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Summary:

Massachusetts; Appropriations; CP; General Obligation; General Obligation Equivalent Security

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Long Term Rating	A/Stable	Affirmed

Rating Action

S&P Global Ratings assigned its 'AA' long-term rating to the Commonwealth of Massachusetts' \$300 million general obligation (GO) bonds, consolidated loan of 2022, series A; and \$350 million GO bonds, consolidated loan of 2022, series B.

At the same time, S&P Global Ratings affirmed its 'AA' rating on the commonwealth's GO debt outstanding and its 'A' long-term rating on the Boston Housing Authority's series 2003 housing project bonds (West Broadway Homes IV project), supported by a commonwealth annually appropriated state-operating subsidy, subject to the terms of a trust agreement. We are also withdrawing our commercial paper rating to reflect termination of the CP program. The outlook on all ratings is stable.

Massachusetts' full faith and credit are pledged to the GO bonds.

Proceeds from the 2022 series A and B bonds will fund various capital expenditures.

Credit overview

Massachusetts' rating reflects a strong economy, with the second-highest per capita income level in the nation, partly due to an above-average presence of high-tech companies in the Boston area. The rating further reflects some historical cyclicality in financial results, although recent strong growth in tax collections and federal aid have led to large operating surpluses and reserves, as well as high debt, pension, and other postemployment benefits (OPEB) liabilities, with a history in recent years of funding less than full annual actuarial recommendations to its pension and OPEB funds.

The commonwealth's economy had a steeper decline than the nation during the initial stages of the COVID-19

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pandemic due to stricter lockdown restrictions, but has since come back strongly. Good revenue growth, combined with extra federal aid, helped the state end fiscal 2021 in strong financial shape. The state budgeted a budget stabilization fund (BSF) drawdown in fiscal 2021, but instead ended up with a substantial increase. At fiscal year-end June 30, 2021, the BSF stood at \$4.6 billion, or a strong 8.9% of operating expenditures and other uses on a budgetary basis of accounting, higher than the 5.3% originally budgeted.

So far in fiscal 2022, Massachusetts's revenues have continued to come in much better than the budgetary forecast. Through December 2021, fiscal 2022 tax collections for the year to date were up 24.8% over the same period the prior year, and 13.6% above the budgetary forecast. In particular, state income tax year to date was up 25.0% over the same prior-year period, and sales and use tax was up 21.4%. The state attributes strong income tax collections partly to a recently enacted state elective pass-through entity provision, which allows certain taxpayers to avoid the federal limit on the deduction for state and local taxes by paying taxes at the pass-through entities' level. As a result, many pass-through entities paid their 2021 excise taxes in December in order to claim the deduction on their 2021 federal return, which the state believes will depress pass-through tax collections in the coming months. Nevertheless, tax collections have still been strong, even without this effect. Fiscal 2022 tax collections year to date were still up 10.0% over forecast after adjustment for pass-throughs, according to the commonwealth.

The state has recently revised the fiscal 2022 tax revenue estimate up by \$1.548 billion to \$35.948, based on recent revenue performance and economic data, and made a consensus revenue forecast for fiscal 2023 for 2.7% tax collection growth in fiscal 2023, which will be used to set next year's budget.

Strong recent tax growth has swelled the state's budget stabilization fund balance, which receives both excess general fund revenue, as well as capital gains tax above an annual benchmark, and certain other lesser revenue sources. The state projects the BSF will reach \$5.8 billion, or a very strong 10.0% of expenditures and other uses at the end of fiscal 2022. The state has not yet enacted a fiscal 2023 budget, and in recent years has enacted budgets late, relying on temporary one-month budgets to operate at the beginning of a fiscal year until a full year's budget has been enacted.

Some financial risks remain. We believe Massachusetts has an above-average dependence on cyclical capital gains tax revenue, which has benefited from the currently high stock market, but which could recede in future years. Also, the state has been chronically underfunding its annual pension contribution. It assumes a fully funded retirement system by 2036, but only if it increases annual contributions by 9.63% per year through 2035, a steep increase that we believe delays current pension pressure to future years. We calculate the pension underfunding amounts to a structural deficit of about 2% per year--or higher, if excluding restricted federal revenue from the budget denominator. The state has also had large recent increases in Medicaid enrollment, a concern if the federal government no longer pays the higher Medicaid reimbursement rate it implemented during the pandemic.

