Bond Case Briefs

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An Ominous Signal in the Muni-Bond Market Now Seen as Just Noise.

- · Governments may start selling debt faster than it's paid off
- Barclays sees positive net supply of \$80 billion in 2020

An ominous signal in the municipal-bond market shouldn't scare buyers too much.

State and local governments' frenzy to seize on lower interest rates could leave them issuing new bonds next year at a faster pace than they're paying them off, causing an increase in the net supply of outstanding securities. Usually, that's viewed as a negative in the \$3.8 trillion municipal market, given that the increase in supply can exert a drag on prices.

But this time, the jump may be matched by a flood of cash that's been washing into the market all year as Americans burned by the limit on state and local tax deductions use the investments to drive down what they owe to the federal government. Municipal-bond mutual funds last week alone received a record \$2.36 billion of new cash, according to Refinitiv Lipper US Fund Flows data, extending an unprecedented influx that's continued since January.

"Higher net supply is not going to be oversupply," said Peter Block, head of municipal strategy at Ramirez & Co., which is projecting positive net supply of \$98 billion next year.

The increase follows what had been a slowdown in new municipal-bond sales, which caused the size of the market to shrink in 2018 and during the first half of this year, according to Federal Reserve figures. That led mutual fund managers to complain about the competition and high prices being paid for new debt issues, though the drop in yields also saved state and local governments money.

With the market's interest rates now holding not far from more than half-century lows, Wall Street underwriters anticipate the pace of borrowing to pick up. Barclays Plc is forecasting that will cause the size of the market to grow by \$80 billion in 2020, which the company projects would be the biggest increase since 2016. Bank of America Corp. strategists last month predicted a similar rise.

The ballooning supply is driven heavily by state and local governments' push to refinance their debt with taxable securities. While that may be a drag on that corner of the market, analysts say it's unlikely to trickle into demand for traditional tax-exempt bonds, which will also benefit from interest and principal payments that bondholders will seek to reinvest.

Barclays strategists led by Mikhail Foux said their forecast for positive net supply in 2020 won't be problematic for tax-free buyers because those sales won't increase "materially."

Bloomberg Markets

By Amanda Albright

December 3, 2019, 10:50 AM PST

"Small Claims Court" Lawsuits Could Cost Wall Street's Credit Rating Agencies Billions.

This is truly a story about David verses Goliath. Over the past four to five months, two hundred and forty small claims court lawsuits have been filed with the California Superior Court. The plaintiffs claim that the executives at the three largest credit rating agencies, Moody's, Fitch and S&P engaged in securities fraud, mail fraud, wire fraud, bribery, extortion and racketeering when they issued credit ratings on tens of billions of dollars in Puerto Rico municipal bonds. The plaintiffs are seeking to recover two thousand five hundred dollars.

Unbelievably, the credit rating agencies decided to dispute the claims rather than reach a settlement. I say "unbelievably" because of what you are about to read next.

The credit rating agencies dispute resulted in an evidentiary hearing on November 15, 2019. The defendants claimed the court did not have jurisdiction in these cases. The court denied that motion and reaffirmed jurisdiction over these disputes. The defendants claimed one of the plaintiffs did not have legal standing to participate in a lawsuit. That motion was also denied by the court. The court asked the plaintiffs to submit evidence justifying these lawsuits.

The following was submitted to the court: A copy of a forensic accounting audit on the bonds reflecting the fact that the municipal agencies were already bankrupt prior to the issuance of these bonds. Sworn testimony from municipal executives claiming that the credit rating agencies knew them to be bankrupt but would issue good credit ratings in exchange for hefty fees. Sworn testimony that the lead auditor for the municipal agencies stating the agencies have been technically bankrupt since 2010. Documents confirming the existence of recorded telephone conversations reflecting payoffs to Department of Justice personnel to prevent any investigations or prosecutions.

The court determined that sufficient evidence exists to move forward with these small claim cases. The evidence was shared with the Riverside District Attorney, Michael Hestrin who then forwarded the evidence on to the California, Attorney General, Xavier Becerra.

One has to ask? What were the credit rating agency executives thinking? Now they are looking at the possibility of billion of dollars in fines from the Securities and Exchange Commission and the real possibility of criminal charges.

The plaintiffs have recently requested that the court issue subpoenas forcing the appearance of the defendants in these small claims court hearings. There is no doubt that there will be law enforcement personnel in the courtroom eagerly listening to the defendant's testimony. Stay tuned this story can only get better. Honestly, you can't make this stuff up!

ROCKLAND COUNTY TIMES

BY RICHARD LAWLESS

December 5, 20190 Comments

Richard Lawless is an investigative journalist and one of the plaintiffs involved in these 240 lawsuits. Lawless has written articles on financial fraud that have appeared with major media outlets all over the world. He has 30 years of experience as a senior and executive banker for companies like Wells Fargo Bank and Home Savings and has served on a number of corporate boards.

S&P: U.S. Higher Education Is Learning To Manage Its Own Risk

How Event Risk That Creates A Crisis Can Have An Impact

Colleges and universities are grappling with event risk with increasing frequency, whether from nature (think weather) or man-made (such as campus shootings, management and governance controversies, racial tensions, or sexual assault). These crisis incidents create difficult assessments in terms of their impact on credit quality, with some not resulting in an immediate rating action and many not triggering any credit action at all owing to some combination of factors that can substantially mitigate the associated risks. In our opinion, these factors include a sound enterprise risk management (ERM) program that is in place and followed promptly; strong management and governance controls; ample financial resources, which may include insurance coverage for the specific risk; and the ready availability of and access to external support such as disaster aid programs. Additionally, we have seen schools with strong market positions that benefit from national brand recognition and solid demand experience little, if any, impact to enrollment or fundraising.

Recent high-profile events of the man-made variety include the Department of Justice's investigation into higher education admission practices ("Varsity Blues," the codename for this examination) and the Harvard admissions lawsuit, which have received widespread news coverage, attracting significant negative attention to the higher education industry. These proceedings have placed a focus on the adequacy and transparency of management and governance and the importance of sound internal controls, such as the need for a well-developed ERM program that can contribute toward an effective response strategy.

While most crisis events represent a significant operational challenge and potentially an immediate headline risk, testing an institution's tactical responsiveness, the long-term effect on a college or university's creditworthiness often takes several months to manifest. Consequently, it is not the actual event but the institution's ability to respond and adapt in light of it that determines whether there will be any credit implications. In most cases, swift corrective actions and effective outreach have enabled institutions to maintain their ratings. On the other hand, some risk management or governance failures have resulted in negative rating actions.

Continue reading.

<u>S&P: U.S. States Are Slow To Reform OPEBs As Decline In Liabilities Masks</u> <u>Increased Risk</u>

Table of Contents

- Liabilities Are Likely To Grow As Nearly All States Fail To Meet Even Static Funding Levels
- Funded Ratios Remain Low For Most States Given Sectorwide Underfunding
- Decline In Liabilities Is Not Driven By Improved Plan Fundamentals
- States Report Responsibility For The Majority Of Net Plan Liabilities
- Understanding Plan Benefit Structure Is Key To Grasping The Credit Story
- Lack Of Prudent Fiscal Management Poses The Greatest Risk To State OPEB Plans
- Related Research

U.S. states continue to severely underfund their other postemployment benefit (OPEB) plans. S&P

Global Ratings' latest survey found that for most states, annual plan contributions do not keep up with growth in liabilities. Given the degree of underfunding, unfunded OPEB liabilities will likely escalate absent meaningful reform.

However, most states have not recently pursued reform efforts. Because the size of these unfunded liabilities varies greatly among states, progress toward reducing them is more pressing for some than others. S&P Global Ratings believes it crucial for states to prudently manage plan fiscal health ahead of a tipping point where rising OPEB costs lead to budgetary stress.

Despite contributions that generally fall short of growth in liabilities, S&P Global Ratings' most recent survey data also indicates that total net OPEB liabilities for states fell by 7.3% in fiscal 2018. This drop occurred primarily due to an increase in the discount rate used to measure OPEB liabilities rather than improved funding or OPEB reforms. Generally, state plans have applied a discount rate based on a municipal bond rate due to a general lack of interest earning assets and Governmental Accounting Standards Board (GASB) methodology.

Continue reading.

Historic US Towns Endured Wars, Storms. What About Sea Rise?

SWANSBORO, N.C. — Historic cities and towns along the Southeastern U.S. coast have survived wars, hurricanes, disease outbreaks and other calamities, but now that sea levels are creeping up with no sign of stopping, they face a more existential crisis.

With a total annual budget of \$225 million, Charleston, South Carolina, can't afford the billions of dollars to save itself without federal help. It's counting on the U.S. Army Corps of Engineers to help surround its downtown peninsula with seawalls, harkening to the barriers the city built when it was founded 350 years ago.

Keeping water off the streets and buildings is even more difficult for smaller towns like Swansboro, North Carolina, with 3,200 people and a \$4 million budget that doesn't account for climate-related sea rise.

The most vulnerable coastal communities sit only a few feet above sea level and are already getting wet at some high tides. Scientists estimate the sea will rise another 2 feet (61 centimeters) to 4 feet (122 centimeters) in the next 50 years.

Municipal leaders say they need billions of state and federal dollars to save block after city block of low-lying homes and businesses. And while even climate change-denying politicians are beginning to acknowledge the inevitable onslaught, city officials worry that those who control the purse strings won't see the urgency of a slowly unfolding catastrophe that's not like a tornado or earthquake.

Founded in 1783, Swansboro became the center of North Carolina's steamboat industry. In 1862, it saw Union troops burn down a Confederate fort guarding the nearby Bouge Inlet to the Atlantic Ocean. Across its quaint downtown on the White Oak River, almost every building boasts a city seal with the date it was built. Most are much older than the gray-haired tourists strolling around, and can't forever withstand the kind of flooding they suffered last year, when Hurricane Florence's sea surge topped 30 inches (76 centimeters) of rain.

Stunned, the town commissioned a report for the future. It said the water's edge may end up a block

or two inland from the historic waterfront, and soberly suggested: "Consider retracting services or strategically abandoning infrastructure in areas that are likely to be risky or dangerous."

Local leaders recognize the importance of Swansboro's charm, but its future is largely out of their hands.

"We're going to be very, very dependent on outside funding," new Town Manager Chris Seaberg said. "We're trying to preserve the history, but trying to accommodate these new issues that weren't there 100, 200 years ago."

North Carolina passed a law in 2012 preventing the state from forming coastal polices based on sea rise predictions. But Republican control of the legislature is waning, and local leaders say hurricanes Matthew in 2016, Florence in 2018 and Dorian in 2019 — along with changing attitudes toward climate science— appear to be shifting the state's outlook. North Carolina created an Office of Recovery and Resiliency this year to plan for floods and other extreme weather events.

"There will need to be political stressors to get people to understand the importance of climate change," said Beaufort, North Carolina, Mayor Rett Newton.

An Air Force retiree who is getting his PhD in marine science, Newton sweeps his arm across the Beaufort Channel. One spot is where the pirate Blackbeard scuttled some of his ships 300 years ago. Nearby is where blockade runners hid from British ships while helping supply the U.S. in the War of 1812. And on the horizon is where freed slaves helped Union troops defeat Confederates in 1862.

The historic buildings along Beaufort's waterfront are gleaming now, reflecting millions in new investment. It wasn't like that when Newton grew up in the 1960s amid grimy seafood shops, rundown shacks and fish plants. People wealthy enough to buy waterfront property can always move, Newton said, but escaping the seas will be much harder for poorer residents, who often live on low-lying land handed down through generations, are already beset by social and economic problems.

"I can't tax anyone else. At the local level, we can't tax our way out of this," Newton said, noting his town of 4,200 people collects about \$3.5 million a year in taxes.

Charleston, with state and federal help, is spending \$64 million to raise the lowest part of the seawall guarding its downtown Battery, which should keep that part of the city safe even if the ocean rises more than 6 feet (2 meters) in the next century, Chief Resilience Officer Mark Wilbert said. The city also is spending hundreds of millions of dollars to modernize its storm water system.

But these measures alone probably can't save a city that was once the most heavily fortified in North America, with a system of walls, moats and drawbridges to keep out the Spanish, French, Native Americans, and occasionally the ocean as well.

The city's 7 million visitors each year come looking for old charm along the water, but probably not underfoot. Downpours regularly cause flooding these days, and more than once a week on average, Charleston gets "sunny day" flooding when tides push water onto city streets.

Four of the seven highest water levels recorded in Charleston Harbor have happened in the past four years, pushed by Hurricane Matthew in 2016, Hurricane Irma in 2017 and nor'easter type storms that hit in 2015 and 2018.

"What used to only happen occasionally is happening more often," Wilbert said.

Charleston is working with the Army Corps on solutions, and everyone agrees sea walls aren't the only answer. Also under consideration are flood gates, enhanced pumps and other potential fixes, and the city hopes for plenty of state and federal help to pay for it.

South Carolina highway funds are already going to raise the downtown sea walls, and Republican Gov. Henry McMaster created the South Carolina Floodwater Commission, which is studying freshwater and ocean flooding and exploring the use of artificial reefs to blunt massive waves in hurricanes.

Charleston also plans to seek at least some of the state's tourism taxes on hotel rooms and restaurant meals for flood control. Currently, that money must be spent on tourism.

"You are not going to reverse this. The sea level is going to keep rising," Wilbert said. "It's not something where you can say how much it will cost or when it will end."

By The Associated Press

Dec. 5, 2019

Elevated Muni Supply to Be Met With Healthy Demand in 2020, BlackRock's Carney Says.

Sean Carney, BlackRock Financial's head of municipal strategy, discusses the outlook for municipal bonds in 2020 with Bloomberg's Taylor Riggs on "Bloomberg Markets."

Watch video.

Bloomberg MarketsTV Shows

December 4th, 2019, 8:38 AM PST

<u>Historic U.S. Towns Now Face A Rising Sea.</u>

SWANSBORO, N.C. — Historic cities and towns along the Southeastern U.S. coast have survived wars, hurricanes, disease outbreaks and other calamities, but now that sea levels are creeping up with no sign of stopping, they face a more existential crisis.

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The Associated Press

December 5, 2019

The Bond Is in the Mail: Muni Market's New Way Around Trump Ban.

- So-called forward delivery bonds used to lock in low rates
- It's one way to refinance after 2017 law vanked subsidies

Anyone who agreed to buy the bonds sold by Washington state this month has a long wait until they see a return on their investment: the nearly \$400 million of securities won't be delivered until March 2021.

The delay is the result of an increasingly popular maneuver that states and cities are using to get around a provision of President Donald Trump's 2017 tax-cut law, which stripped them of their ability to sell tax-exempt bonds to refinance debt that can't yet be called back from investors.

But with rates hovering near more than half-century lows, local governments are eager to refinance. So they're selling bonds now that investors won't receive until months — or even years — later when the outstanding securities can be bought back. There have been \$10 billion of such municipal bonds sold this year, the most since at least 2005, with \$1.4 billion in the last month alone, according to data compiled by Bloomberg.

Illinois's Metropolitan Pier and Exposition Authority is planning next week to sell \$923 million in bonds that won't be delivered to investors until March 2020. Washington D.C.'s airport authority is selling \$364 million in bonds Dec. 12. Those won't settle until July.

"The interest rates are just so favorable right now," said Larita Clark, chief financial officer of the Metropolitan Pier and Exposition Authority, which expects to save as much as \$150 million. "We just wanted to lock in those rates."

After the Federal Reserve cut rates for a third time this year, Henry Dachowitz, the chief financial officer for Norwalk, Connecticut, decided to sell about \$18 million of forward delivery bonds. He had been talking to multiple underwriters who were marketing the structure.

"The forward structure was new to me. I explored it and when I saw the present value savings were almost \$2 million, it was compelling," he said in an interview. "I thought interest rates if anything would go up. It was time to pull the trigger after the last rate cut."

Washington delayed the delivery date longer than any other borrower this year, according to data compiled by Bloomberg. The nearly year-and-a-half wait did come with a price: the 10-year bonds were priced with a 2.3% yield, or 73 basis points more than top rated debt. Comparatively, the state in September sold 10-year bonds for 1.47%, a 16 basis-point spread.

Sylvia Yeh, co-head of municipal fixed income at Goldman Sachs Group Inc., said the deals are largely suited to bigger institutional investors, given the risks that could crop up between when the bonds are sold and when they're delivered.

"The funds definitely have the opportunity to do this. For them it comes down to spread," she said. "There is appetite at a price. That speaks to how our market continues to develop."

Bloomberg Markets

By Danielle Moran and Fola Akinnibi

November 26, 2019, 10:30 AM PST

— With assistance by Sowjana Sivaloganathan

A Missouri Bank is Using Tech to Secure Large Deposits from Public Entities.

Bank of Franklin County, a Washington, Mo.-based bank with \$273 million in assets, is using 'cash sweep' technology to gain large deposits from public funds without having to put up its own assets as collateral.

While accepting large deposits is not a pain point for most financial institutions, accepting public funds requires additional steps. If a bank accepts a deposit over the FDIC insurance limit (\$250,000) from a public entity, banks have to put up their own assets as collateral, limiting their abilities to use these funds for other purposes.

Becky Buhr, vice president of finance and retail manager at Bank of Franklin County, told Bank Innovation the bank has sought help from the tech company Reich & Tang to seek an alternate solution to this problem that involves spreading out the deposit among a network of institutions.

"All these banks that participate in the [Reich & Tang] network each have \$250,000 of FDIC insurance coverage, so they can take my \$13 million, put it out there on that network and it gets spread out among all these banks in increments of less than \$250,000," Buhr said.

According to Bank of Franklin County, this tool has been used since May of this year, when the bank secured a \$13 million deposit from the local school district. "The school district gets full FDIC insurance. They get a good interest rate. I get \$13 million that I have access to any time," Buhr explained.

