

Strategy insights

February 2018

The Muni Opinion

Fixed income

The Muni Opinion: What the Tax Reform Package headlines didn't tell you about the muni market—Feb 2018

After a strong year for the municipal bond market in 2017—remarkable, given the low interest rate environment, what lies in store for munis in 2018? We believe the recently passed tax reform is a “game changer” for the municipal bond market as it is likely to limit new issuance of bonds and provide for a strong technical (less supply/stable demand) backdrop in 2018. In our 2017 outlook, we expected “certain” uncertainty regarding tax policy, infrastructure spending along with other fiscal policy changes. In 2018, some of the uncertainty is resolved, yet we expect to get more clarity on potential infrastructure spending, the impact of the aforementioned tax policy changes, and of course the direction of interest rates. Much to discuss in our 2018 year outlook...

2017 Review

The municipal bond market had a strong 2017 with returns of 5.45%, much improved from the flat returns of 2016. Munis outperformed most fixed income classes (after-tax) including Treasuries (+2.31%), IG corporate bonds (+6.42%) and HY corporate bonds (+7.50%).¹ The S&P 500 Index finished the year up 19% and in case you haven't read about

it yet, Bitcoin finished the year up 1400%! Interest rates were lower across the most of the yield curve with 30 year muni yields leading the way 50 bps lower in yield from the start of the year. The move lower for interest rates helped add to positive price return and contributed to the strong total return (coupon including reinvestment plus price return) for the year. Breaking down the total return in 2017, price return contributed 1.10% of the 5.45% total return, or 20% of total return. Looking at the past 25 years, price return contribution has been 3% of total return.

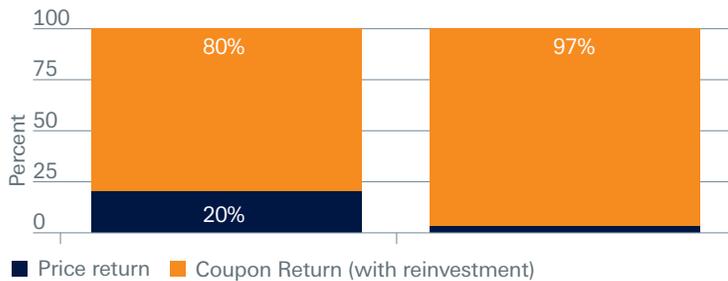
Contributors

- Carol L. Flynn, CFA, co-head
Deutsche AM Municipal Bond Department
- Ashton P. Goodfield, CFA, co-head
Deutsche AM Municipal Bond Department
- Robert J. Fogarty, CFA, investment specialist,
Deutsche AM

¹ Source: Barclays as of 12/31/17 Treasuries are represented by Barclays U.S. Treasury Index, IG corporates are represented by Barclays U.S. Credit Index and HY corporate bonds are represented by the Barclays U.S. Corporate High Yield index. Past performance may not be indicative of future results. See last page for index definitions.



In 2017, 20% of total return was price return, as interest rates fell. Historically (25 yr avg), muni returns have been driven by coupon income return (97%)



Source: Barclays as of 12/31/17.

Supply came in slightly lower compared to the record year of supply in 2016. This is despite the flood of issuance during the record breaking monthly volume in December, as issuers rushed to hit the market prior to tax reform changes in 2018. For the year, total volume was \$436 billion, down 3% year-over-year but still higher than the 10 year average of \$385 billion. New money issuance was up 15% while refunding volume was down 20% compared to 2016. (Source: BondBuyer as of 12/31/17) Demand was strong, led as usual by individual investors. Inflows into municipal funds totaled \$29 billion over the course of the year, according to Morningstar.

AAA muni yield curve changes (12/30/16–12/29/17)



The tax cut cometh?

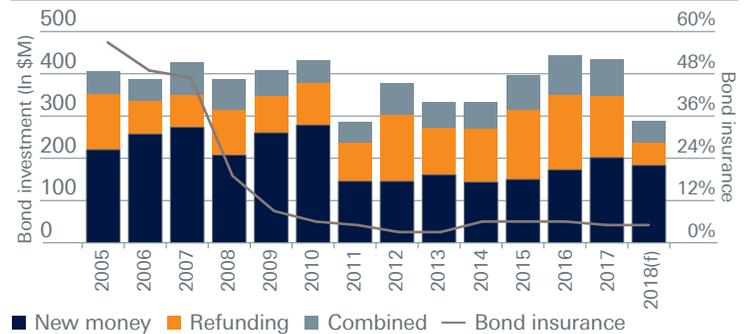
Described by some as the nation’s most significant tax overhaul since the Tax Reform Act of 1986, on 12/22/17, President Donald Trump signed the Tax Cuts and Jobs Act of 2017 into law. The law contains several provisions that will likely impact the municipal bond market—both for issuers and investors.

