

The Economy, Interest Rates and the Municipal Bond Market

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April 7, 2014

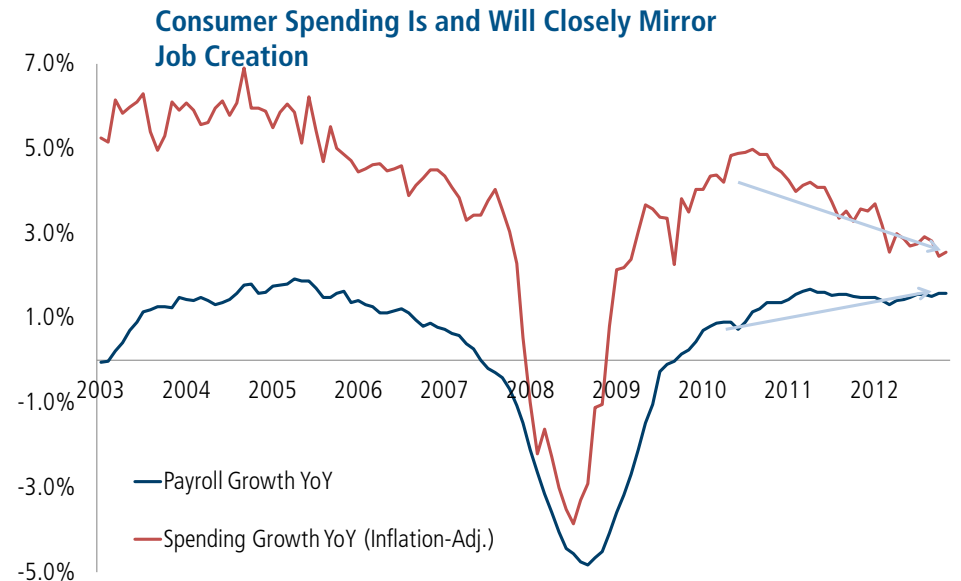
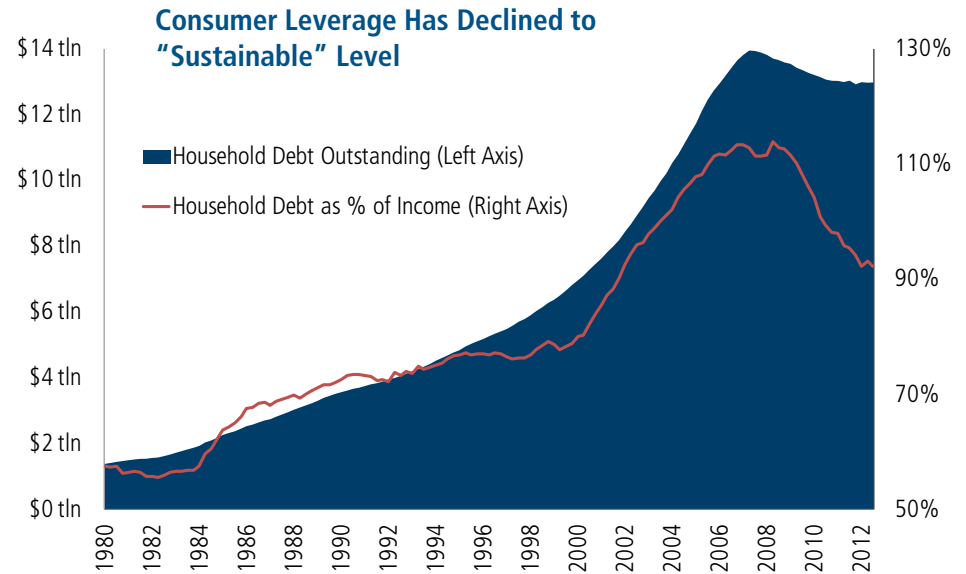


2014 Economic Outlook

- **Economic growth should be steady in 2014 with estimated GDP expansion in 2.1% to 2.6% range, which is about as rapid a growth as we can expect based on the secular economic backdrop**
- **Jobs growth has accelerated and should sustain at a 180 – 200K monthly pace, which would push the unemployment rate to 6.5% – 6.8% by year end, though the usefulness of the “raw” unemployment rate is limited by changes in the composition of the job markets and falling participation**
- **Inflationary expectations, the primary driver of long term interest rates, are benign, with the potential for disinflation looming, despite five years of monetary expansion**
- **Fiscal policy will continue to be contractionary. Congressional budget debates represent the greatest downside threat to our economic forecasts; the more times Congress plays chicken with the debt ceiling, the greater the probability of a car crash**
- **Longer term, the lack of real economic innovation is very troubling, and will serve to constrain economic growth, as well as inflation and interest rates, below its post-World War II average**

