expected loss of enhanced federal Medicaid reimbursement and continued high caseloads. To proactively address this fiscal cliff, the state has set aside \$1.2 billion of its FY2021 surplus to pay for a portion of these higher Medicaid costs in fiscal 2022 and fiscal 2023. The state estimates that it will take 14 months to redetermine Medicaid eligibility and reduce enrollment, a more structural solution for the Medicaid funding gap. However, enrollment and costs will remain well-above pre-COVID levels over the medium term; the state estimates that enrollment will average 3.31 million through FY2025, compared to 2.8 million pre-COVID.

Reflecting its strong budget management, Ohio has routinely lowered its income tax rate over the past decade while simultaneously growing its budget stabilization reserve and/or generating budget surpluses. The top marginal income tax rate is now 3.99% compared to 7.5% in 2005. The current biennial budget reduced the income tax rate to all but the top two brackets by 3%. Withholding tax rates have also been lowered 3% and the minimum taxable income has been raised to \$25,000. The state estimates the cost of these changes to be \$885 million and \$759 million in FY2022 and FY2023, respectively.

LIQUIDITY

Ohio plans to retain historically high liquidity and fund balance as cushion against unexpected budget gaps during the coronavirus recovery. With two years of strong revenue performance, Ohio's FY2022 unencumbered fund balance has increased to \$5.7 billion (20% of tax receipts) from \$785 million (3.5%) in FY2020. While the state typically appropriates any fund balance above 0.5% of appropriations in the following budget, in the FY2022-2023 budget the state opted to preserve the excess in the general revenue fund as additional liquidity. Projected FY2023 ending fund balance is \$5.8 billion (20.7% of tax receipts).

The state's internal liquidity has also grown due to strong revenues and federal stimulus aid. Ohio's internal liquidity includes funds that can be borrowed by the General Revenue Fund within the fiscal year, up to 10% of revenues. As of June 30, 2022, available daily liquidity was \$10.1 billion, on a discounted basis.

Ohio's BSF will remain stable at \$2.7 billion (10% of GRF tax receipts) in fiscal 2022-23. The state's statutory BSF target is 8.5% of total GRF revenues (including federal revenues). The state has strengthened statutory protections around the BSF in recent years. In FY2020, Ohio increased this statutory target to the current level and in FY2022 statutorily required that BSF interest income remain in the BSF rather than flow to the GRF.

Debt and pensions

The state's leverage position will remain moderate through the next biennium due to below-average pension and OPEB liabilities and modest additional borrowing plans. With FY2021 total liabilities equivalent to 110.7% of own-source revenue, Ohio has maintained a [moderate debt burden relative to other states](#), whose median is 155%. Ohio ranks 31st among states based on total liabilities as a percent of revenue. The state currently plans to issue less than \$1.05 billion of new debt through fiscal 2023, which will be partially offset by principal paydowns.

Exhibit 11

OH relies on GO debt for most financing (millions)

Security		FY2020		FY2021
General obligation bonds	\$	9,418	\$	9,442
Lease and appropriation bonds	\$	2,279	\$	2,628
GARVEE bonds	\$	1,003	\$	971
Certificates of participation	\$	282	\$	273
Capital leases	\$	24	\$	27
Portsmouth Bypass P3 project	\$	342	\$	320
JobsOhio liquor enterprise revenue bonds	\$	1,311	\$	1,246
Buckeye Tobacco Settlement Financing Authority	\$	5,741	\$	5,656
Total net tax supported debt	\$	20,400	\$	20,564
GO highway bonds included above	\$	989	\$	1,001

Source: OH Official Statement; OH CAFR; JobsOhio CAFR; Moody's Investors Service

The credit profile of the state's lease appropriation bonds (Aa2 positive) reflects the need for biennial legislative appropriation of lease payments backing the bonds, and is notched down from the state's general obligation credit. There are no bondholder remedies in the event of non-appropriation.

Ohio's net tax-supported debt includes \$1.2 billion of debt issued by the [JobsOhio](#) (Aa3 stable) state liquor enterprise as well as a \$320 million long-term liability associated with the state Department of Transportation's public-private partnership (PPP) with the Portsmouth Gateway Group, LLC to construct the Southern Ohio Veterans Memorial Highway (State Route 823), a four-lane limited access highway around the City of Portsmouth, Ohio.