The Act:

- Eliminates the tax exemption of advance refunding bonds.
- Cuts the corporate income tax rate indefinitely to 21% from 35% beginning 1/1/18.
- Cuts the maximum individual income tax rate to 37% from 39.6% from 1/1/18 through the end of 2025.
- Caps the federal deduction of state and local taxes (SALT deduction) for individuals’ state and local property, income and sales taxes at \$10,000 beginning 1/1/18 through the end of 2025.
- Only permits mortgage interest associated with loans of up to \$750,000 to be deducted, down from a \$1 million cap, for residences bought 1/1/18 through the end of 2025.
- Repeals the corporate AMT.
- Retains the individual AMT but raises its exemptions from 1/1/18 through the end of 2025.
- Repeals the individual mandate to obtain insurance coverage under the Affordable Care Act.

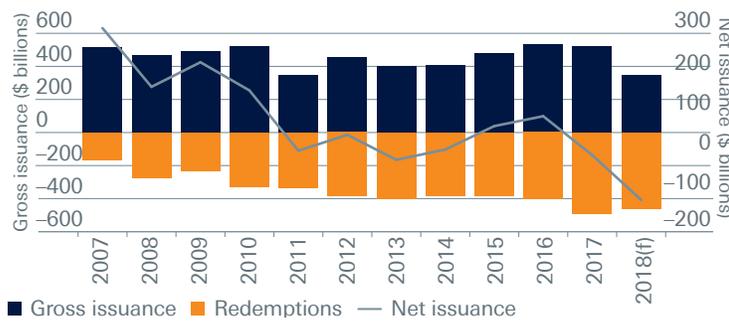
Our key takeaways are that we expect supply to be considerably lower in 2018 and subsequent years due to the elimination of the tax exemption of advance refundings, thereby reducing market supply by approximately 20% over the longer term. In the near-term, we expect 1st quarter 2018 supply to be drastically lower due to the highest monthly issuance on record in December 2017 (\$62.5 billion), surpassing the previous record set in December 1985 (\$54.7 billion) in advance of the Tax Reform Act of 1986. This time, the “supply stampede” was due to tax reform proposals, some of which were enacted and some left out of the final bill, and issuers pulled forward expected 2018 issuance. This should lead to lower supply in 2018 and we are forecasting \$290 billion in gross supply, which would be a reduction of 33% from 2017. (Source: Bond Buyer as of 12/31/17)

Municipal Bond Gross Supply 2005–2018(f)



We believe early 2018 should set up well for the muni market as investors continue to take advantage of the tax exemption of munis during the lower supply environment. We also expect new records to be set with respect to bonds maturing in single months. For instance, Siebert Cisneros Shank and Co., LLC expects that July 2018 will have the most amount of bonds ever maturing in a single month on record.² This is likely to lead to another year of net negative supply, a shrinking muni market .

Honey, I Shrunk the Muni Market. Since 2007, net issuance has declined as more bonds matured and were called away than were issued



Source: Citi and DeAM 12/31/17

A potential risk looming is the reduction of demand from institutional market participants such as banks and property & casualty (P&C) insurers due to the reduction in the corporate income tax rate. We don't expect significant selling, but buying demand is likely to decline, especially for P&C insurance companies. We have discussed in the past the flow cycle for municipal bonds, typically 3 stages: in stage 1, retail investors sell muni bonds due to either credit or interest rate risks. In stage 2, crossover buyers such as insurers buy munis as yields and relative valuations are attractive, stabilizing the market. In stage 3, retail investors return to the market as yields are typically higher and NAVs stable. Without crossover interest, the market may experience more volatility and increased liquidity risk, especially in longer maturities. On the flip side, professional money managers and institutional bond buyers may be able to take advantage of the volatility and find attractive relative value as opportunities arise. With this volatility, we could see more fluctuation with muni yield ratios compared to US Treasuries, which could represent some opportunity to capture attractive relative value.

2018 Outlook—Don't expect Bitcoin returns!

In 2018, we return to our baseline assumption of coupon-like returns, meaning we expect municipal bonds to return their coupon interest or income return. When we look at historical

total return municipal bond total returns have been primarily income return with some price return. We don't expect market interest rates to move much higher over the course of this year, but expect price return to be slightly lower as interest rates end the year at modestly higher levels.

