

CREDIT OPINION

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New Issue
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Ohio, (State of)

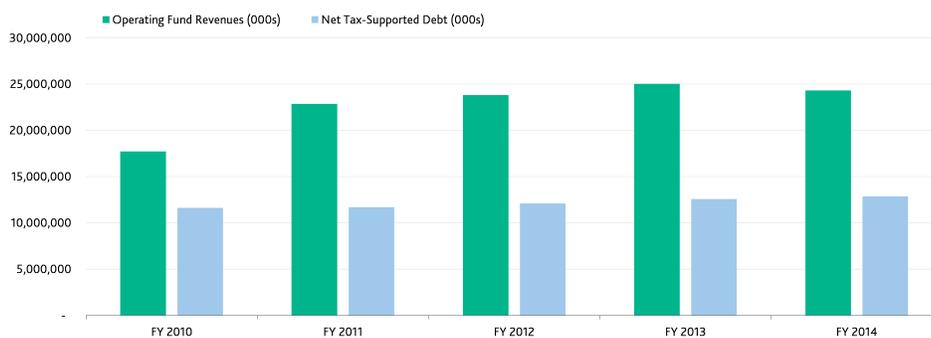
New Issue-Moody's assigns Aa1 to Ohio \$245.7M G.O. bonds; outlook stable

Summary Rating Rationale

Moody's Investors Service has assigned a Aa1 rating to the State of Ohio's \$12 million Coal Development General Obligation Bonds, Series N and \$100 million Third Frontier Research and Development General Obligation Bonds, Series 2016A. Moody's also assigned a Aa1 rating to the \$71.55 million Infrastructure Improvement General Obligation Refunding Bonds, Series 2016A; \$44.82 Million Common Schools General Obligation Refunding Bonds, Series 2016A; and \$17.31 Conservation Projects General Obligation Refunding Bonds, Series 2016A. All issues are tax-exempt except the Third Frontier Bonds, which are federally taxable.

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. Recent revenue growth has helped improve the state's financial position, mitigating exposure to an economy that is expected to lag the nation. Newly enacted tax reforms are expected to reduce general fund revenues, but are largely offset by baseline revenue growth.

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 recently enacted budget and proactive financial management will support a satisfactory financial position for the current budget year amid enacted tax reforms. It also reflects our view that the state's economy will continue to improve, despite relatively weak demographic trends, like slow population growth.

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

Ohio	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Operating Fund Revenues (000s)	17,720,032	22,853,269	23,799,656	25,017,473	24,320,752
Balances as % of Operating Fund Revenues	-0.8%	1.8%	5.3%	13.2%	14.8%
Net Tax-Supported Debt (000s)	11,610,653	11,680,585	12,089,413	12,572,156	12,856,609
Net Tax-Supported Debt/Personal Income	2.8%	2.8%	2.8%	2.7%	2.7%
Net Tax-Supported Debt/Personal Income 50 State Median	2.8%	2.8%	2.8%	2.6%	2.5%
Debt/All Governmental Funds Revenue	24.2%	23.4%	24.5%	24.6%	24.4%
Debt/All Governmental Funds Revenue 50 State Median	23.4%	22.7%	24.3%	23.8%	23.0%
Adjusted Net Pension Liability/All Govt Funds Revenue	19.1%	19.6%	32.0%	33.0%	27.2%
Adjusted Net Pension Liability/All Govt Funds Revenue 50 State Median	57.1%	48.7%	63.9%	60.3%	59.2%
Total Non-Farm Employment Change (CY)	-0.8%	1.3%	1.5%	1.8%	1.3%
Per Capita Income as a % of US (CY)	90.2%	91.3%	91.0%	91.7%	92.3%

Source: Moody's Investors Service

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Recent Developments

In November 2015, the Ohio legislature enacted a relatively small tax reform package that modified 2015 income tax rates on taxable business income, provided additional personal exemptions and credits, and a commercial activity tax exclusion on receipts from the transfer of personal care products. The state estimates a \$83 million reduction in anticipated state tax receipts across the current biennium, or 0.4% of fiscal 2015 actuals. Given the relatively small impact to state revenues, we believe this reform in and of itself will not materially impact the state's financial position.

Detailed Rating Considerations

Economy: State economy remains stable overall, despite slower job growth

After a strong initial post-recession recovery, Ohio's job growth remains slightly below the national average. Through December 2015, Ohio's preliminary non-farm employment grew only 1.5% on an annualized basis, down from approximately 2.3% in mid-2012, and below the nation's 1.9% level. However, seasonally adjusted nonfarm employment experienced a very strong Q4 2015, bringing total jobs to 5.45 million, a level not seen since June 2006 - a pre-recession high. The state's unemployment rate has been below the US rate since February 2014 and was 4.7% in December (preliminary), compared to 5.0% for the US. Ohio's unemployment rate increased from November's 4.5%, reflective of workers returning back into the labor force. The state's personal income growth has been at or above the nation's since mid-2011. Ohio's 2014 per-capita personal income (\$42,236) improved to 92% of the nation's, from 89% in 2008.

Overall, manufacturing, healthcare and professional services have been key components of Ohio's stabilized economy. According to Moody's Analytics, Ohio's recovery will lag the nation due to weaker demographics, but growth is expected accelerate in 2016 as the state diversifies its industrial base.

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 FY 2016-2017 biennial budget was enacted in late June 2015, with fiscal 2016 state tax receipts estimated at \$22.2 billion, 3.5% above fiscal 2015 actuals. The enacted budget anticipates positive revenue growth despite the enacted tax reforms. Fiscal 2016 preliminary year-to-date tax revenues through January 2016 totaled \$13.1 billion, virtually matching current year estimates and 5.4% above prior year levels.