The state has two enhancement programs, the [Ohio School District Credit Enhancement Program](#) (Aa2 positive) and the [Ohio Board of Regents Community and Technical College Credit Enhancement Program](#) (Aa2 positive). The programs provide credit enhancement to qualified participants by allowing the authorizing state department to intercept state aid revenues to a trustee to ensure timely debt service payments.

DEBT STRUCTURE: VRDO LIQUIDITY SUPPORT PROVIDED BY THE STATE

The state maintains a self-liquidity program to support \$500 million of state variable-rate demand debt (or 2.4% of total debt). The short-term ratings on these bonds are VMIG 1, reflecting the state's strong management of available liquid resources. Ohio's June 30, 2022 liquidity (see above) provides 12.6x coverage of potential liabilities.

Potential liabilities include liquidity programs that the state treasury offers through its Ohio Market Access Program (OMAP) and its [Ohio Liquidity Program](#) (OLP; P-1 issuer rating). Through OMAP, the Ohio treasury provides back-up liquidity to qualified local governments that have issued bond anticipation notes (BANs). The program authorization is capped at \$300 million, and as of June 30, 2022, there were \$127 million of BANs outstanding.

Through OLP, the treasury also provides liquidity to VRDB of qualified governmental issuers that have entered into standby bond purchase agreements with the state. The program currently covers \$175 million of outstanding bonds. The state does detailed credit analysis and monitoring of participants in both programs.

The state has well-organized staff and clearly-articulated policies and procedures for monitoring its own VRDB portfolio and other potential liquidity calls. The state receives notices of tender 7 days prior to the purchase date for bonds in the weekly mode, and at least one day prior to the purchase date for bonds in the Alternative Trading System Mode (the Series 2016 bonds). With this timing, the state is prepared to begin liquidating assets one day before the purchase date, and have sufficient funds available in advance of the deadline on the purchase date. The state has never had a failed remarketing, but has successfully implemented its liquidity support procedures.

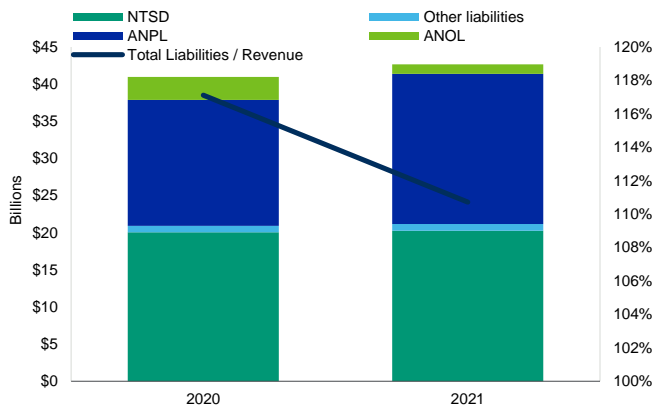
DEBT-RELATED DERIVATIVES

The state is a party to four swap agreements with a combined notional principal of \$126 million that hedge interest rate risk on its variable-rate obligations. Collateral posting requirements are pegged to rating levels starting at Aa3 and lower, and termination provisions are triggered if the state's rating falls below Baa3 or BBB-. Triggers at these low rating levels introduce minimal risk to the state. As of June 30, 2021, the combined mark-to-market value of the swaps was negative \$10.5 million and the mark-to-market with accrued interest was negative \$11.8 million.

PENSIONS AND OPEB

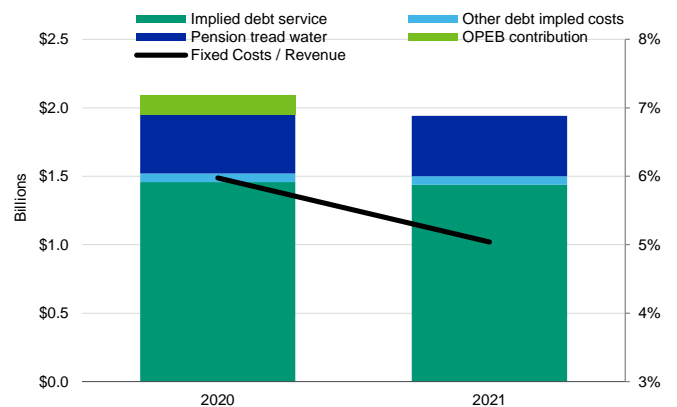
Ohio's low pension and OPEB costs have been a relative strength, offsetting challenges posed by its relatively older population and slow population growth. Importantly, the state has an above-average level of flexibility to manage its liabilities as pension and OPEB benefits are not guaranteed under state law, and contribution requirements and benefit levels can be changed for future and current employees. However, while the state's direct pension and OPEB liabilities are below-average, [Ohio's local governments and school districts have large unfunded liabilities](#) that could pressure the state for additional support. Ohio's pension systems overall are considered [moderately pressured](#).