That said, let's review some of the fundamentals of the asset class and why we continue to believe municipal bonds offer attractive benefits in a balanced portfolio. First, munis are a good diversifier with risk assets such as US equities in an investor's portfolio. Over the past five years, munis have demonstrated a -0.08 correlation with the S&P 500 Index, meaning when equities zig, munis zag. Historically, munis have been a "risk-off" asset class and have done particularly well in periods of market distress as investors have run to safe havens such as municipal bonds and US Treasuries. With equities at all-time highs, owning diversified asset classes in one's portfolio is prudent, in our opinion.

Another benefit that has become more valuable due to the recent tax reform signed into law is the municipal interest income tax exemption. Most municipal bond interest is exempt from Federal income tax and under most circumstances, also state income tax when investors invest in bonds issued in their respective states. With the recent changes to the level of Federal income tax deductions, including limiting the state and local tax (SALT) deduction to \$10,000, the muni exemption has become inherently more valuable for many individual tax payers. Therefore, we do not foresee a reduction in demand from retail investors, even after the modest cut in tax rates. Consider the benefits of the tax-exemption compared to other fixed income classes.

Asset Class	Five-Year Correlation to S&P 500 Index	12-Month Yield (Tax Equivalent)
U.S. OE High Yield Bond	0.69	5.93%
U.S. OE Multisector Bond	0.60	3.62%
U.S. OE Nontraditional Bond	0.61	2.89%
U.S. OE Bank Loan	0.59	3.78%
U.S. OE Emerging Markets Bond	0.50	4.52%
U.S. OE Intermediate-Term Bond	0.11	2.40%
U.S. OE High Yield Muni	0.02	6.06%
U.S. OE Muni National Long	-0.05	5.12%

Source: Morningstar as of 12/31/17 "Asset Class" represents Morningstar categories. See last page for category definitions. Past performance may not be indicative of future results.

Additionally, we expect munis to maintain very low default rates compared to corporate bonds and anticipate the market to remain high quality in terms of rated securities. In fact,

² Siebert Cisneros Shank and Co., LLC is a full service investment banking and financial services company.

of rated securities, 95% are rated investment grade (BBB or higher) by at least one rating agency (Moody's, S&P or Fitch).

Credit update

Our outlook for general municipal credit quality in 2018 is stable. However, as with every year, there are some names and sectors we are watching more closely than others. The end of 2017 brought us the Tax Cuts and Jobs Act of 2017 which has implications for the muni market in a number of ways, including on credit quality. Let's first dive into some general sector comments and then discuss the impacts the Tax Cuts and Jobs Act of 2017 will have on municipal issuers.

At this point in the economic cycle, most state and local governmental units have experienced annual tax revenue increases for a number of years, which combined with restraint on discretionary expense spending, have led to increased fund balances and replenished rainy day funds. In this low interest rate environment which we know has lasted for quite a while, many municipal issuers have taken advantage of the time to refinance existing debt and lower annual debt service costs. This has allowed municipalities some financial flexibility in their budgeting processes by freeing up dollars for other expenses.

Unlike debt service, though, for many municipalities what has not been declining are unfunded long-term obligations for pensions and retiree health care. While many issuers have enacted pension plan changes to lower their unfunded liability, others because of state law or constitution have not so far had the flexibility to do so. Another driver of the funding levels of pension plans is the assumed rate of return municipalities

use when valuing pension plan assets. In recent efforts to be more realistic on long term investment returns, a number of pension plans have reduced the rate used in calculating their unfunded liability. While it is a positive step to do this, the immediate results are a reduction in the funded status of the plan and the need for higher annual contributions to get the plan closer to a full funded status, even if implemented in a year of strong investment returns. We plan to write more about municipal pension plans in an upcoming Muni Opinion, so stay tuned for that. In the meantime, we are watching most closely New Jersey, Illinois, Connecticut and Kentucky, as well as some local municipalities, for the headwinds they face on the pension front.

In summary for state and local government issuers, we continue to see primarily good investment opportunities at the state level and in high quality local municipalities in high quality states. While there are uncertainties with future federal funding, tax reform, infrastructure financing, health care and unfunded obligations, many governmental issuers are sufficiently prepared at this time to weather some cyclical revenue decline, and as active managers we look to capitalize on opportunities presented by some of these uncertainties.