Consumer Balance Sheets Repaired; All About the Jobs

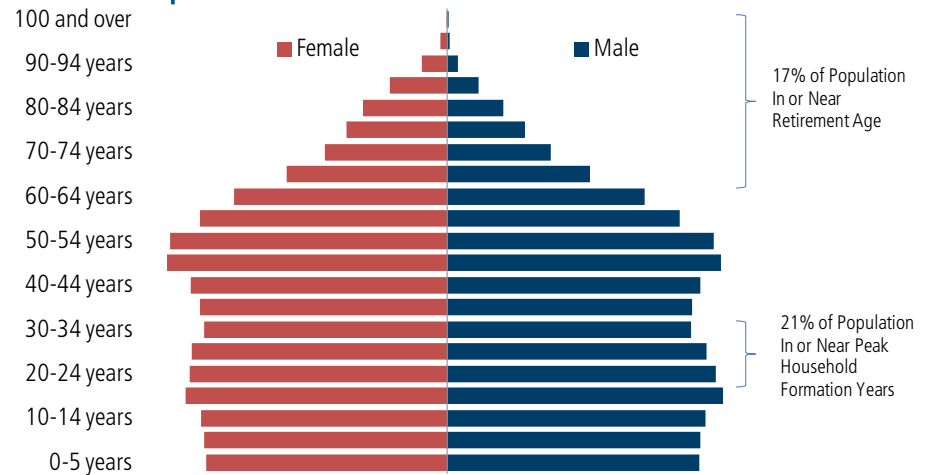
- The consumer deleveraging that began in 2008 is nearing its short-term completion, with consumer debt/income ratios stabilizing around 90%
- The end of consumer deleveraging means that consumer spending, which accounts for about 70% of the US economy, should more closely track income growth
- With wage inflation extremely low, much of this income growth will need to come from continued job creation



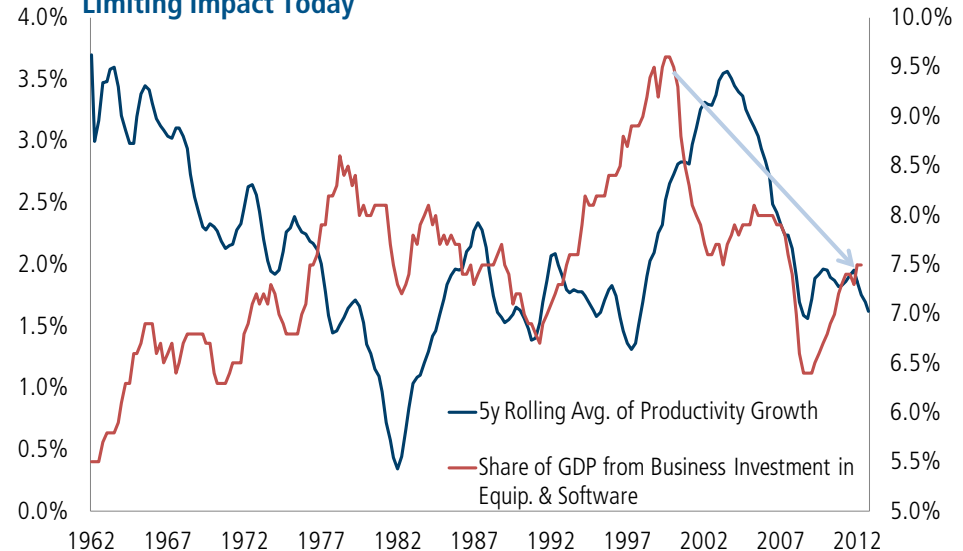
Speed Limits to Economic Growth

- There are significant longer term problems which suggest economic growth won't return to its pre-2008 average
- Demographic trends are not particularly favorable, as a large portion of the workforce is beyond its "productivity improving" period, but household formation of millennials in coming years provides an offset
- More problematic for the long run is the lack of economic innovation that drove growth in the 1990s (tech innovation) and 2000s (financial innovation); businesses have pulled back materially on long term capex and R&D spending
- Lower levels of real investment in the 2000s and today restrict future innovation and act as a speed limit for long term economic growth

Demographic Profile Poses Challenges, but Millennials Cushion Impact



Decline in Real Investment Beginning in 2002 is Having Productivity-Limiting Impact Today



Source: Janney FISR; Census Bureau; Commerce Dept.