The deposit came from the School District of Washington, which wanted to work with a local bank that could reinvest that money in the community. When Bank of Franklin County was deciding whether or not to bid on the deposit, Buhr said she needed to find a way to secure it without having to offer up the bank's assets as insurance. Reich & Tang, which has hundreds of banks on its deposit marketplace, told Buhr it could spread those funds throughout its member institutions and provide the required FDIC insurance.

The bank can access the funds by emailing Reich & Tang, which will then wire the money to the bank, explained Buhr. Institutions on the marketplace can also request capital to fund new loans, but they must pay Reich & Tang back with interest.

The technology acts as a two-way street for capital solutions. Banks that need money can request it, and banks that need to insure their deposits can send money. Bank of Franklin County, according to Buhr, actually generates revenue from interest Reich & Tang pays to keep the deposit on its marketplace.

The Bank of Franklin County has five branches in eastern Missouri, slightly west of St. Louis. Although its primary functions are commercial transactions, it also features retail products like personal checking and savings accounts. According to Buhr, the cash sweep technology is part of a bigger effort to digitize operations.

"We have a very robust online banking platform, and we have a very robust mobile banking platform. We offer remote deposit capture so our business customers can scan in their checks right on site," Buhr said. "We really can compete with the big banks, but what limits us is the size of those relationships."

Bank Innovation

by Rick Morgan

December 2, 2019

Fitch Rtgs: Cordon Pricing May Boost US City Public Transit Usage, Revenue

Fitch Ratings-New York-03 December 2019: Well-designed cordon pricing (CP) has the potential to reduce traffic and raise revenue for highly congested US cites, which can help fund public transit, says Fitch Ratings. CP is effective at quickly and materially reducing congestion and vehicle trips, while increasing transit usage, as shown in several European cities using CP. However, CP in isolation may not meet public policy goals unless there is substantial investment in a region's transit system.

Cities must consider the capital costs of the CP system itself and upfront costs required to expand the transit system to accommodate motorists who switch to public transit. Alternate transportation is only valid to the extent there is a robust transit system that serves the cordoned zone and can accommodate additional users. CP zones with transit systems that are unreliable, small, infrequent, or at capacity may find motorists will not respond to CP because driving is preferable to the alternatives.

Unlike European cities using CP, many US cities do not contain a single central business district or urban core. US cities are likely to be lower density, with less public transit alternatives, featuring more diffused traffic patterns and requiring more than one congestion zone with a variety of congestion-pricing methods, such as dynamically priced parking meters and managed lanes. These characteristics do not necessarily rule out CP systems as an effective congestion management system but they suggest a smaller pool of suitable cities in the US.

Continue reading.

03 DEC 2019

Fitch Rtgs: Managed Lanes Performance Strong but Untested in Recession

Fitch Ratings-New York-03 December 2019: Performance among Fitch-rated managed lanes (MLs) is strong with fiscal YTD 2019 total revenue rising by a median of 21%, says Fitch Ratings. This is in line with a longer trend of robust ML performance. Growth is supported by accommodative economic conditions, low gas prices, and solid population and generally higher growth in regions with MLs.

MLs typically exist in corridors with free general purpose lanes (GPLs) at or near designed capacity and grow much faster than the corridors they operate in. As a result, a high proportion of marginal corridor traffic growth spills into the MLs instead of the more congested GPLs. This same dynamic leaves MLs more vulnerable to corridor traffic declines, whether caused by recession, increased corridor capacity, or new competing routes.

The MLs sector is young and growing quickly. The proliferation of projects, operational and post ramp-up, provides a critical mass of data not available in recent years. Most MLs projects outperformed our base and rating case projections in most years. Fitch uses this data to form its assumptions as it relates to truck traffic, value of reliability, induced traffic and project extensions.

Although MLs performed extremely well under the U.S.'s prolonged economic expansion, only Orange County Transportation Authority's (OCTA) SR-91 MLs were open during the Great Recession of 2007-2009, when the facility's traffic fell 18% and revenue fell by 11%. The lack of robust historical recessionary performance data results in limited visibility as to how MLs will perform in the next recession. Fitch continues to use conservative assumptions in our rating case cash flow projections as it relates to the effects of economic volatility.

Although Fitch-rated MLs growth slowed in each of the past three years, this is to be expected, as newer facilities exit the fast growth ramp-up phase. Over the next year Fitch-rated MLs projects are projected to finish construction in California, Colorado, North Carolina and Texas, and portfolio-wide revenue growth may rise as the proportion of facilities in ramp-up increases. Fitch expects the growth of MLs to continue as they tackle congestion issues while simultaneously producing revenue streams that can be used to pay for roadway maintenance and possibly other capital projects.

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Additional information is available on www.fitchratings.com. The above article originally appeared as a post on the Fitch Wire credit market commentary page. The original article can be accessed at www.fitchratings.com. All opinions expressed are those of Fitch Ratings.

At Pimco, Climate Change Is Happening Sooner Rather Than Later.

- Muni analysts treat climate change as more a near-term threat
- Traditional credit factors are seen through 'different lens'

The typical municipal-bond analyst already wields an array of jargony acronyms befitting the niche market: GO, COP, POS. Now comes WUI.

That's wildland urban interface, a term once confined to firefighters and academics. But since 2017, when some of the most destructive fires in California history burned entire neighborhoods, analysts for bond giant Pacific Investment Management Co. have increasingly focused on whether muni-bond sellers reside in that kind of environment, where people live near brush and trees and are at a greater danger from fire.

"When we make investments in California, we take a birds-eye view of where these communities are located," said Sean McCarthy, Pimco's head of municipal credit research, in an interview. "It's not just the warming climate — there are more homes in harm's way, there are more human ignition sources."

That's just one of the ways the firm is assessing the impact of climate change, which for its analysts has moved from a long-term threat to one that could impact local governments within three to five years. They look at traditional metrics such as the size and diversity of the tax base with a "different lens" and evaluate how resilient they would be if there's a fire or other natural disaster, he said.

"It's front and center more on the individual analyst's mind when they're doing their ratings process," said McCarthy, whose firm holds about \$50 billion of municipal bonds. "We are more acutely concerned about some of these longer-term risks falling within the shorter-term ratings horizon than we were in the past."

Investment and rating companies are seeking to reassure investors in the \$3.8 trillion municipal-

bond market that they're accounting for climate change when they evaluate issuers given how state and local government bond sellers are on the front lines. Climate scientists predict hurricanes will intensify and rainfall will increase in a warming globe. In California, the biggest municipal-bond issuer, 10 of the 20 most destructive wildfires have occurred since 2015.

Pimco analysts use an internal tool that pulls up dozens of different financial metrics by zip code. If a jurisdiction is within an elevated risk area, they consider offsetting factors such as support from state and local governments. (For instance, California lawmakers backfilled lost local property-tax revenue due to wildfires in this year's state budget.)

"A geographically desirable city, such as Malibu, California — which has strong credit factors and occupies prime oceanfront property — will likely show relative resilience after severe wildfires, with residents more willing and able to return to rebuild," Pimco analysts wrote in a report this month.

How essential the project being financed also gets scrutinized. A local government at risk from wildfires is more likely to continue making debt payments on a hospital than an arena, for instance. And important considerations some may overlook, McCarthy said, are technicalities of the deal, such as the ability of an issuer to redeem the bonds before maturity.

A lower internal rating doesn't necessarily mean Pimco would avoid buying the bond altogether, but "we should be compensated with greater risk premiums," he said.

Bloomberg Markets

By Romy Varghese

November 25, 2019, 9:40 AM PST

Cities Should Invest Now to Reduce Climate Change Depreciation.

Cities are beginning to worry that a susceptibility to climate change could reduce the chance that partners will invest in them. No financial support means no funds for the infrastructure to protect against the climate.

(TNS) — Someday soon, analysts will determine that a city or county, or maybe a school district or utility, is so vulnerable to sea level rise, flooding, drought or wildfire that it is an investment risk.

To be sure, no community has yet seen its credit rating downgraded because of climate forecasting. And no one has heard of a government struggling to access capital because of its precarious geographical position.

But as ratings firms begin to focus on climate change, and investors increasingly talk about the issue, those involved in the market say now is the time for communities to make serious investments in climate resilience — or risk being punished by the financial sector in the future.

"We look not just at the vulnerability of state and local governments, but their ability to manage the impact," said Emily Raimes, vice president with Moody's Public Finance Group. "While we'll be looking at the data on rising sea levels and who may be more vulnerable, we'll also be looking at what these governments are doing to mitigate the impact."

Moody's has been especially vocal about its climate change concerns. The firm has issued numerous papers assessing climate risk, and two months ago it purchased a majority stake in Four Twenty Seven, a climate-risk data firm.

Emilie Mazzacurati, Four Twenty Seven's founder and CEO, said that the bond sector's attention to the issue should prompt local governments to make it a priority. "It creates an incentive for them to be better prepared, because it's going to cost them money if they don't."

But some worry that punishing places for their susceptibility to climate change will just make it more difficult for them to finance the infrastructure improvements that might protect them.

"Nobody has yet been penalized for having a bad environmental policy or practice or system," said Tim Schaefer, California's deputy treasurer for public finance. "I don't know how much longer that's going to go on. I'm assuming not much longer."

Assessing Florida's Future

Governments large and small rely on the \$3.8 trillion municipal bond market for much of their infrastructure work. When officials want to build a highway or a school — or a seawall or an emergency operations center — they often issue bonds, bringing in the money needed to complete the project. Investors are repaid with interest over a period that can run for decades or more.

About two-thirds of infrastructure projects in the United States are paid for by municipal bonds, and more than 50,000 states, local governments and other authorities have issued bonds to finance their work.

Governments pay higher interest rates on those bonds when their credit ratings are low. Firms such as Moody's Investors Service and Standard & Poor's Financial Services issue the ratings assessments.

"Investors are in a position of demanding a higher return when they see greater risk," said Kurt Forsgren, managing director of S&P Global Ratings.

Municipal bonds are considered a conservative investment, with a current default rate of around 0.3%, according to Matt Fabian, a partner at Municipal Market Analytics. To date, the bond market has done little to reflect that the risk may be increasing.

"There is almost no impact on muni bond prices with respect to climate change vulnerabilities. Prices do not acknowledge the risk in climate change," he said. "Most investors believe that [climate change] is going to start affecting the market right after their own bonds mature."

As more investors and firms study the risks, however, that might change.

"We are about a year away from climate change beginning to affect the muni market — a little," Fabian said. "Changes on the investor side are going to happen first, [credit] ratings will come second, and issuer behavior will be a distant third."

Some investors already have begun to factor climate change into their decisions. Eric Glass, a portfolio manager with AllianceBernstein, said his portfolio opted to steer clear of a recent three-decade bond in the Florida Keys, which is facing rising sea levels.

"What does [the Florida Keys] look like in 30 years?" Glass said. "I don't know. But I know it's not going to look like what it looks like today. That is a tough calculus to make, and we've decided not to

take it."

David Jacobson, vice president of communications for Moody's Public Finance Group, called a downgrade over climate projections a "what-if type of thing." Moody's ratings are based on what its analysts expect a government's creditworthiness to be in the next 12 to 24 months, he said, even though the bonds they issue can run for decades.

"The things that are happening right now or in the next 24 months weigh a whole lot more than things we think will happen in 15 to 20 years," said Lenny Jones, a managing director at Moody's. "We're not scientists."

Credit-rating firms have always acted conservatively, said Justin Marlowe, a professor at the University of Washington who studies public finance. To some critics, that reluctance to downgrade pre-emptively is leaving the market unprepared for the onslaught of climate effects that so many local governments will face.

That's the conundrum facing the municipal bond market right now: If the market fails to be proactive about future risks, it could lead to billions in ill-fated investments in communities at the forefront of climate change. But making it more expensive for governments with environmental liabilities to borrow money could prevent them from making the improvements needed to strengthen their infrastructure.

And just because a city is likely to be struck by sea level rise or wildfire doesn't necessarily mean it will default on its bonds. Further effects like crop yields and population shifts — and their impact on a tax base — could prove even harder to project.

"It's a pretty big step from 'we have economic impacts' to 'this is going to affect their long-term ability to repay their bonds.' There's a really big difference," Mazzacurati said. "[Ratings firms'] focus is really about counties who repay their debt. That's it. There can be really important impacts that are not going to be reflected in the bond rating, and that doesn't mean the bond rating is off."

Disaster Fallout

So far, the few climate-related credit downgrades have come after specific disasters. New Orleans and Port Arthur, Texas, experienced credit downgrades after major hurricanes. And after a fire nearly destroyed Paradise, California, last year, the pool of pension obligation bonds it was a member of saw its credit downgraded.

As New Orleans rebounded, its credit improved. The city adopted a resilience strategy, bolstered its levee system and pursued other projects, such as turning green space into water reservoirs during periods of flooding. Today, the city sees its biggest climate threat as extreme rainfall, which has increased in frequency in recent years and flooded parts of the city.

Leaders in New Orleans are asking voters to approve \$500 million in new bonds, which would pay for infrastructure improvements such as the replacement of outdated pipes, as well as other goals like affordable housing. City officials say it shows New Orleans is "doubling down" on its infrastructure program.

"The environment is changing. More water's coming down in a shorter period, and we have to respond to that," said Norman White, the city's chief financial officer. "Our first responsibility is to the citizens of New Orleans. Fortunately, that lines up with investors."

Coastal cities across the country are building seawalls to stave off rising oceans. Others are

elevating roadways to prepare for more frequent flooding. Some are requiring sturdier new construction and retrofitting existing buildings to withstand severe weather events. Communities in drought-prone areas may focus on projects such as water storage, while those with flooding concerns must fortify their sewage infrastructure.

Last year, Moody's surveyed the 50 largest U.S. cities; 28 responded. Among them, they had 240 climate resilience projects, totaling \$47 billion. Some 60% of the projects were to combat flooding.

Florida's Miami-Dade County has been praised by analysts for its infrastructure investments focused on climate preparedness. Ed Marquez, the county's deputy mayor, said future financing is a "concern," but officials are trying to address that with capital plans focused on dealing with the changing climate.

"This is a many-year process as we fix our infrastructure, as we add new infrastructure, as new science comes on board," he said. "Miami is still growing. People are still coming. Investors are buying our bonds. We're telling them what the odds are, but it's odds that they're willing to play."

Statewide, Florida remains in good shape creditwise, despite the challenges many of its communities are facing. Ben Watkins, the state's director of bond finance, said that's likely to continue, even amid hurricanes and rising sea levels. Even the most devastating hurricane seasons have ended up being a "blip on the radar" in terms of Florida's credit health, he said. But concern remains for smaller governments within the state.

"People are dying to come to Florida and coming to Florida to die," he said. "Until that changes, we'll have the economic engines to be able to access credit."

Cities with climate change risks should follow Florida's lead and borrow now for local projects, said Fabian, the analytics researcher.

"As investors get smarter about climate change risk, it will become more expensive for governments with the largest need to borrow," Fabian said. "Their costs to borrow could certainly be higher. Acting earlier is almost always cheaper."

BY ALEX BROWN, STATELINE.ORG | NOVEMBER 26, 2019 AT 3:01 AM

The Troubling Decline in City Revenue Growth.

The economy continues to grow, yet cities anticipate revenue problems. How can both be true?

The most startling conclusion of The National League of Cities' <u>new fiscal conditions report</u> was that revenue growth "stalled" last year and that this trend has continued—creating real problems for city budgets.

This came as a particular shock to us because gross domestic product from coast to coast continues to grow. According to the U.S. Bureau of Economic Analysis, "Real gross domestic product (GDP) increased in all fifty states in the first quarter of 2019."

So, the question emerges: While the economy has remained healthy, why are so many cities experiencing revenue growth stagnation or even declines? Columbia, Missouri (population 122,000),

for example, saw annual growth in sales tax revenues of 5.8 percent in 2011, but just 1 percent growth in 2018. The city's budget report last year noted, "Sales tax growth has been historically low for the last four years. These revenue challenges appear to be long term problems."

Continue reading.

Route Fifty

By Katherine Barrett & Richard Greene

Nov 24, 2019

Wells Fargo Warns of Mispricing of Risk in Municipal Bond Market.

Gabe Diederich, portfolio manager at Wells Fargo Asset Management, discusses risks within the municipal bond market. He speaks with Bloomberg's Taylor Riggs in this week's "Muni Moment" on "Bloomberg Markets."

Watch video.

Bloomberg MarketsTV Shows

November 27th, 2019, 10:07 AM PST

<u>Understanding Municipal Debt Backed by Transportation Districts.</u>

Transportation debt is unique in the way that it's often issued for projects that can take a long time to complete, involve multiple jurisdictions and may span across a vast region. These initiatives include: bridges, highways, public transit system (including rail and buses), ports and airports. And because these projects are rarely unique to one local government, you will often see a large metropolitan area consisting of many cities and counties taking part in these projects by creating special districts, electing a board with a unanimous consensus and funding these initiatives.

Contrary to popular belief, transportation bonds aren't limited to the big infrastructure projects mentioned above or only issued by larger jurisdictions. In 2016, Kenmore, Washington (population 22,460), passed its first bond measure in the city's history: a Walkways and Waterways bond that supports new sidewalks and buffered bike lanes along two streets in the city. The bond is tied to the city's Target Zero goal, which strives for zero fatalities of people walking and bicycling by 2025.

In this article, we will take a closer look at the transportation debt market, revenues that back up this form of obligation and how it fits in your portfolio as an investor.

Continue reading.

municipalbonds.com

by Jayden Sangha

Rural Communities Look to Jails for Revenue.

A new report found that rural areas are increasingly renting out jail beds to places with overcrowded facilities in an effort to bring in more revenue.

