MOODY'S
INVESTORS SERVICE

CREDIT OPINION
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New Issue

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Ohio (State of)

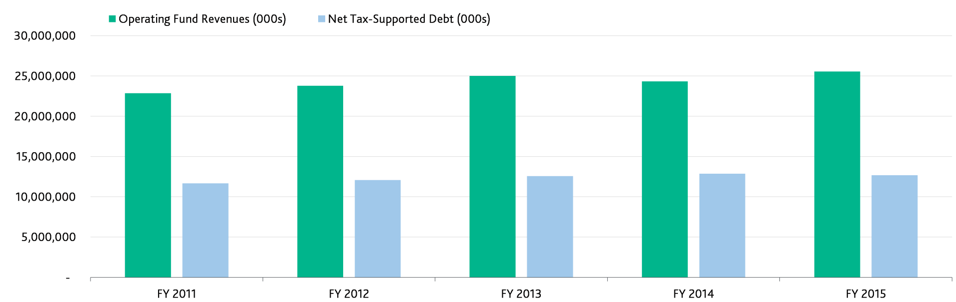
New Issue: Moody's assigns Aa1 to OH $77.6M GO refunding bonds; outlook stable

Summary Rating Rationale

Moody's Investors Service has assigned a Aa1 rating to Ohio's $39.5 million Higher Education General Obligation Refunding Bonds, Series 2016A, $15.8 million Natural Resources General Obligation Refunding Bonds, Series U, and $22.4 million Third Frontier Research and Development General Obligation Refunding Bonds, Series 2016B. The outlook is stable.

The state's Aa1 GO rating is supported by strong and proactive financial management, including timely response to budget shortfalls and moderate, affordable debt, pension and other post-employment benefit (OPEB) liabilities.

Exhibit 1
Ohio's Operating Revenues Rebounded from the Recession



Source: Moody's Investors Service

Credit Strengths

» Conservative fiscal management including sound budgeting and proactive responses to budgetary shortfalls

» High levels of internal liquidity including available balances outside the general revenue fund

» Relatively moderate long-term liabilities that are affordable compared to the state's budget

» Statutory requirement to deposit surplus year-end revenues in the state's Budget Stabilization Fund

Credit Challenges

» Economy that remains vulnerable to manufacturing industry exposure

» Potential revenue reductions from tax reform that could threaten the state's balanced financial operations

» Lack of certain best financial management practices

Rating Outlook

Ohio's stable outlook is based on our expectation that its enacted budget and proactive financial management will support a satisfactory financial position for the current budget year, offsetting revenue losses from tax reforms. It also reflects our view that the state's economy will continue to improve, despite relatively weak demographic trends.

Factors that Could Lead to an Upgrade

» Sustained increase in reserves and fund balance position significantly above historic levels

» Economic performance that exceeds national averages over an extended period

Factors that Could Lead to a Downgrade

» Evidence of financial deterioration, including a return to budgetary structural imbalance

» Weakening of GAAP-basis general fund balances and liquidity position below current expectations

» Persistent economic weakness, reflected in below-average employment, personal income or demographic trends

Key Indicators

Exhibit 2

Ohio	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Operating Fund Revenues (000s)	22,853,269	23,799,656	25,017,473	24,320,752	25,554,301
Balances as % of Operating Fund Revenues	1.8%	5.3%	13.2%	14.9%	11.7%
Net Tax-Supported Debt (000s)	11,680,585	12,089,413	12,572,156	12,856,609	12,664,731
Net Tax-Supported Debt/Personal Income	2.8%	2.8%	2.7%	2.7%	2.6%
Net Tax-Supported Debt/Personal Income 50 State Median	2.8%	2.8%	2.6%	2.5%	2.5%
Debt/All Governmental Funds Revenue	23.4%	24.5%	24.6%	24.4%	22.6%
Debt/All Governmental Funds Revenue 50 State Median*	22.7%	24.3%	23.8%	23.0%	20.4%
Adjusted Net Pension Liability/All Govt Funds Revenue	19.6%	32.0%	33.0%	27.2%	N/A
Adjusted Net Pension Liability/All Govt Funds Revenue 50 State Median	48.7%	63.9%	60.3%	59.2%	N/A
Total Non-Farm Employment Change (CY)	1.3%	1.5%	1.8%	1.3%	1.3%
Per Capita Income as a % of US (CY)	91.3%	91.0%	91.7%	92.3%	91.2%

