

CREDIT OPINION

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Contacts

Blake Cullimore +1.617.535.7692
 AVP-Analyst
 blake.cullimore@moody's.com

Nicholas Lehman +1.617.535.7694
 VP-Senior Analyst
 nicholas.lehman@moody's.com

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 EMEA 44-20-7772-5454

Vermont Municipal Bond Bank

Update to credit analysis

Summary

The Vermont Municipal Bond Bank's (Aa2 stable) d/b/a Vermont Bond Bank, "the bank", credit quality reflects the weighted average credit quality of the participating borrowers that is further enhanced by the Vermont State Aid Intercept Program (Aa2 stable) and the debt service reserve fund that is secured by a moral obligation of the state of Vermont (Aa1 stable). The rating also incorporates the large and diverse pool of program participants, the bank's strong legal covenants and debt structure, as well as an experienced management team.

We regard the coronavirus outbreak as a social risk under our ESG framework, given the substantial implications for public health and safety. We do not see any material immediate credit risks for the Vermont Municipal Bond Bank. However, the situation surrounding Coronavirus is rapidly evolving and the longer term impact will depend on both the severity and duration of the crisis. If our view of the credit quality of Vermont Municipal Bond bank changes, we will update our opinion at that time.

Credit strengths

- » Highly rated state and strong legal provisions
- » Sizeable and diverse pool of participants
- » Experienced management team
- » Healthy debt service reserve and operating reserve funds

Credit challenges

- » Very small excess cash flows due to program design
- » Decline in state aid
- » Pool credit quality is dependent on state intercept rating

Rating outlook

The stable outlook reflects the stable credit quality of the very large pool of program participants that is unlikely to materially change over the outlook period. In addition, the bonds benefit from adequate payment timing mechanics to the trustee from the participants or the state, if the intercept is triggered. Further credit strength is provided through managements policies and procedures which have led to essentially all participants being reviewed annually.

Factors that could lead to an upgrade

- » Upgrade to the state of Vermont's general obligation rating
- » Improved credit quality of pool participants
- » Substantially higher unrestricted reserve levels

Factors that could lead to a downgrade

- » Downgrade to the state of Vermont's general obligation rating
- » Deterioration of credit quality of pool participants
- » Change in pool composition
- » Material reduction in reserve levels

Key indicators

Exhibit 1

Size and Diversity	
Size of Portfolio	198
% of Borrowers with less than 1% of the pool	40.10%
% of loans to the top 5 borrowers	22.08%
Total bonds outstanding (\$ millions)	\$580,856
List of significant participants	
Champlain Valley School District	5.80%
St. Albans (City of)	5.00%
South Burlington (City of)	4.80%
Middlebury (Town of)	3.50%
Burlington (City of)	3.00%
Brattleboro (Town of)	2.90%

Source: Moody's Investors Service and Vermont Municipal Bond Bank

Profile

The Vermont Municipal Bond Bank was created in 1969 and is authorized to issue bonds in order to provide loans to local governments. As of February 2021 the bank had \$581 million in outstanding loans and since its inception has provided over \$2.5 billion in loans for local infrastructure throughout Vermont. Approximately 98% of the loans are secured by a general obligation of the municipality, school district, or special district receiving the loan.

Detailed credit considerations

Credit strength: Pool Credit quality benefits from a participant general obligation pledge, the bank's general obligation pledge, and a State of Vermont Intercept

Pool credit quality benefits from the state intercept rating which when applied results in the weighted average pool credit quality of a solid Aa3. The credit quality of the pool participants, after applying the intercept, is comprised of 83.5% Aa credit, 15.85% A credit, and 0.48% Baa credit.

A moral obligation from the State to replenish any draws on the debt service reserve fund adds to credit strength. In addition the participant pool benefits from strong state law protections requiring any participant securing their loan with a general obligation pledge is required to assess and collect funds owed to the Bank.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

Overall credit quality is further supported by the bank's general operating policy which requires unrestricted reserves of the bank to be at least 3% of the outstanding loan balance. As February 2021 the Bank had \$30.5 million of available fund balance and debt service reserves of \$54.5 million, or nearly \$85 million in available reserves to support debt service, relative to estimated 2021 debt service of \$71 million.

Diversity of portfolio: Diverse pool of participants

The pool is diverse with 198 participants. The top five participants, by outstanding debt, account for 22% of the pool debt, however the participant with the most debt in the pool, of which accounts for 5.8% of the debt, Champlain Valley School District, is a regional school district with six members, providing further diversification. Added diversification is demonstrated with 40% of the participants each have outstanding debt accounting for 1% or less of the pool's debt.