The jail population in the U.S. has been steadily falling over the past decade. Much of that decline has been driven by cities, like New Orleans, which shrunk the jail population to the lowest numbers since 1979, and New York, where the jail now holds almost 70% fewer people than it did in the 1990s.

But jail capacity hasn't seen the same shift. Instead, rural communities, as well as some suburban localities and mid-sized cities, are often choosing to build new jails or additions. Overall jail capacity grew by over 11% between 2005 and 2013, according to a <u>new report</u> from the Vera Institute of Justice, a nonprofit that advocates for changes to the criminal justice system.

"Across the country, you see a really interesting trend," said Chris Mai, one of the report's authors. "While the number of people in jail is going down, capacity is going up. Small towns and rural America just keep adding more jail beds."

Continue reading.

Route Fifty

By Emma Coleman

Nov 27, 2019

How Fit Is Your School? The Methodology Behind Forbes' 2019 College Financial Health Grades.

The majority of the nation's institutions of higher education are in precarious financial straits, as many tuition-dependent colleges compete to fill freshman classes in order to stay open. Forbes' sixth report on the financial health of private-not-for profit colleges finds that the overall financial well being of colleges has deteriorated and many are in danger of closing or merging. Student demand is tapering, tuition pricing (and discounting) is growing, and unfortunately many administrations and faculties are loath to adapt to this new reality.

This is not a moment; it's a trend. The outlook for the higher-education sector is negative, according to analysts at credit agencies Moody's and Fitch Ratings. And while both public and private schools are feeling the heat, according to Fitch's Emily Wadhwani, "The typical credit characteristics of a public institution are better suited for weathering with resilience declining demand. ... In general, [private colleges] are more pressured than their public counterparts."

That pressure is painfully evident in Forbes' College Financial Health Grades. The number of D-graded colleges, those with GPA's less than 1.5, have swelled from 110 when we started grading

finances in 2013 to 177 today—a 61% increase. Only 34 schools, including Harvard, Brown and MIT, earn A+'s.

To grade the schools, we used data from the <u>Department of Education's IPEDS database</u>. We averaged the figures from the two most recent "final release" fiscal years, 2016 and 2017. Only private not-for-profit colleges with at least 500 students and sufficient data were examined, and the lowest grade we gave out was a D.

The GPA's and grades measure financial health as determined by nine components:

- **1. Endowment Assets Per FTE (15%):** This is year-end endowment assets divided by the number of 12-month full-time equivalent students. Denison University was the lowest-scoring school to still get full credit, with \$337,980 per student; Columbia University got 14.9%, with \$334,870. Eleven schools boast over \$1,000,000 in endowment per student; only one, Princeton, eclipses \$2 million.
- **2. Primary Reserve Ratio (15%):** This "liquidity"-oriented ratio analyzes how well a university's "expendable assets" could quickly cover its annual expenses without straining its normal operations. Expendable assets are defined as total unrestricted net assets, plus temporarily restricted net assets plus debt related to property, plant and equipment, minus property, plant and equipment net of accumulated depreciation, divided by total annual expenses. Schools needed just beneath a ratio of 2.5, or two years and six months, to get full credit. Grinnell College in Iowa—whose endowment fund was once under the stewardship of Warren Buffett—is once again the top score, with a ratio over 14. University of Pennsylvania, despite its A+ grade, slides in just under 1.0.
- **3. Viability Ratio (10%):** Similar to the primary reserve ratio, the viability ratio measures the amount of expendable assets a college has relative to its debt load. Many colleges carry no debt and therefore received full credit. The cutoff for a perfect score is just above 2.5. Dartmouth has a ratio of 4.8. Davis & Elkins College, a tiny school in Appalachia, was in the midst of a \$100 million fundraising campaign during the years pulled for the list; by paying down its debt, it had a viability ratio of over 65—and the school now boasts no debt, according to its president, Chris Wood.
- **4. Core Operating Margin (10%):** This measures operating profit, otherwise known as "surplus." We looked at core revenues for education, as measured by the DOE, minus core expenses. In other words, how well is a college meeting its annual obligations, like instruction expenses and student services, from the tuition, grant, gift, contract and investment revenue it takes in? Of the 933 schools ranked, 384 had negative margins. Standouts like Bates College and Berea College got near perfect scores, with operating margins around 43%.
- **5. Tuition As A Percentage of Core Revs (15%):** Tuition-dependent schools, where tuition revenues account for more than 60% of their core revenues, tend to be at higher risk. Price discounting can have a big effect on these schools' viability, and enrollment shortfalls can mean budget misses, and potentially layoffs or cost cutting. Any college where tuition dependency is less than 10% of revenues gets a perfect score. Three schools rely on tuition for less than 5% of their revenues: College of the Ozarks, California Institute of Technology and Grinnell College.
- **6. Return On Assets (10%):** This metric divides the change in net assets over the year for an institution by the assets at the beginning of the year. This answers the simple question of whether an institution's assets are actually growing. Only 204 saw their assets shrink; online degree leader Southern New Hampshire University, which Forbes profiled in March, earned a perfect score with an over 30% ROA.
- **7. Admission Yield (10%):** Is a college students' first choice, or a last choice? This measure looks

at the percentage of admitted students who actually choose to enroll. For this metric, we averaged the last three available years of data. Near the top of the pack is College of the Ozarks (profiled by Forbes in 2018), with an average yield over 89%. Meanwhile, colleges like High Point University and Drexel University have safety-school-type ratios, of less than 20%.

- **8. Percent Freshman Getting Institutional Grants (7.5%):** Turns out, giving out merit scholarships does not necessarily mean a school is well-endowed and generous; it may just be desperate. This figure measures the percentage of students getting discounts, otherwise known as institutional grants, to entice enrollment. Schools where the percent is less than 40%, like Wake Forest University and Tufts University, get full credit. Fordham University and Wofford College got half credit because 90% of their first-year students receive institutional grants.
- **9. Instruction Expenses Per FTE (7.5%):** This measure is an indicator of how much funding the particular institution devotes to the core mission of higher education per full-time-equivalent student. Washington University in St. Louis, Yale and Stanford all spend over \$100,000 per student, though spending over \$45,000 per student got a perfect score. The College of Idaho, graded an A, spends less than \$10,000 on instruction.

Forbes.com

by Carter Coudriet & Matt Schifrin

Nov 27, 2019

Fitch Rtgs: Shape of Next US Economic Cycle Will Inform USPF Macro Stress

Fitch Ratings-New York-21 November 2019: The federal government's two primary tools to stimulate the economy, fiscal and monetary policy, may be constrained relative to previous cycles, potentially exacerbating cyclical US public finance (USPF) funding deficits and delaying the rebuilding of issuer reserves during and coming out of the next downturn, says Fitch Ratings. More limited possibilities for aggressive macro policy easing could culminate in a slower path of recovery after any future recession. This has the potential to affect the USPF cyclical stress assumption used at that time in our three to five year forward look analysis, but would not represent a change in criteria, as Fitch's criteria anticipates the potential modification of standard sector scenarios in a period of economic decline. Any such change would be communicated publicly and applied consistently from that point.

Fitch's USPF group embeds a forward-looking stress to test the resiliency of its ratings through the cycle by incorporating a multi-year scenario consisting of a theoretical cyclical moderate decline and recovery, specified in GDP terms. While Fitch does not anticipate a recession in the near term, given the long duration of the current recovery, it is useful to explore certain factors, such as the strength of the next recovery, that might inform if and when to modify USPF's standard stress scenario during and coming out of the next recession.

Policy makers may be more limited in the future to confront a future slowdown in the economy. Over the past four recessions, short-term interest rates fell by over five percentage points shortly before the onset of the recession to the low point experienced after the trough or during early recovery. Currently, treasury yields through the intermediate part of the curve are less than 2%, so such a decline would imply interest rates of between negative 3.5% and negative 4%, which is virtually impossible. Consequently, considering even slightly negative rates as the floor, rates can fall less

than 2% at most, less than half the average decline relative to past recessions, to help confront a recession and spur consumer and business demand.

Continue reading.

Trump Tax Cut Sets Off Boom in Once Sleepy Corner of Muni Market.

- Vanguard, Eaton Vance say they're buying more taxable munis
- Refinancing causes biggest spike in issuance since 2010

At Eaton Vance's daily 8:45 a.m. meetings with fixed-income executives, a usually overlooked segment of the bond world has been coming up more often.

That's because a deluge of debt sales unleashed this year in the \$485 billion taxable municipal-bond market is luring buyers unfamiliar with the world of public finance.

So traditional corporate-debt investors are getting crash courses on concepts like a general-obligation security pledge — which is basically just a promise to repay — and gauging how easy it will be to resell the securities when they need to raise cash. Others are dialing up their long-standing municipal-bond teams as they wade into a market that dangles higher returns and low odds of default, a standout at a time of negative interest rates overseas and frequent speculation about mounting credit risks in corporate America.

So Vishal Khanduja, who heads Eaton Vance's investment-grade portfolio management, and Craig Brandon, who leads the firm's municipal-bond investing, have been talking about taxable municipals more and more.

"In the morning meeting, the discussions have been lively over the last two months," said Khanduja, who has been buying taxable munis for his corporate-bond portfolios, as his team has in the past on occasion.

Continue reading.

Bloomberg Markets

By Amanda Albright

November 22, 2019, 5:52 AM PST

Muni Returns Will Remain Strong in 2020, BlackRock's Carney Says.

Sean Carney, BlackRock Inc.'s head of municipal strategy, discusses the outlook for the municipal bond market with JOHCM Senior Fund Manager Lale Topcuoglu and Bloomberg's Alix Steel on "Bloomberg Daybreak: Americas."

Watch video.

Bloomberg Daybreak: Americas TV Shows

Economic Expansion Doesn't Help Underfunded Public Pension Plans.

Tom Kozlik, head of municipal strategy at Hilltop Securities, discusses public pension funding liabilities. He speaks with Bloomberg's Taylor Riggs on this week's "Muni Moment" on "Bloomberg Markets."

Watch video.

Bloomberg MarketsTV Shows

November 20th, 2019, 10:22 AM PST

Climate Change Disasters And Your Municipal Bonds.

There are numerous details for municipal bond investors to stress over: unfunded pensions, other post-employment benefits (OPEBs) owed, cyberattacks and their ransom demands. But the big headlines consuming municipal bond investors today is climate change and man-made disasters—flooding, droughts, hurricanes, tornadoes, and wildfires. Even the conflicted bond rating agencies are writing about this dilemma and their financial impact on states, cities and counties that lay in the path of mother nature's wrath. You can add to this list the huge man-made blunders causing California's wildfires.

Most do-it-yourself municipal bond investors haven't thought about or begun to reject issuers that can be affected by fires, climate change and other natural disasters. They should.

You may already own municipal bonds where the issuer has suffered from cyclones, hurricanes and flooding and you've come out fine. But that doesn't mean you'll still be fine going forward. Granted, a catastrophe doesn't mean a bond will default but the numbers and frequency continue to mount.

These disasters will eventually impact municipal bond ratings, debt service coverage, and in some cases may actually cause defaults.

When you analyze your municipal bond portfolio you must consider location (coastal or inland). Study enhanced infrastructure projects like flood systems, levee systems, storm drains, brush clearings, emergency preparedness to access if the city, school district, or hospital can survive and continue making interest and principal bond payments in the wake of a disaster. Stay away from areas that constantly are in a state of drought such as California's Central Valley. Risks are now everywhere. This isn't an apocalyptic warning, it's reality.

Today In: Money

I'm no tree-hugger. But as a native Californian having lived through multiple earthquakes, I expect the big one will happen someday as will other multibillion-dollar climate events that are increasing in frequency.

The collateral damage for municipalities suffering such events can be overwhelming: economic disruption, citizens leaving and taking with them the sales taxes, property taxes and personal

income tax revenues the cities and states rely on. Each is essential to pay the interest on their municipal bonds.

If you invest in essential projects, you'll be better off if a disaster occurs. Los Angeles County can survive without Long Beach Airport. But it cannot survive without Los Angeles International Airport—it's the heart of the economy and the arterial system for commerce. Los Angeles International Airport is essential and one of the main reasons I love the top ten large U.S. airport municipal bonds.

In the past, assistance programs from the federal and state governments have been the climate and wildfire disaster safety nets. But those safety nets cannot coax residents into staying as time and time again floods, fires, hurricanes and tornadoes wreck lives and damage property.

Is having insured municipal bonds a safety net? Only if the insurer runs the business properly, doesn't over-commit and is profitable. We saw little of the above during the man-made financial disaster of 2008-2009.

Eventually all these factors appear in the Official Statements when newly issued municipal bonds come to market. Still, after 40 years of dealing with bonds and individual investors, I've met only a handful of people who have ever read such offering documents.

Bottom line: Geographic diversification is helpful as is investing in multiple different issuers. Make sure your issuers aren't in harm's way when a disaster hits. Remember, stadiums, aquariums, museums, hockey rinks, libraries and concert halls are not essential and don't deserve your bond investment dollars. But airports, municipal water districts and sewers are indispensable and worthy of investment. Just use common sense.

If you own municipal bond funds, you'll need to read their quarterly reports for climate change and disaster commentary. If the bond mutual funds aren't commenting, then they aren't being prudent with your money. You might need to change horses to one that doesn't just value yield and total return—but equally values preservation of your capital.

Forbes

by Marilyn Cohen

Nov 17, 2019

With Overall State Spending Up, Transportation Sees Notable Gains.

At least 18 states raised spending on transportation programs by 10% or more in fiscal 2019, based on estimates in a new report.

State government spending across the U.S. increased to an estimated \$2.1 trillion in fiscal year 2019, with the amount of money going toward transportation notably growing, according to a report that the National Association of State Budget Officers released on Thursday.

Overall spending was up from \$2 trillion in fiscal 2018. That means spending grew in 2019 at an estimated rate of 5.7%, slightly above a 33-year average of 5.6%, NASBO said. The findings were included in the latest edition of the group's <u>State Expenditure Report</u>.

Brian Sigritz, NASBO's director of state fiscal studies, said the spending increases can be traced to some extent to more robust tax collections states have seen in the past two years. General fund revenues were more sluggish during fiscal years 2016 and 2017.

"The relatively strong national economy, that has led to gains in state revenues," Sigritz said.

Amid these windfalls, some states are putting more money toward transportation.

During 2019, NASBO's report indicates that 18 states increased spending of state funds on transportation by at least 10%. Overall state transportation spending, including proceeds from bonds and federal funds flowing to states, grew at a rate of 8.9%.

Transportation spending by states in 2019 was roughly \$172 billion, about 8% of total expenditures.

Sigritz pointed out that there are both Democratic and Republican states that have prioritized transportation in the past five years or so.

In some places this has meant raising gas taxes, imposing fees on electric vehicles and adding toll lanes. Some of the revenue from sources like these is now working its way through budgets.

NASBO tracks spending in seven program areas, all of which saw estimated increases in spending during fiscal 2019, which ended on June 30 for most states.

Along with transportation, the area where spending grew the most was an "all other" category that can include a range of items, such as pension contributions, employee pay raises, "rainy day" or reserve fund savings, and expenses tied to natural disasters.

Seventeen states spent at least 10% more state funds in this "all other" category in fiscal 2019, while the overall growth rate was 7.5%. What share of this spending went toward specific areas, like pensions or rainy day funds for instance, isn't outlined in the NASBO report.

Education and Medicaid continue to be big cost drivers for states. Excluding federal funds and bonds, in fiscal 2019 about 25% of state spending went toward K-12 programs and 13% went toward higher education, while about 16.4% was allocated to Medicaid.

When including federal funds, Medicaid accounted for nearly 29% of state spending in fiscal 2019.

Medicaid has increased as a share of state spending since the Great Recession and after the Affordable Care Act, or Obamacare, was enacted, growing from around 20% in 2008 to its current level, although in 2019 it fell slightly as a proportion of state spending.

The Affordable Care Act gave states the option to expand Medicaid to cover more people. The program, which provides health insurance coverage for low income Americans, is "counter-cyclical," meaning costs tend to go down when the economy is better.

A copy of NASBO's report can be found here.

Route Fifty

by Bill Lucia

November 21, 2019

The Bond Buyer to Celebrate 2019's Deal of the Year Honorees at Annual Gala.

18th Annual Awards Ceremony to be held on December 4 at the Conrad New York Downtown.

NEW YORK, Nov. 22, 2019 /PRNewswire-PRWeb/ — The Bond Buyer has announced its finalists for the 18th Annual Deal of the Year Awards. Those honored will be recognized on December 4 at the annual Bond Buyer's Awards Gala at the Conrad New York for their outstanding achievement in municipal finance.

This year's awards include the addition of three new categories, ESG/Green, Public-Private Partnership (P3), and Innovation. The total number of categories of deals eligible for awards has been increased to 10; all 10 of these winners are also finalists for the national Deal of the Year Award, which will be presented at the NYC ceremony.

"This year's lineup reflects the full range of communities and public purposes this market comprises," said Mike Scarchilli, Editor in Chief of The Bond Buyer. "The deals honored vary in size, complexity and structure — as were the nominations we received, which were deeper and more diverse than ever. We're excited to honor these creative and resourceful institutions and highlight their incredible achievements."

Submissions for the awards were open to all transactions that closed between October 1, 2018 and September 30, 2019. Those ultimately deemed finalists were selected by The Bond Buyer's editorial board. Judging criteria included the following: creativity, the ability to pull a complex transaction together under challenging conditions, the ability to serve as a model for other financings, and the public purpose for which a deal's proceedings were used.

