

CREDIT OPINION

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New Issue

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Connecticut (State of)

New Issue - Moody's assigns A1 to \$300M CT GO bonds 2017 series C; outlook stable

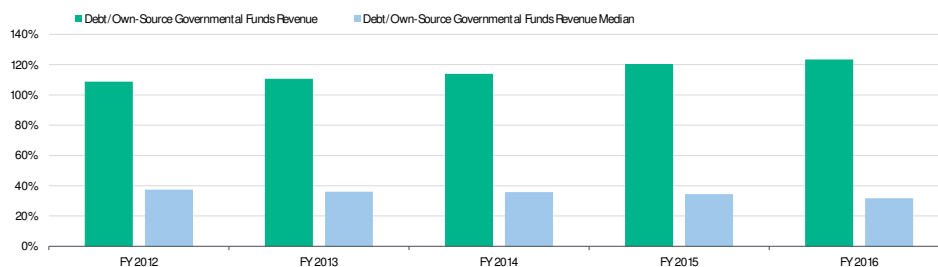
Summary Rating Rationale

Moody's Investors Service has assigned an A1 rating to \$300 million of Connecticut's General Obligation Bonds (2017 Series C). The bonds will be sold as variable rate debt in a private placement with Barclays Capital Inc expected to close on June 28.

The A1 GO rating reflects Connecticut's high income levels, strong governance, and adequate liquidity, offset by high fixed costs for debt service, pension, and post-employment benefits relative to the state's budget. Unfunded pension liabilities and debt outstanding are among the highest, relative to revenues, of any state in the country. The rating also reflects a lagging economy that is highly dependent on volatile revenue sources, three consecutive years of population loss and minimal reserve levels.

Exhibit 1

Connecticut net tax-supported debt-to-revenues is four times state median



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

Credit Strengths

- » Legislated support for application of operating surpluses to the Budget Reserve Fund (BRF)
- » Wealthiest state in the nation with per capita personal income levels well above national levels
- » Strong governance with the ability to make mid-year budget adjustments

Credit Challenges

- » Fixed costs for debt, pension and other post-employment benefits (OPEB) relative to budget are among the highest in the nation and restrict budgetary flexibility

- » Vulnerability to financial market fluctuations due to effect on capital gains for very high-wealth residents and employment in the financial services sector
- » General fund balance sheet will remain negative, with a modest rainy day fund balance, due to state's slower recovery from the recession

Rating Outlook

Connecticut's outlook is stable, reflecting the state's strong provisions to promote fiscal discipline, which pair redressing elements of its high leverage position and requiring GAAP-based budgeting.

Factors that Could Lead to an Upgrade

- » Achievement and maintenance of higher GAAP-basis combined available reserve levels
- » Established trend of structural budget balance
- » Evidence of sustained stronger economic performance
- » Reduced pension and debt leverage relative to Moody's 50-state medians, resulting in lower annual fixed costs

Factors that Could Lead to a Downgrade

- » Significant additional leverage, encompassing bonded debt, pension and OPEB obligations and negative unassigned GAAP balances
- » Rapid acceleration of revenue/economic/demographic weakness
- » Declining liquidity position

Key Indicators

Exhibit 2

Connecticut	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Operating Fund Revenues (000s)	16,378,765	16,909,327	16,880,411	17,187,461	17,750,816
Balances as % of Operating Fund Revenues	-6.4%	-7.2%	-1.2%	-2.3%	-4.3%
Net Tax-Supported Debt (000s)	18,615,067	19,623,311	20,272,617	22,103,517	23,265,534
Net Tax-Supported Debt/Personal Income	9.1%	9.2%	9.0%	9.8%	9.7%
Net Tax-Supported Debt/Personal Income 50 State Median	2.8%	2.6%	2.5%	2.5%	2.5%
Debt/Own-Source Governmental Funds Revenue	108.8%	110.7%	113.9%	120.5%	123.4%
Debt/Own-Source Governmental Funds Revenue Median	37.4%	36.1%	35.8%	34.4%	31.7%
ANPL/Own-Source Govt Funds Revenue	335.7%	326.0%	298.5%	288.4%	285.0%
ANPL/Own-Source Govt Funds Revenue Median	92.6%	90.8%	83.0%	84.9%	N/A
Total Non-Farm Employment Change (CY)	0.8%	0.8%	0.7%	0.8%	0.3%
Per Capita Income as a % of US (CY)	146.9%	144.1%	143.7%	142.8%	143.3%

Source: Moody's Investors Service; Connecticut financial statements

Recent Developments

As of this writing, the state has not enacted a fiscal 2018 budget for the year beginning July 1. Governor Dannel Malloy has announced preparations for continued operation of state government in the event that a budget is not enacted in a timely fashion. The governor may run government under executive authority. The General Assembly may also pass continuing resolutions, which would require the governor's signature.