As of March 2021 the bank estimates that 62% or \$361.5 million of debt is local governments, 35% or \$200.1 million is school districts, and the remaining 3% or \$19.5 million special districts. Diversity supports credit strength with 98% of pool participants securing their bond bank loan with a general obligation pledge (\$568 million), which mitigates for the need of excess cash flows. The remaining 2% are revenue bonds (\$12.7 million) with a 1.25x revenue pledge.

Participants are geographically diverse with the debt allocated to participants in all 14 counties. Participants located in Chittenden county have issued the most debt with 26% of the pool's outstanding debt. This is followed by Windsor, Washington, Franklin, and Rutland counties; together which account for 43% of participant debt.

Debt structure and cash flow: Strong debt structure and cash flow bolstered by general obligation nature of pledge

The debt structure secured by a general obligation pledge of the Bank, including its general operating reserve fund and available cash; general obligation unlimited tax pledge of the pool participants; a state intercept; and a three prong debt service reserve fund backed by a moral obligation pledge of the state.

The debt of the Bank consists entirely of fixed rate obligations. Debt policy limits amortization of debt to the useful life of assets, mandates a flat or front loaded debt service schedule, and does not provide for use of interest rate swaps or other derivative products. Borrowers' loan payments are due on November 1 and May 1, which is 30 days prior to debt service payment dates on the bank's bonds.

The borrowers with a general obligation pledge qualify for an enhanced rating based on the state intercept. Some borrowers do not receive state aid so the intercept is not applicable to them and for pool purposes they receive an internal rating or credit estimate.

Debt service coverage is typically at 1x coverage each year over the entirety of the amortization. The low 1x coverage for the pool is mitigated by the cash flows based on debt service reserve fund balances and operating reserves of \$85 million. This allows for 12.5% default rate in the pool without further cash inflows from the state or participants. Additional mitigation is provided by the debt structure with 98% of the pool supported by a unconditional general obligation unlimited tax pledge of the participant, which is required to be funded by each participant pursuant to state statute.

Legal security

The bonds are a general obligation of the Vermont Municipal Bond Bank, and the full faith and credit pledge of the bank is pledged for the payment of debt service on their municipal bonds. Additionally, the State provides a moral obligation to replenish the reserve fund if there is a draw on the reserve that reduces the amount below the required debt service reserve.

Debt-related derivatives

The bond bank is not party to any interest rate swaps or other derivative agreements.

ESG considerations

Environmental

No material environmental consideration. As a US state with a wealthy and diverse economy, the flexibility to raise revenue, and support from the federal government, Vermont will continue to demonstrate high resilience to environmental risks. In general, US states face low credit risk stemming from environmental events, the most likely to occur being natural disasters. Even among US states, Vermont's environmental risks are low. With no coastal exposure, Vermont counties are primarily exposed to extreme rainfall risk, according to data from Moody's affiliate Four Twenty Seven. Increased rainfall could result in more frequent local or regional flooding.

We expect the state and most of its local governments have the resources and capacity to address flood events. Heavy storms have caused extensive flooding throughout the state, but the state is able to apply its own resources as well as funding from the federal government to address damages. The state is working to build up the flood resiliency of its floodplains and river corridors

Social

No material social consideration. Vermont has one of the slowest growing populations in the US and the most rapid decline in prime working age population (residents aged 25-54). Since 2000, the state's prime working age population fell just over 16% and it has fallen nearly 10% since 2010. These are the highest rates of decline over these two periods among the 50 states and the District of Columbia (Aaa stable). Since 2010, the prime working age population in the US grew nearly 5%. Support for health services by the federal government, mainly through Medicaid grants, represents a vulnerability for states and Vermont is no exception. Vermont is more vulnerable to a change in federal policy or funding than other states given that about 25% of its population is enrolled in Medicaid. This is far higher than the 17% of people enrolled across the US. Statewide, housing affordability has not fallen as much in Vermont as it has in many parts of the US. Though slow population growth could be a drag on future economic growth, it could keep housing affordable in most parts of the state

Governance

The Board of Directors of VMBB currently has five members including ex officio the state treasurer. Members of the board are appointed by the governor for two year staggered terms. Board members have a broad range of experience with a strong background in finance and not for profit management and governance.

The Bank has a small staff.. The Board under the direction of the executive director has led the Bank in an update of many of its policies. Substantive to the Bank's rating are updated loan policies and procedures requiring new loan participants to submit annual financial reports and annual monitoring of all pool participants. Currently, the bond bank achieves full annual monitoring of nearly 90% of outstanding debt.

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