In most revenue bond sectors, our outlook and comments are very similar to last year. Issuers in the municipal transportation sector, including airports and toll roads, have generally posted favorable operating and financial results in recent years and we expect this to continue in 2018. The strength of the economy in most areas of the country and still affordable energy prices have contributed to the performance of these sectors. We expect the public power and water and sewer sectors to also be stable in 2018, again benefiting from strong local economies and affordable debt service costs.

Pension funded ratios have declined while NPLs have increased, placing greater emphasis on credit research with state and local GO sectors.



Source: Federal Reserve, Morgan Stanley Research as of 09/30/17 (most recent data). Data is compiled by the Federal Reserve and Morgan Stanley and shows the aggregate net pension liability (NPL) for all large state/local pensions and the aggregate funded ratio for these plans.

The higher education sector, encompassing both public and private institutions, is facing pressure, particularly in regard to the growth rate of tuition increases and the then corresponding level of tuition discounting which must be offered to meet matriculating students' financial needs. In some areas of the country, demographics are a challenge as the distribution of high school age students varies. The Tax Cuts and Jobs Act of 2017, adds a new cost to some institutions as those with endowments over a prescribed level will have to pay some tax which they previously did not.

The sector on which we consistently receive the most questions is health care, specifically not for profit hospitals. We do expect that not for profit hospitals will face tighter financial operating margins over the next several years, an evolving reimbursement and regulatory environment, and new forms of competition. Most hospital systems have substantially strengthened their balance sheets over recent years to help with the transition. Our focus on hospitals and systems with a leading market presence, proven and experienced management, and strong operating and financial results remains in place. Years like 2017 where health care policy was in the news—a lot—affirm the process we have in place for investing in this challenging, yet potentially rewarding sector. In addition to the constant news out of Washington, the sector has seen a cycle of mergers and consolidations which can take years to fully effect and implement. The Tax Cuts and Jobs Act of 2017 repeals the individual mandate to obtain insurance coverage under Obamacare. We are not forecasting an immediate or major impact on hospital credits. The future effect on the individual insurance market and legislative and policy remedies remain to be seen, and this population accounts for a relatively modest percentage of most health care providers' revenues. Potential significant cuts or changes to federal Medicare and Medicaid funding would have a more material impact on this sector.

Moving on now to more details of the Tax Cuts and Jobs Act of 2017, the legislation looks likely to lead to some negative pressure on the municipal market from a credit standpoint. First, the Act eliminates the ability of municipal issuers to advance refund debt on a tax-exempt basis. This will reduce issuers' financial flexibility to take advantage of lower interest rates. Over time, this will raise borrowers' cost of capital as any advance refundings will have to be done on a taxable basis and thus the interest rate on that debt will be higher than it would be on tax-exempt debt. Current refundings will continue to be allowed on a tax-exempt basis. Additionally, the elimination of tax-exempt advance refundings may impact

the muni high yield market, as there have been instances in the past when distressed high yield issuers were able to refinance their way out of trouble, at least temporarily, and that tax-exempt opportunity will no longer exist.

The cap of the individual state and local tax (SALT) deduction at \$10,000 may put negative pressure on issuers in high tax states as it may hamper the ability to raise taxes when needed to address financial stress or infrastructure investment. This is particularly relevant for troubled states such as Illinois, New Jersey and Connecticut, as well as for issuers in states such as California and others where generally voter approval is required for tax increases.

The reduction of the corporate tax rate to 21% also has credit implications for the muni market. With tax-exempt income less valuable to banks, bank loans and private placements are likely to decline. This is particularly negative for smaller, infrequent issuers with limited capital market access which had relied on bank loans for financing. In order for these issuers to access the broader muni market, they will potentially have to adhere to tougher security provisions and also meet the market's continuing disclosure requirements. This may require some operational infrastructure investment in order to meet these requirements. Also, existing bank loan agreements may contain a "gross up" provision by which the interest rate payable by the issuer on the bank debt increases if the bank's corporate tax rate declines. This would increase the cost of borrowing for the issuer, a credit negative.

For governmental issuers, particularly at the local level, the decrease of the mortgage interest deduction cap to mortgages of \$750,00 could over time temper housing sales and property tax base valuations, especially in high cost areas. Local municipal issuers, including school districts in many states, are highly dependent on property tax revenue.

Finally, there is a provision of the Act which could be helpful to some issuers - the changes to the individual alternative minimum tax (AMT). Approximately 5-10% of municipal bonds are subject to AMT, historically making them less attractive to investors and therefore more expensive to issuers. By curbing the applicability of the AMT to some taxpayers, over the long term there could be more demand for higher yielding AMT debt as these bonds would be attractive to investors not subject to the AMT. Eventually this increase in demand could lead to lower borrowing costs for issuers, such as airports, of AMT debt.