Exhibit 12
Ohio's minimal net OPEB liability supports low overall leverage position



Source: Ohio audited financial statements; Moody's Investors Service

Exhibit 13
State's low fixed costs enhance budget flexibility



Source: Ohio audited financial statements; Moody's Investors Service

Ohio's FY2021 adjusted net pension liability (ANPL), our measure of the government's pension burden, increased to \$20.2 billion from \$17 billion due to the lower adjusted discount rate in 2020 (2.5 vs. 3.2% the prior year). Compared to our [2021 pension medians](#), Ohio's ANPL to own-source revenues was 52.5% vs a 50-state median of 92% and the state ranked 36th in this metric.

Unlike most states, which fund other post-employment benefit (OPEB) obligations on a pay-as-you-go basis, Ohio participates in three OPEB programs that have substantial assets pledged to cover aggregate reported liabilities. As a result, Ohio's adjusted net OPEB liability (ANOL) for the state-only share is a moderate 3.3% of own-source revenues (\$1.3 billion), compared to a state median of 12%.

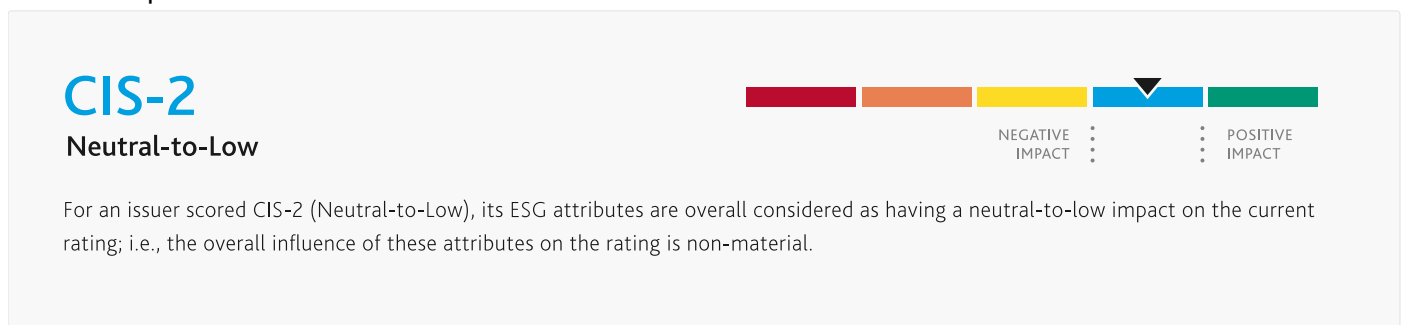
The state's estimated fixed costs (debt service, pension tread water, and OPEB contributions) are currently below average, at 5% of own-source revenues in fiscal 2021 compared the state sector median of 6.3%. However, this is understated because the state did not make an OPEB contribution in FY2021. If the state had made a treadwater OPEB contribution, total fixed costs would be 6% of revenues.

The state's fiscal 2021 pension contribution was a very low 1.1% (\$443 million) of own-source revenues and was slightly above the contribution amount that would allow the state's reported net pension liability to "tread water" – or remain stable from one year to the next, assuming investment return and other actuarial assumptions are met for the year.