Projected increases in general revenue fund appropriations are 13.1% and 4.2%, respectively, over the next two fiscal years. 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. Through January 2016, disbursements were \$20.9 billion, 10.1% above the same period last year, but 2.5% below estimate. The year-over-year higher growth was largely driven by Medicaid and primary and secondary education expenditures.

The current budget brought forward a 6.3% across-the-board income tax rate cut effective this fiscal year, and 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. Ohio also adjusted its cigarette and small business taxes. Per-pack cigarette taxes increased to \$1.60 from \$1.25 and beginning in 2016 small businesses can now deduct 100% of their first \$250,000 in income each year, with excess income subject to a 3% flat rate. However, 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 combined net revenue decrease of tax reforms adopted to date for fiscal 2012 through fiscal 2017 is a significant \$4.9 billion, or 23.3% of fiscal 2015 combined state tax receipts. 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 counter-balance costs of the income tax rate reduction in fiscal 2016. Combined, the fund balance carryover, baseline revenue growth, the cigarette tax hike and increased revenue allocation of existing taxes are expected to fully offset the cost of this latest round of tax reforms.

While solid financial performance so far has limited declines in fund balance, we view these tax reform budgets as vulnerable to slower-than-expected baseline revenue growth, particularly in view of recent fluctuations in Ohio's job growth trends.

LIQUIDITY

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 state made a \$996 million deposit in early fiscal 2014, the first year the BSF reached its statutory maximum since fiscal 2000. 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 a decrease in available general fund balance (unassigned fund balance, including the BSF, plus assigned fund balance) to \$3.0 billion (14.0% of state-source GRF revenues) from \$3.6 billion (14.8% of state-source revenues) in fiscal 2014 (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.

Debt and Pensions

Ohio has maintained a moderate debt burden relative to other states. The state's net tax-supported debt burden is slightly higher than the 50-state median, at 2.7% 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 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 debt, or 59.5% of 2015 total net tax-supported debt. The state also has \$482.1 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 \$4.65 billion of same-day liquid assets available to support the bonds as of January 2016, on a discounted basis, and has access to an additional \$1.91 billion of weekly liquidity (discounted).

DEBT-RELATED DERIVATIVES

The state is a party to five swap agreements with a combined notional principal of \$407.12 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.

In September 2012, Ohio approved pension reform legislation that ensures state plans comply with a 30-year amortization period, assuming level employer contributions at 14% of payroll. Benefits are not guaranteed by the state and are not subject to collective bargaining. The reform took effect in January 2013 and reduces benefits in OPERS (members only) and STRS (members and retirees), and also increases contributions for STRS. The state estimates the reform reduced the OPERS and STRS liabilities by \$3.2 billion and \$15.7 billion, respectively, although the state's share of the STRS liability is minimal.

Unlike most states, which fund other post-employment benefit (OPEB) obligations on a pay-as-you-go basis, Ohio's OPEB programs have substantial assets (\$12 billion) pledged to cover liabilities. After the 2012 reforms, OPEB liabilities dropped substantially, and the state's aggregate funded ratio as of the most recent valuation is 62%. Pension and OPEB benefits are not guaranteed under state law, and contribution requirements and benefit levels can be changed for future and current employees. The state's pay-go portion in fiscal 2014 for OPEB declined to \$64.6 million, a minimal portion of its budget.

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

The Coal Development Series N Bonds will fund grants or making loans for research and development (R&D) of coal technology within the state. The Third Frontier Series 2016A Bonds will finance R&D projects geared toward the state's industry, commerce and business sectors. The Infrastructure Improvement Series 2016A Bonds, Common Schools Series 2016A Bonds, and Conservation Projects Series 2016A Bonds will refunding certain bonds that financed public infrastructure capital improvement projects of local subdivisions of the State, capital facilities for a system of common schools throughout the State, and projects for conservation purposes, respectively.

Obligor Profile

Ohio is the 7th largest US state by population. Its gross domestic product per capita also ranks 7th 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.moody.com for a copy of this methodology.

Ratings

Exhibit 3

OHIO (STATE OF)

Issue	Rating
Third Frontier Research and Development General Obligation Bonds, Series 2016A (Federally Taxable)	Aa1
Rating Type	Underlying LT
Sale Amount	\$100,000,000
Expected Sale Date	02/23/2016
Rating Description	General Obligation
Coal Development General Obligation Bonds, Series N (Tax-Exempt)	Aa1
Rating Type	Underlying LT
Sale Amount	\$12,000,000
Expected Sale Date	02/23/2016
Rating Description	General Obligation
Common Schools General Obligation Refunding Bonds, Series 2016A (Tax-Exempt)	Aa1
Rating Type	Underlying LT
Sale Amount	\$44,820,000
Expected Sale Date	02/23/2016
Rating Description	General Obligation
Conservation Projects General Obligation Refunding Bonds, Series 2016A (Tax-Exempt)	Aa1
Rating Type	Underlying LT
Sale Amount	\$17,310,000
Expected Sale Date	02/23/2016
Rating Description	General Obligation
Infrastructure Improvement General Obligation Refunding Bonds, Series 2016A (Tax-Exempt)	Aa1
Rating Type	Underlying LT
Sale Amount	\$71,550,000
Expected Sale Date	02/23/2016
Rating Description	General Obligation

Source: Moody's Investors Service

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