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CREDIT OPINION
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Connecticut (State of)

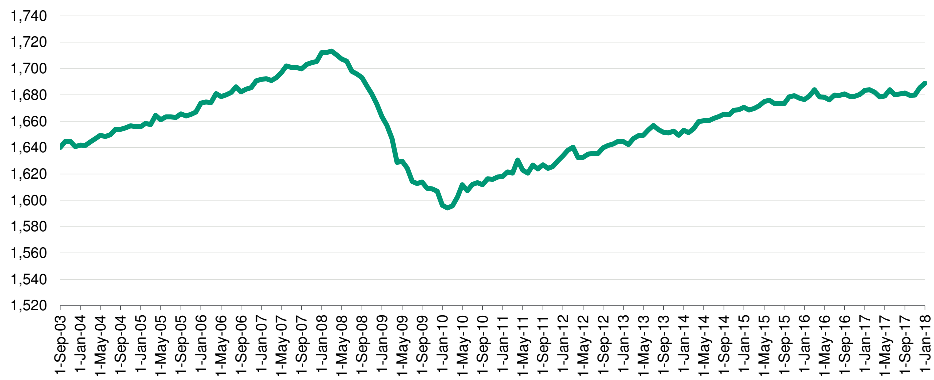
Update to credit analysis

Summary

Connecticut (A1 stable) has 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 combined with 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, recent consecutive years of population loss and minimal reserve levels.

Exhibit 1

Connecticut total employment still well short of pre-recession peak



Source: US BLS; Moody's Analytics

Credit strengths

» 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

» Pro-active initiatives to mitigate impacts of revenue volatility and build rainy day fund

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 small 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%	32.7%
ANPL/Own-Source Govt Funds Revenue	335.7%	326.0%	298.5%	288.5%	285.0%
ANPL/Own-Source Govt Funds Revenue Median	94.2%	87.6%	81.8%	83.0%	82.2%
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

Profile

The State of Connecticut has a population of 3.59 million people located in the coastal northeastern US, bordered by Rhode Island (Aa2 stable), Massachusetts (Aa1 stable) and New York (Aa1 stable) with 618 miles of shoreline, according to the NOAA. The state has a large and diverse economy with a gross state product of $260 billion in 2016. It is the wealthiest state in the country with per capita income of 141% of the US average.

Detailed credit considerations

Economy: high income state lags US growth

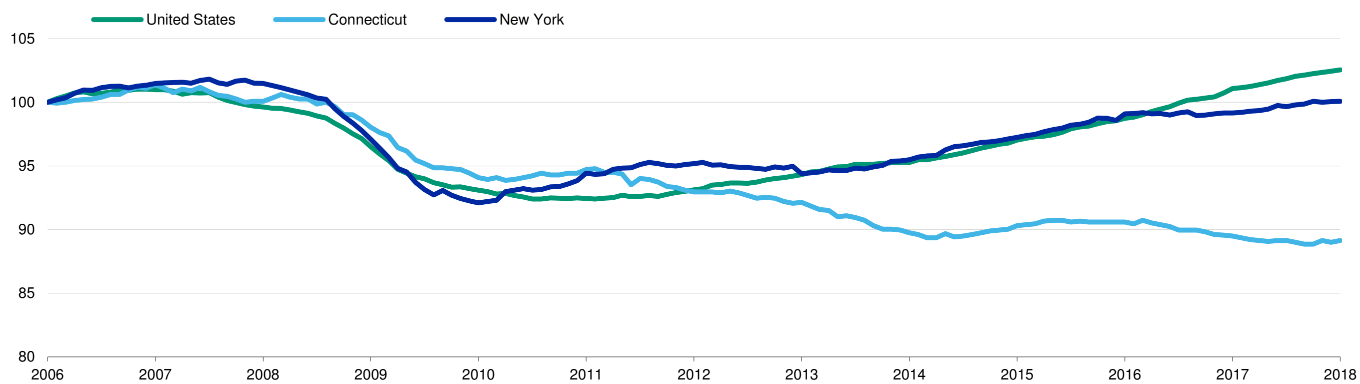
We expect Connecticut's economy to continue to lag the nation. Connecticut is a wealthy state, with per capita personal income exceeding 141% of the US. However, the state's demographics show a negative trend from 2013 to 2016, and population was flat in 2017. The population trends contribute to an underperforming housing market and lagging labor force growth. The state's unemployment rate as of January is higher, at 4.5%, than the nation's rate of 4.1%, and the state's payroll employment stands at 98% of its peak before the last recession. Wage growth has faltered as a result: total wages grew 2.5% annually from 2010 to 2016 compared to 4.6% annually during the expansion from 2003 to 2008. Total wage growth was a mere 0.8% in 2016, the lowest figure apart from 2008 and 2009 over the past decade. Job gains have been concentrated in education and health services, leisure and hospitality, transportation and utilities and professional and business services. Government employment has contracted nearly 9% since 2008, with the largest declines concentrated in the state sector.