2014 Rate Forecasts

Interest Rate Strategy: Forecast Detail

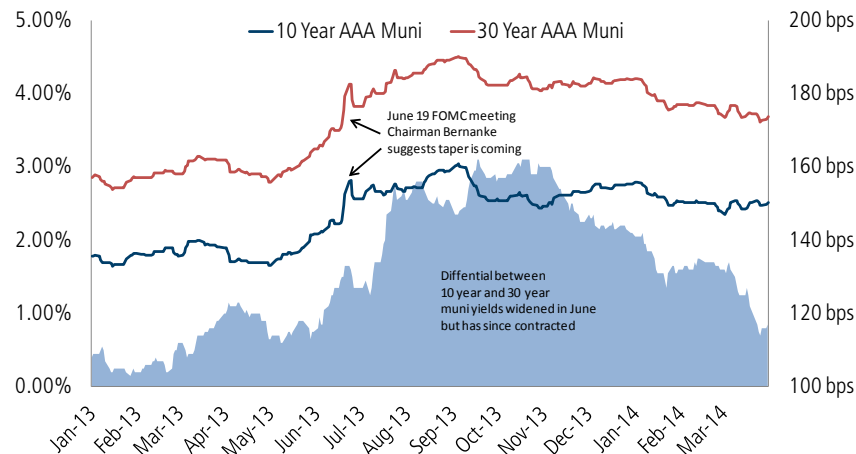
Central Bank Rates	Current	2Q 2014	3Q 2014	4Q 2014	1Q 2015	3Q 2015	4Q 2016
Fed Funds O/N	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%
Treasury Curve	Current	2Q 2014	3Q 2014	4Q 2014	1Q 2015	3Q 2015	4Q 2016
3m Bill	0.01%	0.06%	0.07%	0.09%	0.14%	0.37%	1.91%
2yr Note	0.45%	0.55%	0.73%	0.94%	1.03%	1.47%	2.24%
5yr Note	1.79%	1.87%	1.94%	1.93%	2.07%	2.29%	2.85%
10yr Note	2.79%	2.88%	3.16%	3.30%	3.43%	3.59%	3.63%
30yr Bond	3.62%	3.61%	3.84%	3.92%	4.01%	3.97%	3.88%
2s/10s	234 bps	233 bps	243 bps	237 bps	239 bps	212 bps	139 bps
10s/30s	83 bps	74 bps	68 bps	62 bps	58 bps	38 bps	26 bps
LIBOR/Swaps Curve	Current	2Q 2014	3Q 2014	4Q 2014	1Q 2015	3Q 2015	4Q 2016
1m LIBOR	0.15%	0.19%	0.11%	0.17%	0.24%	0.66%	1.75%
3m LIBOR	0.23%	0.25%	0.22%	0.25%	0.34%	0.83%	2.07%
2yr Swap	0.57%	0.67%	0.85%	1.06%	1.15%	1.59%	2.36%
10yr Swap	2.91%	2.99%	3.28%	3.42%	3.54%	3.71%	3.75%
30yr Swap	3.61%	3.65%	3.93%	4.02%	4.10%	4.07%	3.98%

Source: Janney FISR

Tax Free Interest Rates

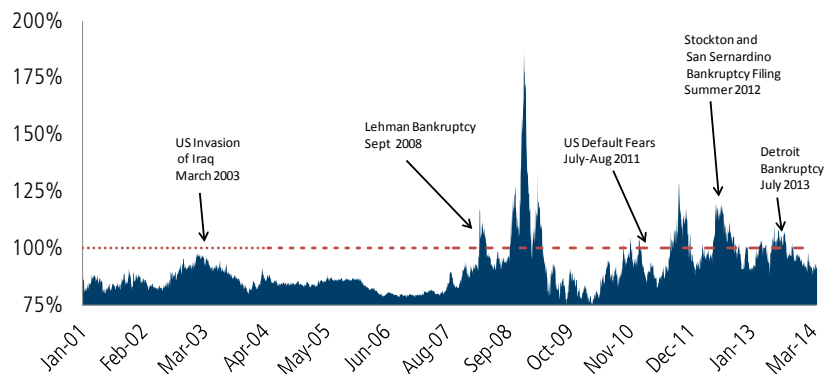
- Long end of muni yield curve has flattened since June 2013 market downdraft.
- We believe munis should outperform Treasuries in 2014. Muni to Treasury ratios will decline.
 - April 2, 2014 – 91%
 - 2013 average – 98%
 - 2010-2013 average – 96%
 - 2000-2009 average – 88%

