

SECTOR IN-DEPTH

30 March 2020



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State and local government - US

Special tax revenue will weaken as coronavirus slows economy and travel

Economically sensitive tax revenue pledged to state and local special tax debt will rapidly decline as the coronavirus outbreak leads to a near-halt in travel and a slowing economy, weakening debt service coverage. Hospitality, leisure and travel-related revenue, generated from taxes on hotel occupancy, restaurant sales, car rentals, parking fees and gambling, is the most vulnerable to the slowdown (see Exhibit 1). Revenue from sales and income taxes will also fall, but to a lesser extent because the tax bases are broader and more diverse. A dedicated reserve fund or parent government with the ability and willingness to cover a revenue shortfall bolsters the credit quality of certain special tax debt.

- » Hospitality, leisure and travel-based tax revenue is subject to the most immediate and substantial drop. Monthly collections of hotel occupancy and prepared food and drink taxes stand to decline by up to 85% through at least mid-summer if trends continue. Debt service coverage for certain debt has the potential to fall by half.
- » Broader consumption- and income-based taxes will fall to a lesser extent. Consumer spending and personal and business income will decline as the economy weakens, making tax base diversity an important buffer to limit a revenue drop-off. The federal stimulus package stands to marginally offset some of the consumption declines.
- » A dedicated reserve fund or supportive parent government strengthens credit quality of certain special tax debt. Most special tax bonds we rate have a debt service reserve requirement protecting against a temporary revenue shortfall. The ability and willingness of a parent government to fill gaps in pledged revenue is another backstop.

Exhibit 1

Coronavirus outbreak will adversely impact revenue streams supporting special tax debt

Special tax types

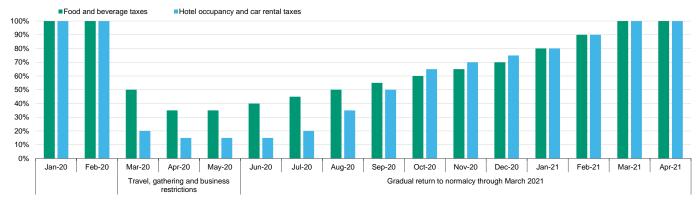
High exposure	Moderate exposure					
» Hotel occupancy	» Business income					
» Casino revenue	» Broad-based sales tax					
» Car rental	» Personal income					
» Prepared food and drink	» Gasoline					
» Parking fees	» Motor vehicle registration					
	» Cigarette, lottery and liquor					
	» Utility services					

Exhibit shows the more common special tax pledges. Source: Moody's Investors Service

Hospitality, leisure and travel-based tax revenue is subject to the most immediate and substantial drop from a coronavirus-induced slowdown

Unprecedented restrictions on social interaction and travel and business activity are sharply curtailing tax revenue supporting special tax debt, notably revenue from hotel occupancy, prepared food and beverage, casino, car rental and other travel and hospitality-based taxes. Monthly collections of several such taxes stand to fall by up to 85% through mid-summer, according to current trends. The duration will depend on the degree to which government restrictions continue or heighten (see Exhibit 2). With the turmoil, debt service coverage is likely to weaken.

Exhibit 2
Taxes levied on hotel occupancy, car rentals and restaurant sales will drop significantly in the coming months before a gradual recovery Projected collections as a % of historical norms



Projections based on current trends and subject to change if government restrictions on consumer activity are markedly increased. Source: Moody's Investors Service

The duration of the impact will depend on how long it takes to contain the spread of the virus and boost consumer confidence and willingness to travel. As of March 27, all 50 states and the District of Columbia had instituted some level of restrictions on how less essential hospitality businesses like restaurants, bars and retail stores operate by either ordering their complete closure, restricting operations or prohibiting an in-person work force, per the National Governors Association. Twenty-nine states had stay-at-home orders that restrict travel, and 23 states had limited the size of public gatherings to under 50.

On March 25, we revised our forecast for real US GDP to decline by 4.3% over the first and second quarters of 2020, with a 2.0% decline for the full year. The longer it takes for households and businesses to resume normal activity, the greater the economic impact.

Revenue declines will curb debt service coverage

Based on our projections of economic contraction through the second quarter of 2020, as well as market trends in hotel occupancy and average daily rates, Exhibit 3 models debt service coverage for a hypothetical bond secured by a hospitality tax. The model assumes hospitality spending falls to 20% of its historical norm in March and levels out at 15% for the remainder of the second quarter (see Exhibit 2 above for monthly projections through March 2021). We assume a gradual recovery through the first quarter of 2021, which is in line with our current macroeconomic outlook.