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

Exhibit 3

Connecticut's financial activities sector stalls while NY and US gain

Jan 2006 = 100



Source: US BLS; Moody's Analytics

Some developments in 2017 point to a firming economic trend. The state did not lose population, and median existing home prices reached their highest levels in five years.

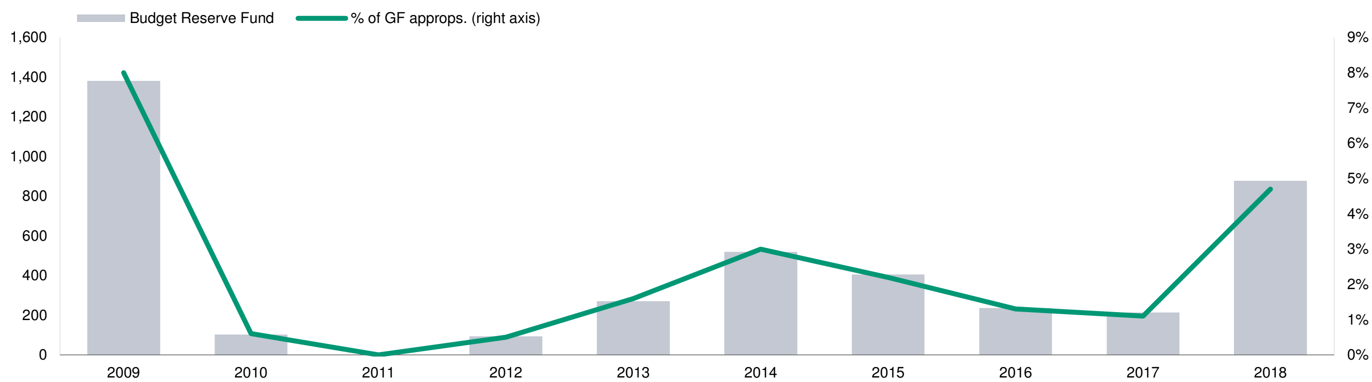
Finances and Liquidity: tax windfall eases short term stress

A slowly growing revenue base and high fixed costs will continue to characterize Connecticut's credit profile and create budgeting and political challenges for the foreseeable future. Spending growth is driven by rising costs for pension and retiree health expenses, as well as Medicaid, crowding out other more discretionary state spending.

Enactment of the 2018-2019 biennial budget was contentious and occurred four months after the beginning of the fiscal year. Appropriating $18.69 billion for fiscal 2018 and $18.79 billion for fiscal 2019, the budget closed a projected $2.28 billion fiscal 2018 gap and a $2.79 billion fiscal 2019 gap with spending cuts and revenue increases. An additional gap for the current year, fiscal 2018, emerged immediately and is expected to be addressed during the current legislative session.

A tax windfall may help the state bolster its finances by providing significant funds for its budget reserve fund and possibly provide one-time resources to help address the current year gap. One-time tax payments by hedge funds pursuant to federal law yielded a surge in revenue which will, under a "volatility cap" provision just enacted by the state in last year's legislative session, trigger mandatory deposits into the budget reserve fund. This additional deposit is currently pegged at about $665 million, bringing the reserve to 4.7% of general fund appropriations, the largest reserve since 2009 (see Exhibit 4). Even if the legislature were to choose to solve the current year budget gap by drawing down the reserve, its balance would still be greater than at any time since the recession.

