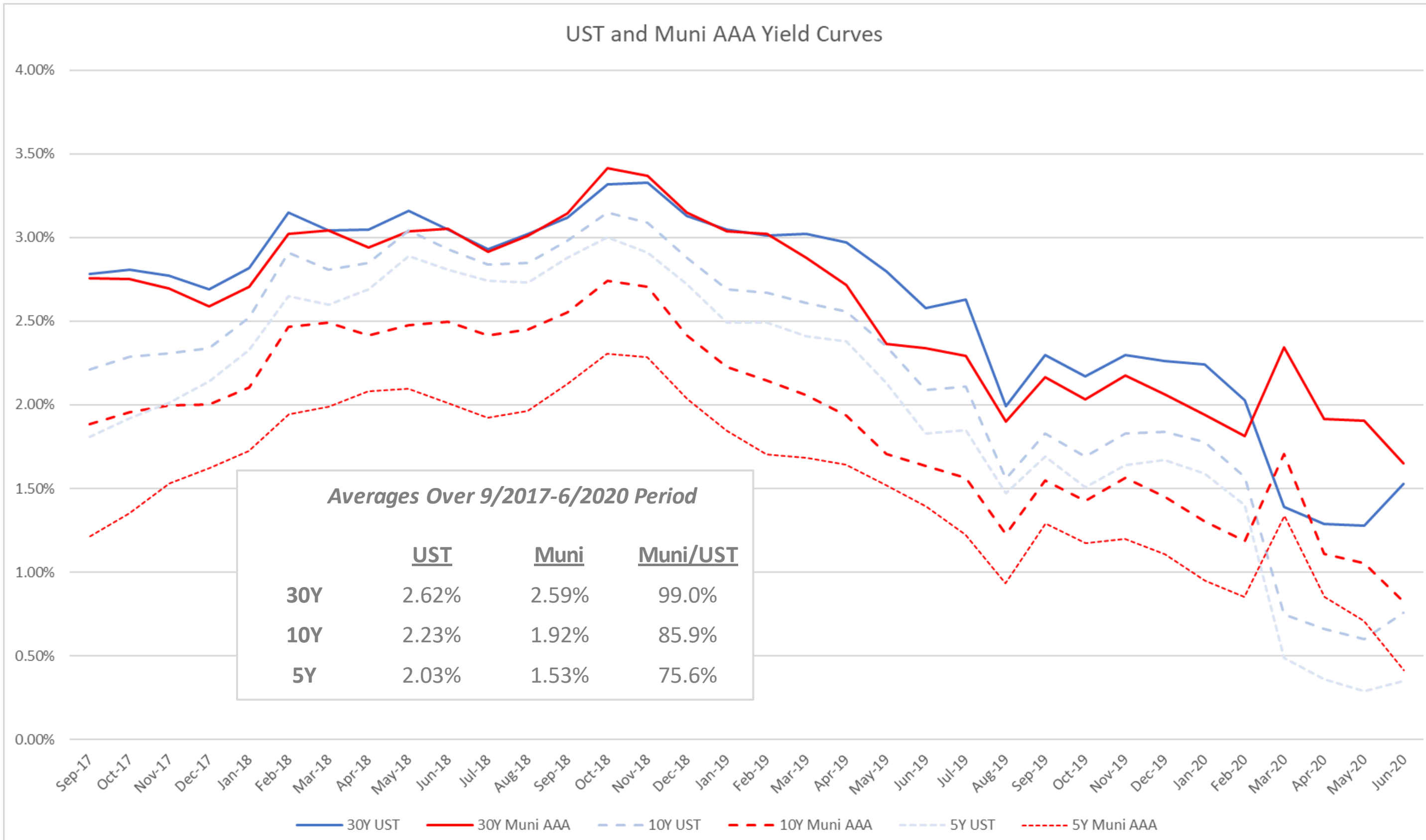
WIFIA Historical Benchmark Data
Series 09-2017 to 06-2020

