WILMINGTON TRUST

Quarterly Market Commentary

Municipal Fixed Income

3Q | 2019

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Supply Moves into the Spotlight—with a Taxable Twist

Municipal performance remained strong in the third quarter despite softer technical indicators. The S&P Municipal Bond Index returned 1.56% for 3Q19 compared to 2.12% for 2Q19. This reflects positive returns in the first two months of the quarter, while September generated a negative total return of –0.65%, the first negative return since October 2018. The broad market index, containing bonds across all maturities, returned 6.57% through 3Q, well exceeding the 2018 full year return of 1.36%.

Issuance picks up but supply/demand imbalance remains

Robust demand continued to outpace supply despite increased issuance. Consistent weekly inflows led to total reported mutual fund flows of $69.5 billion through the 3Q19; the highest year-to-date total since Lipper began collecting this data over 25 years ago. These historic inflows drove credit spreads near 10-year lows.

Municipal issuance picked up in the 3Q following muted supply the first half of the year. Supply in the first two quarters averaged $86 billion while third quarter supply rose to nearly $106 billion. YTD issuance of $277 billion represents a 10% year-over-year increase but remains well below historical averages.

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Taxable issuance trending

Municipal issuers are increasingly turning to the taxable debt market to refund tax-exempt debt, a result of the Tax Cuts and Jobs Act of 2017. The tax law change eliminated municipal issuers' ability to advance refund most tax-exempt debt, limiting opportunities to reduce interest costs. However, the current low rate environment combined with tight differentials between tax-exempt and taxable interest rates provides municipal issuers a means to reduce interest costs by replacing tax-exempt debt issued in a higher rate environment with taxable debt at today's lower rates.

Historic low yields in August

U.S. Treasury and municipal yields declined during much of the third quarter with municipal yields reaching record lows in late August for maturities 10 years and longer.

AAA Benchmark historic lows reached August 29

10 year	1.21%	Historic Low
15 year	1.44%	Historic Low
20 year	1.64%	Historic Low
25 year	1.78%	Historic Low
30 year	1.83%	Historic Low

Muni/Treasury ratios higher

At quarter end, municipal/treasury ratios stood above those of the prior quarter, reflecting municipal underperformance as treasuries rallied. The benchmark 10-year AAA municipal/treasury ratio finished 3Q19 at 88%, higher (cheaper) than the 2Q19 ratio of 81%. Notably, the long-term average for the ratio is 91% which highlights the relative richness of the market despite the uptick.

AAA municipal to U.S. Treasury ratio

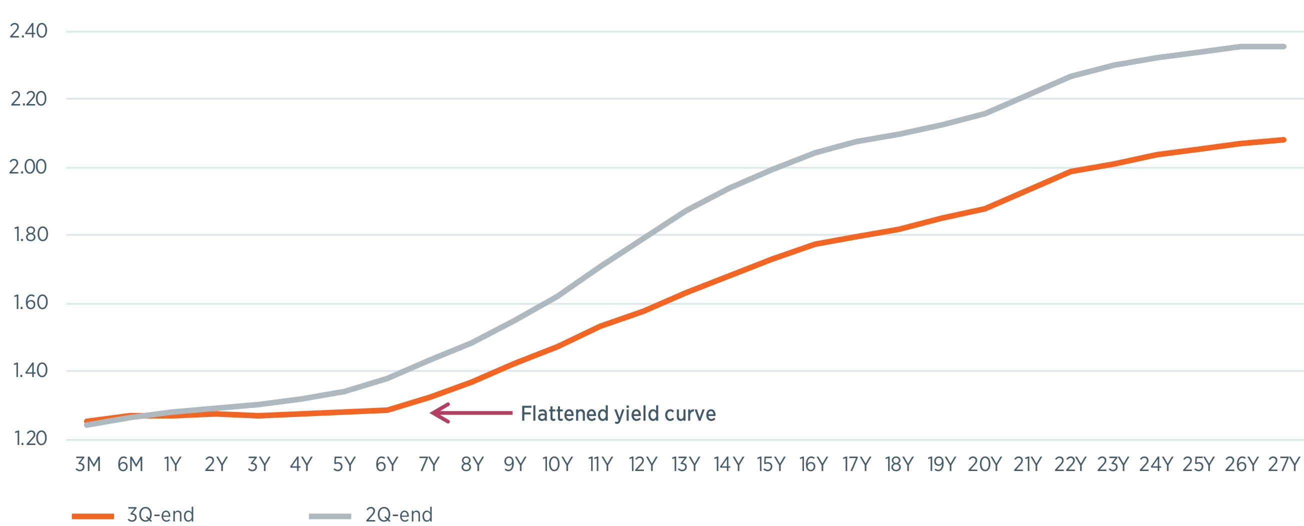
	9/30/19	6/30/19	12/31/18
2 years	78.387	73.519	72.289
5 years	82.913	75.778	77.866
10 years	88.355	80.857	86.294
30 years	99.905	94.862	102.421