Rates Have Been Relatively Stable Since June Crash



- Including 3.8% Medicare tax on investment income, tax brackets are highest since 1981, making tax exempt income increasingly valuable
- With credit concerns receding, the threat to tax exemption is the remaining driver of elevated ratios.

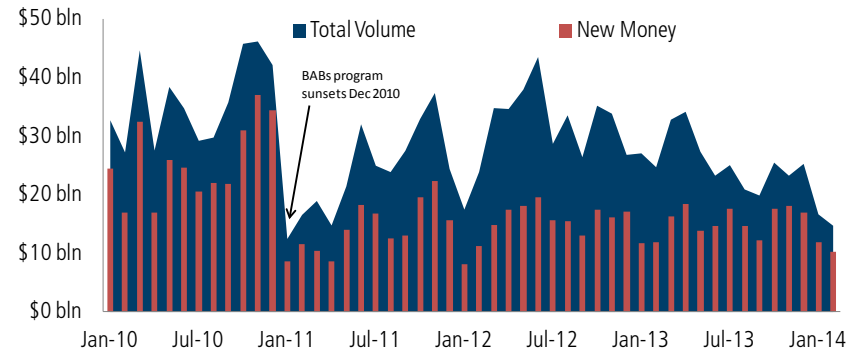
Muni to Treasury Ratios Are Above Historical Averages



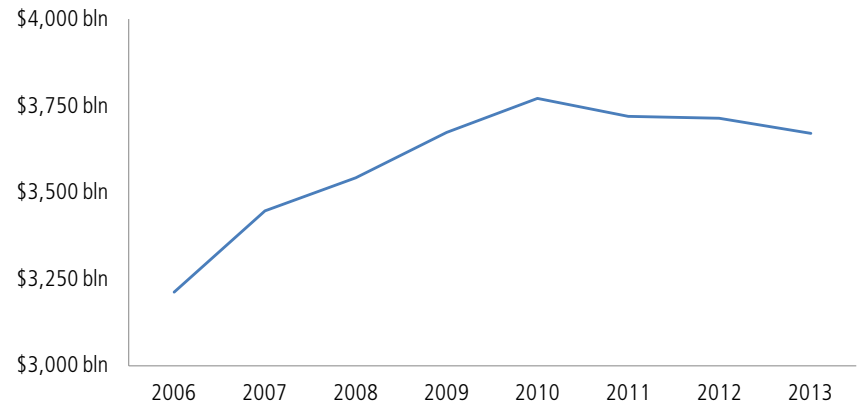
New Issue Pace Has Slowed. Fewer Municipal Bonds Outstanding

- Since Build America Bond program ended in December 2010, municipal bond new issue volume has contracted.
- Refinancing of higher coupon debt drove much of borrowing in recent years
 - 50% in 2012
 - 40% in 2013
- Federal Reserve data shows the amount of municipal bonds outstanding is contracting
 - \$3.7 trillion outstanding
 - 44% held by households (shrinking)
 - 28% held by mutual funds (shrinking)
 - 24% held by banks and insurance companies (growing)

New Money Issuance Slowed Sharply With Sunset of Build America Bond Program Sunset



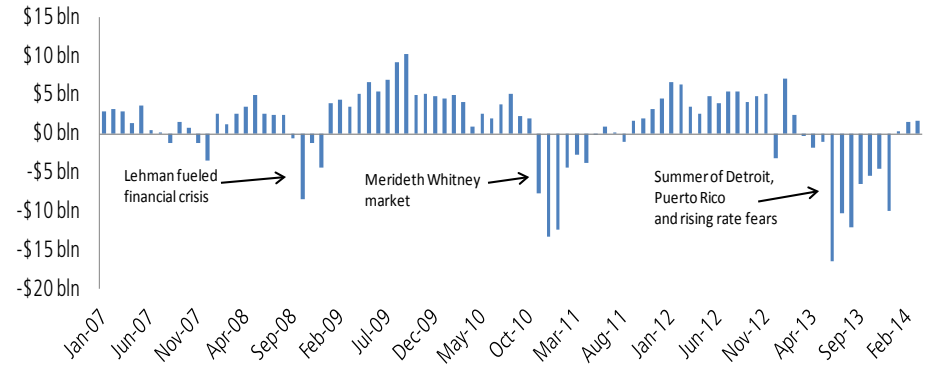
Federal Reserve Data Indicates Amount of Muni Debt Outstanding is Contracting