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Detailed Rating Considerations

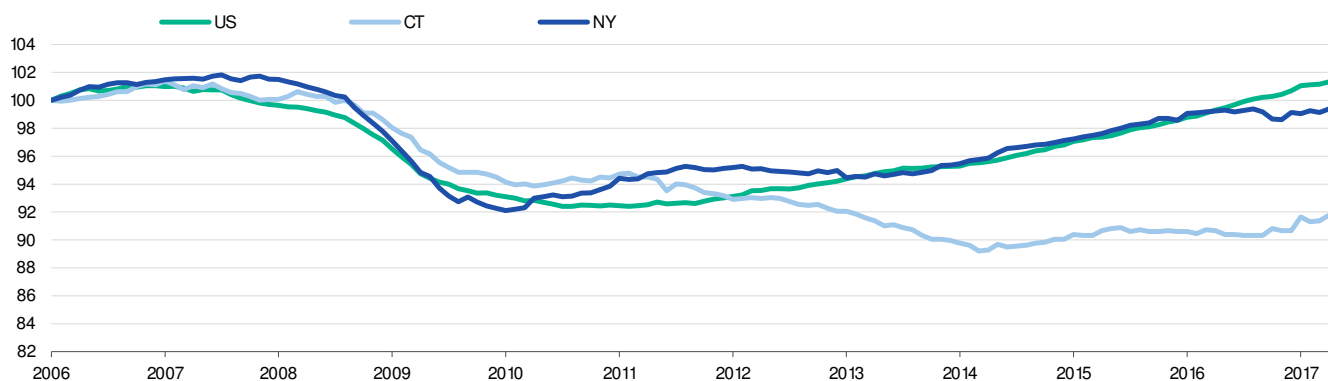
Economy: High income state lags US recovery

Connecticut is a wealthy state, with per capita personal income exceeding 143.3% of the US. However, the state's economy continues to lag that of the nation. The state's demographics show a negative trend, with three years of population loss since 2013 contributing to an underperforming housing market and lagging labor force growth. The state's unemployment rate as of May is higher at 4.9% than the nation's 4.3%, and the state has not yet quite regained the jobs lost to the recession. Wage growth has faltered as a result: the state experienced only 7.2% growth in average annual wages from calendar year 2011-2015 versus 14.5% in calendar 2004-2008. Job gains have been concentrated in education and health services, leisure and hospitality, transportation and utilities and professional and business services.

Economic headwinds include lackluster performance in the state's high-paid financial activities sector (see Exhibit 3). While the US has recovered nearly all the financial activities jobs lost in the recession, Connecticut continued to lose finance jobs into 2014 and has since seen little growth in the sector.

Exhibit 3

CT financial sector jobs lag US and NY growth (January 2006 = 100)



Source: Moody's Analytics; US BLS

Finances and Liquidity: State struggles to close gaps

Because of unexpectedly disappointing April tax collections, the state lowered its revenue projections for the current fiscal year, which ends June 30, and the fiscal 2018-2019 biennium. To close the fiscal 2017 gap, the state enacted a late-year deficit mitigation bill that increased revenues through transfers and reduced spending. The bill authorized the virtual depletion of the state's \$235 million rainy day fund; however, because year-end results show improvement from previous estimates, the year-end rainy day fund balance is now estimated by the budget office at a slim \$128 million. The lower revenue projections also prompted Governor Dannel Malloy to propose a revised budget for the fiscal 2018-2019 biennium in mid-May. The projected fiscal 2017 deficit will be the third consecutive year of red ink for the state. Fiscal 2016 ended with a budgetary deficit of \$170 million, closed with a draw on the state's rainy day fund, and fiscal 2015 ended \$113 million in the red, also prompting a draw on the rainy day fund.

Prior to the April revenue results, lawmakers were already challenged to balance the fiscal 2018 budget in the face of large and growing fixed costs for pensions, debt service and retiree health coverage. In a significant first step toward achieving spending reductions proposed by the governor, the state agreed to a framework with the state employees' bargaining unit, the State Employee Bargaining Agent Coalition (SEBAC), to reduce labor costs through a mix of wage concessions, changes to healthcare benefits for active and retired employees, and pension changes. The state expects the agreement to result in savings of about \$700 million in fiscal 2018, growing to more than \$1 billion by fiscal 2022. The agreement must still be approved by union rank and file and a contract approved by the legislature.