Source: Bloomberg Valuation Service (BVAL).

Yield Curve Flattening

The AAA municipal yield curve flattened from 2Q19 to 3Q19 as the Fed lowered rates once in July and once in September (Figure 1).

Figure 1
Quarter-end BVAL AAA municipal yield curve flatter in 3Q



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SALT suit dismissed

A federal judge dismissed a suit brought by the states of New York, New Jersey, Connecticut, and Maryland which claimed the 2017 Tax Cuts and Jobs Act's $10,000 cap on State and Local Tax (SALT) deductions was unconstitutional. New York, New Jersey, and Connecticut also brought suit against final rules of the U.S. Treasury and the IRS which eliminated the states' workarounds of the SALT cap through methods such as charitable trusts. As long as SALT remains in place, tax-exempt municipal bonds may serve as important tools to minimize the tax burden of investors subject to these caps. This should cause yields in high tax states to remain lower than those in low tax states.

Sector and quality views

We continue to favor a moderate overweight to government-backed housing sector and pre-refunded/escrowed-to-maturity bonds. With triple-B spreads reaching ten-year tights relative to AAA-rated municipals, we will look to take profits on select triple-B securities and rotate into higher quality securities. Relative value offered by short-term variable rate bonds in the current flat yield curve environment reaffirms our decision to increase exposure to these instruments. These strategies provide heightened quality while increasing risk-adjusted yields.

Clyde B. Lane, Jr.
Research Analyst

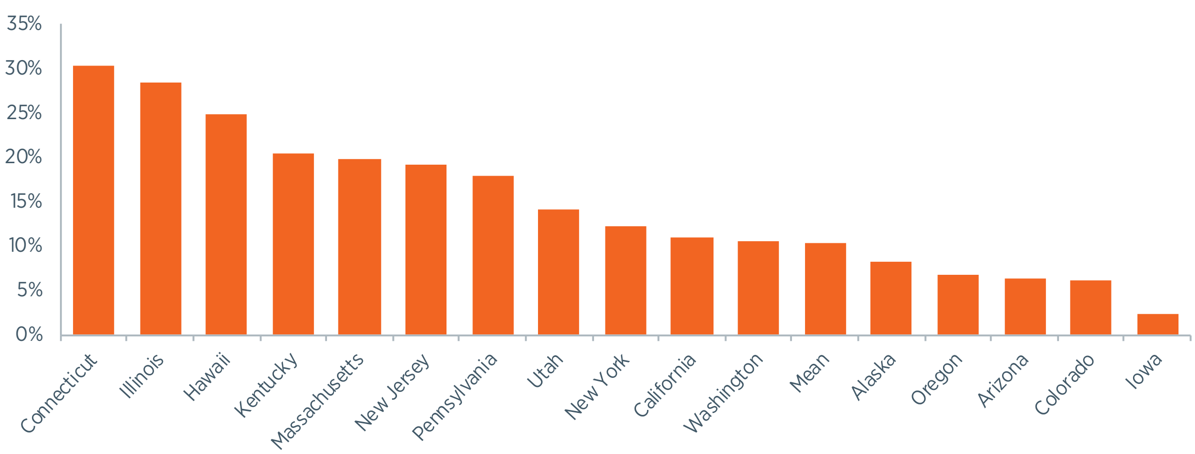
Fixed Costs Could Lead to Broken Finances

