FITCH RATES MASSACHUSETTS' \$700MM GO BONDS 'AA+'; OUTLOOK STABLE

Fitch Ratings-New York-17 April 2019: Fitch Ratings has assigned a 'AA+' rating to \$700 million in Commonwealth of Massachusetts general obligation (GO) bonds, consisting of:

--\$100,000,000 GO bonds, consolidated loan of 2019, series C;

--\$200,000,000 GO bonds, consolidated loan of 2019, series D;

--\$400,000,000 GO bonds, consolidated loan of 2019, series E.

The bonds will be offered by competitive sale on or about May 7, 2019.

In addition, Fitch affirms the Commonwealth's long-term Issuer Default Rating (IDR) at 'AA+' and the ratings on related bonds of the state as detailed at the end of this release.

The Rating Outlook is Stable.

SECURITY

The bonds are general obligations of the Commonwealth, to which its full faith and credit are pledged. A statutory state tax revenue growth limit does not exclude principal and interest on debt obligations from the limit.

ANALYTICAL CONCLUSION

Massachusetts' 'AA+' IDR reflects its considerable economic resources, strong budget controls and a record of careful financial management. The Commonwealth carries a long-term liability burden that is well above average for a U.S. state but remains a moderate burden on resources. The Stable Outlook reflects the expectation that the Commonwealth will continue to act as needed to ensure budget balance and maintain an adequate budgeted reserve position.

Economic Resource Base

The Commonwealth has a broad and diverse economy. Employment growth is solid, education levels are high, and population growth continues to lead the region despite falling below the U.S. average. The Commonwealth's economic fundamentals include significant strength in the health care, technology and education sectors, leaving it well positioned for solid gains going forward. Measured by per capita personal income, Massachusetts is the second wealthiest state in the nation.

KEY RATING DRIVERS

Revenue Framework: 'aaa'

Tax revenues, while diverse, are dominated by individual income taxes, which are sensitive to economic conditions, particularly those related to capital gains. Baseline growth prospects for taxes are strong, driven by the Commonwealth's solid economic fundamentals.

Expenditure Framework: 'aaa'

Consistent with most states, the natural pace of spending growth is expected to marginally exceed expected revenue growth over time, requiring ongoing cost control. The Commonwealth has ample ability to reduce spending throughout the economic cycle.

Long-Term Liability Burden: 'aa'

Liability levels in Massachusetts, while high for a U.S. state, are a moderate burden on resources. The Commonwealth's above average liability position is partly the result of state funding for needs that are more commonly funded at the local level.

Operating Performance: 'aaa'

The Commonwealth has exceptional fiscal resilience, with strong gap-closing capacity stemming from a practice of building solid reserve balances and making revenue and spending changes as needed in response to changing circumstances. Conservative budgeting, ongoing economic and revenue monitoring, and mechanisms to protect the general fund from economically sensitive individual income tax and judgment and settlement receipts, support the Commonwealth's fiscal flexibility.

RATING SENSITIVITIES

The IDR is sensitive to Massachusetts' consistent commitment to strong financial management practices, including preserving budgetary flexibility and actively managing its relatively high long-term liability position.

CREDIT PROFILE

Massachusetts has a fundamentally strong economy with strong growth prospects. Its dynamic, service-oriented economy includes numerous institutions of higher education and health care that lend stability, in addition to supporting development and innovation in other sectors. At 131% of the U.S. average in 2018, per capita personal income is the second highest of the states. Educational attainment is very high, and population growth has been strong during this decade, a shift from historical experience of slow population gains. Despite this shift, the Commonwealth's population profile remains older than the U.S. average, consistent with other states in the region.

Economic performance has been highly sensitive to national trends. In the most recent recession, economic performance was significantly better than the national experience, in contrast to 2002-2004 when Massachusetts suffered among the steepest employment drops in the country. Employment losses in the Great Recession were slightly less severe than those of the U.S. (down 6% in Massachusetts versus 6.3% for the U.S.). Employment growth since then has been consistently solid.

Revenue Framework

General fund resources derive primarily from individual income, sales and corporate income taxes. The former two are particularly important, with an estimated 58% of tax revenues from individual income taxes and another 23% from sales taxes in fiscal 2019. The individual income tax is levied at flat rates based on type of income, with a 5.05% rate currently applicable to most categories. Under current law, the Commonwealth has been gradually lowering the rate to 5%, from a previous level of 5.3%, in 0.05% increments based on a statutory mechanism incorporating Boston-area inflation and baseline revenue growth. A 0.05% reduction was triggered as of Jan. 1, 2019, and the final 0.05% reduction is forecast to be triggered as of Jan, 1, 2020. Revenues are economically sensitive, particularly individual income tax receipts from capital gains and receipts from judgments and settlements. Consistent with the experience of many other states, individual income tax collection trends have also been affected by federal tax law changes, most recently those associated with the December 2017 Tax Cut and Jobs Act (TCJA).

