



the art and science of healthcare finance[®]

The Impact of Tax Reform on the Municipal Market

Corporate Tax Rates and the Market

Date: January 9, 2018

By: Grant Ostlund and Michael Tym

615-613-0215

www.ponderco.com

“It's like my father always said to me, he said, Roseanne Roseannadanna, it's always something. If it isn't one thing—it's another!”



Executive Summary

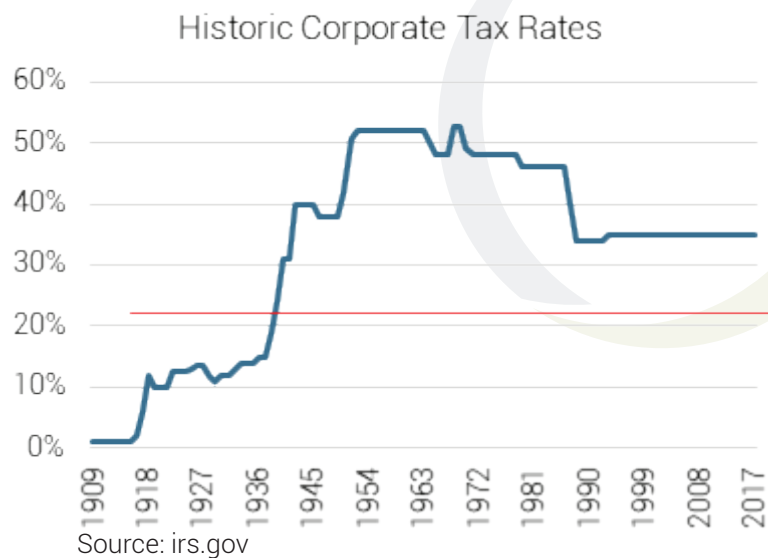
- The reduction in the corporate tax rate is historically significant
- While private activity bonds have been spared, the 2017 Tax Cuts and Jobs Act (the “Act”) will still impact tax-exempt markets
- The decrease in the corporate tax rate will reduce demand for tax-exempt bonds
- The decrease in supply due to the loss of advance refunding bonds will be offset by the reduced demand
- Publicly issued and direct placement debt will be impacted differently due to the primary participants in each market
- Direct Purchase Bonds, a product used by many borrowers, will be directly impacted the most, becoming more expensive and putting their continued use in question
- For borrowers who rely on variable rate debt, alternatives do and will exist if direct placements become uneconomical



Corporate Tax Rate

Signed into law on December 22, 2017, the Act lowers the maximum corporate tax rate from 35% to a flat rate of 21%. While effective corporate tax rates have varied over time, the maximum rate has not been lower since 1938, when it was 19%.

Many historic movements in the corporate tax rates were rationalized to fund war time activity while rate reductions were commonly used to generate growth through economic stimulation to recover from recessions. As a general statement, historical rate reductions were relatively small with the largest occurring during the Reagan administration to fight a major recession.



As one would expect there are different views on the impact the former rate changes have had on the economy. One thing we can anticipate is the significant reduction will alter the behavior of tax-exempt bond market participants.



Public Fixed Rate Market

The Act did not eliminate the use of Private Activity Bonds by non-profit (and other non-governmental) organizations as originally proposed by the House Bill. It did however eliminate the ability of all municipal issuers to advance refund debt.

With the elimination of advance refunding, there will be a reduction in supply. Various sources¹ estimate advance refunding bonds account for between 20% and 30% of the market, potentially more the past two years. On its own, the "scarcity" of tax-exempt debt should generate higher prices (i.e. lower yields). However, the tax-exempt market does not operate in a vacuum. Tax-exempt bond issues will compete (and always have competed) with taxable bond issues. While rational investors base their decisions on many factors, after-tax return is a major one. Theoretically, scarcity should drive yields lower but tax-exempt debt is just one option available to fixed income investors and a drop in tax-exempt yields may simply result in investors switching or crossing-over their preference to taxable bonds.