Growing municipal pension liabilities are a frequent topic of concern in the financial press, but a related subject has received less focus. Growing fixed costs, which include pension contributions, deserve attention as they are outpacing revenue growth for many municipalities, comprising a larger and larger percent of the budget and sometimes, crowding out other spending priorities. This is occurring during a time of economic growth. When economic headwinds emerge, municipalities will have a steeper climb to achieve a balanced budget. Falling, or even stagnant, revenues could have a drastic impact on municipal budgets and, in turn, the services upon which the public relies.

For purposes of this discussion, fixed costs are defined as debt service, pension, and OPEB (other post-employment benefits) contributions. These costs are largely not negotiable, and failure to pay has dire consequences: Fail to pay bondholders, and a government can lose all access to capital markets. Fail to pay pensioners, and the courts will likely intervene.

Recent Moody's data highlighted state fixed costs as a percent of state own source revenue. Among the states, Connecticut, Illinois, and Hawaii are relative outliers with fixed costs exceeding 24.8% of state revenue (Figure 2).

Figure 2
Fixed costs as % of own source revenue for selected states



Source: Moody's Investors Service, "*States—US: Medians – Adjusted net pension liabilities spike in advance of moderate declines*," August 27, 2018.

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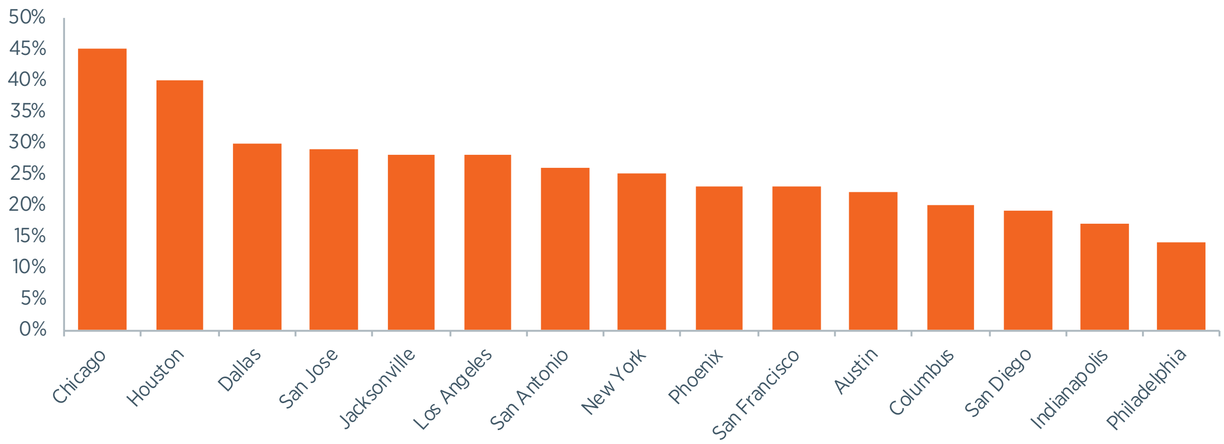
Figure 3
Fixed costs as % of total governmental expenditures