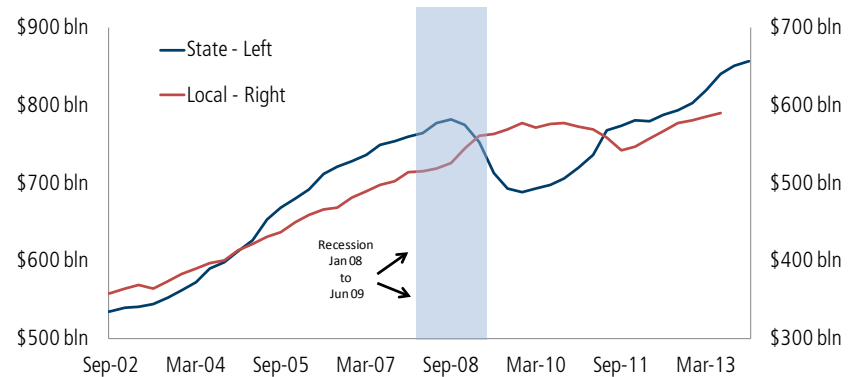
Demand for Muni Bonds Fell in 2013 even as Credit Conditions Improved

- Detroit bankruptcy filing (July 2013) and concerns about Puerto Rico (\$70 billion in debt) fueled municipal credit concerns and municipal mutual fund outflows
- State sales and income tax revenue, which fell sharply during and after the recession, has recovered to exceed pre-recession levels. The pace of recovery has not been consistent in all locations.
- Property taxes, which underlie about 75% of local government tax revenue, have been slower to recover and more spotty than sales and income taxes, but stability is gradually returning.
- The challenge of managing expenses and balancing budgets during recent difficult times, have prepared municipalities and states to manage finances in future slower growth economy.

Weekly Mutual Fund Flows are Proxy for Demand



State and Local Tax Revenue has Recovered to Pre-Recession Levels But Some Areas are Lagging

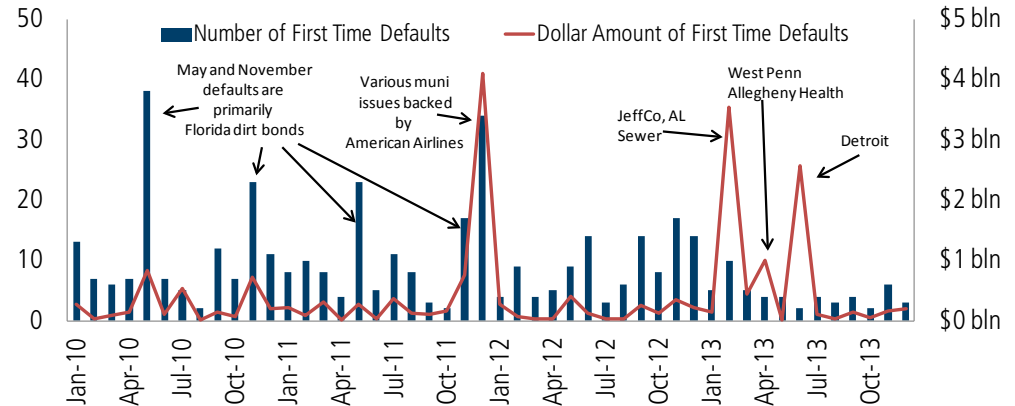


Default Trends Improving, Pension Funding Remains a Challenge

Defaults Are Fewer

- Core municipal sector defaults are fewer, with large 2013 amounts driven by long simmering situations such as Detroit and Jefferson County.
- Real estate backed issues such as non rated Florida Community Development District bonds drove default numbers in 2010 and 2011.