Data Summary

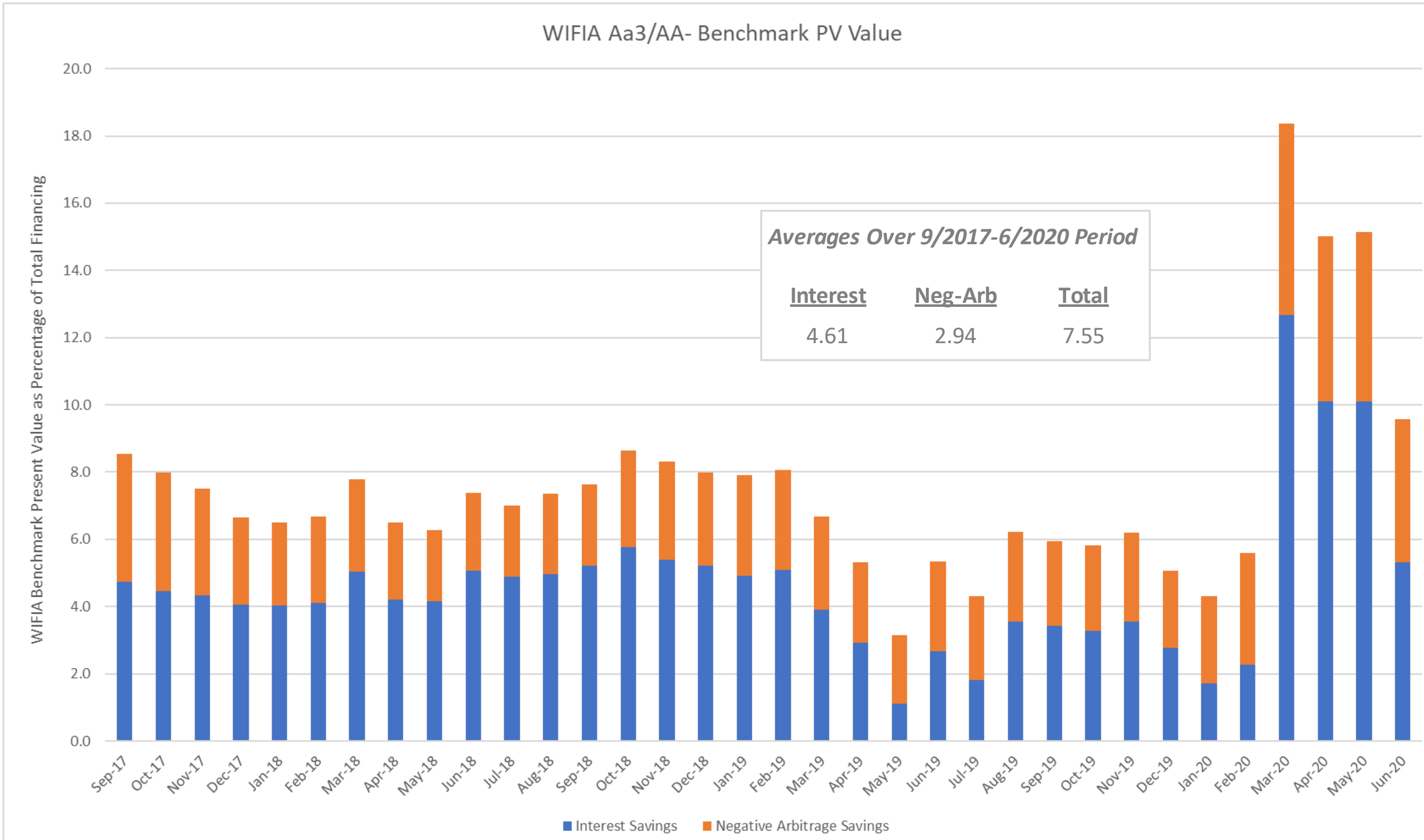
June 2020

1. US Treasuries and AAA Muni Bond Yield Curves



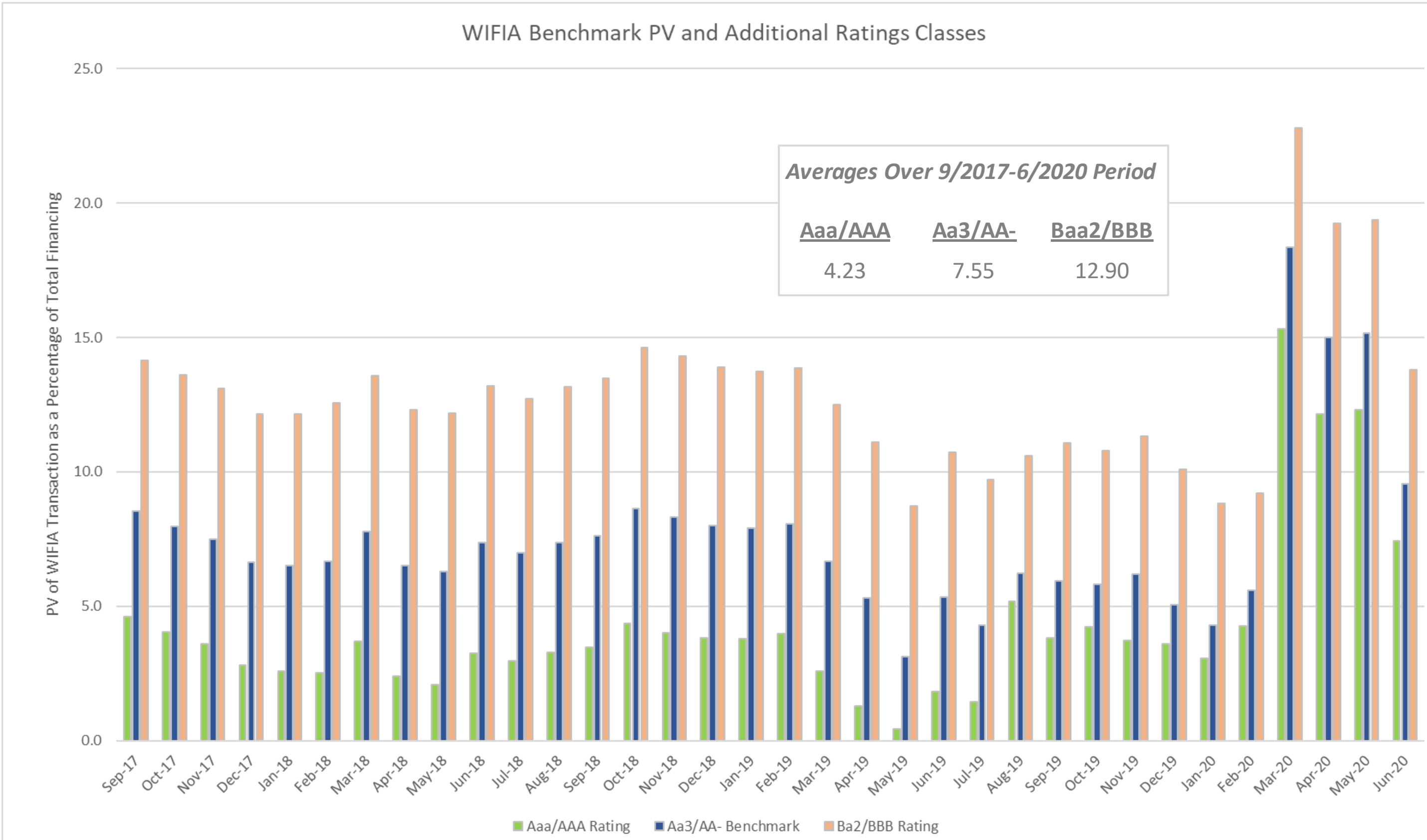
For highly rated public water agencies, the value of a WIFIA loan is primarily determined by the relationship between US Treasury rates (offered by WIFIA) and tax-exempt municipal water revenue bonds (their traditional alternative). In general, Treasuries and munis are highly correlated, except in unusual market circumstances (the Covid-19 liquidity crisis in Q1 2020).