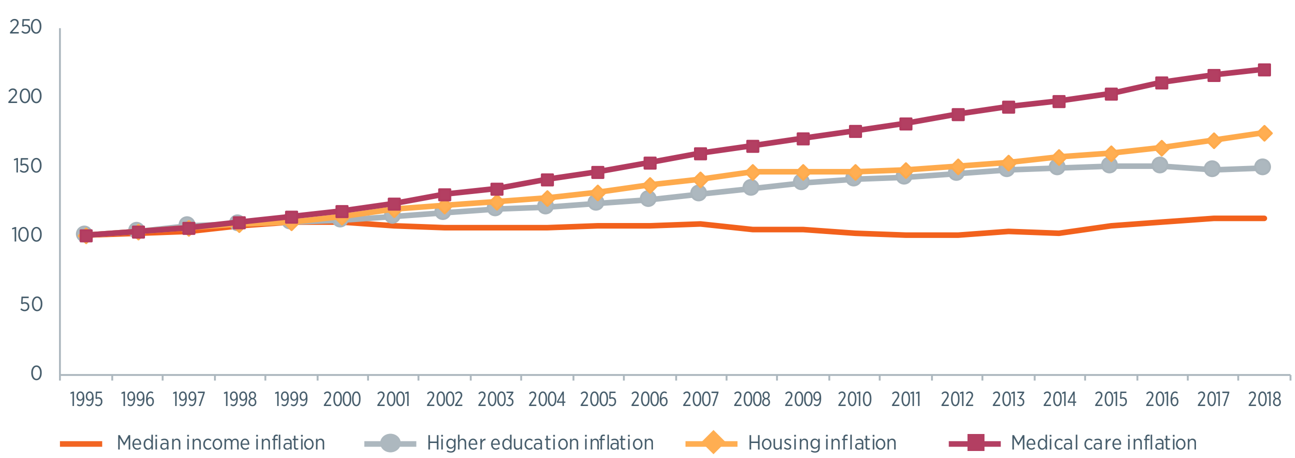
Source: S&P Global Ratings, "*Fifteen Largest U.S. City Pensions See Modest Gains In 2018, But Recession Risk And Rising OPEB Cost Challenges Persist.*"

S&P recently examined fixed costs among the 15 largest U.S. cities. As a percent of total governmental expenditures, fixed costs exceeded 25% on average (Figure 3). These expenditures are expected to grow.

Municipalities with high and growing fixed costs face an increasingly formidable obstacle to any new spending initiatives and even existing public safety and public works spending. Notably, the judiciary has taken a position that places the interest of pensioners ahead of bondholders, which, in some cases, has had a severe effect on a government's ability to provide funding for roads, schools, hospitals, and social services—programs whose own expenses have been rising steadily. Examples can be found in the bankruptcy proceedings of Detroit, MI, and Stockton, CA, with the latter suffering a severe cut in its police force, along with a 25% reduction in the city workforce over a three-year period.[1]

Tax rate increases are unlikely to provide a solution to the municipal budget problem as taxpayers are already pressured by the steadily increasing cost of living, as documented in this chart from the Federal Reserve below (Figure 4).

Figure 4
Since 1995, critical consumer expenses have grown faster than income
1995 = 100



Source: Federal Reserve Economic Database: https://fred.stlouisfed.org.

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In spite of these challenges, there are some positive developments. New accounting rules have forced local governments to adopt more realistic assumptions regarding pension fund investment returns, and in some cases, to initiate comprehensive pension reforms. Although this has a negative effect on reported funding levels, it helps facilitate larger contributions. A good case-in-point is the state of Minnesota, which in 2017 lowered its pension liability discount rate. (This is the rate of return the state will expect on its investment portfolio, the lower the rate, the higher the liability.) While this caused a spike in its reported unfunded pension liability, the state has since taken measures to increase employer and employee contributions to close the gap over time. This can be viewed as a positive step forward. Similarly, the city of Memphis, TN, executed a reform program that requires increased employer and employee contributions, in order to bring pension funding to more sustainable levels. This entailed eliminating, then partially reinstating, a 70% retiree health care subsidy, as well.[2]

All told, fixed costs are a large and growing problem for some municipalities. A careful examination of such costs is a critical component of Wilmington Trust's review prior to the purchase of any municipal bond. We view favorably state and local efforts to address growing fixed costs in a meaningful manner.

[1] Badenhausen, Kurt, "*Stockton Moves From Miserable to Bankrupt,*" Forbes, June 29, 2012, https://www.forbes.com/sites/kurtbadenhausen/2012/06/29/stockton-moves-from-miserable-to-bankrupt/#153fc49d2155.

[2] WMCA-TV: https://www.wmcactionnews5.com/story/33669957/city-of-memphis-reintroduces-benefits-for-retirees-under-65/ November 9, 2016.