Conclusion

At the time of this writing, we are awaiting details on a number of key events in 2018 including a potential bill on infrastructure spending. Increased infrastructure spending would likely trickle into the muni market via private activity bonds (PABs), which we fully support for rebuilding our nation's infrastructure, though this could potentially add to the future supply picture. Another proposal floating around is the potential for Congress to grant HQLA (high quality liquid asset) status for investment grade munis, which would likely increase bank demand for munis.

To reiterate, we believe the most significant impact on the muni market for 2018 is the expected reduction of supply, which should have a positive impact overall compared to the potential reduction in demand from institutional buyers, all else being equal. Further, we think the Tax Cuts and Jobs Act of 2017 will have more of an impact on the muni market than any other legislation since the Tax Reform Act of 1986. As always, with the many changing dynamics impacting the municipal bond market, diligent credit research and active portfolio management are as important as ever to stay ahead of market trends and deliver strong total return.

Definitions

The alternative minimum tax (AMT) is a federal income tax that some individuals and corporations must pay on pay in addition to the regular income tax. Credit ratings and associated research by global leading ratings agencies provide detailed information of the ability of creditors and/or bond issuers to meet their obligations and enable investors to measure their investment risk. While higher credit ratings can provide greater market liquidity for securities and reduced transaction costs, credit ratings do not remove market risk and are subject to change. The leading global rating agencies are Standard & Poor's, Moody's Investors Service and Fitch Ratings. The default rate refers to the proportion of borrowers who cannot service their loans. A general obligation (GO) bond is type of municipal bond in the United States or its territories which is secured on the issuing local or state government's pledge to use legally-available revenues (e.g. property tax revenues) to repay bond holders. The net pension liability is the difference between the total pension liability (the present value of projected benefit payments to employees based on their past service) and the assets (mostly investments reported at fair value) set aside to pay current employees, retirees, and beneficiaries. Private Activity Bonds (PABs) are tax-exempt bonds issued by or on behalf of local or state government for the purpose of providing special financing benefits for qualified projects. The financing is most often for projects of a private user, and the government generally does not pledge its credit.

Index Definitions

Barclays U.S. Treasury Index tracks the performance of U.S. Treasury obligations with a remaining maturity of one year or more. Barclays U.S. Credit Index is a sub index of the Barclays U.S. Government/Credit Index, tracks the performance of both corporate (industrial, utility and finance) and non-corporate (sovereign, supranational, foreign agency and foreign local government) sectors. Barclays U.S. Corporate High Yield Index tracks the performance of fixed-rate non-investment-grade debt. The S&P 500 Index includes 500 leading U.S. companies capturing approximately 80% coverage of available U.S. market capitalization. It is not possible to invest directly in an index. Nothing contained herein is fiduciary or impartial investment advice that is individualized or directed to any plan, plan participant, or IRA owner regarding the advisability of any investment transaction, including any IRA distribution or rollover.

Morningstar category definitions

U.S. OE High Yield Bond—A fund with at least 65% of assets in bonds rated below BBB.

U.S. OE Multisector Bond—Used for funds that seek income by diversifying their assets among several fixed-income sectors, usually U.S. government obligations, foreign bonds, and high yield domestic debt securities.

U.S. OE Nontraditional Bond—funds that pursue strategies divergent in one or more ways from conventional practice in the broader bond fund universe.

U.S. OE Bank Loan—funds that invest primarily in floating-rate bank loans instead of bonds. In exchange for their credit risk, they offer high interest payments that typically float above a common short-term benchmark.

U.S. OE Emerging Markets Bond—funds with at least 65% assets in emerging-markets bonds.

U.S. OE Intermediate-Term Bond—Funds that focus on corporate, government, foreign or other issues with an average duration of greater than or equal to 3.5 years but less than or equal to six years, or an average effective maturity of more than four years but less than 10 years.

U.S. OE High Yield Muni—funds that invest at least 50 percent of assets in high-income municipal securities that are not rated or that are rated by a major rating agency at the level of BBB (considered speculative in the municipal industry) or below.

U.S. OE Muni National Long—funds with an average duration of more than seven years, or average maturity of more than 12 years.

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Deutsche AM Distributors, Inc.
222 South Riverside Plaza Chicago, IL 60606-5808
www.deutschefunds.com service@db.com
Tel (800) 621-1148