2. WIFIA Benchmark Value and Components



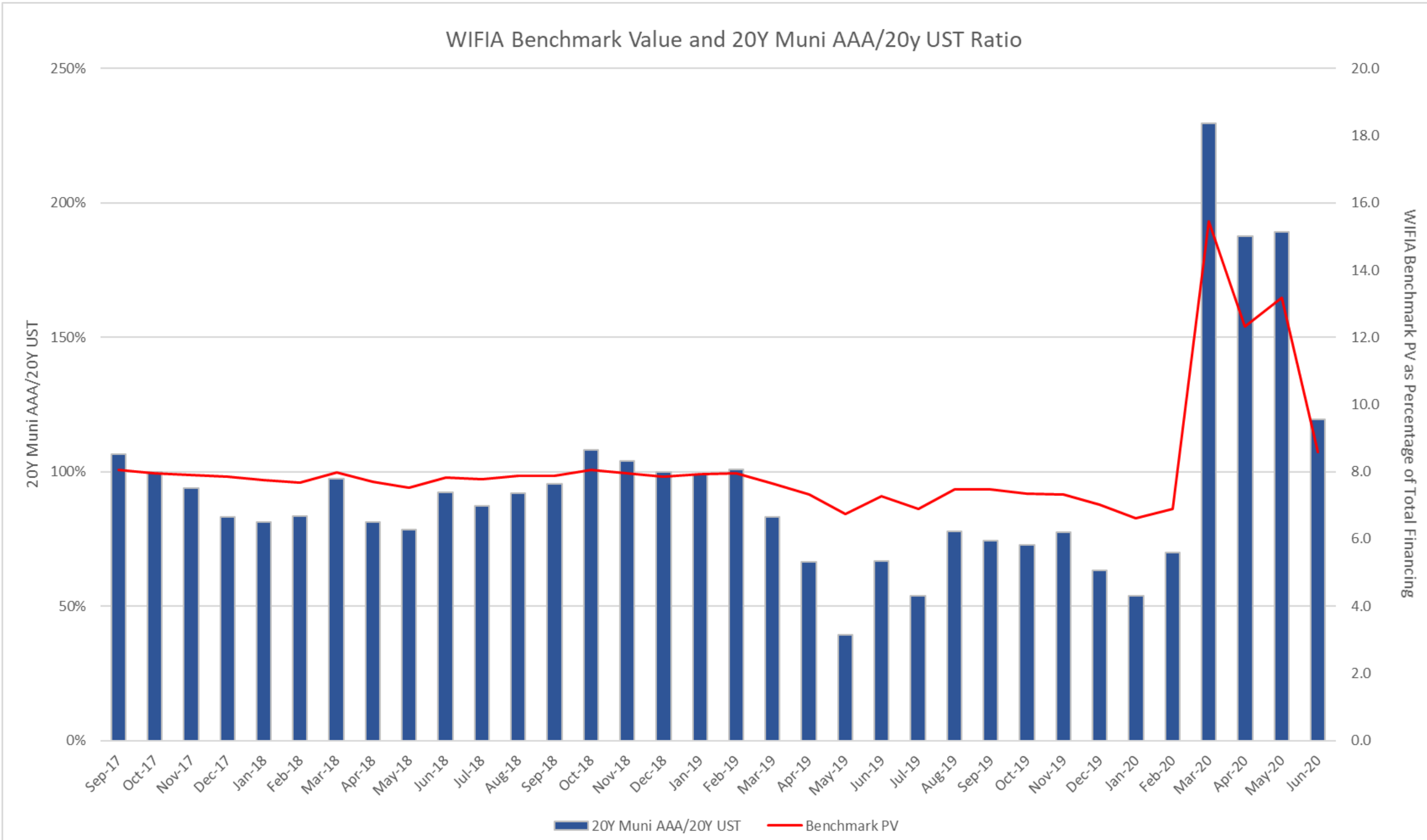
Benchmark value is determined from UST and muni market data applied to common project capitalization assumptions (see Methodology). The primary metric, the PV of debt service savings, can be divided into two components: Interest cost savings over the full term of the financing and the avoided cost of negative arbitrage during the construction phase. Both components vary in amount and relation to each other depending on relevant market rates.