A full list of finalists can be found below:

- Innovative Financing: Cities of Dallas and Fort Worth, Texas
- ESG/Green Financing: Los Angeles County Metropolitan Transportation Authority
- Public-Private Partnership Financing: Virginia Small Business Financing Authority
- Health Care Financing: CommonSpirit Health
- Smaller Issuer Financing: Vermont Municipal Bond Bank
- Northeast Region: Battery Park City Authority
- Midwest Region: Indianapolis Local Public Improvement Bond Bank
- Southwest Region: City of Austin
- Southeast Region: Solid Waste Authority of Palm Beach County, Florida
- Far West Region: San Diego Association of Governments

In addition to recognizing the Deal of the Year finalists, the December 4 gala will include the presentation of the Freda Johnson Award for Trailblazing Women in Public Finance to two public finance professionals, one from the public sector and the other from the private. The 2019 recipients are Ritta McLaughlin, most recently the MSRB's Chief Education Officer and Courtney Shea, the owner and managing member of Columbia Capital Management, LLC.

"The Bond Buyer has developed as an essential resource for municipal finance and real time market data. We are so honored to be presenting these prestigious Deal of the Year awards for the 18th annual year," said Gemma Postlethwaite, CEO of SourceMedia. "I am also truly pleased to recognize

Ritta McLaughlin and Courtney Shea for their leading-edge work as public finance professionals."

For more details on each finalists and their award winning initiative, please visit bondbuyer.com. The National Deal of the Year recipient will be announced at the December 4 gala and will be listed on bondbuyer.com that evening.

About The Bond Buyer

The Bond Buyer is the only independent information resource serving the entire municipal finance community. Its comprehensive paid-subscription package of news, analysis and data is unique in the industry, serving a complete spectrum of senior industry professionals, through its website, enewsletters and alerts, and daily print edition.

About SourceMedia

SourceMedia is a business information and marketing services company that advances professional communities. The company engages professionals in financial services, as well as leaders in advisory and data management, with deep, agenda-setting content, peer networks, and provocative research and benchmarking. Our brands drive the transformative conversations shaping these industries, and include American Banker, The Bond Buyer, PaymentSource, Financial Planning, Digital Insurance, Accounting Today, and National Mortgage News.

Seeing Green: Investing in Municipal Green Bonds to Support Local Climate Projects.

New York – Responsible investment vehicles seek to align investments with investors' values through programs and projects that contribute to local communities in a positive way. Green municipal bonds offer investors the opportunity to support climate-aligned projects in such sectors as transportation, water and waste infrastructure, pollution control and renewable energy, which includes wind and solar power.

Green bond issuance

Green bonds are standard municipal bonds whose proceeds are used specifically to fund environmentally beneficial projects, as well as social and governance improvements.1 These bonds can encompass not only climate-related issuers in public power, water and sewer, but also issuers in the education, health care and affordable housing sectors of the market.

Green-labeled issuance remains small. In 2017, there was \$12 billion of green bond issuance in the US municipal market, an increase of 85% over the \$6.5 billion of municipal green bond issuance in 2016.2 Total par declined to \$4.9 billion in 2018 — a drop of 50% from 2017 and 33% less than was issued in 2016 — reflective of lower municipal issuance overall.

Continue reading.

Eaton Vance

by Lauren Kashmanian

Municipal Portfolio Manager Eaton Vance Management

Future Returns: ESG Investing in Nonprofit Municipal Debt

The environmental, social, and governance (ESG) investing trend has taken a leap forward recently from a stock-centered approach to include fixed income, but it has largely overlooked debt issued by community-based organizations that can have direct, measurable impact on pressing local issues.

Municipal bonds issued by small nonprofit groups working to bring about change in their communities can satisfy investors' growing appetite for impact investing ideas while paying yields ranging from 4.5% to 6%, says Buck Stevenson, managing director and portfolio manager at Silvercrest Asset Management Group in New York.

In contrast to green municipal bonds issued by large entities such as the Massachusetts Water Resources Authority or San Francisco Public Utilities, many smaller municipal bonds with the potential for social rather than environmental impact—the "S" in ESG—have been strikingly absent from the values-based investing dialogue, Stevenson says, adding that he is working hard to change that.

"We are educating our clients that you don't have to look far to do good in your community," he says. "We're talking about issuers that fly under the radar—you wouldn't know them unless you were in their local area."

Nonprofits Fill Vital Needs With Debt

Community hospitals, charter schools, and organizations providing mental health care and veterans services are among the groups that are typically structured as nonprofit organizations with 501c(3) status, and can issue debt to raise funds for improvements, new facilities, equipment, and other needs.

These services fill a critical need and are nothing new, "but they've never been looked at as an impact investment, which is what they really are," Stevenson says. "We're not reinventing anything; we're trying to highlight the good that these financings do to communities. You can visit facilities and see exactly what your investment built."

Consider the New Dawn Charter School in the Carroll Gardens neighborhood of Brooklyn, N.Y. The school's mission is to draw kids back to school who have fallen out of the education system. Earlier this year, the school issued \$20.6 million in 30-year debt to buy and renovate a new facility. The yield: a tax exempt 5.37%.

"This is a very good investment, and to top it off, the school focuses on finding kids who have dropped out and could have had problems down the road," Stevenson says. "It has 300 students with an 80% matriculation rate."

Another example in Silvercrest's portfolio is the Hopeway Foundation, a Charlotte, N.C., area provider of both outpatient and inpatient mental health services that focus on substance abuse rehabilitation, post-traumatic stress syndrome for veterans, and other issues.

A 30-year bond paying 6% is being used to renovate structures on 12 acres and attract top professionals. Hopeway has built referral services in its area, so when hospital services fall short,

doctors can refer patients to its facilities.

These munis are considered to be riskier than investment-grade issues, because they are nonrated. But that's typically because they are such small deals, "not because the credit is no good," Stevenson says. "If you're talking about a \$20 million deal or a \$7 million deal, to pay an extra \$100,000 to get a rating doesn't make sense."

Making Sure the Deals are Strong

Due diligence is where Silvercrest's credit research team pulls its weight. Stevenson wants to see a solid balance sheet with manageable debt levels, strong demand, and sustainable revenues. He avoids rules of thumb when it comes to what constitutes too much debt, particularly for health-care facilities because their compensation methods vary. Medicare reimburses at a higher level than Medicaid, for example—so a manageable level of debt will vary depending on the composition of reimbursements, among other factors.

Beyond a financial analysis, Stevenson wants to see a good answer to the question, "Does this facility need to be there?" he says. "If there is a problem and people work together to solve it, that's an important factor that's not going to show on a balance sheet."

Strong community support is a powerful driver of these organizations' success and an important sign to investors that an issuer has the potential to make good on its debt. For example, when the folks in King Fisher, Okla.—a city with a population of roughly 4,900—voted overwhelmingly to raise the local sales tax by 1% to help support their local 25-bed hospital, the resounding support caught Stevenson's attention. The hospital's debt, issued to rebuild its facility, is currently a part of Silvercrest's portfolio.

Really, All Munis Have a Social Bent

Taking a step back from these smaller issuers, which account for about \$220 billion, the \$3.7 trillion municipal bond market in general can be viewed as strong investments for values-based investors. Muni bonds, by definition, bring about improvements in water systems, infrastructure, schools, and other aspects of daily life.

But it can be harder to feel as connected with, say, a massive international airport renovation than with solving a problem in a community you feel connected to. Says Stevenson, whose firm has relationships with 30 small broker dealers around the country that help scout out smaller deals, "these munis are the 'S' in ESG."

Barron's

By Karen Hube

Nov. 19, 2019 11:29 am ET

<u>Green Banks and Green Bonds are Bringing Billions to Utilities for the Energy Transition.</u>

The financial mechanisms are bringing investors to renewables and distributed energy as utilities, co-ops and munis move away from uneconomic legacy assets.

Hundreds of billions of dollars in untapped new money can finance the U.S. power system's transition away from legacy fossil assets to renewables and distributed generation.

Utilities like Duke Energy and Xcel Energy have issued billions in green bonds to fund renewables development. Green banks in New York, Connecticut and other states are backing investments in distributed resources and energy efficiency. It appears much more institutional money wants in on the green opportunity.

"Green bonds are a capital-raising mechanism that a wide range of institutions could use to raise capital," <u>Coalition for Green Capital</u> Executive Director Jeff Schub told Utility Dive. "A green bank is an institution [capitalized by public funds] that invests capital in clean energy projects. [They] are complementary, capital raising and capital deploying."

Continue reading.

Utility Dive

by Herman K. Trabish

Nov. 19, 2019

S&P U.S. Not-For-Profit Health Care Rating Actions, October 2019

View the Rating Actions.

New Approaches to Large-Scale Green Stormwater Infrastructure Investment Build Climate Resilience.

More frequent and intense rainstorms. Elevated heat and humidity. High water levels and increased shoreline erosion. The realities of climate change, combined with aging and outmoded stormwater infrastructure, create a crisis for Great Lakes stormwater managers.

The good news is many of these challenges can be mitigated through the construction of green stormwater infrastructure-constructed wetlands, porous concrete, and bioswales that help treat stormwater and take the pressure off traditional gray infrastructure like sewers, pipes, pumps, and tunnels. But communities are challenged to fund and implement projects at the scale needed to address the crisis.

Fortunately, new thinking and approaches to funding and constructing green stormwater infrastructure are emerging. These methods, which combine market principles with community benefits, are upending the traditional economics and practice of building green stormwater infrastructure and are bringing climate resilience within reach.

Continue reading.

P3 GREAT LAKES INITIATIVE | THURSDAY, NOVEMBER 21, 2019

FAA Focuses on Controlling Revenue Diversion.

The concern of the Federal Aviation Administration ("FAA") regarding the use by airport operators of airport generated revenues to soften budget shortfalls off the airport appears to be growing. In a speech delivered at the November 11, 2019 National Air Transportation Association Leadership ("NATA") Conference, Kirk Shaffer, FAA's Associate Administrator for Airports, solicited the assistance of the aviation community in working with jurisdictions on compliance. Mr. Shaffer went on to opine that jurisdictions that operate airports are sometimes unaware of the laws governing revenue diversion, or confused by revenue flows, particularly as related to state and local taxes. He illustrated the problem by sharing the fact that, of the 177 jurisdictions with which the FAA has worked over the past five years on revenue diversion issues, 107 still remain noncompliant.

That number of noncompliant jurisdictions is somewhat surprising as the rules governing the use of airport revenues from airports are fairly explicit. The general rule is that revenues generated by a public airport may only be expended for the capital and operating costs of: (1) the airport; (2) the local airport system; or (3) other facilities owned or operated by the airport operator and directly and substantially related to the air transportation of passengers or property. 49 U.S.C. §§ 47107(b)(1) and 47133(a). The use of airport revenue for purposes other than airport capital or operating costs is generally considered "revenue diversion" and is prohibited by federal law. See Policy and Procedures Governing the Use of Airport Revenue, 64 Fed.Reg. 7696, 7720 (February 15, 1999) ("Revenue Policy"). Airport revenues subject to the revenue use requirements include all fees, rents, charges, or other payments received from anyone who makes use of the airport and from the airport sponsor's activities on the airport. Id. at 7716.

The third prong provides unique revenue allocation opportunities to airport sponsors that own or operate other facilities.

Specifically, the statute permits sponsors to use airport revenue for other facilities owned or operated by the airport owner and directly and substantially related to the air transportation of passengers or property. "Owned" means that the airport owner or operator holds legal title to the facilities for which airport revenue is used. FAA Bulletin 1: Best Practices – Surface Access to Airports (2006). "Operated" means that the local or state government or authority that owns or operates the airport is legally responsible for the operation of the facility and operates the facility either with its own employees or through a management contract with another public agency or private firm. Id. "Directly and substantially related to the air transportation of passengers" is a standard that FAA interprets on a case by case basis with a focus on whether the project of facility is intended primarily for users of the airport. Where revenues are not expended wholly or primarily for users of the airport, they must be prorated to the actual or forecasted use of the facility. For example, if 10% of actual or projected use of the facility will be for non-airport purposes, the airport revenues can only be used to pay for 90% of the project.

Finally, federal law and policy permit the use of airport revenues for certain costs of off-airport environmental mitigation incurred for an airport development project. "Airport revenue may be used where airport development requires a sponsoring agency to take an action, such as undertaking environmental mitigation measures contained in an FAA Record of Decision approving funding for an airport development project, or constructing a ground access facility that would otherwise be eligible for the use of airport revenue." Revenue Use Policy at 7720.

In short, airport operators are allowed to spend airport generated revenues on airport operation and development, including an off-airport project that contributes substantially to that operation and/or

development. Off-airport uses that are unrelated, or marginally related, to airport operation or development are explicitly precluded by the airport revenue use policy.

This emphasis is particularly interesting in light of FAA's recent decision to allow the City of Santa Monica to use airport revenues to tear up portions of its runway to make access by jets less likely. (See blog post FAA Ignores Its Own Regulations in Allowing Expenditure of Airport Revenue to Demolish Runway at Santa Monica Municipal Airport, November 11, 2019). Nevertheless, revenue diversion occupies a central position in the complex of policies directed at airport development. It is essential for any airport operator to understand and apply these policies scrupulously, for the purpose of avoiding FAA retribution, including, but not limited to, repossession of grant funds already allocated, sometimes amounting to millions of dollars. In the long run, being safe is more effective than being sorry.

by Barbara Lichman

November 15 2019

Buchalter

Homespun Firms Challenge Wall Street's Muni-Bond Supremacy.

The SEC is considering allowing advisers to arrange sales to skilled investors without the involvement of large banks and midsize brokers

Wall Street's longstanding hold on the \$4 trillion municipal-bond market faces a challenge from an onslaught of small, independent firms known as municipal advisers.

The Securities and Exchange Commission is considering allowing these advisers to arrange private bond sales to skilled investors without the involvement of the large banks and midsize brokers that have for decades dominated the market for high-grade local government debt.

Though private sales make up only a small portion of the overall market, broker-dealers—as these banks and brokers are known because they price and sell new bonds and trade existing ones—aren't eager to face further inroads.

Continue reading.

The Wall Street Journal

By Heather Gillers

Updated Nov. 13, 2019 6:04 pm ET

Muni-Bond Trading Evolves.

Slowly but surely, change is coming to municipal bond trading.

For brokers, tech providers and trade-venue operators seeking to modernize transactions, the \$3.8

trillion muni-bond market has all the challenges, in spades — small issue size, little standardization, and a highly dispersed network of buyers and sellers. When a local savings and loan needs to buy a municipal bond backing a toll road on behalf of a wealth management client, the S&L representative historically has picked up the phone to do so.

Electronic trading has gained traction in government and corporate bonds, so technology providers and trading-platform operators are looking to export advances in those markets to their fixed income cousin. It is expected to be a long path with incremental gains, very much an evolution rather than a revolution.

"It's not going to be an overnight change where all the tools and protocols that happen over voice will appear on a platform on day one," said Amanda Meatto, Head of Sales and Relationship Management at fixed income marketplace Tradeweb Direct. "The wide range of securities and deals in the municipal marketplace make it more complex."

"What we see happening in munis is a phased approach, where step one is enhancing liquidity, connecting people with as many broker-dealers as possible, and automating small workloads that are very manual today," Meatto continued. "Those are the simpler parts of electronifying a product. There will be multiple stages of innovation from there, driven by the needs of buy-side and sell-side institutions."

While only 12 to 15 percent of municipal bond trading volume is conducted electronically, uptake by financial institutions is moving the needle. In 2018, 62% of buy-side firms traded munis on a screen, up from 51% two years earlier, according to a Greenwich Associates report published in 2Q 2019.

"Investors — primarily asset managers and hedge funds — are increasingly looking to e-trading platforms for order execution," Greenwich wrote. "The largest institutions are a leading indicator of technology adoption."

One unique characteristic of the muni market is a comparatively small average trade size, in the order of \$100,000-\$200,000. High net worth individuals are an important presence in the muni market, especially via the \$6.8 billion parked in separately managed accounts; Tradeweb is aiming to better connect institutions with this retail order flow.

Last month, the platform operator <u>announced</u> a partnership with InvestorTools, a provider of portfolio management and credit analysis systems for institutions, to enable straight through processing for municipal bond trades executed by Tradeweb Direct clients.

"The portfolio manager sits in InvestorTools to make decisions, and the next part of the workflow is execution," Meatto explained. "It was a natural progression for us to link up to streamline the PM's or trader's pivoting from choosing bonds, to looking for liquidity and then executing."

Meatto noted that the muni-bond market lends itself to electronic trading in the sense that buyers often search on criteria, such as duration and coupon, rather than coming in to buy one specific issue as is often the case in corporates and Treasuries. As there were an estimated 1.02 million different muni issues as of February according to Greenwich, electronic platforms can make inventory searches manageable.

Going forward, the challenge for electronic trading is to move beyond just the smaller, so-called odd lot trades and make headway in deals north of \$1-\$2 million. "How do we electronify two people speaking to each other to agree on a price?" Meatto asked. "That is going to be a huge part of electronifying the round-lot marketplace for muni bonds."

<u>Municipal Bond CEFs - Pressure For The Sector After The Treasury Yields</u> Increase

Summary

- All of the net asset values of the municipal bond closed-end funds finished the week in negative territory.
- We continue to follow the most important yields and municipal/Treasury spread ratio.
- Most of the funds from the sector are still trading at positive Z-scores, and we do not see a statistical edge to include some of them in our portfolio.

Continue reading.

Seeking Alpha

Nov. 14, 2019

Municipal CUSIP Request Volume Surges in October.

NEW YORK, NY, November 11, 2019 – CUSIP Global Services (CGS) today announced the release of its CUSIP Issuance Trends Report for October 2019. The report, which tracks the issuance of new security identifiers as an early indicator of debt and capital markets activity over the next quarter, found significant increases in CUSIP request volume for municipal debt and a slight decline in requests for corporate debt identifiers in October.

Read Report.

34% Monthly Increase in Muni Requests Puts Year-to-Date Volume on Record Pace.

