

MUNICIPAL CREDIT OBSERVATIONS

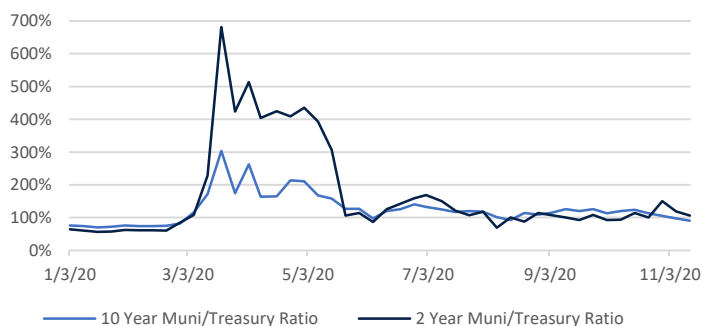
NOVEMBER 2020

A New Beginning Awaits

To say the least, 2020 has been a year like no other and turning the page to 2021 is most definitely welcome. The onset of COVID-19 shocked healthcare systems, the economy, and municipalities across the nation. Fortunately, the capital markets have recovered extraordinarily well, although an ongoing surge in COVID cases indicates that we are not yet out of the woods. As the New Year approaches, let’s look at the state of municipal credit quality.

In [early May](#) amid extensive pandemic-driven commercial restrictions we emphasized the importance of differentiating credits likely to hold up well in a very difficult environment from those with much greater vulnerability. Back on March 20th, the 2-year and 10-year AAA municipal/UST ratios had soared to 681% and 303% respectively; this severe dislocation suggested to us that many high-quality municipal bonds were significantly undervalued. Security specific analysis is critical, and we caution against generalizing credit risk, nonetheless our belief that larger issuers with diversified revenue streams, substantial reserves, and management acumen would weather the storm has so far proven to be the case. That said, credit vigilance remains imperative.

2 and 10 year AAA Muni/Treasury Ratio



Source: Refinitiv MMD

State Revenue Resilience

The extent to which state revenues have held up during 2020 will likely surprise most observers. According to JP Morgan, state tax receipts measured YTD through September for the 47 states reporting data reveals an average decline of just 1.03% vs. 2019. For the 27 states that have published October numbers, the median YOY monthly growth in tax collections was 1.9%, suggesting that positive trends continue. Federal stimulus has been a contributing factor, although economic dynamics arguably play a larger role.

It is an unfortunate reality that the majority of 2020 job losses have been in lower paying service industries, particularly those associated with travel and entertainment. Higher paying white-collar jobs are better able to adapt to a remote work environment and have been far less affected. Correspondingly, state budgets in tourist dependent states such as Nevada (-15.9%), Hawaii (-12.5%), and Florida (-11.0%) have incurred the largest YOY tax revenue shortfalls on a YTD basis.

Fortifying Resources in an Uncertain Environment

Despite promising vaccine news, tough economic times brought on by the pandemic remain with us. As we write, economic restrictions are increasing not receding, and state and local municipalities still face a challenging budget cycle. Earlier this year we pointed to robust state reserves and a variety of financial levers stronger issuers have at their disposal as reasons to be optimistic about our bond holdings’ credit quality. Looking ahead, comparing recent revenue trends to budget projections offers a useful credit indicator.

Most states’ fiscal years begin on July 1st, a timetable that requires formulating budget projections in April and May. Those were some of the worst days of the pandemic, leading to conservative assumptions. The satisfaction level of markets, like human beings, is often calibrated relative to expectations, and the first three months of the new fiscal year have generally exceeded low hurdles. The nine states that report monthly budget details saw Q1 (July to September) revenue outperform assumptions by an average of 13%. California now projects a \$26 billion FY 2021 surplus driven by greater than expected income and capital gains tax revenues and the impact of budget cuts. While we do not know if positive state budget momentum will be sustained, a significant fiscal buffer is being established.