Individuals, either directly or indirectly, are the largest investors in tax-exempt fixed rate bonds. While personal tax rates under the Act will drop modestly, demand by individuals for tax-exempt debt should remain fairly consistent. Countering the demand by individuals will be corporate investors who potentially will "cross-over" if

the tax-exempt debt yields fall relative to taxable yields as well as decreased demand from corporate investors in tax-exempt debt. Historically, corporations have been significant investors, with insurance companies estimated to own approximately 15% of all outstanding tax-exempt fixed rate bonds. The reduction in the corporate tax rate will affect the investment decisions of corporations and most likely will result in lower demand for tax-exempt debt with yields acceptable to individuals. Overall, it is anticipated that even without advance refunding, the lower demand will result in yields relatively higher than historical levels.



Direct Purchase Market

According to SIFMA², banking institutions hold 15.3% (approximately \$530 Billion) of outstanding municipal debt.

The after-tax return on a tax-exempt security held by a bank will be directly impacted by the reduction in the corporate tax rate. Banks are averse to accepting outside risks which could affect their returns and have deliberately transferred these risks to borrowers to protect returns. Besides credit risk, the banks initially transferred many if not all of the risks associated with regulatory and capital requirements (Dodd Frank legislation or BASEL III banking requirements). With corporate tax rates becoming an election topic several years ago, the banks have actively pursued transferring the risk of a tax rate change to issuers. The risk transfer language in many documents is very broad, attempting to capture essentially all increased costs due to providing or maintaining the loan.

Bank direct placement loans typically use a multiplier to adjust for the tax rate impact and can have a dramatic impact on the cost of debt.

A typical multiplier would compare the new corporate tax rate to the old corporate tax rate to generate a ratio to be applied to the effective interest rate on the loan. While formulas for establishing the ratio vary, the following illustrates the goal of the multiplier.

$$\frac{(1 \text{ minus the new maximum tax rate})}{(1 \text{ minus the old maximum tax rate})}$$

With the proposed maximum corporate tax rate being reduced from 35% to 21%, the illustrative formula generates a multiplier of 1.215.

Not only will the multiplier formula vary but the application of the multiplier varies.

A typical tax-exempt direct placement variable rate loan will have a formula setting the interest rate on the loan. Formulas typically consist of a tax-exempt index rate plus credit spread. Depending on the bank (and when the loan was put in place), the multiplier may apply to just the tax-exempt index rate or both the tax-exempt index rate and the credit spread. Obviously, a multiplier which is applied to both the tax-exempt index rate and the credit spread will result in a larger increase in cost.

The table below illustrates the impact of the change in corporate tax rates from 35% to 21% to the full formula (tax-exempt index and the spread) on a Direct Purchase with a cost formula of 67% 1 month LIBOR + 0.50%. Based on current 1 month LIBOR, the impact would be approximately 33 basis points or 0.33%. The impact increases as 1 month LIBOR increases.

		1 Month LIBOR				
		1.56%	2.00%	2.50%	3.00%	4.00%
Corporate Tax Rate	21%	1.88%	2.24%	2.64%	3.05%	3.86%
	35%	1.55%	1.84%	2.18%	2.51%	3.18%



Direct Purchase Documents

It is important for a borrower to review documents to see if the formula is present, how the formula is written and how any tax adjustment multiplier works. Although definitions (and their locations) may be slightly different, there are three areas to review in direct placement documents to determine how the loan may be affected.

The determination of the interest rate is commonly found in section two of a bond indenture with references to several definitions including an Index, Applicable Spread, and Applicable Factor. Definitions may be slightly different depending on the drafting attorney's preference. If the definitions or description on determining the interest rate does not include a corporate tax factor, this is a good sign the rate may not be impacted. If it does, then it will be clear the interest rate will change. Though we would note that the risk transfers are not in every document, so it is essential to understand your risks.

If the documents include a definition for Excluded Taxes (or something similar) in the "increased cost" provisions the corporate tax rate change may not affect the interest rate. It was not uncommon in the increased cost language of bank documents to obligate a borrower for increased costs, including taxes to the bank, except for Excluded Taxes. These excluded taxes are commonly defined as any tax based on income

of the bank. If this term is in the documents and used within the increased cost language, the rate should not automatically change.

Finally, increased cost provisions exist to protect the bank against uncontrollable regulatory changes, not their tax obligations. Without direct reference to a change in the corporate tax rate, this is a provision that some banks may use inappropriately to request gross up payments to realign their return to their original expectations.