"The favorable interest rate environment for debt issuers has put municipal bond CUSIP request volume on pace for a record year," said Gerard Faulkner, Director of Operations for CUSIP Global Services. "While we have seen some month-to-month volatility in the municipal bond category over the course of 2019, the general trend for the first three quarters has been toward steady growth."

Read Press Release.

The MSRB Adds Links to Additional Indices on EMMA®

View the new links.

MSRB's Quarterly Trade Statistics Report.

Municipal market trading declines to \$723 billion in the third quarter.

Read the MSRB's quarterly trade statistics report.

Denver Supportive Housing Social Impact Bond Initiative: Housing Stability Payments

Abstract

In February 2016, the City and County of Denver and eight private investors closed on the city's first social impact bond, an \$8.6 million investment to fund a supportive housing program for 250 of the city's most frequent users of the criminal justice system. The city will make outcome payments over five years based on the initiative's goals of housing stability and a decrease in days spent in jail by participants. This report details the third assessment of housing stability payment outcomes and interim housing stability outcomes for the program.

Read the full report.

The Urban Institute

by Mary K. Cunningham, Sarah Gillespie, Devlin Hanson, Mike Pergamit, Alyse D. Oneto & Prasanna Rajasekaran

November 12, 2019

Fitch Ratings: Upgrades Again Outpace Downgrades for U.S. Public Finance in 3019

Fitch Ratings-New York-14 November 2019: Last quarter saw a bump in rating activity for U.S. municipal credits with upgrades again exceeding downgrades, according to Fitch Ratings in its latest Rating Actions & Sector Updates report for U.S. public finance.

As of third-quarter 2019 (3Q'19), the quarterly special report consolidates content from previous U.S. Public Finance Rating Actions and Sector Briefing special reports, and discusses the latest key credit issues for each sector.

Fitch upgraded 45 U.S. public finance security ratings and downgraded 31 in 3Q'19, compared with 34 upgrades and 19 downgrades in 2Q'19. Positive Rating Outlooks and Watches also increased by four to 99 (from 95 in 2Q'19) while Negative Rating Outlooks and Watches fell to 102 in 3Q'19

compared with 106 in 2Q'19.

On Oct. 7, 2019, Fitch resolved all 42 public power long-term ratings placed Under Criteria Observation after revisions to the U.S. Public Power Rating Criteria in April 2019. Nine out of 16 public power long-term rating upgrades and all four downgrades in 3Q'19 were the result of the criteria revision.

'U.S. Public Finance Rating Actions & Sector Updates: Third-Quarter 2019' is available at 'www.fitchratings.com'.

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Additional information is available on www.fitchratings.com

Haskell and Richbourg on Municipal Bond Market (Podcast)

Lisa Abramowicz and Paul Sweeney speak with Patrick Haskell Managing Director of Municipal Securities at Morgan Stanley and Scott Richbourg, Head of Public Finance at Build America Mutual.

Play Episode

Bloomberg Markets

November 14, 2019 — 8:19 AM PST

Fitch Ratings: U.S. Water Utilities' Financial Profiles Strengthen

Fitch Ratings-Austin-11 November 2019: Net margins accelerated for U.S. water utilities over the last year while sector leverage declined, according to a new report from Fitch Ratings.

Surplus cash flows climbed to 135% of annual depreciation in the current median cycle as revenues expanded over 5% and expenses were held in check. Most of the revenue growth occurring continued to come from rate adjustments. Water sales were marginally positive while sewer flows were flat, similar to recent results. 'Revenue growth is expected to continue expanding at about 3%

annually based on planned adjustments, with revenue volatility sufficiently mitigated by residential rate structures that typically recover 40% of charges from fixed components,' said U.S. Public Finance Managing Director Doug Scott.

With the current medians, sector debt service coverage reached its highest levels observed by Fitch. Strong operations and robust reserves allowed the sector to utilize more pay-go funding for capital, which in turn drove virtually all debt metrics lower. Despite some drawdown of cash balances, liquidity levels continue to be among the highest seen and are more than 55% above those a decade ago, providing a significant degree of flexibility to utilities in managing their business.

Capital spending dipped to a four-year low of around 130% of depreciation, but was sufficient to maintain the age of facilities. The drop in capital deployment appears to be relatively short-term as utility capital projections for the next few years jumped around 20% relative to the last medians. While planned outlays have increased, sector leverage is expected to remain relatively unchanged given two-thirds of capital funding is anticipated to come from available resources,' said Scott.

Fitch's '2020 Water and Sewer Medians' is available at 'www.fitchratings.com'.

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Lisa Abramowicz and Paul Sweeney speak with Mark Muller, Senior Portfolio Manager at Loews Corporation and Grant Dewey, Head of Municipal Capital Markets at Build America Mutual.

Play Episode

Bloomberg Markets

November 14, 2019 — 8:44 AM PST

Bond and Market Analysis from Build America (Podcast)

Paul Sweeney and Lisa Abramowicz broadcast from Build America in New York City. Their guests include: Sean McCarthy, CEO Build America Mutual, Scott Richbourg, Build America Mutual Head of Public Finance, Patrick Haskell, Morgan Stanley Head of Public Finance, Grant Dewey, Build

America Mutual Head of Capital Markets, Mark Muller, Head of Municipal Investments at Loews Corp, David McIntyre, Build America Mutual Chief Information Security Officer and Jonathan Couch, Sector Cyber-Security Expert. Hosted by Paul Sweeney and Lisa Abramowicz.

Listen to podcast.

Bloomberg Markets

November 14, 2019 - 9:17 AM PST

Multifamily Private Activity Bond Issuances Decline 3.7 Percent in 2018.

Housing finance agencies issued \$14.7 billion in tax-exempt multifamily rental housing bonds in 2018, a 3.7 percent decrease in multifamily issuance from last year, according to the Council of Development Finance Agencies (CDFA).

The issuance of single-family mortgage revenue bonds increased more than 50 percent, from \$5.6 billion in 2017 to \$7.4 billion in 2018. The combined multifamily and single-family mortgage revenue bond issuances increased by 5.3 percent to \$22.1 billion. The percentage of volume cap private activity bonds (PAB) issued in 2018 for single and multifamily housing in the 50 states and the District of Columbia was 91.5 percent of all volume cap PAB activity, a record high.

The decrease in multifamily PAB issuance is not surprising, because of the risk of repeal of PABs at the end of 2017 as part of the tax law commonly known as the Tax Cuts and Jobs Act (TCJA) of 2017. Many planned 2018 multifamily issuances were accelerated into 2017 to eliminate the risk, evidenced by the fact that multifamily PAB issuance in 2017 was nearly \$15.3 billion, compared to \$14 billion in 2016.

This year's CDFA report, "CDFA Annual Volume Cap Report: An Analysis of 2018 Private Activity Bond & Volume Cap Trends," states that total annual private activity bond cap in 2018 increased 5.1 percent to \$37.1 billion. The CDFA report surveys agencies from the 50 states and District of Columbia that allocate private activity bond cap among the eligible uses.

In addition to the \$37.1 billion in new 2018 bond volume cap available, state agencies had an additional \$53.1 billion in existing carryforward allocation. The resulting total available amount of national volume cap was approximately \$89.8 billion in 2018. Of that, \$24.1 billion in bond volume was issued, a slight 2.9 percent decrease from 2017.

CDFA also reported a total of \$4.75 billion in total private activity bond cap abandoned, as states have three years to use such authority before it expires. Such a total represents a more than 50 percent decrease from the last time CDFA reported on abandoned cap in its 2016 report. However, 10 states—Alaska, Arizona, California, Florida, Iowa, Mississippi, Missouri, New Hampshire, New York and Tennessee (a list that includes some significant bond-issuing states)—did not report on how much bond cap was abandoned in 2018, and so the total 2018 reported amount likely under-reported the actual amount. See list below for full details.



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New Report Shows Some States Are In Terrible Financial Shape.

By Jose Nino, includes "... The bottom three states — Connecticut, Illinois, and New Jersey — have the highest debt burden per taxpayer. ... These states are also known for having forced unionization, sub-optimal tax policies, bad environments for starting a business, and their lack of affordable housing options thanks to heavy land-use restrictions. None of these are policy coincidences. ..."

Read the full article on: Advocates for Self-Government

Jose Nino | November 14, 2019

Learnings from the Private Sector for Local Government Operations.

The concept of public private partnership is nothing new and you will often see a strong presence of private companies in local, state and federal government operations - including IT, public finance consulting, wealth management, HR and many other areas where public finance relies heavily on the industry experts from the private sector.

These partnerships are often formed either because there isn't enough in-house knowledge/expertise to take on the project or simply because the private sector has already completed similar projects for other jurisdictions and has the experience to complete the work. For example, let's assume that a local government is looking to raise capital to build a public library. Many of the local and state government will hire the right private sector partners to see the project to fruition, from the municipal advisor to the bond counsel to the fixed income underwriters.

It's quite evident that, given the business potential, there are many private companies that are rapidly changing their business models to include and go after local government business pretty aggressively. However, you may also hear the term "red tape" often used when describing the local government operations, or government operations in general, which simply means "excessive bureaucracy or adherence to rule and formalities".

In this article, we will take a closer look both at private sector involvement in local government operations and learnings for local governments from the private sector.

Continue reading.

municipalbonds.com

by Jayden Sangha

Nov 13, 2019

America's Housing Crunch Is So Bad It May Hurt City Bond Ratings.

- Moody's foresees long-term impact if problem keeps worsening
- San Francisco approves \$600 million bond for affordable homes

Not only is the shortage of affordable housing and the number of homeless on America's streets a social and public policy crisis, it's increasingly becoming a risk for municipal-bond buyers as residents of high-cost cities struggle to make ends meet.

Home prices are up 33% nationwide over the past five years and the homeless population increased in Los Angeles, New York City and the Seattle metro area between 2014 and 2018, according to a report from Moody's Investors Service. Failure to deal with these changes puts local governments's bond ratings at risk as residents move to cheaper jurisdictions, spend less and use more social

services.

It's an issue that has a growing importance for investors in the \$3.8 trillion municipal-bond market, especially those with long-term horizons like life-insurance companies. That's because bad economic development policies and housing stresses can factor into decisions to buy a bond or not, said James Lyman, director of research for the municipal fixed-income team at Neuberger Berman.

"This has been evolving more quickly as a credit factor in recent times," Lyman said. "It really depends on the type of client, the duration of the bond you're buying and the speed at which the problem is evolving."

The rising cost of living in America's major cities isn't posing much of an immediate risk for investors, with governments including San Francisco, Los Angeles County and New York City all winning bond-rating upgrades as the rising values increase property tax revenues that are one of their biggest sources of cash. But widening inequality could pose a challenge if it continues to run its course over the next decade, particularly in places like California where housing already eats up a large share of residents' incomes.

Related: America's Worst Housing Market Is Desperate to Find More Supply

The growing problem has pushed municipalities to try addressing these issues. San Francisco residents Tuesday approved selling \$600 million of bonds to pay for public housing rehabilitation and the purchase of new affordable housing units, according to preliminary results, seeking to address the city's increasingly visible homelessness epidemic.

University campus housing expansion and hospital housing for the homeless have also emerged as options to stem the housing issues, according to Moody's.

Bloomberg Markets

By Fola Akinnibi

November 6, 2019, 10:35 AM PST

Investing In Senior Housing Muni Bonds Amid Demographic Change.

Summary

- Continuing care retirement communities (CCRC) fall within a broader category of municipal bonds called private activity bonds (PABs).
- The overall size of the CCRC market is still relatively small (\$5 billion of issuance in 2018), but it's doubled in size over the past decade.
- With a potential yield advantage over AAA munis, CCRC issues can offer attractive tax-exempt income in a well-diversified portfolio.

This credit sector can offer attractive opportunities, but investors shouldn't be drawn in by high yield alone.

Continuing care retirement communities (CCRC) and senior housing facilities have historically been a sought-after category by institutional investors, who are often attracted to this credit sector

because of its higher yield. Yield aside, investing in the senior living sector is supported by positive demographic fundamentals that should expand opportunities in this sector.

Continue reading.

Columbia Threadneedle Investments

By Catherine Stienstra, Head of Municipal Investments; Douglas Rangel, CFA, Vice President, Fixed Income Client Portfolio Manager

Nov. 8, 2019

S&P Criteria | Governments | Request for Comment: Methodology For Rating U.S. Public Finance Rental Housing Bonds

Read the S&P Request for Comment.

<u>S&P Proposed Methodology For Rating U.S. Public Finance Rental Housing</u> Bonds.

CENTENNIAL (S&P Global Ratings) Nov. 4, 2019–S&P Global Ratings is requesting comments on its proposed update to its methodology for rating rental housing bonds in the U.S. (see "Methodology For Rating U.S. Public Finance Rental Housing Bonds").

This proposed methodology, if adopted, would apply to ratings on bonds backed by rental income from residential properties that serve a public purpose. In particular, the proposed methodology would apply to bonds backed by revenues from:

- Affordable multifamily housing (including mobile home parks);
- Age-restricted independent or assisted-living rental housing;
- Privatized military housing;
- Privatized student housing affiliated with a university, college, or community college; and
- Pools of loans secured by affordable multifamily housing.

The primary purpose of the proposed methodology update is to recalibrate our rating analysis, following observed volatility and sharp deterioration in creditworthiness within subsectors of the issues in scope.

S&P Global Ratings is seeking responses to the following questions, in addition to any other general comments on the proposed criteria:

- What is your view of the overall structure of the proposed methodology and clarity of its scope (type of entities rated with the proposed methodology)?
- In your opinion, does the proposed methodology contain any significant redundancies or omissions?
- Are our proposed criteria principles and adjustments comprehensive and clearly defined?
- Do you believe that the proposed methodology appropriately captures credit risks and do you

agree with the manner in which we propose to assess these risks (selection of key factors, their weighting, associated ratios and measures to assess these risks, associated caps)? If not, what alternative(s) would you propose?

- Do you agree with our proposal to focus on borrower default risk rather than property liquidation value, and therefore to use DSC as the key quantitative metric of our coverage and liquidity reserves analysis rather than loan-to-value?
- Do you agree with our proposal to apply a negative adjustment to the rating for transactions with multiple tranches of varied seniority that include a "springing-lien" provision, which results in a pro rata distribution of recovery proceeds following a default of the most senior tranche (see Table 1, and the proposed guidance document in Appendix B)?
- Are there any other views regarding this methodology proposal that you would like to bring to our attention?

We encourage interested market participants to submit their written comments on the proposed criteria by Dec. 18, 2019, to http://www.standardandpoors.com/en_US/web/guest/ratings/rfc where participants must choose from the list of available Requests for Comment links to launch the upload process (you may need to log in or register first). We will review and take such comments into consideration before publishing our definitive criteria once the comment period is over. S&P Global Ratings, in concurrence with regulatory standards, will receive and post comments made during the comment period to

 $www.standardandpoors.com/en_US/web/guest/ratings/ratings-criteria/-/articles/criteria/requests-for-comment/filter/all\#rfc.$

Comments may also be sent to CriteriaComments@spglobal.com should participants encounter technical difficulties. All comments must be published but those providing comments may choose to have their remarks published anonymously or they may identify themselves. Generally, we publish comments in their entirety, except when the full text, in our view, would be unsuitable for reasons of tone or substance.

This report does not constitute a rating action.

The report is available to subscribers of RatingsDirect at www.capitaliq.com. If you are not a RatingsDirect subscriber, you may purchase a copy of the report by calling (1) 212-438-7280 or sending an e-mail to research_request@spglobal.com. Ratings information can also be found on S&P Global Ratings' public website by using the Ratings search box located in the left column at www.standardandpoors.com. Members of the media may request a copy of this report by contacting the media representative provided.

<u>S&P Credit Conditions: In The Mist Of Mixed Economic Signals, U.S. State</u> <u>And Local Credit Quality Remains Strong</u>

Table of Contents

- What To Look For
- Federal Policies Increase The Potential Pressure At The Local Level
- ESG, Cyber And Fixed Cost Pressures Are Here To Stay
- What To Look For: Regional Variations

Despite some indications of a weakening economy at the national level, state and local government

credit quality has not shown any signs of broad deterioration. States continue to project revenue growth, and local revenues also appear to be on solid footing. Signs that we typically look for to indicate economic slowness, such as an increase in Medicaid enrollees or falling sales tax revenues, haven't materialized and therefore the end of 2019 looks to be on track for states and locals.

Even with cautious revenue projections, most states expect that fund balances will be maintained or grow in fiscal 2020, helping to project stability over the near term. Supported by this solid financial backdrop from states, local government credit quality remains stable with limited signs that state governments intend to cut aid or otherwise negatively impact local government operations. Overall we expect most local governments will be able to weather the changes; however, a confluence of events such as a weakening economy and a cyber- or weather-incident would result in a different scenario.

Continue reading.

Fitch Ratings: North American Infrastructure Projects Are Complex, Require Unique Solutions

Link to Fitch Ratings' Report(s): <u>North American Project Finance</u>: <u>Lessons Learned (Decades of Challenges and Successes)</u>

Fitch Ratings-New York-05 November 2019: North American Infrastructure projects are complex undertakings that require careful coordination among multiple parties to adequately address risks and avoid delays, according to Fitch Ratings in a new report.

Fitch's new report highlights over 30 case studies in North American infrastructure from the 1990s to the present, highlighting projects that faced considerable challenges and lessons learned from the experience. Earlier projects are found to have been most frequently stymied by revenue underperformance relative to missing original traffic and revenue projections. More recently, Fitch observes that a larger portion of project challenges are tied to completion risk, including issues during construction and counterparty exposure.