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Selected S&P Municipal Bond Index totals and averages

	AS OF SEPTEMBER 30, 2019								
	Number of holdings	Market value (in $ billions)	Coupon	Yield-to-worst	Maturity	Maturity (in yrs.)	Priced-to-date	Priced-to-date (in yrs.)	Effective duration
Municipal Bond	198,217	2,438.71	4.359	1.888	04/02/2032	12.504	03/08/2025	5.44	5.408
Investment Grade (IG)	189,514	2,281.79	4.456	1.766	09/23/2031	11.974	01/30/2025	5.34	5.316
Intermediate	113,666	1,166.32	4.496	1.664	04/06/2028	8.519	02/01/2025	5.34	4.841
IG Intermediate	110,099	1,118.70	4.493	1.601	04/01/2028	8.505	02/09/2025	5.36	4.871
Short Intermediate	80,280	803.33	4.554	1.435	12/23/2023	4.225	05/18/2023	3.63	3.302
IG Short Intermediate	77,132	766.03	4.546	1.395	01/02/2024	4.252	06/02/2023	3.67	3.343
Short	45,718	450.95	4.551	1.340	11/13/2021	2.119	10/12/2021	2.03	1.909
IG Short	43,416	422.91	4.526	1.321	11/18/2021	2.132	10/19/2021	2.05	1.925
High Yield	8,703	156.92	3.415	3.675	12/15/2039	20.214	08/25/2026	6.92	6.745
High Yield Ex-Puerto Rico	8,525	135.02	3.762	3.689	06/13/2039	19.702	05/16/2026	6.64	6.202
California	27,839	391.15	4.111	1.735	05/31/2033	13.659	06/09/2025	5.70	5.750
New York	12,884	288.41	4.518	1.737	10/03/2032	13.000	12/08/2024	5.20	5.199
Puerto Rico	232	24.41	2.150	3.465	11/17/2041	22.141	04/16/2028	8.57	9.646

Sources: Wilmington Trust Investment Advisors, Investortools, Inc., S&P Dow Jones Indices LLC, ICE Securities Evaluations, Inc.
Index calculations by Investortools, Inc. Custom Index Manager, the Federal Reserve System.

DISCLOSURES

The S&P Municipal Bond Index is a broad, market value-weighted index that seeks to measure the performance of the U.S. municipal bond market. It tracks fixed-rate bonds exempt from federal income tax, though they may be subject to the alternative minimum tax (AMT), with par outstanding of at least $2 million. The index includes bonds of all quality ratings–from AAA to non-rated, including defaulted bonds–and from all sectors of the bond market. The S&P Municipal Bond Index constituents undergo a monthly review and rebalancing.

The S&P Municipal Bond Investment Grade Index consists of bonds in the S&P Municipal Bond Index that are rated at least BBB- by Standard & Poor's, Baa3 by Moody's, or BBB- by Fitch Ratings. For the avoidance of doubt, the lowest rating is used in determining if a bond is eligible for the Index. S&P Dow Jones Indices looks at the long term rating, either insured or uninsured, and the underlying rating for index inclusion. All bonds must also have a minimum maturity of three years and a maximum maturity of up to, but not including, fifteen years, as measured from the rebalancing date.

The S&P Municipal Bond Intermediate Index consists of bonds in the S&P Municipal Bond Index with a minimum maturity of three years and a maximum maturity of up to, but not including, 15 years, as measured from the rebalancing date.

The S&P Municipal Bond Investment Grade Intermediate Index consists of bonds in the S&P Municipal Bond Index that are rated at least BBB- by Standard & Poor's, Baa3 by Moody's or BBB- by Fitch Ratings. All bonds must also have a minimum maturity of three years and a maximum maturity of up to, but not including, fifteen years as measured from the rebalancing date.

The S&P Municipal Bond Short Intermediate Index consists of bonds in the S&P Municipal Bond Index with a minimum maturity of one year and a maximum maturity of up to, but not including, eight years, as measured from the rebalancing date.

The S&P Municipal Bond Investment Grade Short Intermediate Index consists of bonds in the S&P Municipal Bond Index that are rated at least BBB- by Standard & Poor's, Baa3 by Moody's or BBB- by Fitch Ratings. All bonds must also have a minimum maturity of one year and a maximum maturity of up to, but not including, eight years as measured from the rebalancing date.