We believe that Massachusetts' economy, with a substantial tech sector presence in the Boston area, has been a bright spot, with a substantial proportion of well-educated workers that were able to work at home during the pandemic and contribute to the state's income tax. Massachusetts has the second-highest per capita income in the nation, at 132% of the nation. IHS Markit forecasts that real gross state product will increase at a slightly slower rate than that of the nation, at 3.3% in calendar 2022 and 1.9% in 2023, compared with the nation's real GDP growth of 4.3% and 2.6% in those respective years. The state's monthly unemployment rate has come down from a peak of 16.4% in April 2020, to

a 5.4% preliminary unemployment rate as of November 2021, compared with 4.2% in November for the nation.

While Massachusetts has high income levels and a good rainy-day fund, this is partially offset by high debt, moderately high OPEB, and persistent underfunding of its annual actuarial pension contribution. At fiscal year-end 2020, the last audited fiscal year, we calculate the commonwealth had net total tax-backed debt per capita of \$5,697 and 7.1% of personal income, including tax-supported revenue debt. The commonwealth reports a slight increase of GO debt only, from \$24.0 billion at fiscal year-end 2020 to \$24.8 billion at fiscal year-end 2021. Massachusetts has contributed less than its actuarial annually recommended contribution since 2011, funding only 76% of its annual actuarial recommendation in fiscal 2021 and an estimated 81% in 2022, which has contributed to what we consider a relatively low combined pension-funded ratio on a Governmental Accounting Standards Board (GASB) basis of 56% in fiscal 2020. However, funded levels might improve somewhat, at least temporarily, when a high investment return of 29.9% in fiscal 2021 is incorporated into the next GASB actuarial valuation. At fiscal year-end 2020, the commonwealth's net pension liability on a GASB basis was a high \$6,871 per capita, or 8.8% of state personal income. Net OPEB liability on a GASB basis at fiscal year-end 2020 was also high, at \$3,002 per capita, although the state has made efforts in recent years to prefund a portion of OPEB through a trust fund.

The stable outlook reflects our view that Massachusetts has had a history of rebuilding its BSF after economic drawdowns and generally conservative budget forecasting, and that the commonwealth's economy will largely track national growth trends in the next two years.

Factors supporting the 'AA' GO rating include what we view as Massachusetts':

- Deep and diverse economy;
- High income levels, with per capita income at 132% of the nation in 2020, the second-highest among the states;
- History of timely monitoring of revenues and expenditures and swift action when needed to make adjustments;
- Strong financial, debt, and budget management policies, including annualized formal debt affordability statements and multiyear capital investment planning; and
- Strong BSF balance, equal to 8.9% of expenditures and other uses on a budgetary basis at fiscal year-end 2021, and an estimated increase in 2022 to 10.0%, in part due to currently strong capital gains tax.

Offsetting factors include high debt, pension, and OPEB liabilities.

In particular, the commonwealth's pension-funded ratio on a GASB basis has had a long-term declining trend and stood at only 56.2% on a combined basis as of a June 30, 2019, measurement date for fiscal 2020, the last audited year. Massachusetts has contributed less than its annual actuarial recommendation to its pension funds in every fiscal year since 2011. However, Massachusetts has put in place a plan to increase annual pension contributions by a steep 9.63% per year to fully amortize unfunded pension liabilities by 2036, and a large investment return of 29.9% in fiscal 2021 could at least temporarily improve funded levels. The \$815 million shortfall against the annual actuarial recommendation in fiscal 2022 and the contributions actually budgeted, which we view as a structural deficit, is only about 1.4% of estimated fiscal 2022 budgeted operating expenditures and other uses. The commonwealth is paying 81% of the actuarial recommendation in fiscal 2022. Massachusetts projects state pension contributions will increase

by \$1.5 billion above the fiscal 2022 level by 2026, the year when the commonwealth projects annual payments will equal the ARC, assuming it continues to increase payments 9.63% per year and pension returns meet actuarial assumptions. (In fiscal 2020, the last audited year, the actual return was 2.38%, compared with the 7.25% assumed return; the return of 29.9% in calendar 2021 is yet to be reflected in fiscal 2022's audited financial report.)