3. WIFIA Value and Different Credit Ratings



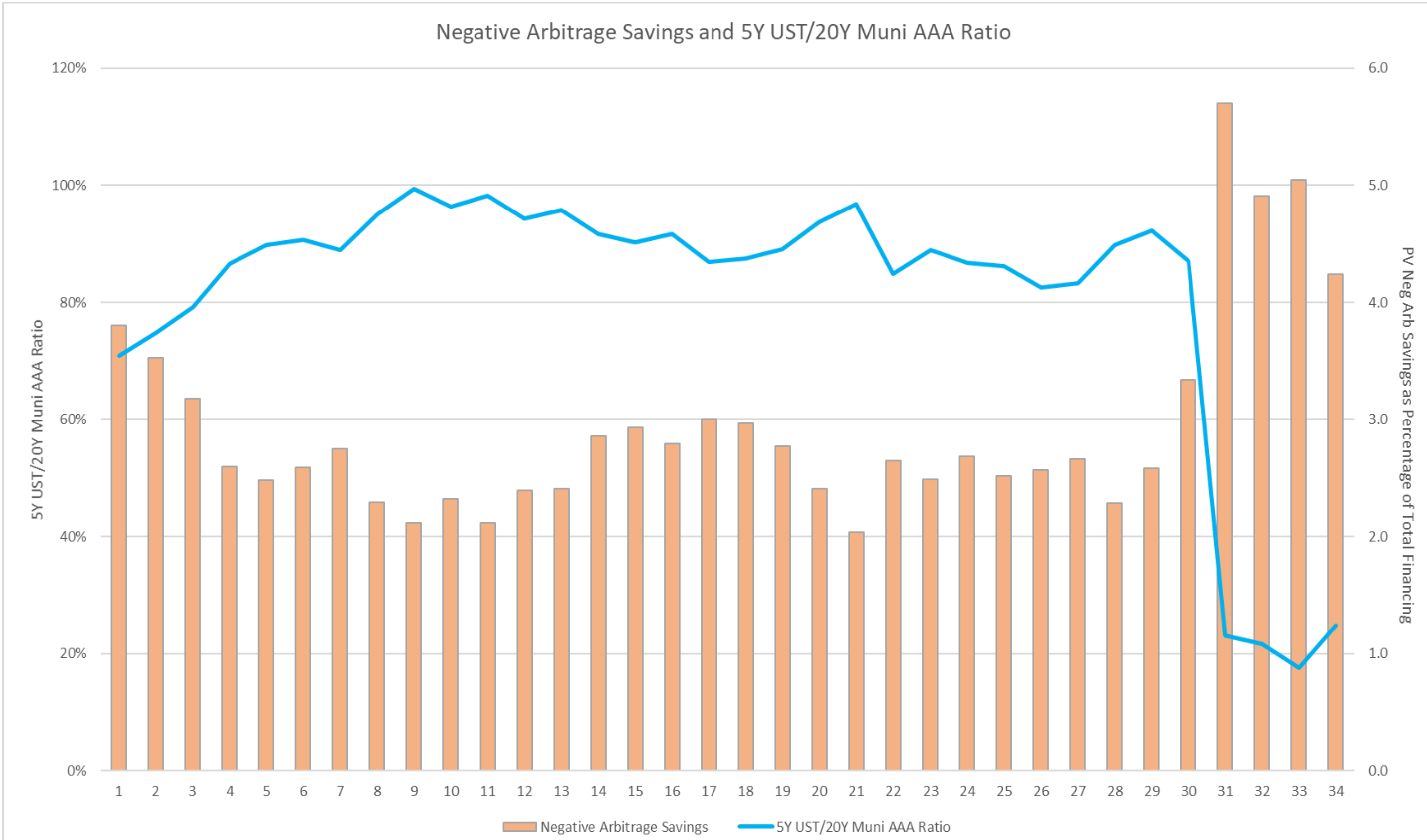
For comparison over time, the benchmark is based on same assumed credit rating of Aa3/AA- corresponding to the most common WIFIA borrower. Specific WIFIA borrowers include a range from Aaa/AAA to Baa2/BBB. The chart shows benchmark analysis applied to this range of ratings.

4. WIFIA Benchmark Value and Muni/UST Correlation



Benchmark value is closely correlated to the relationship between 20-year munis and 20-year Treasuries, since most infrastructure financings have a weighted average life (WAL) of about 20 years and the WAL calculation reflects many aspects of the overall yield curves. The correlation is positive: the higher muni rates are in relation to Treasuries, the greater the value of a WIFIA financing.

5. Avoided Cost of Negative Arbitrage and Muni/UST Correlation



Specific aspects of benchmark value are also correlated to certain muni and Treasuries relationships. The chart above shows that avoided cost of negative arbitrage is negatively correlated with the relationship between the construction period investment rate (5-year US Treasury SLGS) and the long-term borrowing rate (20-year munis).