While recognizing that several projects have faced challenges and that project teams cannot anticipate every potential development, Fitch notes that risks to lenders have ultimately been well managed, with very few projects ending in default. "With the complexity of this asset class, some problems are to be expected," said Senior Director Emma Griffith. "These projects require unique solutions, and smart risk transfers from beginning to end can do a lot to protect lenders when challenges occur."

A point to note is that terminations for convenience that have occurred have not reimbursed investors their make-whole premiums. While this is consistent with the terms of the transaction, investors can view this negatively, as it constitutes a loss for them. Fitch expects investors will likely raise this issue as terms are agreed for new financings going forward.

'North American Project Finance: Lessons Learned' is available at 'www.fitchratings.com' or by clicking on the above link.

Cases are also accessible in an interactive map format on FitchRatings.com, where the projects are sortable by industry, highlighting the primary risk for each project.

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Additional information is available on www.fitchratings.com

Bond Buyers Hit by Negative Yields Around the Globe Flock to U.S. Muni Debt.

- Taxable bond boom drawing increased interest from overseas
- Foreign holdings hit record high as U.S. vields stay higher

Jeffrey Burger, a money manager at Mellon Investments Corp., in September swung through Zurich, where government bonds are yielding less than nothing, to pitch his U.S. municipal debt funds to investors hunting in unfamiliar places for positive returns.

So he brought up one of Switzerland's most famous men, the professional tennis player Roger Federer, who competed in the U.S. Open in New York's Arthur Ashe Stadium, a venue financed with the types of securities Burger's funds buy.

"Even though he lost, what can give you some joy, is that he did it in a U.S. muni-funded stadium," said Burger, who held meetings with investors in London, Paris and Milan. "And if you go four kilometers to the north, guess what you run into? LaGuardia Airport, another example."

The unprecedented era of negative interest rates in Europe and Asia is turning some of America's most domestic securities into a valuable export. Even with interest rates holding near a more than half-century low, the returns promised by the \$3.8 trillion municipal-bond market look good compared with the \$13 billion of sovereign debt that it winds up costing investors to own.

Foreign buyers have been a steadily growing presence in the U.S. municipal market, doubling their direct holdings over the past decade to a record \$102 billion by the end of June, according to Federal Reserve Board data. But the interest has been given an added jolt in recent months because of a torrent of refinancing by states and cities, who have seen rates fall so much that they are selling taxable debt — which carries higher yields — to refinance tax-exempt securities. Oversees buyers

are primarily interested in taxable bonds because they have no need for the U.S. income-tax shelter typical municipal securities provide.

U.S. governments have sold about \$48 billion of taxable bonds this year, an 119% increase from the same period in 2018 and the most in almost a decade, according to data compiled by Bloomberg. Such debt has delivered a 10.5% return this year, according to the Bloomberg Barclays index.

"This supply really helps to get focus and attract the broadest possible investor base," said Patrick Brett, head of municipal capital markets at Citigroup Inc., which has a municipal-bond banker stationed in London. "We've had quite a bit of interest from overseas for these issues."

The influx of foreign cash is similar to what happened in the wake of the recession, when President Barack Obama's recovery program covered part of the interest bills on Build America Bonds that were issued to finance public works projects intended to jump-start the economy. They were structured as taxable securities to expand the market for the bonds beyond traditional buyers of municipal debt.

International investors are buying municipal securities both directly and through mutual funds like those run by Mellon's Burger. MFS Investment Management offers a fund to institutional investors in Europe and Asia that is registered in Luxembourg, for example. Its top holdings include debt issued by Illinois, Denver's water system and New York City.

Lori Cohane, a portfolio manager at Credit Suisse Asset Management, said such big, well-known issuers have benefited from the global interest.

"If the state of Texas issues taxable municipal bonds, global buyers are going to know the state of Texas. Or if Harvard University issues taxable municipal bonds there's a familiarity there," Cohane said.

The Dallas Fort Worth International Airport is one that's tapped into the trend. The largest airport in Texas sold \$1.2 billion in taxable bonds in August that were specifically marketed to international buyers. Christopher Poinsatte, the chief financial officer for the airport, traveled to London, Paris, Seoul, Hong Kong and Taipei ten months before the sale to educate potential investors about his airport and the mechanics of the U.S. industry.

"We understand that international investors are very interested in U.S. infrastructure," he said. "There's an entirely untapped market out there."

Poinsatte said the sale received \$465 million in direct international orders from buyers in London, Norway, Tokyo and Taipei, with about 15% of the total deal eventually allocated to foreign accounts. The airport plans to sell another billion in taxable bonds next summer and Poinsatte is planning another trip — both to the places he visited previously and to new cities in Italy and Norway.

"There are tens and hundreds of billions of dollars in international money that is very anxious to invest in infrastructure," he said. "We are playing the long game. We are trying to tap that market."

Bloomberg Markets

By Danielle Moran

November 7, 2019, 4:30 AM PST

— With assistance by Chikafumi Hodo

KBRA Releases Research - Environmental, Social and Governance (ESG) Considerations by Sector

NEW YORK-(BUSINESS WIRE)- Kroll Bond Rating Agency (KBRA) publishes sector-specific research pieces on Environmental, Social and Governance (ESG) factors as they relate to credit analysis.

KBRA's public finance ratings incorporate all material credit factors including those that relate to ESG factors. This report serves to increase transparency around how KBRA views ESG factors as they relate to credit risk. It does not introduce new credit variables but, rather, expands upon the many factors that KBRA considers in our ratings analysis as they relate to ESG.

While ESG factors may influence ratings, it is important to underscore that KBRA's ratings do not incorporate value-based judgments around credit factors. Rather, KBRA's ratings incorporate expectations for the credit impact of such factors, which include an evaluation of risk management and mitigation efforts.

KBRA's analytical approach intends to capture all meaningful factors into our ratings when we believe there will be an impact on the credit in the near term or in the future, after considering risk mitigation efforts. Factors that may influence credit analysis are not always static and require continuous surveillance. As credit factors develop more clarity, they are incorporated into KBRA's surveillance reviews. And as new information comes available and as future expectations evolve, the information and expectations may trend in a way that could materially impact KBRA's credit analyses and ratings.

To view the report, <u>click here</u>.

November 6, 2019

The Imperfect Art of Tracking Local Government Financial Stress.

California is the latest state to launch a program to shed light on the financial conditions in localities. Systems like this can have benefits, but also limitations.

When the California auditor's office recently rolled out a new online system that tracks and ranks local governments based on their levels of financial risk, David Dale, the city manager in Calexico, was caught somewhat off-guard when he found his town listed as fifth worst-off.

The city of 40,000 about 100 miles east of San Diego has certainly had its share of problems.

Its police department was raided by the FBI back in 2014 amid allegations of various criminal conduct by officers and other city staff. Just a couple years later, Dale said poor financial management led the city to the brink of bankruptcy.

"The city was a complete mess politically, financially," Dale said. "It was bad all around." Lately, however, he said that things within Calexico's city government are improving. "We've made a lot of strides and sacrifices," Dale said. "People are doing two jobs, pay cuts."

Calexico's designation as financially at risk appeared on a list along with the release of California's new "local government high-risk dashboard," a system that is designed to provide a snapshot of how 471 cities around the state are doing financially.

Information for it is pulled from publicly available, audited financial statements, which cover past years. The dashboard currently shows where cities stood as of June 30, 2017—part of the reason the progress Dale touts in Calexico isn't necessarily reflected in the rankings.

"When this came out in the news," he said, "they painted the picture that the city was currently in a financial debacle."

California is the latest state to develop a public facing program that provides a way to monitor the finances of local governments statewide. New York has had <u>a system</u> like this for about six years now and Michigan has <u>done similar work</u> since before the Great Recession.

"It definitely is a trend," said Justin Marlowe, a professor who specializes in public finance at the Daniel J. Evans School of Public Policy and Governance at the University of Washington, and who advised California on its program.

"You've seen, I think, a big uptick in interest," he added.

There are a number of ways that the systems can prove useful. But they also have limitations, including issues like Dale keyed in on concerning the timeliness of the data.

Dale explained that during the bad years Calexico's general fund was \$4 million in the hole and the city borrowed \$3.5 million from its own wastewater account to backfill it.

He said the city is now on track to pay back the loan about a year early and ended the last fiscal year with a roughly \$1 million surplus. The city's total general fund budget is about \$16 million annually.

"We've gotten so far," Dale said, which is why he says it was frustrating to unexpectedly see the city in the No. 5 spot on a list of the state's most fiscally distressed municipalities.

Marlowe agreed that a dashboard like California's is going to fail to capture all information. "The perfect system does not exist," he said.

California's dashboard was built as part of the high-risk local government audit program within the state auditor's office. That team is responsible for identifying local governments that may have troubled finances, and <u>in some cases</u> auditing them.

"We thought it was important to do a comprehensive analysis of all the cities as opposed to looking at a subset," said Mike Tilden, a deputy state auditor who was involved in the project.

The dashboard and the rankings it presents rely on a set of 10 "financial indicators" meant to assess how well a city can cover its near-term and long-term costs. Some indicators include a city's cash position, debt burden, financial reserves and revenue trends.

ROUTE FIFTY

BY BILL LUCIA

NOVEMBER 7, 2019

Schroders Sees Value in Municipal Bonds Over Treasuries.

Julio Bonilla, U.S. fixed income portfolio manager at Schroders, discusses the advantage municipal bonds have over U.S. Treasuries. He speaks with Bloomberg's Taylor Riggs in this week's "Muni Moment" on "Bloomberg Markets."

Watch video.

Bloomberg MarketsTV Shows

November 6th, 2019, 1:07 PM PST

KBRA Municipal Ratings Available on Bloomberg Terminal Calendar Screens.

Kroll Bond Rating Agency (KBRA) ratings on municipal securities and new issues are now available on the Bloomberg Terminal.

Bloomberg subscribers can find KBRA's ratings for municipalities by accessing the following functions: MUNI DES (Description), CDRA (Calendar), CDRN (Negotiated Calendar), and CDRC (Competitive Calendar).

"Bloomberg's decision is a very welcome affirmation of KBRA's accelerated growth and coverage in public finance, where we now rate over \$310 billion of municipal debt. More and more of the municipal market's largest and most complex issuers are choosing to use KBRA on their transactions because of the seniority of our analysts, the quality of our reports, and the timeliness of our service," said William Cox, Senior Managing Director and Senior Analyst in the Funds, Insurance, and Public Finance Ratings groups at KBRA.

To view a full list of KBRA's Public Finance ratings, please visit www.kbra.com.

Business Wire

November 7, 2019

<u>First Foundation Bank Launches Municipal Lending Offering with the Appointment of Trevor Mael as Vice President, Director of Public Finance.</u>

First Foundation Inc. (FFWM) ("First Foundation"), a financial services company with two wholly-owned operating subsidiaries, First Foundation Advisors and First Foundation Bank, announced the new municipal lending and public finance service offering with the appointment of Trevor Mael as Vice President, Director of Public Finance. In his new role, Mael will oversee the department for First Foundation Bank which seeks to add to its existing strong loan portfolio with a new public finance footprint.

"As First Foundation Bank continues to expand, we continue to search for service and product offerings that complement our existing capabilities," said Scott F. Kavanaugh, CEO. "The

opportunity to offer municipal lending and government banking is a nice fit with our Sacramento location and comes at a time when we found a proven and well-connected leader in Trevor to lead this effort."

Mael began his 10-plus years banking career with Umpqua Bank, and grew to a role as a Vice President, Relationship Manager, where he managed the bank's municipal finance portfolio. He has built a strong reputation as a banker committed to helping communities build and grow by utilizing bank-financing. He comes to First Foundation Bank with experience also as an operator in loan administration, underwriting and credit, allowing him to effectively manage the loan process from application to funding.

The new offering will seek to focus on community development projects such as schools, transportation, infrastructure improvements, economic development, and other major projects to help grow and enrich the community. The initial offering by First Foundation Bank will include general financing for the needs of cities, counties, and special purpose districts across the First Foundation Bank footprint.

"I am honored by this opportunity to work with a relationship-driven bank with so many strong resources to support the local communities. First Foundation Bank's expansion into financing local projects will now bridge the gap to making integral investments into the communities in which our clients and team both live and work," said Mael.

About First Foundation

First Foundation, a financial institution founded in 1990, provides private wealth management, personal banking, and business banking. The Company has offices in California, Nevada, and Hawaii with headquarters in Irvine, California. For more information, please visit www.firstfoundationinc.com.

Business Wire

November 7, 2019

How Transparent Should Government Be After a Cyberattack?

City tech leaders and cybersecurity experts confront the tension between elected officials beholden to the public and IT bosses whose primary concern is limiting the information available to bad actors.

Atlanta was one of the first major cities hit, waylaid by a costly ransomware attack. As headlines about what happened continued in the months to come, similar incidents besieged other government agencies across the country. There was Baltimore. There was the Colorado Department of Transportation, twice. There were half a dozen small cities in Massachusetts. There was Albany, N.Y.

In the past 18 months or so, cyberattacks on government have accelerated. Experts say this is an evolution wherein bad actors have moved from targeting individuals at random, to going after governments, school districts, companies, and other institutions, which often have more to lose and are thereby more lucrative. Another factor in the recent acceleration is that many of these entities have been traditionally underfunded in the realm of cybersecurity.

As such, public-sector IT leaders have begun to view a successful cyberattack as a matter of when, not if. Essentially, regardless of how well-prepared government is, a breach is still coming, and so a larger onus is now being placed on response, specifically on best practices for the aftermath of a cyberattack. Within this conversation, however, a major point of tension has arisen — transparency.

A question local government leaders must grapple with is this: How transparent should government be after a cyberattack? Should they tell citizens everything, or should they downplay incidents altogether, obscuring details under the assumption that any information on their vulnerabilities can and will be used against them?

It's a complicated debate, and with this wave of cybercrime showing little sign of slowing, finding answers has become imperative.

Being as transparent as possible with citizens has evolved as of late, fueled by technology that enables easier sharing of data as well as more convenient lines of communication between government and the citizens it serves.

There is, perhaps, a growing expectation that local government should tell residents everything, provided it doesn't infringe on the privacy of others. But what about emergency situations like cyberattacks?

In March, Albany was hit by a cyberattack on a Saturday. Thanks to an alert about the breach, the city had most major systems up and running again by Monday, except for getting birth, death and marriage certificates. City offices were closed Monday morning, though, as the city worked to ensure a full recovery.

Albany Mayor Kathy Sheehan was open with information throughout, announcing via social media that an attack had occurred the same day she found out. On Sunday, she again took to social media to let residents know city officials had been working to prevent any interruptions in government service. Then on Monday, the city let residents know when it was open again.

It all seems innocent enough, but at a recent breakfast roundtable discussion about cybersecurity and cities, hosted during the CityLab DC summit, Sheehan said not everyone in City Hall agreed with that open approach.

"Our CIO would have preferred saying nothing at all," Sheehan told a collection of other elected officials and IT leaders, the majority of whom had similar anecdotes to share.

Other CIOs in attendance agreed with the stance, or at least the desire to be able to maintain silence. But Sheehan felt obligated as an elected official to let the public know all that she could about what was happening. Moreover, she said her CIO and the rest of the IT staff had "done a phenomenal job" and she wanted the public to know that as well.

The reason for advocating silence, however, is in part a concern that a larger cybersecurity target will be put on local governments, and that bad actors will see detailed news of a successful defense as a challenge. Another layer is that releasing detailed information will help bad actors find a new vulnerability to exploit. Cyberattacks are, after all, a crime, and so some of the details will always be sensitive.

Brian Nussbaum, who is a fellow with New America's Cybersecurity Initiative and an assistant professor of cybersecurity at the University of Albany, said a balance must be struck between giving citizens necessary info and obscuring the scope of defenses and recovery, noting that "it's possible to describe in general what's being done without being specific about what's being done."

Sometimes, Nussbaum added, public organizations withhold information not in the name of secrecy, but rather because they are still sorting out "second order effects," which basically means assessing the problem and understanding the damage. For organizations like government or public health systems, which keep private data subject to regulations, this is paramount.

Nussbaum, however, was optimistic that more answers about transparency after a cyberattack will emerge as this particular challenge matures. As cybersecurity defenses, response plans and general knowledge evolves in the public sector, so too will best practices around what information to share with the public.

This is also far from a new tension within government.

"This is not an unusual problem in the abstract," Nussbaum said. "Elected officials who are accountable to citizens often have impulses to do things that people in the business line don't have the same incentives to want to do, because they are not directly talking to the citizens in the same way. I don't think this is a problem that's unique to local government cybersecurity, but rather a problem for government writ large."

Gary Brantley, the Atlanta CIO, continues to oversee that city's cybersecurity in the wake of its recovery. Also in attendance at CityLab DC, Brantley said his goal is always to share as much information as he can without compromising operations or inciting fear. One thing that gets lost, he added, is just how common failed attacks are.

"These attacks are widely unsuccessful," Brantley said, "and that's one thing we don't talk about."

BY LUCAS ROPEK, GOVERNMENT TECHNOLOGY | NOVEMBER 8, 2019 AT 3:01 AM

Investors Reap Rewards Using Conduit-Issued Municipal Bonds.

Summary

- Conduit-issued munis are little-known area of the muni market that can increase yield.
- Investors benefit from higher yields and maintain the same tax-free status.
- Look under the hood of conduit issuers to avoid getting burned.

The search for safe and generous tax-free income with individual municipal bonds is becoming more difficult each day. But rest easy, there's an obscure area of the muni market that can offer generous yields. Conduit-issued muni bonds often offer much higher yields than their traditional municipal counterparts and at the same time carry the same tax-free status. Many are safe and stable, but others can be very high risk. Investors must exercise due diligence. Safe conduit issues are a great alternative to municipal ETFs and mutual funds. Mutual funds carry redemption risk, meaning they will likely suffer value erosion during periods of large outflows. Individual bonds – including conduit-issued munis with good credit ratings – have no such redemption risk.