Other initiatives proposed by the governor are politically challenging, such as a partial shift of teacher pension costs to local governments, and have not been embraced by the legislature, resulting in potentially late budget adoption. Debt service for general

obligation bonds and most other debt of the state is deemed appropriated, mitigating the impact of a late budget on the timeliness of debt service payments.

LONG-TERM PLAN TO ADDRESS LARGE NEGATIVE GAAP BALANCE INTERRUPTED

On a GAAP basis, the state has a long-standing large cumulative unassigned GAAP deficit, which stood at -\$999 million on June 30 2016, or about -4.3% of operating revenues. The state implemented a plan to address the deficit, which included devoting the proceeds of \$560 million of 2013 general obligation bonds to reduce it and committing to amortize the remaining gap from annual payments from the general fund. While the strategy has little balance sheet impact in the short run, maintaining discipline over time would reduce the state's liabilities. However, the deficit mitigation plan for fiscal 2017 included elimination of the year's payment of roughly \$48 million.

FIXED COSTS COMMAND A THIRD OF BUDGET

The state's combined debt service, pension, and OPEB contributions in fiscal 2016 were nearly 30% of own-source governmental revenues, among the highest of the states. As a share of general fund revenues, these fixed costs were 32%, illustrating the tight squeeze that the state's long-term obligations are placing on the operating budget. Fixed costs will command 36% of general fund revenues by 2019, based on the latest revenue forecast and state spending projections. The high fixed costs are partly attributable to the state's absorption of certain costs covered by local governments in most other states. High fixed costs reduce the share of discretionary spending and the state's budgetary flexibility. Unlike other states with high fixed costs, however, Connecticut's actual pension contributions are very close to the "tread water" amount, which is the amount of contribution that would prevent further growth in unfunded liabilities were actuarial targets for investment returns and other assumptions met during the year.

LIQUIDITY

Connecticut's liquidity remains adequate. The state did not have to borrow for cash flow purposes in calendar 2015 or fiscal 2016 and does not expect to do so in fiscal 2017. Cash balances averaged \$2 billion in fiscal 2016 and averaged \$2.3 billion through May of fiscal 2017. As of mid-June 2017, available cash was \$2.2 billion. However, use of rainy day fund and other cash balances for deficit mitigation will diminish the state's cash margin.

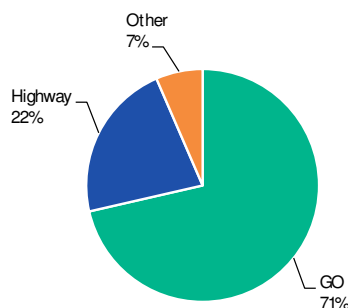
Debt and Pensions: Large liabilities create high fixed costs

Connecticut is a frequent borrower and the state's debt per capita and debt-to-personal income ranked first and third, respectively, among the 50 states for [Moody's 2017 debt medians](#). Net tax-supported debt equaled \$6,505 per capita and 9.7% of total state personal income, well above the 50-state median of \$1,006 in debt per capita and 2.5% for debt-to-personal income. These high debt ratios are partly due to substantial capital financing for K-12 school building construction that is carried out at the local level in many other states. However, pension obligation bonds, economic recovery notes (deficit borrowing) and GAAP conversion bonds to address a portion of the state's sizeable cumulative GAAP deficit add considerably to the state's normal sizeable annual debt issuances and ensure that Connecticut's debt ratios will remain among the highest in the country for the foreseeable future. Connecticut adheres to a 20-year level principal repayment schedule for its general obligation debt, with a declining debt service schedule that provides some flexibility.

DEBT STRUCTURE

Connecticut's \$23.3 billion in net tax-supported debt outstanding consists primarily of general obligation bonds, which account for 71% of NTSD (see Exhibit 4). Bonds backed by special taxes for highway construction account for another 22% of state debt. Most GO debt is structured with 20-year principal amortization, resulting in a pay-out rate of 67% within 10 years. The state has issued economic recovery notes as deficit financing instruments, which will be paid off in mid fiscal 2018. Other debt consists primarily of bonds issued by related organizations, especially the University of Connecticut, for which the state guarantees payment from special capital reserve funds.

Exhibit 4

Connecticut's debt outstanding dominated by general obligation

Source: Connecticut financial statements and reports; Moody's Investors Service

The state has \$1.656 billion in variable rate debt, approximately 10% of the state's total GO debt, most of which is indexed to either SIFMA or CPI. One series is variable rate with an SBPA provided by [Bank of America, N.A.](#) (A1(cr)/P-1(cr)).