Exhibit 4
Tax windfall will boost budget reserves
dollars in millions



Source: Connecticut Office of Policy and Management

The next biennial budget begins in fiscal 2020, when the deficit is projected at $2.2 billion, according to the Office of Policy and Management. From there the gap grows to $3.4 billion by fiscal 2022. The outyear deficits reflect in part the expiration of a health provider tax enacted for two years as part of the fiscal 2018 budget agreement. In addition, sales tax revenues that currently flow into the general fund will once again be diverted to aid local governments. Reconsidering expiration of these measures will likely be taken up when the next biennial budget is created. The legislature may also consider a set of recommendations produced by a nonpartisan Commission on Fiscal Stability and Economic Growth, which proposed a slate of sweeping reforms to the state's finances.

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 -$821 million on June 30 2017, or about -4.6% 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 had little balance sheet impact in the short run, maintaining discipline over time would reduce the state's liabilities. However, the payments have been suspended in fiscal 2017 and in the 2018-2019 biennium as the state has applied the contributions toward closing budget gaps. The fiscal 2017 payment would have been roughly $48 million and the fiscal 2018 and 2019 payments would have been $57.5 million in each year.

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 roughly 36% of general fund revenues by fiscal 2019. 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.

Connecticut's actual pension contributions are closer to the "tread water" amount than many other states with high fixed costs. The "tread water" benchmark is the contribution amount 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, 2016 or 2017, and does not expect to do so in fiscal 2018. Cash balances averaged $2 billion in fiscal 2016 and $2.3 billion in fiscal 2017. As of March 10, 2018 available cash was about $3.7 billion.

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, and combined state and local debt metrics place Connecticut closer to the middle of the pack. However, pension obligation bonds 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. Economic recovery notes issued to balance the budget during the recession have matured.

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 and a declining debt service schedule, resulting in a pay-out rate of 66% within 10 years. 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.

The state has $1.54 billion in variable rate debt, most of which is indexed to either SIFMA or CPI. Its variable rate debt accounts for less than 10% of the state's total GO debt, One variable rate series (2016 Series C) is privately placed with an SBPA provided by Bank of America, N.A. (A1(cr)/ P-1(cr)). Two series are direct placements, 2017 Series C and 2017 Series D.

DEBT-RELATED DERIVATIVES

Only $20 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 counterparty is JP Morgan Chase Bank, N.A. (Aa2(cr)/P-1(cr)). As of December 31 2017, the mark-to-market was minimal, at negative $682,000 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 third 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 contributions, about $2.55 billion in fiscal 2017. It is required via bond indenture to pay the full required contribution to the TRS plan and by collective bargaining to do the same for SERS. Even so, its 2016 contributions were not quite enough to prevent its net pension liability (NPL) from growing even if investment returns all the actuarial assumptions associated with the plan had come to fruition. The contributions were about 98% 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 the discount the liabilities, was reduced to 8% from 8.5% starting with the 2016 valuation. This led to a significant increase in the contribution for fiscal 2018, which has been partly offset by a requirement that teachers contribute an additional 1% of salary to the plan.

In late 2016, the state reached an agreement with labor representatives to change its approach to funding SERS to a level dollar payment, lower the investment rate of return assumption to 6.9% from 8%, and extend amortization of most of the plan's unfunded liabilities to 2046 from 2032. These changes will benefit the budget in future years because SERS 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.

The 8% discount rate for TRS is increasingly an outlier as other pension plans across the country have brought rates down to reflect a lower-inflation lower-return environment and to decrease risk and volatility in their investment portfolios. The plan's contributions escalate rapidly until 2032, helping drive the state's fixed costs.

Connecticut also has a very high OPEB liability. As reported in the fiscal 2017 financial statements, the net OPEB liability is $20.86 billion, including a $3.5 billion Teachers' OPEB liability as of the June 30 2017 valuation date. Employees have been required to make contributions to prefund OPEB benefits since 2011, and the state is now making matching contributions, which total about $120 million in both fiscal 2018 and fiscal 2019.

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, as the state has accumulated high debt levels and did not until this year make a constitutional spending cap 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. In addition, the state legislature recently passed a number of measures designed to contain spending and debt growth, rebuild the state's rainy day fund, and more frequently assess the condition of its pension funds. Following some of these provisions will now be required by bond covenants unless the legislature acts to change the law before it becomes effective for any bonds issued on or after May 15, 2018. While the required practices would strengthen the state's long term credit profile, covenanting to follow them reduces budgetary flexibility.

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