APPLETON PARTNERS, INC.

CORONAVIRUS AND MUNICIPAL CREDIT

AN ACTIVE, CONSERVATIVE INVESTMENT PROCESS

In times like these commitment to a conservative credit research process tends to demonstrate its value. While the magnitude and duration of Coronavirus impact is uncertain, we hold a portfolio of large, well-established issuers that we feel possess the high quality credit characteristics needed to successfully manage through economic unknowns.

Our approach to municipal credit is rooted in fundamental analysis that follows a consistent framework based on diverse research inputs. This supports our ability to understand credits well and factor ever changing dynamics into our research opinions and portfolio construction. Focusing on quality rather than speculation better positions our clients' municipal bonds to weather unforeseen events, while also providing us with the liquidity and flexibility active managers need to capitalize on market dislocation.

ESSENTIALITY DRIVES RESILIENCY

Many of the names in our municipal universe provide essential services. Long before Coronavirus became a global crisis, we built into our research process a focus on essentiality. Our belief is that when economic stress demands difficult decisions, municipalities and their constituents will be much more likely to retain support for projects, facilities and services that serve valuable everyday activities.

- State and local governments, hospitals, transportation entities (i.e. mass transit, airports, and toll roads), colleges and universities, and utilities (i.e. water & sewer and electric enterprises) all provide essential services.
- Utilities, in particular, exhibit valuable defensive characteristics. With more of the work force operating from home, increased service usage could translate into higher revenue generation.
- Although the current environment is weighing on credit spreads and a prolonged disruption could strain credit fundamentals, we are remaining up in credit quality.

When we look at essential service providers, we assess the diversity of their revenue streams and view concentration or reliance on any one rate payer unfavorably.

THE MERITS OF LARGE ISSUERS

At Appleton, we prefer large, well-established tax-exempt issuers, as we feel these credits often offer:

- Access to broad and diverse economies that are more resilient in stressful environments;
- Diverse revenue streams that can help offset volatility in one area or another;
- Healthy financial reserves that often include sizeable rainy-day funds;
- Multiple triggers that can be called upon to help maintain financial footing;
- Well-tenured, strong management teams with experience managing through economic cycles;
- Greater market access and enhanced bond liquidity;
- Strong investor relationships and a history of comprehensive financial disclosure.

STARTING FROM A POSITION OF STRENGTH

State and local governments are generally in better shape today than they were pre-2008, thereby affording a degree of financial flexibility should revenues materially underperform:

- Tax revenues have grown in 35 of the last 40 quarters. Fiscal YTD state tax revenues were up over 6%, outperforming budget expectations;
- This growth has facilitated a rebuilding of reserves. Median state rainy-day funds equaled 7.5% of expenses in 2019 vs. 1.9% in 2011. The comparable local municipal rainy day fund median equals 22% of expenses;
- Rebuilt balance sheets also reflect lower leverage (state debt outstanding has increased only 4.8% since 2011).

In the Revenue Bond area, we prefer issuers that operate in traditionally monopolistic sectors, such as water & sewer, electric utilities, and other essential government services. Where competition exists, such as healthcare, higher education, and airports or toll roads, we prefer entities that dominate their markets, as this leads to pricing power and inelastic demand.

We are spending a great deal of time looking at risk in sectors such as transportation, healthcare and sales-tax backed bonds, as they are likely to experience acute near-term pressure. While we have some exposure to these sectors, our consistently conservative approach gives us confidence that our holdings have the attributes needed to manage short-term disruption.

Coronavirus and Municipal Credit

Our top holdings in the Airport sector have enough cash on their balance sheets to cover normal operating costs for an average of 579 days. None of these issuers rely solely on Passenger Facility Charges, a revenue source that is directly correlated with enplanements. Los Angeles International Airport, one of our largest airport holdings, has sufficient liquid financial reserves to meet normal operating expenses for 531 days even if they received no revenue for that entire period.

Financial strength is also evident in our toll road and healthcare holdings. Approved toll road names would need to have revenues drop 40% for an entire year to reduce debt service coverage below 1.0x even without tapping balance sheet reserves. The median cash balance of our Toll Road Holdings covered nearly two years of operations (679 days). Our top hospital positions benefit from reserves covering 257 days of operations, although it is important to note that accelerated virus hospitalization levels would likely displace high revenue and high margin patient care with a greater percentage of much lower margin Medicare reimbursement.

Municipalities Have Effectively Managed Past Crises

Municipalities have long successfully operated through economic downturns while still providing essential constituent services. Although Coronavirus is first and foremost a health crisis, there will be economic impact. Looking back at recent stressed environments can be useful.

During the Financial Crisis, states experienced an $87 billion drop in tax revenues from October 2008 through September 2009, an 11% reduction compared to the prior 12 months. In response, states undertook a comprehensive and balanced approach to repairing their financial profile. From 2008 to 2009, 33 states enacted measures that increased tax revenues, while expenses were cut in 42 states by a cumulative 9% in 2009 and 2010. Reserves were also drawn upon, as is their purpose during times of fiscal stress.

Local governments, who also maintain some flexibility to adjust expenditures and revenues, are typically defensive during recessionary periods. On average, 80% of local government revenue is derived from property taxes, which tend to have lower elasticity than income and sales taxes and an inherent lag in declines. This gives municipalities time to adjust budgets.

Pensions remain a credit focus of our municipal team and a key element of issuer-specific analysis. While still a fixed cost for state and local governments, we believe progress is being made to improve benefit affordability. According to the National Association of State Retirement Administrators, nearly every state pension plan has enacted benefit reforms since the last recession. While some issuers face outsized unfunded pension liabilities, state and local governments are now generally better able to afford current and future retiree costs.

Historical Default Rates Are Low

The municipal market has a low default history, as essentiality and financial flexibility provide support during challenging times. Defaults that have occurred have primarily been in sub-investment grade or non-rated issuers, and concentrated in sectors such as senior living, affordable housing, charter schools and project financings.

Since 1970, the first year Moody's began tracking rated-defaults, there have been 117 defaults by Moody's-rated issuers, a very low 0.16% of issuers over that period. Although defaults have ticked up since the Financial Crisis, the rate remained only 0.29% from 2009 through 2018. Focusing more narrowly on investment grade names, the post-1970 default rate drops to 0.10% and 0.22% since 2009. By contrast, investment grade corporate entities experienced default rates of 2.28% and 1.20% over the same time periods.

As this situation develops, we will continue to carefully monitor impact on the markets and our credits, maintaining an emphasis on conservative fundamental research and active portfolio management.

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