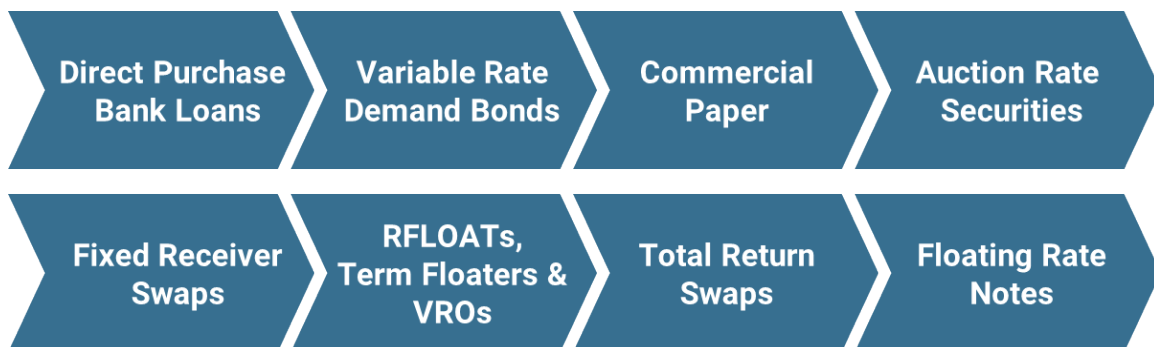
While the reduction in the corporate tax rate will affect the cost of direct placement loans in the future, we anticipate banks will continue to provide tax-exempt direct placement loans.



Variable Rate Alternatives

With the collapse of the auction rate market and higher costs/lower supply of liquidity facilities, many tax-exempt issuers turned to direct placements for their variable rate needs. Due to the strong demand of variable rate products and the cost increases anticipated for most direct placements, a review of alternative products is warranted.

As discussed in our February 2017 white paper *Challenges in Public and Private Variable Rate Debt* (<http://ponderco.com/challenges-in-public-and-private-variable-rate-debt/>), the variable market has evolved over time and continues to look for sustainable options.



Regardless of the product, variable rate debt must be monitored and managed. The very nature of variable rate debt requires monitoring of rates, market demand, and support costs. Further, the risk profiles of variable rate products are similar, but each has its own twist relative to put options, tender requirements, and market demand.

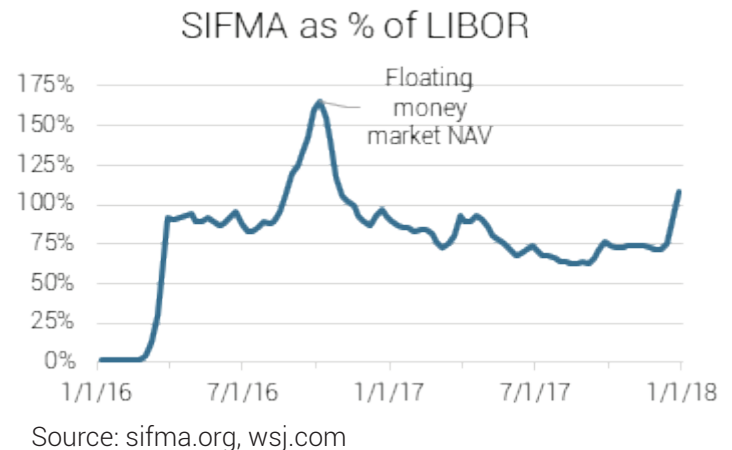
The following descriptions highlight several products that may be available. When evaluating options it is best to work with an advisor to ensure the risks, benefits, and costs are fully understood.

Variable Rate Demand Bonds

The VRDB market, despite lack of growth, remains an option for borrowers.

Investors in the VRDB market are primarily the tax-exempt money market funds whose investors are primarily individuals. With a nominal change in the individual tax rates, we do not anticipate a dramatic change in the relative rates provided by this product. Demand for these money market assets have been reduced over the years with assets of approximately \$155 billion².

Though banks were hesitant to provide letters of credit post financial crisis, they are beginning to provide them again. The letter of credit fee to the bank is, and always has been, a taxable revenue source. Changes in the credit fee will fluctuate over time, but will not be driven by the corporate tax rate change.