Strong economic fundamentals and a revenue system that captures economic growth are the basis for a revenue profile that is likely to grow at or above the national average over time, in Fitch's view.

The Commonwealth has no significant legal limitations on its ability to raise revenues. A statutory tax revenue growth limit based on average wage and salary growth is present but has not hindered

the Commonwealth's ability to manage its revenue resources. The initiative environment has periodically been active, and certain revenues have been affected by past initiative petitions, notably property taxes. Importantly, the legislature retains the ability to make changes to statutes passed by successful initiative petitions.

Expenditure Framework

Massachusetts' expenditure profile is very broad, driven by an expansive scope of services. Medicaid and other social services are the largest single spending commitment in the general fund at about half of total spending. Rising needs, including those emerging from implementation of the Affordable Care Act, have pressured spending in the current decade. Education is also a significant commitment, with extensive funding of local schools and a broad higher education network. The Commonwealth's education commitment extends to covering the pension liabilities of local teachers, although not the liability associated with their other post-employment benefits (OPEB). Consistent with practices in many smaller states, the Commonwealth is responsible for delivering or funding many services routinely funded at local levels elsewhere.

As with most states, spending in the absence of policy actions is expected to be in line with to marginally above expected revenue growth, primarily driven by social services, particularly Medicaid. Fitch believes significant federal action to revise Medicaid's programmatic and financial structure, which had appeared to be possible in recent years, appears less likely in the near term given divided control in the U.S. Congress.

The Commonwealth retains ample ability to cut spending; statute allows for swift response in the event of forecast revenue underperformance, including the governor's statutory powers to unilaterally cut allotments under Section 9C of Commonwealth General Law, Chapter 29.

Carrying costs for long-term liabilities, including debt service, actuarial determined pension contributions, and OPEB pay-go appropriations, are elevated but manageable, at 14.3% of governmental expenditures as of the fiscal 2018 comprehensive annual financial report. Some pension reforms have been undertaken, including shifting to more conservative assumptions while maintaining a relatively conservative statutorily closed amortization target for achieving full funding in 2040. Currently, the Commonwealth expects contributions to rise 8.9% per year until the projected date of full prefunding, in fiscal 2036. Under state finance law revenues available for budgeting are net of statutory pension contributions and transfers for the Massachusetts Bay Transportation Authority (MBTA) and the Massachusetts School Building Authority (MSBA).

Long-Term Liability Burden

Debt and net pension liabilities are high for a state. On a combined basis, the burden of taxsupported debt and the adjusted net pension liability for employees and teachers equaled 20.1% of personal income, well above the 6% median for U.S. states as of Fitch's 2018 state pension update report. Fitch recalculates reported net pension liabilities using a 6% return assumption per Fitch' U.S. Public Finance Tax-Supported Rating Criteria.

As of Feb. 28, 2019, Fitch estimates the Commonwealth's tax-supported debt at a comparatively high 8.5% of 2018 personal income, including sales tax-backed obligations of the MBTA and the MSBA and annual contract assistance commitments that support the Massachusetts Department of Transportation. GO bonds represent the majority of outstanding debt. The comparatively high direct debt level is partially explained by the Commonwealth's above-average role in funding local government capital needs, relative to most other states. Fitch expects direct debt to remain high for a U.S. state but still manageable.

As of their June 30, 2018 financial reports, pension systems covering state employees and teachers (except in the City of Boston) held fiduciary assets covering 67.9% and 54.8% of their total pension liabilities, respectively, based on the 7.35% discount rates implemented as of their 2018

valuations; the rates were lowered from 7.5% for the 2018 valuation, and will be lowered to 7.25% as of the 2019 valuation. Using Fitch's more conservative 6% return assumption, ratios would fall to 58.8% and 47.6%, respectively. The Commonwealth carries a net OPEB liability for state employees, but not local teachers, measuring \$14.9 billion, based on a 3.95% discount rate and net of \$1.2 billion of prefunding built in recent years from tobacco settlement monies, excess capital gains collections and other sources; the net OPEB liability measures 3.1% of 2018 personal income.

Operating Performance

Fitch believes the Commonwealth retains a high capacity to address cyclical downturns and operating under-performance and has repeatedly demonstrated its commitment to maintaining a solid financial position. Mechanisms for maintaining balance include the governor's requirement to reduce allotments or identify alternative balancing measures in the event of a mid-year forecast deficiency, under Section 9C of Commonwealth General Law, Chapter 29.