DEBT-RELATED DERIVATIVES

Only \$40 million of the state's variable rate debt is swapped to fixed, based on 60% of LIBOR or a percentage point above CPI. The swap counterparties are [JP Morgan Chase Bank, N.A.](#) (Aa2(cr)/P-1(cr)) and Morgan Stanley Capital Services Inc. As of March 30, 2017, the mark-to-market was minimal, at negative \$1.046 million against the state. In accordance with its swap guidelines, the state generally negotiates provisions that permit funding a required termination payment over a period of time to allow time for a refunding. Accordingly, the state would have 270 days to fund a termination payment for its general obligation swaps. The state has no plan to incorporate swaps into future GO bonds.

PENSIONS AND OPEB

Connecticut's adjusted net pension liability (ANPL), our measure of the government's pension burden, is significantly above the 50-state median. As of the state's 2016 financial statements, ANPL was 285% of own-source governmental revenue, and 200% of total governmental revenue, the second highest among the states. The state participates in 3 pension systems, of which the most significant are the State Employees Retirement System (SERS) and the Teachers Retirement System (TRS). Connecticut is among the handful of states that take responsibility for directly funding teacher pensions. Moody's ANPL reflects certain adjustments made to improve comparability of reported pension liabilities.

The state contributes the full amount of its actuarially determined contribution, about \$2.5 billion in fiscal 2016. It is required via bond indenture to pay the full required contribution to the Teachers plan and by collective bargaining to do the same for the State Employees. Even so, its 2015 contributions would not have prevented its net pension liability (NPL) from growing even if investment returns all the actuarial assumptions associated with the plan had come to fruition, as the contributions were about 92% of our "tread water" benchmark, which is the payment covering the year's newly accrued service costs and interest on the NPL. The assumed rate of investment return on the TRS fund assets, which also is used to discount the liabilities, was reduced to 8% from 8.5% starting with the 2016 valuation, leading to a significant increase in the contribution for fiscal 2018. The state also in late 2016 reached an [agreement](#) with labor representatives to change its approach to funding SERS to a level dollar payment, to lower the investment rate of return assumption to 6.9% from 8%, and to extend amortization of most of the plan's unfunded liabilities to 2046 from 2032.

These changes will benefit the budget in future years (after the end of the current biennium) because contributions were previously scheduled to escalate throughout the next decade until unfunded liabilities were fully amortized. Although improving the long-term outlook for the state, the changes do not mitigate the near- and medium-term pressure from exceptionally large pension contributions.

Connecticut also has a very high OPEB liability. As reported in the fiscal 2016 financial statements, the liability is \$19.2 billion. The state is responsible for the \$2.99 billion Teachers' OPEB liability as of the June 30 2016 valuation. As of 2011, employees were required to make contributions to prefund OPEB benefits, for which the state is required to make matching contributions starting July 1 2017.

Governance: State profile features strong practices

The state's financial management is characterized by strong practices that include timely budget adoption and binding consensus revenue forecasting conducted at least three times a year. Annual multi-year Fiscal Accountability reports are produced by both the governor's budget office and the legislative office of fiscal analysis, and the state releases monthly budgetary updates. The state constitution requires a balanced budget, given greater force by the state's recent move to GAAP-basis budgeting. In addition, the state is not constrained by supermajority requirements to enact tax increases, mandated initiatives or voter referenda.

The governor's executive authority to cut expenses mid-year without legislative approval is limited to 5% of an individual appropriation, not to exceed 3% of any fund providing only moderate flexibility. We consider strong executive flexibility to make mid-year spending adjustments a plus. If a deficit exceeds 1% of the general fund, a timely deficit mitigation plan is required to be developed by law. Some of the state's financial provisions are not highly effective, such as the statutory limit on debt payable from the general fund, which is not accompanied by a debt affordability analysis and has not prevented the state from accumulating very high debt levels. A constitutional cap on spending has met with an opinion from the attorney general stating that the general assembly must adopt definitions before it can be operative.

The state has taken action to address some of its most pressing long-run financial challenges in recent years by implementing pension and OPEB reforms and committing to moving pension contributions to a more adequate level, although the state's long-term obligations remain formidable. The state also has statutory requirements to deposit budget surpluses into the rainy day fund at year end.

Legal Security

The bonds are secured by the full faith and credit of the state of Connecticut.

Use of Proceeds

Bond proceeds will fund various capital purposes of the state.

Obligor Profile

The State of Connecticut has a population of almost 3.6 million people. The state, located in the northeastern US, has a large and diverse economy with a gross state product of \$253 billion. It is the wealthiest state in the country with per capita income of 143.3% of the US average.

Methodology

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

Ratings

Exhibit 5

Connecticut (State of)

Issue	Rating
General Obligation Bonds 2017 Series C	A1
Rating Type	Underlying LT
Sale Amount	\$300,000,000
Expected Sale Date	06/28/2017
Rating Description	General Obligation

Source: Moody's Investors Service

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