Recent Developments

Fiscal 2016 tax revenues through April totaled $17.8 billion, growing 1.2% over the prior year, but falling 0.7% below estimates that projected 3.3% growth. Ohio's April 2016 tax revenue results reveal continued softening in personal income taxes with collections 3% below estimate year-to-date. April income taxes were 13% below estimate for that month, and 41% below the month of April 2015. The state attributes the April underperformance to investment-related and capital gains taxes, and slower tax return processing that may catch-up in May. Ohio originally anticipated a 32% decline in year-over-year April receipts, incorporating the series of tax rate reductions and allowable increases in small business deductions (discussed below) enacted in the current and prior fiscal years.

Through April 2016, disbursements were $29.6 billion, 1.0% below estimate, but 12% above the same period last year. The high year-over-year growth was largely driven by higher Medicaid and primary and secondary education expenditures, although Medicaid expenditure growth has been slower than estimated. The state expects lower-than-budgeted spending will balance any continued revenue underperformance, and projected unencumbered fund balance will remain in line with the original budget.

Ohio's tax reforms and revenue underperformance may challenge the state's ability to maintain budget balance. Any late-year budget gaps will increase the risk of using additional fund balances. However, such risks are mitigated by the state's strong current fund balance position (11.7% in available fund balance as a percentage of operating revenues), relative to its rated peers in the Aa1 category. Available fund balances include the roughly $2 billion budget stabilization fund the state amassed during its economic recovery.

Detailed Rating Considerations

Economy: State economy remains stable overall and regains jobs lost from recession; unemployment has slightly increased

After a strong initial post-recession recovery, Ohio's job growth remains slightly below the national average. Through March 2016, Ohio's preliminary non-farm employment grew 1.8% on an annualized basis, down from approximately 2.3% in mid-2012, and slightly below the nation's 1.9% level. However, in the fourth quarter of 2015, seasonally adjusted nonfarm employment rose to 5.49 million, the highest level since June of 2006. For the first time since February 2014, Ohio's unemployment rate exceeded the national rate in March with 5.1% and 5.0%, respectively. This change in direction reflects workers returning to the labor force.

Despite exceeding the pre-recession employment high, manufacturing and energy sectors are showing some signs of softening. March 2016 mining and logging jobs decreased by 22% on an annualized basis due to low energy prices. Manufacturing employment trends are much more muted, with a slight decline of 0.8% since December 2015. The strong dollar and lagging global economic growth continue to challenge manufacturing sector growth nationwide. We believe the state's small size of its energy sector (2.1% of total state employment) and the recent slight slide in manufacturing jobs will not pose an outsized impact to the Ohio's finances.

According to Moody's Analytics, Ohio's recovery will lag the nation due to weaker demographics, but moderate growth is expected through 2016. The state's personal income growth has been at or above the nation's since mid-2011. Ohio's 2015 per-capita personal income ($43,478) improved to 91% of the nation's, from 89% in 2008.

Finances and Liquidity: Additional tax reform enacted in Ohio's FY16-FY17 budget; state will use prior-year balances and tax offsets

Ohio's conservative budget management and continued economic growth have maintained solid and favorable financial performance, allowing for gradual absorption of several tax reforms dating back to fiscal 2012. Total fiscal 2015 tax receipts exceeded budget by 1.9% ($390.2 million). In that year, personal income taxes (39.7% of state source revenues) surpassed estimates by 3.4%, demonstrating a stable job market within the state. Actual fiscal 2015 disbursements were 0.3% ($80.9 billion) below budget.

Ohio's fiscal 2016-2017 biennial budget, enacted in late June 2015, was based on projected fiscal 2016 state tax receipts of $22.2 billion, 3.5% above actual fiscal 2015 tax revenues. The enacted budget anticipates positive revenue growth despite the enacted tax reforms. Projected increases in general revenue fund appropriations are 13.1% and 4.2%, respectively, over fiscal 2016 and 2017. Expenditure growth is concentrated in key spending areas of Primary and Secondary Education (5.3% and 4.1% increases, respectively, in 2016 and 2017) and Medicaid (21.8% and 5.1%). The projected increase in fiscal 2016 Medicaid spending is largely driven by an accounting shift that will move certain expenditures, and the associated federal funding, into the general revenue fund.