The Commonwealth has established mechanisms to cap the impact on the general fund of volatile capital gains-related individual income tax and judgment and settlement receipts, with excesses devoted to the stabilization fund (the Commonwealth's rainy day fund) or to retirement liabilities. Since fiscal 2011, capital gains have been budgeted in the general fund at \$1 billion maximum, rising annually based on U.S. GDP growth; for fiscal 2020 the figure is \$1.26 billion. Judgments and settlements are capped based on a five-year rolling benchmark, at \$193 million for fiscal 2019.

The Commonwealth has consistently supported financial flexibility both in the form of the rebuilt stabilization fund as well as its ability to cut expenses in response to unforeseen weakness. Similar to many states, the Commonwealth has faced budgetary challenges at several points in the current economic expansion, including from the impact of shifting federal tax law and from unexpected demands for Medicaid triggered in part by federal health reform. Although these factors initially weighed on progress in rebuilding the stabilization fund balance to prerecession levels, more recently the budgetary mechanisms to shift cyclical windfalls to the stabilization fund have raised its balance.

The stabilization fund balance reached \$2 billion as of fiscal 2018 following the deposit of \$463 million from capital gains collections in excess of the fiscal 2018 threshold of \$1.169 billion and \$209 million from prior-year surplus; these deposits brought the balance to 7.2% of fiscal 2018 total tax revenues. Based on current projections, a deposit of approximately \$494 million is expected in the stabilization fund for fiscal 2019, bringing the balance to nearly \$2.5 billion, or 8.7% to total tax revenues.

Recent Operating Performance

As noted above, the Commonwealth's recent tax experience has been affected by the TCJA's impact on the timing of taxpayer filings. Fiscal 2018 collections surged beyond enacted budget expectations, driven by the non-withholding component of individual income taxes and corporate levies. Collections totaled almost \$27.8 billion, excluding judgments and settlements, 8.3% over the prior-year figure and well above the 3.5% growth rate forecast at the time the fiscal 2018 budget was adopted. At the time, the Commonwealth assumed that much of the excess would be timing-related and would reverse in later periods.

Fiscal 2019 tax revenues as of the January 2018 consensus revenue forecast were expected to rise a modest 1.9% over the January 2017 consensus forecast, to about \$27.6 billion, excluding judgments and settlements. Incorporating enacted budget changes and minor adjustments from the December 2018 consensus, the fiscal 2019 forecast currently assumes \$28.5 billion in collections, 2.7% higher than fiscal 2018 actual budgeted revenues. Year-to-date through March 2019, fiscal

2019 collections are 0.1% above benchmark and 4.1% above the prior year. Collections in the nonwithholding component of individual income are running 37.3% below benchmark, while corporate levies are running 21.6% above benchmark.

Based on the December 2019 consensus forecast, the Commonwealth expects tax collections of \$29.3 billion in fiscal 2020, which begins on July 1; collections would rise 2.7% from the revised fiscal 2019 level. As noted earlier, the fiscal 2020 forecast assumes that the final, statutorily-triggered 0.05% drop in the individual income tax rate will take place on Jan. 1, 2020 based on recent economic growth trends. The legislature is currently deliberating the budget for fiscal 2020. The governor's executive budget, released in February, proposes maintaining the policy direction of recent years, with a continued focus on Medicaid cost control, increases in education spending and local aid, and targeted expansions in key policy areas, such as to combat opioid addiction. The executive budget assumes an additional \$297 million deposit to the stabilization fund.

Related Affirmations

Fitch affirms the ratings on the Commonwealth's Long-Term IDR at 'AA+' and the ratings on GO or GO-linked bonds of the Commonwealth as follows:

--Approximately \$23.2 billion in GO bonds at 'AA+';

--Approximately \$257 million in Massachusetts Development Finance Agency (MDFA) special obligation bonds (Commonwealth contract assistance) at 'AA+';

--Approximately \$198 million in Commonwealth guaranteed bonds, issued by the University of Massachusetts Building Authority (UMBA) and the MBTA, at 'AA+';

--Approximately \$95 million in UMBA (Commonwealth Guaranteed) refunding revenue bonds, series 2011-2 at 'AA+'/'F1+'.

The Rating Outlook on the long-term ratings is Stable.

For the Commonwealth contract assistance bonds issued by MDFA, UMBA and MBTA, the Commonwealth's obligation under the contract to make payments equal to debt service is a general obligation of the Commonwealth, to which its full faith and credit are pledged. The short-term 'F1+' rating on the UMBA series 2011-2 bonds is based on the long-term 'AA+' rating of the Commonwealth.

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Additional information is available on www.fitchratings.com

Applicable Criteria U.S. Public Finance Short-Term Debt Rating Criteria (pub. 01 Nov 2017) https://www.fitchratings.com/site/re/905637 U.S. Public Finance Tax-Supported Rating Criteria (pub. 03 Apr 2018) https://www.fitchratings.com/site/re/10024656

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