State Revenue Running Ahead of Budget Estimates

State	Fiscal YTD Revenue (\$ millions)	% change from FY20	% change from Estimate
Kansas	2,253	5.1%	+29.7%
Indiana	4,981	26.0%	+23.4%
California	54,359	69.9%	+15.4%
Minnesota	5,720	2.4%	+12.7%
Idaho	1,112	18.4%	+10.2%
Arkansas	1,743	15.0%	+10.0%
West Virginia	1,239	12.8%	+7.9%
Nebraska	1,645	26.7%	+5.4%
Ohio	6,589	14.3%	+4.1%

Source: Bank of America

Property and Sales Taxes Have Mitigated Municipal Pain

In stark contrast to the Great Recession of 2008-09, the housing sector has been an economic bright spot as extraordinarily low interest rates have buttressed demand. Property taxes provide an average of about 80% of local government revenue and the inherent lag in property values and assessments relative to economic conditions is also favorable for near-term budget stability.

Cities that publish monthly data, such as Houston, Philadelphia, and New York, reported that January through July revenues declined on average by less than 5% YOY. New York City's revenues from March through August were down only 3.5% YOY. Property taxes alone, which represent a third of City revenue, increased 3.9% over the same period.

State and local sales taxes have also been more stable than anticipated. Federal stimulus payments have supported consumption, while a shift in economic activity towards goods rather than services has helped insulate municipal revenue streams, as many services are not subject to sales taxes. As a frame of reference, 40 states reporting YTD sales tax revenue posted an average YOY decline of only 1.01%.

Politics Clouds State and Local Aid Prospects

Expectations of further state and local aid have diminished in recent months. While we feel additional support remains likely at some point, it will not be anywhere near the House's once proposed \$1 trillion. We would be happy to see \$250-350 billion. Much larger aid packages are not politically feasible and may no longer be needed given a recovery in state and local revenue. Should additional federal support materialize, in most cases it would reduce the need for painful budget cuts in areas such as personnel and education rather than representing resources needed to meet debt obligations. The DC municipal aid debate does not materially factor into our credit research or proprietary ratings.

What About Revenue Bonds?

Reliance on revenues associated with a bond's intended purpose rather than taxes demands more narrowly focused due diligence. [Credit briefs](#) we published last Spring evaluated the sustainability of our revenue bond issuers' debt coverage levels through scenario-based stress testing. Healthcare, higher education, toll road, airport authority and port holdings were scrutinized with conservative revenue loss assumptions and the results gave us confidence that all these issuers would be able to meet their debt obligations. So how have vulnerable sectors fared since that time?

Healthcare

As elective procedures returned during 2Q 2020, patient volumes and sector revenues accelerated off depressed levels. As always, sector trends do not translate equally at the issuer level. Capacity remains constrained in certain markets and rural hospitals often lack the operational efficiency of larger, more urban hospitals. Our preference for size, breadth of services, and financial flexibility has been beneficial, as COVID-19 has exposed a growing divergence between strong and weak healthcare providers.



Higher Education

Enrollment weakness and rising expenses associated with efforts to open campuses have stressed higher education providers. The extent of these challenges is reflected in data provided by the National Student Clearinghouse Research Center which reported that undergraduate enrollment was down 4% YOY through Fall 2020. Strikingly, first year enrollment declined by more than 16%.

Our higher education holdings are comprised of private institutions with consumer demand, solid financial operations, and sizeable balance sheet resources, coupled with flagship public institutions that enjoy consistent state support and enrollment appeal. As communicated in [late May](#), we evaluate numerous credit metrics, including stress testing revenues, and remain comfortable with the credit standing of our higher education bonds.



Toll Roads

The Energy Information Administration's weekly Finished Motor Gasoline Supplied reading serves as a proxy for highway utilization and that indicator has rebounded sharply. Down more than 48% YOY during the depths of the pandemic, this measure has since recovered YOY to -6% as of November 6th. Monthly reports from toll road bond issuers in which we invest indicate that while this has been a very tough year, revenue shortfalls are not likely to introduce serious credit concerns. This sample revealed that average YOY traffic at the end of October declined by 15%-20% and toll revenues by 10%-15%. An earlier return of commercial highway traffic helped, as auto travel was slower to rebound.