What Are Conduit Bonds?

Conduit bonds are bonds issued by an organization (usually a government agency) to fund projects on behalf of a third party who is the actual borrower. The borrower is usually responsible for the bond payments. Most conduit securities are issued to benefit the public at large (hospitals, airport improvements, housing, veterans, and pollution reduction). These issues can vary widely in size,

purpose, and geography. They range from well-known public projects like hospitals to smaller projects like museums, airplane hangars, or maternity centers. In most cases the more obscure it is, the more risk.

Continue reading.

Seeking Alpha

by Alexander Anderson

November 1, 2019

Lukewarm Bond Yields Belie Mayors' Climate Alarm.

If politicians believe what they say on the campaign trail, why don't their cities disclose it to borrowers?

Dire climate-change warnings have become a mainstay of politics. This is particularly true for state and local politicians whose coastal constituents stand to be most affected by rising sea levels. Mayors declare that impending eco-dangers represent an "existential threat," and that significant portions of their cities will be submerged without swift and dramatic action. But do municipalities disclose these perilous environmental risks to potential bond investors?

The Government Accountability Institute undertook a <u>yearlong study of 40 major cities</u> to find out if mayors' apocalyptic projections about climate risks are factored into the interest rates on the municipal bonds their cities issue. The results revealed a gulf between the words municipal leaders speak and the disclosures cities make. There was no statistically significant difference in the interest rates for bonds issued by cities in high-risk locations for climate-change devastation versus those issued by low-risk cities.

The study compiled 100 bond issuances for 20 cities at risk of climate-induced sea-level rises such as New York and New Orleans, as well as 100 issuances for 20 low-risk, inland cities such as Chicago and Kansas City. Greater risk to investors should produce a higher bond interest rate, or "coupon rate." But the average rate for at-risk cities was 4.21% versus 3.99% for low-risk cities, and our analysis found that this difference of 22 basis points was not statistically significant. The study controlled for factors like type of bond, maturity and purpose, which also affect interest-rate variation.

The study also found scant mention of climate change in bond disclosure documents. The disclosure statements of the 20 at-risk cities totaled 4,361 pages. Phrases like "climate change" and "sea-level rise" appeared fewer than 100 times across all 20 at-risk cities in the context of the issues addressed in this study. Further, 12 out of the 20 disclosures for at-risk cities did not mention climate language in the same context.

The contrast between what mayors say in public and what cities disclose in bond language is often stark. New York's Bill de Blasio has called climate change an "existential threat" and a "dagger aimed straight at the heart" of the city. Yet New York and the Port Authority of New York and New Jersey barely mentioned climate change or rising sea levels in their risk statements to investors.

The city's official 297-page disclosure for its April 2018 \$1.1 billion general-obligation bond issuance

contains four paragraphs with generic mentions of rising sea levels and climate change. This issuance was composed of \$250 million in taxable bonds with an average coupon rate of 3.2% and \$850 million in tax-exempt bonds with an average coupon rate of 4.21%. These interest rates hardly reflect the "dagger to the heart" threat Mr. de Blasio says is imminent.

California municipalities evinced a similar pattern. In a 2017 lawsuit against Exxon Mobil Corp. and four other oil companies, the city of Oakland painted a dystopian portrait of looming environmental calamities. "Global warming has caused and continues to cause accelerated sea level rise in San Francisco Bay and the adjacent ocean with severe, and potentially catastrophic, consequences for Oakland," the city's lawsuit stated. Worse, "by 2050, a '100-year flood' in the Oakland vicinity is expected to occur on average once every 2.3 years and by 2100 to occur 44 times per year or almost once per week." The lawsuit added that "Oakland is projected to have up to 66 inches of sea level rise by 2100." The city alleged this would "imminently threaten Oakland's sewer system" and harm property with a "total replacement cost of between \$22 and \$38 billion."

Contrast that detailed, dramatic language with Oakland's bland, measured 2017 bond risk disclosure to investors: "The City is unable to predict when seismic events, fires or other natural events, such as sea rise or other impacts of climate change or flooding from a major storm, could occur, when they may occur, and, if any such events occur, whether they will have a material adverse effect on the business operations or financial condition of the City or the local economy."

Politicians can't have it both ways. If climate change is the existential threat they claim, then why aren't municipal-bond investors being rewarded with higher interest rates for taking greater risks? And why don't bond disclosure statements contain the grave and granular data from climate-change projections those same municipalities tout elsewhere?

If mayors are serious about leading on climate change, they should align the rhetoric they speak on the campaign trail with the interest rates and disclosures they offer on municipal bonds. And if they need another motivation, there's this: While campaign promises aren't legally binding, bond disclosure statements are.

The Wall Street Journal

By Peter Schweizer

Oct. 28, 2019 6:50 pm ET

Mr. Schweizer is president of the Government Accountability Institute.

U.S. City Revenue Lags Inflation for First Time in Seven Years.

- Collections to decline by inflation-adjusted 1%, report says
- Two thirds of large cities foresee recession as soon as 2020

U.S. cities' revenues are failing to keep pace with inflation for the first time in seven years, signaling an increase in the financial pressure on local governments despite the nation's record-long economic expansion, according to a survey released by the National League of Cities.

On average, municipal finance officers estimate general-fund revenues will decline by 1% when adjusted for inflation, the survey found. At the same time, officials have grown more cautious about

the economic outlook, with almost two-thirds of those from large cities now forecasting a recession as soon as next year.

"Fiscal trends are beginning to align with some of the negative economic trends that we've seen in past downturns," Christiana McFarland, the director of research for the National League of Cities, said during a televised discussion on the report.

The findings come amid rising global geopolitical tensions that are frightening investors and dampening business confidence. U.S. manufacturing reached its lowest since the last recession in September and the pace of home sales has slowed.

Yet, cities are still largely benefiting from the more-than decade long economic expansion, even if their revenue isn't keeping up with inflation. Three out of four finance officers said they are confident their cities are able to meet their financial obligations, roughly the same as last year, according to data from 554 cities.

The local governments are poised to spend 2.3% more in 2019 than they did the previous year, as the cost of goods and services, including health care, rises.

"The purchasing power of the public sector is weakening in relation to other parts of the economy, and having a large impact on city budgets," the report said.

Property-tax collections, typically the biggest source of municipal revenues, are expected to increase by 2% in 2019, about the same pace as a year earlier. Sales taxes, which are more sensitive to economic swings, are anticipated to grow 0.3% after a jump of 1.9% in 2018.

Bloomberg

By Maria Elena Vizcaino

October 28, 2019, 1:29 PM PDT

MSRB: Trends in Municipal Bond Ownership.

What are the possible implications of the recent increase in holdings of municipal bonds by mutual funds and ETFs?

Read the MSRB's issue brief on municipal bond ownership trends.

How Does PG&E Impact the Utilities Market?

Nisha Patel, municipal portfolio manager at Eaton Vance, examines credit risk for utilities from PG&E Corp. and how overall climate change affects municipal water and sewer bonds. She speaks with Bloomberg's Taylor Riggs on "Bloomberg Markets."

Watch video.

Bloomberg Markets TV Shows

Is Public Finance Ready to Rely on Blockchain Technology?

Governments often contend with many issues when attempting to link public dollars to real-world outcomes captured by data in disparate systems. EY claims its OpsChain Public Finance Manager will reduce those struggles.

The stewardship of public dollars is a challenge as old as government itself, but nascent technologies are coming into the space with the intention of streamlining it. Blockchain-enabled tools are one such example.

The OpsChain Public Finance Manager (PFM), a new blockchain-based tool from Ernst & Young, is designed to allow governments to "focus more directly on the things that matter," said Mark MacDonald, EY global public finance management leader.

The potential of this tool lies in helping governments track the "financial integrity of the way public money is spent" and the related outcomes that are achieved, MacDonald said. Essentially, the PFM promises to enhance the ability of governments to see how public dollars are connected to actual results, which should support further decision-making.

"In simple terms, it's the integration between a financial view and non-financial view that can really help public managers manage more effectively, public budgeters budget more effectively, and ultimately it's about trying to advance that cause of 'better finance, better government,'" MacDonald said.

The PFM is based on the EY Ops Chain, which is a blockchain platform that entered its second generation earlier this year. According to EY, this platform can "support up to 20 million transactions per day on private networks" and has reportedly led to efficiency gains of more than 90 percent in certain cases.

Most governments utilize an enterprise resource planning (ERP) system to keep up with public funds. MacDonald said those systems are generally well understood, but he suggested a critical piece of the organizational puzzle is missing when it comes to linking ERP data to outcome data in other systems.

"The question becomes when I have an opportunity to try and connect financial data and information to another system that perhaps has my non-financial information in it, how easily am I able to do that?" MacDonald said.

Mike Mucha, deputy executive director of the Government Finance Officers Association, said his organization helps governments prepare and procure ERP systems, so he understands the challenge that MacDonald refers to. Mucha cited an example involving a school district. A district will have its financial data in one system (ERP), but student performance data will be stored in a student information system (SIS).

"If you're trying to calculate like an academic ROI ... you need to basically, through some sort of third-party tool or some sort of third tool, correlate your spending on various programs with the academic return that you're getting out of your student data system," Mucha said.

Additionally, MacDonald said governments often deal with a "complicated array" of contractors, partners and not-for-profits in delivering public services. The chances of these external agents being on the government's ERP system are essentially zero, which creates a "hard organizational interface to try to overcome." The blockchain component can help manage this kind of chaos, almost acting as an "ERP across ERPs."

Another challenge is simply the idea of the government running multiple systems itself. Almost no organization runs just one ERP system, Mucha said. Then there's the fact that public entities frequently house their own information even though those entities might need to work together for the common good. Although Mucha admits that he doesn't know anything about the EY tool, he can imagine great potential for public entities wishing to work together.

"From a business intelligence perspective, you might want to pool that information together ... so if you had an ERP across ERPs, then you could conceivably use data from each one of those individual entity's ERP system in sort of a shared resource," Mucha said.

MacDonald stressed that the blockchain aspect of the PFM is not "technology for technology's sake." Rather, the blockchain platform presents a logical opportunity for technology to address long-standing business challenges within the complexity of a government system.

"It [blockchain] has the ability to work at that network level across organizational boundaries, across different authorities, and so forth," MacDonald said.

According to EY, the PFM has been tested by multiple governments around the world. MacDonald would not reveal all of those governments due to concerns related to privacy and confidentiality. It is public knowledge, however, that Toronto has tested the tool, but Toronto's chief financial officer Heather Taylor could not be reached for further comment.

BY JED PRESSGROVE, GOVERNMENT TECHNOLOGY | OCTOBER 30, 2019 AT 3:01 AM

Muni-Bond Desks Stand to See Big Wins If Trump Loses.

- Tax-the-rich plans of Democrats may boost muni-bond market
- Tax-exempt debt saw outsize gains early under Clinton, Obama

Elizabeth Warren wants to tax those she calls ultra-millionaires. Bernie Sanders has targeted the top 0.1%. And Joe Biden is seeking to reverse President Donald Trump's tax cuts.

On the whole, Wall Street may not be very excited about the tax-the-rich push that's front and center in the Democrats' efforts to unseat Trump next year. But a \$3.8 trillion corner of the bond market could reap big gains if one of them wins the White House.

That's because the value of tax-exempt state and local government debt tends to rise when taxes head higher as wealthy investors buy those bonds to hold down what they owe.

Continue reading.

Bloomberg Markets

By Amanda Albright

The Grand Experiment: The State and Municipal Pension Fund Diversification into Alternative Assets

By Jeff Hooke and Ken Yook, includes "Over a nine-year period (2008–2016), state and municipal pension funds embarked on a grand experiment. They boosted their commitments to alternative assets, spending tens of billions of dollars per year on additional third-party money management fees. ... We conclude that the states and municipalities obtained neither lower risk nor higher returns with the higher level of active management and diversification implied by alternative assets. The experiment is thus a failure."

Read the full article on: Portfolio Management Research

Truth In Accounting

Jeff Hooke, Ken Yook | November 1, 2019

Risky Business: As Some Major Contractors Pull Back from P3s, Others Embrace the Approach

Most public-private partnership contracts are for design-build, fixed-budget, fixed-schedule work that Skanska, Fluor and others say is just too risky to guarantee profit.

When President Donald Trump announced his campaign pledge to upgrade the country's infrastructure, he endorsed public-private partnerships (P3s) as a way to help finance and build the \$1 trillion worth of projects subject to his proposal.

He said he would leverage the power of P3s to turn \$200 billion of public dollars into \$1 trillion of investment, refurbishing crumbling infrastructure without emptying public coffers.

But just a year later, he had soured on the idea, telling a group of legislators in 2017 that private financing of public infrastructure isn't likely to work and that P3s are "more trouble than they're worth."

Continue reading.

Construction Dive

by Jenn Goodman

Oct. 25, 2019

Building Demand in US Water Quality Trading Markets.

IN BRIEF

- WATER QUALITY TRADING MARKETS ALLOW THE OPERATORS OF POINT SOURCES OF WATER POLLUTION — such as sewage treatment plants or factories — to offset that pollution by purchasing credits representing reductions elsewhere.
- BUT DESPITE THE PRESENCE OF FUNCTIONING PROGRAMS ACROSS THE COUNTRY, the overall volume of trading remains low.
- TO EXPAND TRADING, STAKEHOLDERS NEED TO ADDRESS THE LACK OF NUMERIC DISCHARGE LIMITS, transaction costs, risk aversion, and the absence of empirical data on programs.

Environmental credit trading programs have gained traction for pollutants like carbon emissions, at least in concept. Is water quality trading the next frontier? The mechanism offers the possibility of more flexible and cost-effective water quality control, but in contrast to some environmental credits, markets have struggled to gain momentum.

Water quality trading markets allow the operators of point sources of water pollution — such as sewage treatment plants or factories — to offset that pollution by purchasing credits representing reductions elsewhere. Just as the purchase of a carbon offset gives its buyer credit for reducing their carbon footprint, a water quality trading market allows participants to buy and sell the credit for reduction of water pollution into a given water body.

Trading is a tool that may be well-suited to address the evolving nature of water pollution in the United States.

"The Clean Water Act was written at a time when the major pollution in our waterways was coming from pipes," said Kristiana Teige Witherill, clean water project manager at the Willamette Partnership, a nonprofit focused on market-based conservation in the American West. "Today, depending on what watershed you're looking at, 80 to 90% of pollution is coming from non-point sources, not coming from the end of a pipe."

After establishing parameters for water quality trading in 2003, the Environmental Protection Agency (EPA) reiterated its support for the tool in a statement in February. A 2017 Government Accountability Office (GAO) report tallied 19 water quality trading programs operating in 2014 in a diverse set of 11 U.S. states, from California to Idaho to Florida.

But despite the presence of functioning programs across the country, the GAO noted that the overall volume of trading remains low. "According to stakeholders, two key factors have affected participation in nutrient credit trading — the presence of discharge limits for nutrients and the challenges of measuring the results of nonpoint sources' nutrient reduction activities," the report stated.

Now, proponents of water quality trading are working to bring more participants into the fold. What can be done to scale up use of trading?

How Water Quality Trading Works

Under the U.S. Clean Water Act, states are responsible for regulating the quality of water discharged into water bodies. Water quality trading markets provide an alternate way for any point source regulated by the <u>National Pollutant Discharge Elimination System</u> to meet requirements set by states through the act.

Water quality trading credits most often deal with nitrogen and phosphorus pollution, but they can

be generated for other purposes as well. To protect temperature-sensitive salmon species, for example, Oregon has a functioning trading market for water temperature, according to Witherill. Less commonly, markets can also facilitate trades for credits that represent reduced stormwater quantity.

Credits are frequently generated through reduced pollution from agricultural land, but can also come from point-source sites that have exceeded pollution-reduction requirements. States are responsible for approving and verifying credits.

Water quality trading has the potential to provide massive increases in the cost-effectiveness of pollution reduction. According to the World Resources Institute, reducing nitrogen pollution through water treatment plant upgrades costs an average of about \$15 per pound of nitrogen, but under \$5 per pound through planting cover crops on farms.

Generating Demand

The GAO's 2017 report stated that in the year they surveyed, 2014, the majority of trading occurred in Connecticut, Pennsylvania and Virginia. In those states, most point sources didn't purchase credits, resulting in a substantial share of generated credits going unused. State officials told the GAO, however, that trading programs still provided other benefits, like flexibility in complying with water quality regulations.

"I would say that there are a number of programs across the country that are working well, like here in Oregon where we have a number of facilities and municipalities that are successfully using water quality trading," Witherill said. "But I think we haven't yet reached a tipping point where water trading becomes a mainstream solution for meeting water quality regulations."

Often, the issue centers around the question of bringing buyers to the table.

In October 2018, the National Network on Water Quality Trading — facilitated by the Willamette Partnership — published its <u>report</u> "Breaking Down Barriers: Priority Actions for Advancing Water Quality Trading." The group aimed "to diagnose why, in contrast to other environmental markets, interest in water quality trading and demand for water quality credits has been slow."

Along with discharge limits, the "Breaking Down Barriers" report points to transaction costs, risk aversion, and the absence of empirical data on programs as deterrents to trading. When it comes to discharge limits, the regulatory structure of a given state plays a big role. Under the Clean Water Act some states, but not others, have set specific quantitative limits on pollution.

"In places like Wisconsin that have numeric criteria for nutrients, they have a really strong driver for cities and municipalities to be looking at options like water quality trading," Witherill said. "It's kind of a precondition for it to have some kind of regulatory driver."

Wisconsin has a <u>statewide trading program</u> for the variety of pollutants regulated by the state Department of Natural Resources, but the difficulty of conducting trades <u>has limited its use</u>, according to Wisconsin Public Radio. Critics of the program's current design have blamed low participation on inflexible rules and trouble connecting buyers and sellers.