Large 2013 Defaults Trace to Recession and Pre-Recession Roots



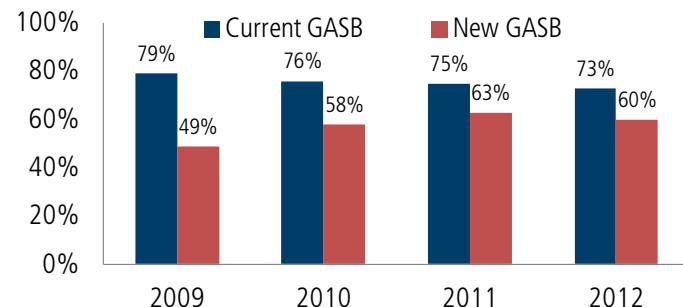
Underfunded Pensions Continue as Problem

- Reforms such as those of Puerto Rico and Illinois are encouraging.
- Moody's four notch downgrade of Chicago since July is harbinger of future problems
- New GASB standards on accounting and reporting of public pension plans will cast harsher light on underfunding in 2014.

Number of First Time Defaults Falling - Large Outliers Skewed Dollar Numbers in 2013

Year	Number of Defaults	\$ Amount of Defaults	Comments
2010	140	\$3.2 bln	Florida dirt bonds in May and November
2011	133	\$6.5 bln	Dirt bonds plus AMR in December 2011
2012	107	\$1.9 bln	Pace slowing with total under \$2 billion
2013	52	\$8.4 bln	Long simmering Detroit and Jeffco

State and Local Pension Funding Levels Old GASB vs New GASB



Other Municipal Market Considerations

The Threat to Tax Exemption

- Simpson Bowles Dec 2010 – no exemption going forward.
- Three administration budgets – cap tax exempt benefit to 28% bracket - effective 11.6% tax for top bracket
- Dave Camp's February proposal would tax muni interest at 10% for taxpayers earning above \$400,000
- Even if no change to exemption, tax reform could lower top tax rate, reducing exemption benefit
- Higher than historical M/T ratios somewhat discount reduction or elimination of exemption
- Issuers need to emphasize importance of tax exemption in supporting necessary infrastructure investment

<http://www.munibondsforamerica.org/>

Legacy Credit Issues

- Detroit – Bankruptcy process and results may establish unwelcome precedents
- Puerto Rico - \$70 billion plus of high yield debt

Reemergence of Bond Insurance

- Recent S&P upgrades – National return to market?
- Insurance often enhances liquidity in a increasingly illiquid market
- Success story – Stockton, Detroit, Jefferson County, Harrisburg

Resume

Alan Schankel

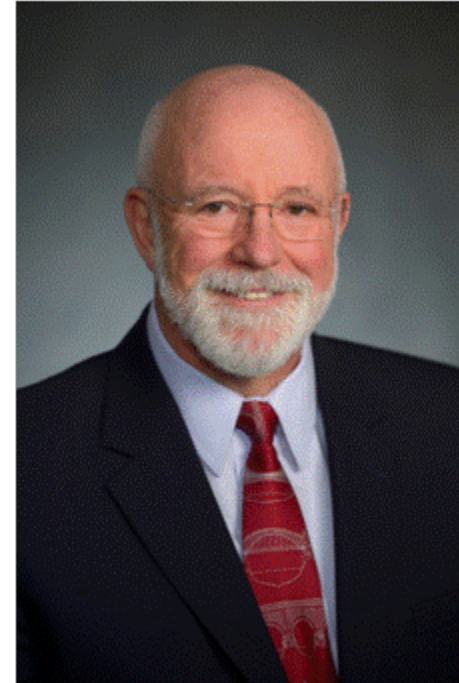
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Alan Schankel is a Managing Director on Janney Capital Market's Fixed Income Strategy team focusing on Municipal Research and Strategy. His 47 years of industry experience, including 27 at Janney, involved management roles in fixed income underwriting, sales, trading and research with particular focus on state and municipal finance. Mr. Schankel publishes regular municipal bond strategic and research commentary in Janney's daily, weekly, and monthly publications and is quoted frequently in local and national media including Bloomberg, Dow Jones, Reuters and the Bond Buyer. He has also appeared on CNBC, Bloomberg and Fox Business television shows.

He is active in a variety of industry groups, has served on the FINRA Fixed Income Committee and is a regular arbitrator for FINRA Dispute Resolution. Mr. Schankel is a graduate of the Wharton School of the University of Pennsylvania and has done postgraduate work at the University of Pennsylvania, Temple University and Rutgers. He is a Past President of both The Bond Club of Philadelphia and the Municipal Bond Club of Philadelphia.



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