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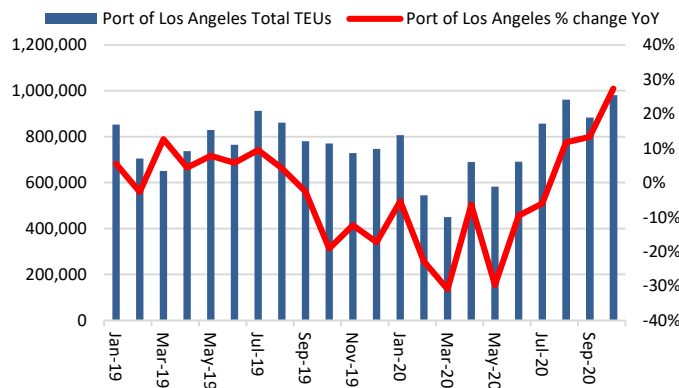
Airports and Mass Transit

Massive declines in business and consumer travel are fallouts of the pandemic. It probably does not come as a shock that as of November 16th the rolling seven-day average of TSA airport passenger activity had declined 64% YOY. On a brighter note, that is an improvement from negative 95% YOY levels last Spring. Mass transit ridership in major urban centers has plummeted YOY by roughly 70%. Bond issuers in these sectors have been reliant on Federal and State aid as well as reserves to cover shortfalls. Once again, economic essentiality and balance sheet strength have risen to the forefront as management teams are forced to bridge large fiscal gaps prior to a return to greater normalcy. Internal analysis gives us confidence in our holdings, while the promise of vaccine availability raises hopes that the New Year will see increases in airport and mass transit utilization.

Ports

The current economic picture has been much brighter for manufacturing than services, a stark change from past years. Accordingly, larger, more economically vital US ports have seen a healthy recovery in commercial shipping and related economic activity. For example, on a calendar year basis through October, Port of Long Beach volume was up 2.3% vs. 2019 and the Port of Los Angeles was down a manageable 5.3%. This speaks to scale and economic essentiality, characteristics we seek in municipal issuers.

Port of Los Angeles TEUs



TEUs are twenty-foot equivalents, a common cargo capacity measure
Source: Port of Los Angeles

Strength in the Face of Adversity

The pandemic rages on with winter approaching. Expanding economic restrictions in the face of another wave of infection will add to the strains faced by municipalities. Much yet remains unknown relative to vaccine efficacy, including how widely and quickly vaccination will become available. Nonetheless, the municipal fiscal picture is in our view healthier than market commentary often suggests. And as we have long emphasized, municipal defaults are rare. Despite severe conditions, the 60 defaults reported by Municipal Market Analytics during the 1H of 2020 represented only about 0.45% of outstanding tax-exempt bond issues. All YTD defaults were non-investment grade and 56% were in the nursing home sector.

These are extraordinary times, yet in any environment we look to stay up in quality with a focus on bond issuers with the financial resources and flexibility needed to address budget gaps. Credit quality is a function of many factors, including an ability to adjust to adverse conditions. We look to 2021 with belief in the stability of the municipal market and the credit strength of the bonds we own.

High Grade Municipal Defaults Have Been Rare

	10-yr. Cumulative Default Rates	
	Muni	Corporate
Investment Grade	0.10%	2.25%
All Rated	0.16%	10.17%
Speculative Grade	7.29%	28.68%
Default Rate Since 2010		
Investment Grade	0.12%	1.04%
All Rated	0.21%	9.43%
Speculative Grade	8.16%	23.98%

Source: Moody's Investors Service, US Municipal Bond Defaults and Recoveries, 1970-2019

Accessibility and communication are important in any environment, although these attributes are especially valuable during uncertain and volatile times. Appleton Partners is committed to sharing our market and portfolio management perspectives as developments unfold. We hope these briefs are helpful and also invite you to reach out to us directly and/or visit www.appletonpartners.com/Insights for additional commentary and insights.

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