The current budget implemented a 6.3% across-the-board income tax rate cut effective this fiscal year, This latest round of rate reductions will be balanced with baseline revenue growth, the cigarette tax increase, increased revenue allocation of existing taxes, and $393 million of fund balance that is in excess of the 0.5% ending general revenue fund balance. When added to income tax rate reductions in the past two fiscal years, the top marginal tax rate drops down to 4.99% from 5.93% in 2011. In addition, per-pack cigarette taxes increased to $1.60 from $1.25 and, beginning in 2016, small businesses can deduct 100% of their first $250,000 in income each year, with excess income subject to a 3% flat rate. Post-reform tax receipts are budgeted to increase 3.3% and 4.1% in the two fiscal years due to assumed base revenue growth and an increased allocation of certain taxes to the general revenue fund. The net revenue decrease from tax reforms adopted between fiscal 2012 through fiscal 2017 is a significant $4.9 billion, or 23.3% of fiscal 2015 state tax receipts.

LIQUIDITY

The fiscal 2015 General Revenue Fund ending unencumbered fund balance was $1.287 billion (6% of state-source revenues), down from a high of $2.3 billion (11% of state-source revenues) in fiscal 2013, but above an initial projection of $632 million for the fiscal year. With the excess funds, the state made several designated transfers, including a $425.5 million transfer to the Budget Stabilization Fund. The resulting unencumbered and unobligated balance was $550.4 million, which is $393 million above the statutory 0.5% ending general revenue fund balance ($157.4 million). The excess will balance costs of the income tax rate reduction in fiscal 2016.

The state increased the Budget Stabilization Fund (BSF) statutory target to 8.5% (from 5%) of general revenue fund revenues, followed by a $526.6 million deposit in early fiscal 2016, its fourth consecutive deposit into the BSF. The current BSF balance of $2 billion is 6.4% of prior-year general revenue fund revenues. Of the deposit amount, $425.5 million was from general revenue fund surpluses, while the remaining amount was transferred from Medicaid Reserve Fund balances. The statutory requirement to deposit surpluses in excess of 0.5% of general revenue fund revenues into the Budget Stabilization Fund generally accelerates reserve restoration, although the legislature has diverted surpluses for other uses in past years.

Fiscal 2015 audited results reflect available balances as 11.73% of total revenues, down from 14.9% the prior year (on a GAAP basis). As discussed earlier, the decrease reflects implementation of the state's tax reforms.

The long-term lease of the state liquor enterprise to JobsOhio, through January 2038, provided a non-recurring $500 million GRF contribution in fiscal year 2013. In addition to the up-front payment, the state will receive 75% of excess net profits above an agreed-upon threshold under the lease. JobsOhio is a private 501(c)(4) nonprofit enterprise operates under a service agreement with the state's Commerce Department's Division of Liquor Control.

Debt and Pensions

With net tax-supported debt of $12.7 billion, Ohio has maintained a moderate debt burden relative to other states. The state's 2015 net tax-supported debt burden is slightly higher than the 50-state median of 2.5%, at 2.6% of personal income. Ohio ranks 24th among states based on net tax-supported debt as a percentage of personal income, down from 20th in 2005.

In April, Ohio enacted its 2017-2018 capital biennium budget at a total of $2.62 billion in capital appropriations, with 83% funded by debt authorizations supported from the state general revenue fund. The remaining budget portion would be funded from financing backed by non-general revenue fund revenues and direct appropriations. The capital budget typically supports capital projects associated with essential core services, such as K-12 education, correctional services, and parks and recreation facilities. The budget authorizes $1.33 billion in GO debt and $591 million in lease appropriation debt.