Modified VRDBs (RFLOATs, Term Floaters, VROs)

Many investment banks have developed a modified weekly floater product with the goal of eliminating the use of bank credit support. The modifications include long put periods and punitive rates if puts are not honored. The demand for these products has been limited, but worth exploring as new issuance needs arise.

Floating Rate Notes (FRN)

Floating Rate Notes allow for a weekly variable rate structure without the requirement of bank credit support. The term of FRNs are flexible, but the borrower gives up the right to call the bonds with short notice. Since FRNs have been introduced into the marketplace, demand and pricing for the product has been volatile.

Commercial Paper

Tax-Exempt Commercial Paper ("TECP") has had limited use. Commonly an option under multi-modal documents known as CP mode, the administrative burden of each TECP roll may be categorized as a reissuance and creates another level of active management many borrowers want to avoid. It lends itself to organizations that have a full treasury staff that can focus on these duties.

Term Notes and Put Bonds

A common approach to taking advantage of the short end of the yield curve, without the volatility of a weekly or monthly rate reset, is the use of Term Bonds or Put Bonds. Publicly offered with typical terms of three, five, or seven years. The Term bonds are hard maturities while the Put bonds may be a mandatory tender allowing the bonds to be remarketed for a new period. Since both are publicly offered the renewal process, relative to a private placement or credit facility, is more involved due to increased disclosure and remarketing efforts. One significant benefit is that neither form of product requires bank credit support.

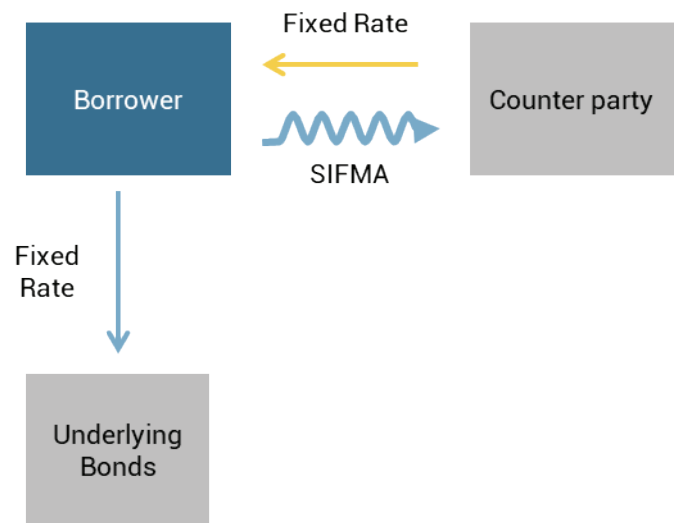
Total Return Swaps

A Total Return Swap is an agreement with an investment bank where the bank purchases a fixed rate bond and swaps the fixed rate back to variable. The all-in rate is often attractive because the borrower gives the bank price protection on the bonds to lock in the lower rate. Given this transaction is done directly with the counterparty the corporate tax rate change will likely make this product less beneficial. The product does provide bank credit without some of the concerns regarding ancillary service requirements.

Synthetic Variable

Most borrowers are familiar with synthetic fixed rate debt achieved by issuing variable rate debt and using a Fixed Payor Swap to convert to fixed rate. It is also possible to issue traditional fixed rate debt and enter into a Fixed Receiver Swap to convert fixed rate to variable.

This structure provides many benefits, however due to the extremely low interest rates and the availability of bank credit the cost has been prohibitive. As the bank products become more expensive this may become a viable alternative.





Conclusion

The Act has been signed into law and will affect both fixed rate and variable rate tax-exempt borrowers. The elimination of advance refundings and the reduction of the corporate tax rate will alter the behavior of investors in publicly issued fixed rate debt but the resulting cost, if any, to borrowers is unclear. It is clear that the cost of tax-exempt debt to commercial banks has increased. The cost of direct placement tax-exempt debt is anticipated to increase even for many existing programs. While borrowers may or will witness increased costs in their variable rate programs, viable alternative products exist to maintain efficient and effective floating rate programs.

“The best preparation for the future is the present well seen to, and the last duty done.”

George MacDonald, Author

Sources: [irs.gov](https://www.irs.gov) | ¹The Bond Buyer, MSRB, and SIFMA | ²Securities Industry and Financial Markets Association | [wsj.com](https://www.wsj.com)