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Our Perspective GREEN BONDS – JULY 2017

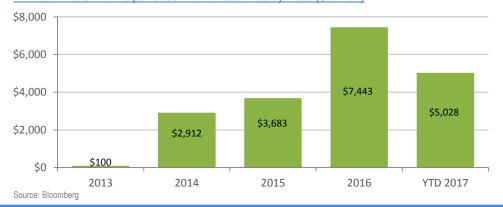
Municipal green bond issuance has increased significantly over the past four years since Massachusetts became the first state to offer tax exempt bonds designated as 'green' in 2013. While only a small part of the municipal market at approximately \$19bn in outstanding bonds, green designated tax exempt bond issuance has been accelerating over the past two years, with over \$5bn issued YTD. There is growing domestic and global demand for sustainable, responsible, and impact (SRI) investing, despite the U.S. recently withdrawing from the Paris Agreement. Global green bond issuance increased 92% in 2016 to over \$95bn and is forecasted to top \$120bn this year (see chart below). U.S. municipal bonds since their inception have been used for capital projects and infrastructure that have delivered benefits that today could also be construed as green and socially responsible. While we have not seen much pricing differential between an issuer's regular bonds and their green labeled bonds, we do believe that investor demand is growing for SRI assets, and green muni bonds could outperform as a result.

Bonds whose proceeds are specifically used for environmental, climate, or other sustainable purposes can be designated as green. Green bonds are self-labeled by the issuer with a voluntary set of rules from the Green Bond Principles (GBP). Under GBP, issuers can use green bonds for renewable energy, energy efficiency, sustainable waste management, sustainable land use, biodiversity conservation, clean transportation, clean water, and/or drinking water.

Exhibit 1: Global Annual Green Bond Issuance (\$bn)



Exhibit 2: U.S. Municipal Green Bond Issuance by Year (\$million)





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The states with the largest issuance of tax exempt green bonds are New York, California, and Massachusetts. The bonds have primarily financed transportation, water, and renewable energy projects.

CA AZ VA SSOOM-\$100 SSOOM-\$500M-\$500M-\$500M-\$500M-\$100M-No data

Exhibit 3: New York, California and Massachusetts Are the Top 3 Climate-Aligned Bonds Issuers



Source: Moody's



Internally, we evaluate a green bond based solely on the credit fundamentals of the issuer since the only effective difference is the use of the proceeds. Therefore, if the security for an issuer's green bond is the same as its other bonds; performance is generally linked to the issuer's underlying credit. However, if demand grows for SRI designated assets, it is likely a green bond could outperform pari passu obligations for purely technical reasons due to the green designation. As you can see in the yield chart in Exhibit 4, there has been very vield differential Massachusetts general obligation bonds (orange line) and their green labeled general obligation bonds (green line).

	Average	First	Last	Max	MaxDate	Min	MinDate	Periods	StdDev	ZScore
MASSACHUSETTS ST 4	3.08	3.150	2.340	4.764	26 Aug 2013	1.950	24 Jun 2016	53	0.69	-1.07
04.01.2033										
MASSACHUSETTS ST 4	3.08	4.477	2.320	4.762	26 Aug 2013	1.950	24 Jun 2016	50	0.72	-1.06
08.01.2033										

Source: Morgan Stanley



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SRI tax exempt investing is still somewhat in its infancy and we have not seen any significant pricing differential between green and regular bonds. As we have previously stated, most muni bonds are used for capital projects and infrastructure that have historically delivered benefits that today could be construed as green and socially responsible. As such, many traditional investors view the new 'green' designation as more of a marketing ploy, particularly since the current standards and accountability are voluntary, which could be one of the reasons for the lack of a pricing differential. Municipal bonds also often lag taxable fixed income investing trends because of the large component of individual investors, but retail appetite for environmentally friendly investing is likely to grow going forward. The green designation may also expand the network for potential investors, including cross-over investors that are not typically active in the tax exempt market. Internally, we have experienced increase demand for SRI investment strategies and have set up SRI investment portfolios for our clients that consist of green labeled municipal bonds and bonds that fit our proprietary SRI designation. Currently, the green label is a free option, and if we like the underlying credit and sector, we will continue to overweight green bonds in anticipation of growing impact investing demand that could lead to technical outperformance.

The assertions in this perspective are Seix Investment Advisors' opinion.

Investment Risks: All investments involve risk. Debt securities (bonds) offer a relatively stable level of income, although bond prices will fluctuate providing the potential for principal gain or loss. Intermediate-term, higher-quality bonds generally offer less risk than longer-term bonds and a lower rate of return. Generally, a portfolio's fixed income securities will decrease in value if interest rates rise and vice versa. A portfolio's income may be subject to certain state and local taxes and, depending on your tax status, the federal alternative minimum tax. There is no guarantee a specific investment strategy will be successful.

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