The S&P Municipal Bond Short Index consists of bonds in the S&P Municipal Bond Index with a minimum maturity of six months and a maximum maturity of up to, but not including, four years, as measured from the rebalancing date.

The S&P Municipal Bond Investment Grade Short Index consists of bonds in the S&P Municipal Bond Index that are rated at least BBB- by Standard & Poor's, Baa3 by Moody's or BBB- by Fitch Ratings. All bonds must also have a minimum maturity of six months and a maximum maturity of up to, but not including, four years as measured from the rebalancing date.

The S&P Municipal Bond High-Yield Index consists of bonds in the S&P Municipal Bond Index that are not rated or whose ratings are less than or equal to BB+ by Standard & Poor's, Ba1 by Moody's, or BB+ by Fitch Ratings. Bonds that are prerefunded or escrowed to maturity are not included in this index. The lowest long-term underlying rating, either insured or uninsured, is used in determining if a bond is eligible for the Index.

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Selected S&P Municipal Bond Index total returns

	AS OF SEPTEMBER 30, 2019			CALENDAR
	MTD	QTD	YTD	2018
Municipal Bond	–0.646%	+1.555%	+6.571%	+1.356%
Investment Grade (IG)	–0.690%	+1.471%	+6.376%	+1.125%
Intermediate	–0.775%	+1.275%	+6.175%	+1.546%
IG Intermediate	–0.802%	+1.248%	+6.144%	+1.394%
Short Intermediate	–0.594%	+0.643%	+3.906%	+1.777%
IG Short Intermediate	–0.612%	+0.629%	+3.901%	+1.684%
Short	–0.290%	+0.391%	+2.429%	+1.778%
IG Short	–0.299%	+0.380%	+2.402%	+1.717%
High Yield	+0.000%	+2.807%	+9.567%	+5.226%
High Yield Ex-Puerto Rico	–0.095%	+2.415%	+8.744%	+3.258%
California	–0.713%	+1.624%	+6.707%	+1.077%
New York	–0.757%	+1.389%	+6.419%	+0.918%
Puerto Rico	+0.605%	+5.160%	+14.769%	+23.698%

Sources: Wilmington Trust Investment Advisors, Investortools, Inc., S&P Dow Jones Indices LLC, ICE Securities Evaluations, Inc. Index calculations by Investortools, Inc. Custom Index Manager.

The S&P Municipal Bond High Yield Index Ex-Puerto Rico is designed to measure bonds in the S&P Municipal Bond Index that are not rated or are rated below investment grade, excluding Puerto Rico

The state level municipal bond sub-indices consists of bonds in the S&P Municipal Bond Index that have been issued by municipalities or municipal authorities within the respective states, the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands. States and municipalities may have issues across the duration and quality spectrums or may be more concentrated to certain sub-indices, such as in the S&P Investment Grade or High Yield bond indices.

The S&P Municipal Bond Puerto Rico Index consists of bonds in the S&P Municipal Bond Index issued by the Commonwealth of Puerto Rico, and municipalities and municipal authorities within the Commonwealth. Individually these entities may have issues across the duration and quality spectra; however, as a general matter they have been increasingly concentrated in the S&P High Yield Bond Index.

Indices are not available for direct investment. Investment in a security or strategy designed to replicate the performance of an index will incur expenses, such as management fees and transaction costs, which would reduce returns.

Quality ratings are used to evaluate the likelihood of default by a bond issuer. Independent rating agencies, such as Standard & Poor's and Moody's Investors Service, analyze the financial strength of each bond's issuer. Moody's ratings range from Aaa (highest quality) to C (lowest quality). Bonds rated Baa3 and better are considered "Investment Grade." Bonds rated Ba1 and below are "Below Investment Grade" (also "High Yield" or "Speculative"). Similarly, Standard & Poor's ratings range from AAA to D. Bonds rated BBB– and better are considered "Investment Grade" and bonds rated BB+ and below are "Below Investment Grade."

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