In December 2014, the state, through its Department of Transportation, entered into a public-private partnership (PPP) to construct the Southern Ohio Veterans Memorial Highway (State Route 823), a four-lane limited access highway around the City of Portsmouth, Ohio. The project is expected to alleviate traffic congestion and reduce travel time for commuters. The Portsmouth Gateway Group, LLC's $227.4 million senior Tax Exempt Private Activity Bonds, Series 2015 and its $208 million subordinate TIFIA loan were both assigned a Baa2 rating. Ohio's termination payment as of June 30th, 2015, for its PPP is $30.9 million. Given the long-term, debt-like obligation of the state to make availability payments through the life of the concession agreement, we include this obligation in the state's net tax supported debt.

DEBT STRUCTURE

Ohio currently holds $7.6 billion in general obligation bonds, or 60% of 2015 total net tax-supported debt. The state also has $472.4 million of variable-rate demand debt outstanding (or 3.7% of total debt), for which it has maintained an internal liquidity program for tendered bonds that are not remarketed. The ratings on these bonds are VMIG 1, reflecting the state's strong management of available liquid resources. Ohio had $4.6 billion of same-day liquid assets available to support the bonds as of April 2016, on a discounted basis, and has access to an additional $1.9 billion of weekly liquidity (discounted).

DEBT-RELATED DERIVATIVES

The state is a party to five swap agreements with a combined notional principal of $397.4 million that hedge interest rate risk on its variable-rate obligations. Collateral posting requirements are pegged to rating levels starting at A3 and lower, and termination provisions are triggered if the state's rating falls below Baa3 (Moody's) or BBB- (S&P). Triggers at these low rating levels introduce minimal risk to the state. As of June 30, 2015, the combined mark-to-market value of the swaps was negative $45.9 million.

PENSIONS AND OPEB

Based on the state's fiscal 2014 pension data, we have calculated that its adjusted net pension liability (ANPL) was 27% of revenues, a six percentage point decrease from prior year. The 50-state median ANPL to revenues is 59%, and Ohio ranks 43rd in this ratio. Our adjustments to reported state pension data include the common 20-year amortization period, as well as an assumed 13-year duration of plan liabilities and a market-based discount rate to value the liabilities, rather than the long-term investment return used in reported figures. Our adjusted liability amounts include the three major state plans, the Ohio Public Employees Retirement System, the State Teachers Retirement System, and the Highway Patrol Retirement System.

Management and Governance

Ohio operates on a biennial budget. The state constitution has no revenue raising caps or mandated spending levels, providing flexibility to increase revenues and cut expenditures when needed. The governor also has the ability to reduce appropriations through executive orders. The state rainy day fund's statutory target is 8.5% of the prior year's general revenue fund revenues. The state is also required to retain funding equal to 0.5% of fiscal year revenues in the general revenue fund that could be carried over to the following fiscal year.

Legal Security

The general obligation bonds are secured by a pledge of the full faith and credit, revenue and taxing power of the State of Ohio and are on parity with other general obligation bonds issued by the state. Debt service payment of the bonds are not dependent on the progress, completion, or operation of the facilities or projects financed by the G.O. bonds.

Use of Proceeds

Bond proceeds will be used to advance refund prior general obligations previously issued to finance capital costs for state supported or state-assisted higher education institutions, capital improvements for natural resource projects, and the financing of research and development projects that support state industries.

Obligor Profile

Ohio is the seventh-largest US state by population. Its gross domestic product per capita also ranks seventh among the states (in current dollars).

Methodology

The principal methodology used in this rating was US States Rating Methodology published in April 2013. Please see the Ratings Methodologies page on www.moodys.com for a copy of this methodology.

Ratings

Exhibit 3

Ohio (State of)

Issue	Rating
Higher Education General Obligation Refunding Bonds, Series 2016A	Aa1
Rating Type	Underlying LT
Sale Amount	$39,495,000
Expected Sale Date	05/19/2016
Rating Description	General Obligation
Third Frontier Research and Development General Obligation Refunding Bonds, Series 2016B	Aa1
Rating Type	Underlying LT
Sale Amount	$22,355,000
Expected Sale Date	05/19/2016
Rating Description	General Obligation

Natural Resources General Obligation Refunding Bonds, Series U	Aa1
Rating Type	Underlying LT
Sale Amount	$15,790,000
Expected Sale Date	05/19/2016
Rating Description	General Obligation

Source: Moody's Investors Service

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