ESG considerations

Ohio (State of)'s ESG Credit Impact Score is Neutral-to-Low CIS-2

Exhibit 14
ESG Credit Impact Score

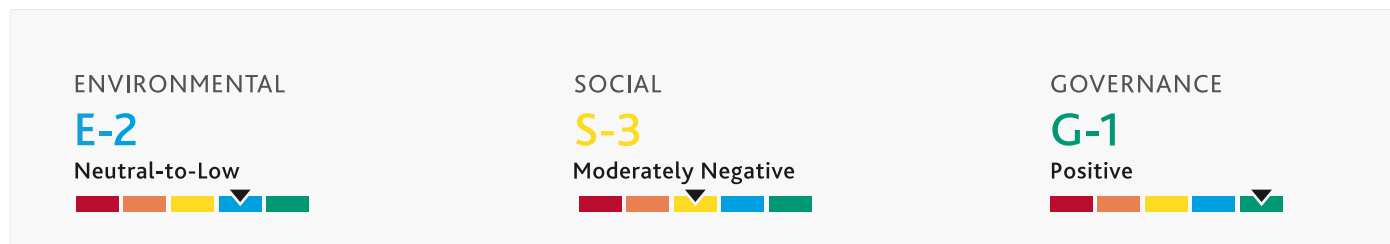


Source: Moody's Investors Service

Ohio's ESG Credit Impact Score is neutral-to-low (**CIS-2**) reflecting its neutral-to-low exposure to environmental risks, its moderately negative social risks and positive governance profile.

Exhibit 15

ESG Issuer Profile Scores



Source: Moody's Investors Service

Environmental

Ohio has minimal exposure to climate risks, reflected in its E issuer profile score of neutral-to-low (**E-2**), given its inland location and history of very manageable natural disaster damage. According to data from Moody's ESG Solutions, 64% of Ohio's population and 67% of its GDP are located in areas with a high risk of rising heat stress. In addition, 89% of the state's agricultural land is exposed to high rising heat stress and 61% is exposed to extreme precipitation, although the sector, which includes forestry, fishing and hunting, constitutes just 0.8% of Ohio's 2021 GDP. Other factors in our assessment of Ohio's environmental risks, such as carbon transition, water management and natural capital, are considered to have a neutral to low impact on its credit profile.

Social

Ohio's S issue profile score is moderately negative (**S-3**). Ohio's key social challenge is negative domestic net migration, although this has improved in the past five years. Negative net migration, particularly in the prime working age cohort, reduces overall population growth, increases the median age and potentially dampens future job creation over time. In addition, Ohio's metrics are somewhat below average for median age and life expectancy. One of the state's key social benefits, which contributes to a low-cost business environment and low homelessness, is strong housing affordability. The state's educated workforce is also a draw for economic development that will potentially improve the state's historic demographic challenges. For more information on demographics and social factors, please see our Economy section.

Governance

Ohio's overall governance and constitutional framework are strong, reflected in its positive G issuer profile score (**G-1**). The state has a high degree of flexibility to raise revenues and cut expenditures when needed. The state constitution has no revenue raising caps or mandated spending levels, and tax increases require only a simple majority vote. In addition, the governor has the ability to reduce appropriations through executive orders, allowing for quick budget corrections when revenues decline. As discussed above, Ohio also has above-average flexibility to change pension and OPEB benefits to manage long-term liabilities.

Ohio has strengthened its statutory requirements for its budget stabilization fund to reduce the impact of unanticipated budget events, however maintains the flexibility to reduce or defer contributions. The state's statutory targets for the budget stabilization fund and the general revenue fund are 8.5% and 0.5% of the prior year's general revenue fund revenues (state and federal sources), respectively. Statute requires the state to deposit general revenue fund surpluses in excess of 0.5% into the budget stabilization fund, which generally accelerates reserve restoration. However, the legislature retains the flexibility to divert surpluses for other uses, as it has several times since the recession ended. The state's governance framework does not require consensus revenue forecasting, or publication of long-term forecasts of future debt, financial or economic performance, however this is balanced by the state's strong budget and financial management which results in positive financial performance and rapid budget stabilization fund replenishment.

Rating methodology and scorecard factors

The [US States and Territories Rating Methodology](#) includes a scorecard, which summarizes the rating factors generally most important to state and territory 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 map closely to the actual rating assigned.

Exhibit 16

Ohio (State of)

	Measure	Weight	Score
Economy			
Resident Income (PCI Adjusted for RPP / US PCI)	98.3%	15%	Aa
Economic Growth (5-year CAGR real GDP - 5-year CAGR US real GDP)	-0.8%	15%	Aa
Financial performance			
Financial performance	Aaa	20%	Aaa
Governance/Institutional Framework			
Governance/Institutional Framework	Aaa	20%	Aaa
Leverage			
Long-term liabilities ratio (adjusted long-term liabilities / own-source revenue)	110.7%	20%	Aa
Fixed-costs ratio (adjusted fixed costs / own-source revenue)	5.0%	10%	Aaa
Notching factors			
Very limited and concentrated economy	NA		
Scorecard-Indicated Outcome			Aaa
Assigned rating			Aa1

Source: US Bureau of Economic Analysis; State audited financial statements; Moody's Investors Service

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