Our model projects debt service coverage based on a bond year in order to assess the tax collections available at the time debt service is due. For a hypothetical bond with an October year-end and 2019 debt service coverage of 1.2x, we project pledged revenue will provide just 0.6x coverage in 2020.

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Exhibit 3

Timing of debt service payment and historical coverage are key in projecting special tax performance over the next 18 months

Orange denotes projected declines to below 1.0x debt service coverage

Last year's	debt service coverage:	1.2x	1.3x	1.4x	1.5x	1.6x	1.7x	1.8x	1.9x	2x	2.1x	2.2x
Bond year ending	Decline in bond year collections	Projected debt service coverage										
Mar-20	-7%	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1
Apr-20	-14%	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.6	1.7	1.8	1.9
May-20	-21%	1.0	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.6	1.7	1.7
Jun-20	-28%	0.9	0.9	1.0	1.1	1.2	1.2	1.3	1.4	1.4	1.5	1.6
Jul-20	-35%	0.8	0.9	0.9	1.0	1.0	1.1	1.2	1.2	1.3	1.4	1.4
Aug-20	-40%	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.1	1.2	1.3	1.3
Sep-20	-44%	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.2
Oct-20	-47%	0.6	0.7	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.1	1.2
Nov-20	-50%	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1
Dec-20	-52%	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.1
Jan-21	-53%	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0
Feb-21	-54%	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0
Mar-21	-48%	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.1	1.1	1.2
Apr-21	-40%	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.1	1.2	1.3	1.3
May-21	-33%	0.8	0.9	0.9	1.0	1.1	1.1	1.2	1.3	1.3	1.4	1.5
Jun-21	-26%	0.9	1.0	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.5	1.6
Jul-21	-20%	1.0	1.0	1.1	1.2	1.3	1.4	1.4	1.5	1.6	1.7	1.8
Aug-21	-14%	1.0	1.1	1.2	1.3	1.4	1.5	1.5	1.6	1.7	1.8	1.9
Sep-21	-10%	1.1	1.2	1.3	1.4	1.4	1.5	1.6	1.7	1.8	1.9	2.0

Coverage does not include any pledged reserves. A bond year consists of the 12 months prior to when a debt service payment is due. Source: Moody's Investors Service

The above scenario is assumes level revenue collections throughout the year. Seasonal economies will be impacted very differently. Collections in areas highly reliant on spring and summer travel will be hit much harder than areas reliant on winter travel.

A locality's economic mix will also play an important role — with areas reliant on discretionary travel and tourism set to face a more prolonged and steep decline than areas reliant on less discretionary business travel.

Broader consumption- and income-based taxes will fall to a lesser extent because revenue comes from a larger base

The coronavirus outbreak will adversely impact certain consumption and income taxes securing special tax debt, but to a lesser extent than hospitality taxes that draw from a narrower base. Taxes drawn from a broader base include sales and use taxes, personal and business income taxes and utility franchise fees (see taxes with moderate exposure listed in Exhibit 1 on page 1). Still, these taxes are subject to revenue declines rooted in the downturn, and tax base diversity will remain important in offsetting the effects. The recently enacted federal stimulus bill will marginally offset some of the declines in consumption.

States and localities with mandatory stay-at-home orders will see the sharpest and most immediate decline in sales tax revenue as inperson shopping is restricted to essential items and many businesses are ordered to close. Compounding the negative impact on sales taxes is many states' exemption of more essential items like groceries and prescription drugs from the tax.

Tax revenue will continue to fall as the economy suffers, and the economic diversity of the tax base will impact the extent of the decline. Areas dependent on tourism, hospitality, shipping and manufacturing are among those most likely to be immediately affected

as the coronavirus outbreak disrupts certain supply chains and weakens consumer demand for discretionary goods and travel. (See Appendix for the 15 states that account for the bulk of our special tax ratings.)

Early indications point to record unemployment, with initial jobless claims for the week ending March 21 rising to 3.3 million, per the US Department of Labor. The largest weekly increases (on an absolute basis) came in Pennsylvania, Ohio, New Jersey, Massachusetts, Texas, California and Michigan. Not only will earned income fall, but earnings from capital gains will suffer as the coronavirus continues to take a toll on the stock market.