Based on the analytic factors we evaluate for states, on a scale of '1.0' (strongest) to '4.0' (weakest), we have assigned a composite score of '1.9' to Massachusetts, which is consistent with a 'AA' indicative rating.

Environmental, social, and governance

We consider Massachusetts' environmental risks elevated because of the state's coastal exposure, while social and governance risks are generally in line with the state sector, and the commonwealth has historically maintained a stable management and policy framework to respond to developing risks.

Stable Outlook

Upside scenario

An upgrade would require the state to take measures to strengthen its pension funding discipline based on a prudent actuarial footing, while maintaining a strong BSF balance as a matter of budgetary policy during periods of strong economic activity.

Downside scenario

We could lower the rating if we believe Massachusetts will fail to make budget adjustments to maintain structural balance or rebuild its BSF after periods of economic softness. Factors that could pressure the rating include overly optimistic revenue projections; significant unexpected growth in Medicaid costs, even with increased federal reimbursement; significant increases in debt or other fixed costs; or material drawdowns of its BSF, even when underlying economic activity is strong. In particular, weak liquidity, significant deficit borrowing, or a significant fall in pension-funded levels due to the commonwealth falling significantly behind static pension funding contribution levels could trigger a negative outlook or downgrade.

Credit Opinion

For more information on the commonwealth, please refer to our most recent full analysis, published April 27, 2021, on RatingsDirect.

Related Research

• Through The ESG Lens 2.0: A Deeper Dive Into U.S. Public Finance Credit Factors, April 28, 2020

Ratings Detail (As Of January 20, 202	2)				
Massachusetts go bnds cons loan ser 2019F due 05/01/2029					
Long Term Rating	AA/Stable	Affirmed			

Ratings Detail (As Of January 20, 2022) (cont.)		
Massachusetts CP A		
Short Term Rating	NR	Affirmed
Massachusetts CP B		
Short Term Rating	NR	Affirmed
Massachusetts GO		
Long Term Rating	AA/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA/Stable	Affirmed
Massachusetts GO bnds cons ln		
Long Term Rating	AA/Stable	Affirmed
Massachusetts GO bnds, consolidated loan of 2019 (Fede	erally Taxable) ser 2019H due 09/01/20	49
Long Term Rating	AA/Stable	Affirmed
Massachusetts GO cons loan of 2020 ser D due 03/01/2	050	
Long Term Rating	AA/Stable	Affirmed
Massachusetts GO rfdg bnds		
Long Term Rating	AA/Stable	Affirmed
Massachusetts GO rfdg bnds ser 2019 C due 05/01/203	1	
Long Term Rating	AA/Stable	Affirmed
Massachusetts GO rfdg bnds ser 2020A due 03/01/2042		
Long Term Rating	AA/Stable	Affirmed
Massachusetts GO (wrap of insured) (FGIC & BHAC) (SE	EC MKT)	
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Massachusetts GO (AGM)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Massachusetts GO (AGM) (SEC MKT)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Massachusetts GO (AMBAC)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Massachusetts GO (BAM)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Massachusetts GO (BAM) (SECMKT)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Massachusetts GO (BAM) (SECMKT)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Massachusetts GO (BAM) (SECMKT)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed

Ratings Detail (As Of January 20, 2022) (cont.)	
Massachusetts GO (BAM) (SECMKT)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Massachusetts GO (BAM) (SEC MKT)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Massachusetts GO (CIFG)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Massachusetts GO (FGIC)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Massachusetts GO (FGIC) (National)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Massachusetts GO (MBIA) (National)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Massachusetts GO (SYNCORA GTY)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA/Stable	Affirmed
Massachusetts Bay Transp Auth, Massachu	ısetts	
Massachusetts		
Massachusetts Bay Transp Auth (Massachusetts) GOEQUIV	
Long Term Rating	AA/Stable	Affirmed
Massachusetts Bay Transp Auth (Massachusetts) GOEQUIV RMKTD	
Long Term Rating	AA/A-1/Stable	Affirmed
Massachusetts Bay Transp Auth (Massachusetts		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Massachusetts Development Finance Agen	cy, Massachusetts	
Massachusetts		
Massachusetts Dev Fin Agy (Massachusetts) GC		A 65
Long Term Rating	AA/Stable	Affirmed
Many issues are enhanced by bond insurance.		

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