Special tax debt secured by taxes drawn from a broader base tends to carry relatively high debt service coverage

Special tax debt secured by broader consumption and income taxes tends to have higher debt service coverage than that secured by narrower hospitality tax. For example, debt issued by cities, counties and other local special districts we rate has a median maximum annual debt service (MADS) coverage for sales- and income tax-backed debt of around 4.0x. Median MADS coverage for special tax debt secured by hospitality-based taxes is around 2.0x.

A dedicated reserve fund or supportive parent government strengthens credit quality of certain special tax debt

In cases where annual debt service coverage is narrow or the pledged revenue is highly exposed to the coronavirus outbreak, the presence of a debt service reserve requirement or a parent government's ability and willingness to step up and cover temporary shortfalls in pledged revenue will lift credit quality. A parent government's willingness is not guaranteed and hinges on political and other unpredictable factors.

Debt service reserve funds generally help avoid a default following temporary revenue disruptions. Nearly two-thirds of special tax bonds we rate have debt service reserve requirements — most commonly funded at a level equal to a standard three-prong test (the lesser of 10% of par, MADS, or 125% average annual principal and interest) or a level greater than or equal to MADS. An even larger share of rated bonds secured by the most vulnerable hospitality taxes have a debt service reserve requirement. While the presence of a reserve requirement is a credit strength, it is only as good as the trustee's willingness to tap it — which has not happened all of the time in the municipal market.

If debt service coverage is low and there is no reserve requirement, the financial strength of the state or local government that issued the debt, and its willingness to extend support if pledged revenue falls short, is a critical backstop. Exhibit 4 illustrates that parent government issuers of special tax debt tend to have high underlying credit quality.

Exhibit 4

Parent governments typically have strong investment-grade credit quality, signaling the ability to support shortfalls in pledged revenue for special tax debt

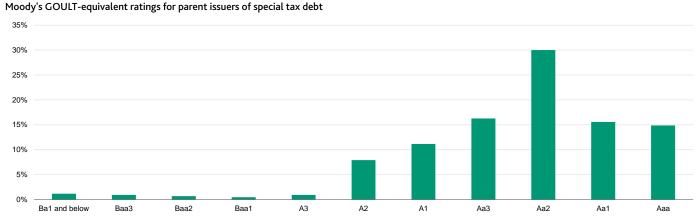


Exhibit does not include special-purpose entities without direct ties to a parent government. GOULT refers to general obligation unlimited tax. Source: Moody's Investors Service

Parent governments with otherwise sound credit quality and liquidity are better positioned to step up and cover temporary shortfalls in pledged revenue. Though not legally required, many governments may decide to support debt service payments to avoid reputational

risks associated with a default and preserve market access. Some special tax issuers are special-purpose entities without direct ties to a parent government.

Moody's related publications

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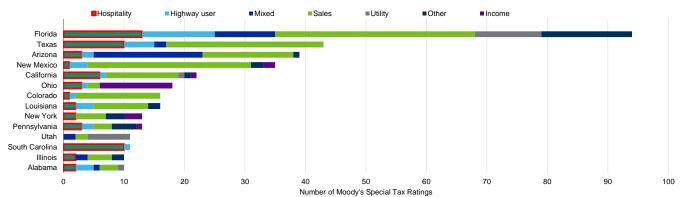
» Global Macro Outlook 2020-21 (March 25, 2020 Update): The coronavirus will cause unprecedented shock to the global economy, March 25, 2020

Sector In-Depth

- » Public finance US: Heat map Coronavirus will have broad effects across US public finance, March 20, 2020
- » Corporates Global: Heat map Coronavirus hurts travel-driven sectors, disrupts supply chains, effects compounded with global spread, March 16, 2020
- » Companies EMEA: Coronavirus will curb profitability and test the liquidity of lower rated companies, March 17, 2020

Appendix

Exhibit 5
Fifteen states account for over 75% of Moody's special tax ratings
Number of Moody's special tax ratings by state and pledged revenue type



Source: Moody's Investors Service

Endnotes

1 Data from STR for the week ending March 21 show hotel occupancy in the top-25 US hotel markets fell by 66% year over year and the average daily rate fell by 35% year over year. New York City's and San Francisco's hotel occupancy each fell by 80% for this period.

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