In the absence of a "regulatory driver" like quantitative pollution limits, water quality trading programs have limited options for attracting buyers.

The Ohio River Basin Trading Program, run by the Electric Power Research Institute (EPRI), manages a trading market in Ohio, Indiana and Kentucky. The program aims to address nutrient

pollution into the Ohio River — and ultimately, the Gulf of Mexico — by generating credits from conservation practices on agricultural land. According to Program Manager Jessica Fox, the Ohio River Basin Trading Project has over 100,000 of the \$12 to \$14 credits — each representing a pound of verified reduced nitrogen or phosphorus discharge — "on the shelf" waiting to be sold.

EPRI has sold credits to power companies, a university and individuals, Fox said, but not at the volume necessary to make the program self-sustaining. "When every transaction requires me to take a business trip," she said, "that's not going to work. It has to be more liquid than that."

There are other preconditions needed for water quality trading in addition to quantitative criteria, the "Breaking Down Barriers" report argues. First, unless the technology required for polluters to meet limits is expensive or nonexistent, managers of point sources are unlikely to turn to trading. Regulatory agencies must also support purchasers interested in pursuing credits. "We've also seen that the utilities who pursue water quality trading often have a champion supporting the program within their own organization," the report stated.

Building Markets and Confidence

Through stakeholder interviews and other research, the "Breaking Down Barriers" authors identified seven steps that stand to increase use of trading. They advocate for simplifying trading programs; making sure state regulators have the capacity and resources they need; clarifying the policies of EPA and states; reducing buyer risk, real and perceived; addressing the legal risk that stems from a lack of case law on trading; developing more direction for stormwater trading; and building relationships.

For its part, the Ohio River Basin Trading Program is looking to stimulate more demand of its own accord. In May, EPRI announced a partnership with First Climate, a firm that specializes in selling environmental credits, to sell credits on international markets and make them available to a wider range of domestic buyers. Before, the trading program wasn't able to accommodate transactions of less than \$25,000, according to Fox. Through First Climate, however, the program is taking a more retail approach to trading.

"You can go on now, and you can buy one credit with a credit card or Paypal account," Fox said. The program has a calculator online that individuals can use to determine their personal nitrogen footprint, and provides buyers a photo of the farmer who generated their credit. It even sells t-shirts.

"It's kind of like 'adopt a sea lion,'" she said. "It's getting it to be a more publicly accessible thing."

First Climate and EPRI are also pitching large corporate buyers on water quality credits as a way to meet voluntary sustainability commitments.

But as trading programs continue to try to break into the mainstream, Willamette's Witherill cautioned that they are just one tool in the toolbox for "expanding the number of options utilities have to invest in their watersheds," she said. "Maybe that doesn't necessarily look exactly like water quality trading, maybe that looks like a source water protection program or some kind of groundwater irrigation management."

On the policy front, Fox also wonders if EPA could do more to support markets. The agency's February memo was "a huge signal that the administration is strongly behind water quality trading," she said, but it doesn't actually change implementation on the ground.

One possibility worth exploring, Fox said, would be whether EPA could allow states to use their own share of funds from joint federal-state programs — such as <u>Clean Water State Revolving Funds</u>, for

example — to buy credits.

"Any way to incent the buyer side is a great solution," she said.

Conservation Finance Network

Chris Lewis

September 25, 2019

With Interest Rates Low, Colleges Get In On 100-Year Debt.

Colleges in need of capital are eyeing a financing option that lets them pay back their investment over a longer period than most bonds.

The University of Pennsylvania wasn't necessarily looking to issue bonds this summer, much less bonds that would take 100 years to repay. But as its analysts watched the debt markets, they saw an opportunity that was too good to pass up.

Colleges and universities regularly secure funds to improve their facilities by issuing bonds that they'll have to repay, with interest, over several years. Usually, the longest they will take to repay the bonds is 30 years. Since the Great Recession, however, a dozen elite public and private universities, including Penn, have issued century bonds, which don't mature for 100 years.

That timeframe lets schools pay off massive investments over a lifetime or more, usually at a fixed, low interest rate. For the investors that buy them, such as insurance companies, century bonds are a chance to lock in guaranteed returns even in tough market conditions. But the opportunity to issue them doesn't come up often.

So far this year, the pieces have fallen into place for four universities: Penn, the University of Virginia, Rutgers and Georgetown. Together, they have issued more than \$1.23 billion in 100-year financing.

Penn's finance team knew the university was interested in issuing debt sometime in the next year, said MaryFrances McCourt, vice president of finance and treasurer. The university had issued century bonds once before — \$300 million in 2012 — to help upgrade its facilities to meet environmental goals. Several developments moved university officials to consider those bonds again.

The first major signal was that interest rates were low — really low. In July, interest rates for 30-year municipal bonds were lower only about 1% of the time, while rates on 30-year U.S. Treasury bonds were only lower about 2% of the time, according to McCourt's office. "It kind of takes you aback," she said.

The second factor was that lenders weren't paying a significant penalty for long-term bonds. Investors usually demand higher interest rates for longer-term investments. But when Penn analysts looked at the market, they found little difference in interest rates for shorter- and longer-term investments.

Other market indicators were also favorable: The interest rates Penn would have to pay on its bonds were lower than usual relative to U.S. Treasury bonds. And the interest rates for taxable bonds were

not significantly higher than the rates on the tax-exempt municipal bonds that public and private universities typically depend on.

Plus, Penn's fiscal models showed that the century bonds would help, not hurt, its financial situation in an economic downturn. If cash ran short or if interest rates in the bond market spiked, having access to a low-interest pool of money could let the university meet its capital needs.

"You don't know what's going to happen tomorrow. All we knew was what was staring at us then," McCourt said. "We decided we've got to move quickly on this."

Education Dive

by Daniel C. Vock

Oct. 29, 2019

Cities Prepare for Climate Risk. Bond Prices May Not Reflect It.

An analysis covering 620 municipalities shows there's plenty of room for improvement.

Climate change is no longer the problem of the future—some 70% of cities worldwide are already experiencing its effects. The good news is that many of them are doing what they can to prepare, according to an <u>analysis of global disclosures</u> by the nonprofit CDP.

There's a direct connection between identifying climate-related threats and taking steps to reduce them, according to Kyra Appleby, global director of CDP's program on cities, states and regions. Climate change "is affecting cities now," she said. That reality is not, however, always reflected in local real estate and municipal bond markets.

The three U.S. cities identified by CDP as having the highest climate hazard scores (St. Louis, Boynton Beach, Fla., and Lakewood, Col.) have about \$218 million in outstanding municipal bonds, including utility debt sold by Boynton Beach.

The hazards outlined by CDP aren't reflected in the prices of state- and local-government securities, which continue to hover near record-low yields. "These risks will undermine your tax base. They'll undermine your economy, and ultimately they will undermine the ability to pay back the debt, which is what investors really care about," said Eric Glass, a portfolio manager for fixed income impact strategies at AllianceBernstein. "They are material risks, and I don't think investors are entering this into their credit analysis."

CDP asks companies and sub-national governments to submit reports every year explaining the specific concerns they have about climate change and what they're able to do about them. At least 620 cities filled out those surveys for 2018, which the British nonprofit scored by type and quantity of threat, in its eighth annual assessment. Fewer than half of those cities have conducted citywide climate vulnerability assessments, which Appleby linked to increased action to lessen risk.

More than 40% of the hazards that cities reported last year are likely to occur in the relatively short-term, according to the group's seven-page analysis, well-within that 30-year time-frame of a typical muni bond. That's an improvement compared with trends before the 2015 Paris Agreement, Appleby said, but still insufficient. Climate threats are going to keep increasing, particularly after mid-

century, according to the UN's Intergovernmental Panel on Climate Change, which means, theoretically, that cities should report more threats in the future, not fewer.

"What cities are reporting doesn't line up with what the science tells us the future will be like," Appleby said.

St. Louis, for example, is planning for drought when it's also at risk of flash floods, which can bring water-borne diseases. The city was struck with outbreaks of Legionnaires' and cryptosporidium in 2014 and 2015. Heavy rain and ever-higher tides threaten low-lying businesses in Boynton Beach. In its 2018 survey, the city noted local snorkeling and scuba trips could diminish as more coral reefs die. Lakewood is staring down the barrel of extreme heat, heavy snow, drought, forest-fires and greater insect infestation.

Banks and other businesses are preparing for future threats as well. The Federal Reserve Bank of San Francisco last week published an 18-chapter volume dedicated to climate risks in low- and moderate-income U.S. communities. The report calls for an entirely new system for financing resilient infrastructure.

"Historically, cities have taken the approach of willful ignorance because actual notice of a problem often legally required them to do something about it," said Jesse Keenan, a climate risk and adaptation specialist at Harvard University and the editor of the new Federal Reserve volume. "Some cities are actively disclosing the risks and uncertainties with the hopes that they can dictate the terms of how they will invest in the adaptation."

Bloomberg

By Eric Roston and Danielle Moran

October 22, 2019, 1:00 AM PDT

Smaller Muni Issuers Face Some of the Biggest Climate Risks.

The threats posed by a changing climate spell trouble for a number of small municipal-bond issuers, including some in South Carolina, Kentucky, and Texas.

Muni investors face long-term risks in the \$3.8 trillion market, <u>Barron's wrote recently</u>, because climate change raises an issuer's credit risk by damaging its assets and tax base. Absent efforts to curb emissions, <u>BlackRock estimates</u> that within a decade more than 15% of the S&P National Municipal Bonds index will come from metropolitan issuers that probably will suffer climate-related losses of 0.5% to 1% of local gross domestic product a year.

The recent article looked at some of the largest constituents of the popular ICE U.S. Broad Municipal Index and their climate risks, based on analysis by HIP Investor, a San Francisco-based sustainability ratings, data and analytics provider. (HIP stands for "Human Impact plus Profit.")

Continue reading.

Barron's

By Leslie P. Norton

Climate Change Has Probably Hit Your City Already.

Some 70% of cities around the world are already experiencing the effects of climate change, according to a new study by the CDP, formerly known as the Carbon Disclosure Project.

Flash floods, heat waves, rainstorms, extremely hot days, and droughts are among the top hazards.

Investors in municipal bonds are already facing climate risk. Smaller cities and counties, in particular, are already struggling to generate sufficient cash flow to deliver city services, let alone funding efforts to mitigate damage from climate change.

In addition to plans to address risks such as storms, cities will need to provide more public services, given that changing temperatures are likely to allow diseases to spread.

Continue reading.

Barron's

By Leslie P. Norton

Oct. 22, 2019 12:56 pm ET

Fitch Rtgs: P3s Can Fund Higher Ed Projects While Preserving Balance Sheets

Fitch Ratings-New York-21 October 2019: Public private partnerships (P3s) can help fill infrastructure funding gaps for colleges and universities, says Fitch Ratings. In the face of flat or reduced state funding, public universities in particular will need to find other sources of funding to address aging infrastructure and ongoing capital needs. By allocating costs to the private sector, universities are able to preserve balance sheet capacity. While potential benefits make P3s a useful funding tool, the strength of a P3 is dependent upon sensible risk allocation and the university's and operator's contractual commitments.

Most four-year institutions face limitations in tuition-raising flexibility to offset operating and capital expense pressures, especially public universities, which are facing a persistent expense and revenue mismatch. State appropriations remain below pre-recession highs compared with rising operating expense levels. Subsequently, universities are entering into P3s for a wide variety of infrastructure needs. Recent P3s have been used for major capital projects, notably campus utilities at Ohio State University, Dartmouth University and the University of Iowa. Projects requiring specialized technical expertise, such as campus utility systems or laboratories, necessitate a qualified operator and contractor and available replacements that have the technical and organizational resources to manage major projects with intensive capital needs.

Continue reading.

Century Bonds Make No More Sense Than Millennium Bonds.

- Century bonds are not an appreciably "safer alternative" to corporate bonds.
- Taking on more interest-rate risk when rates are at near-record lows is not an attractive idea.
- The current bond rating for a 100-year bond is meaningless 10, 20 or 80 years from now.

Except for bonds that are rated CCC-, I can think of few decidedly worse investments for an individual fixed-income investor than so-called "century bonds" that are touted in an article titled, "For Yield, Look to 2119" (available behind the Barron's paywall, or in the print edition) in the Oct. 7, 2019 issue of Barron's magazine. Virtually all of the purported benefits cited in the article are flawed.

First, these bonds, most of which are municipals, are presented as a "safer alternative" to corporate default because they enormously extend the maturity date and thereby take on more interest-rate risk. That's quite a leap of logic. How does that make them safer? Municipal-bond defaults do, in fact, occur, and the odds only increase over a 100-year period. Moreover, taking on more interest rate risk at a time when rates are at near-record lows can hardly be an attractive idea. They're not going to stay that way forever, and when rates inevitably rise, a bond's value will fall. When, precisely? Well, that's the problem: no investor will hold a bond for 100 years, but where will rates, and the principal value, be when he does want to sell 10, 20... or 80 years from now? That's not just rate risk - that's a lot of rate risk.

Although the article earnestly tries to make a case for these bonds, such as tax exemption in the issuer's home state (so what, that's true of most munis), and inconsequential track records about particular issuers' payout histories ("Rutgers has been around in some form since 1766, and hasn't had any problems repaying debt in recent decades"), I simply can find no silver lining for individual investors unless they've been given medical, actuarial or divine assurance that they'll live past 100 – at least as to bonds bought at issuance.

And stellar investment grades? How can any long-term bondholder take seriously a current high-quality rating for a bond of virtually infinite maturity? Changes in bond ratings occur on a regular basis, and the likelihood increases substantially over a period of 10 decades. For a century bond, therefore, the current rating is practically meaningless.

The article ends by noting that a century bond issued by a hospital in 2016 is currently yielding 3.8% compared to the 3.2% offered by the lowest tier of investment-grade debt. Well, there's a good reason for that: the hospital bond is at the far reaches of the maturity spectrum, and, as with junk bonds, investors demand to be paid for taking unattractive risk, in this case time risk. Perhaps some audacious municipality will offer a millennium bond sometime soon, at an irresistible rate of 4%! Who could turn that down?

It would be far more judicious for an income-oriented investor to buy, say, a 2028 target-date exchange-traded fund that is currently yielding about 3.3%.* Why would you go out 100 years on a single bond when you can hold one for just 10 years for only slightly less yield?

* Note: The 3.3% yield cited for a 2028 target-date ETF pertains to the Invesco BulletShares 2028 Corporate ETF (BSCS), priced at \$22.08 on 10/7/19, the Barron's issue date. The distribution of \$0.0613 on Sept. 23, 2019 would result in an annualized yield of 3.3%: \$0.0613 x 12 = \$0.7356. \$0.7356/\$22.08 = 3.3%.

Munis In Focus: Amanda Albright (Radio)

Amanda Albright, Municipal Bond reporter, will discuss the huge uptick in supply of taxable bonds. Hosted by Lisa Abramowicz and Paul Sweeney.

Play Episode

Bloomberg

October 25, 2019 — 8:36 AM PDT

Fixed Income Is Still a Mystery to Many Investors.

A survey underscores a lack of understanding, but the bond market doesn't have to be an impenetrable enigma.

The top-line takeaway from a BNY Mellon Investment Management national survey on fixed-income investing was stunning: A measly 8% of Americans were able to accurately define fixed-income investments.

The 29-question online survey of just more than 2,000 adults, conducted in July, clearly shows that many Americans admit to having little knowledge about various fixed-income markets and how to invest in them. Here's a rundown of those who answered "I do not understand it at all" with regard to the following types of bonds: Treasuries, 39%; municipal bonds, 45%; high-yield bonds, 46%; corporate bonds, 51%; structured products, 53%; Treasury Inflation Protected Securities, 63%. Of the 849 respondents who don't own fixed income or don't have any investment portfolio, 44% said they don't buy bonds because they don't understand the different types of securities.

Continue reading.

Bloomberg Opinion

By Brian Chappatta

October 24, 2019, 3:00 AM PDT

Housing PABs See Increase of More than \$1.1 Billion in 2018.

Combined multifamily and single-family tax-exempt private activity bond (PAB) issuance was \$22.1 billion in 2018, an increase of more than \$1.1 billion over 2017, according to a report issued by the Council of Development Finance Agencies (CDFA). Today's report contains revised numbers from an original report that was posted Oct. 15. Housing bonds made up 91 percent of total PAB issuance,

the highest percentage since the CDFA began tracking the amounts in 2007. Multifamily housing bonds-which are paired with 4 percent low-income housing tax credits-totaled \$14.7 billion in 2018, a decrease of \$600 million from 2017. States used 65 percent of their PAB allocation 2018, a drop of 5 percent from 2017. California (\$4.3 billion) was one of five states to top \$1 billion in total PAB issuance, with New York, Texas, Florida and Tennessee also topping that figure.

Wednesday, October 23, 2019 - 3:15pm

Is Public Finance Ready to Rely on Blockchain Technology?

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Mike Mucha, deputy executive director of the Government Finance Officers Association, said his organization helps governments prepare and procure ERP systems, so he understands the challenge that MacDonald refers to. Mucha cited an example involving a school district. A district will have its financial data in one system (ERP), but student performance data will be stored in a student

information system (SIS).

"If you're trying to calculate like an academic ROI ... you need to basically, through some sort of third-party tool or some sort of third tool, correlate your spending on various programs with the academic return that you're getting out of your student data system," Mucha said.

Additionally, MacDonald said governments often deal with a "complicated array" of contractors, partners and not-for-profits in delivering public services. The chances of these external agents being on the government's ERP system are essentially zero, which creates a "hard organizational interface to try to overcome." The blockchain component can help manage this kind of chaos, almost acting as an "ERP across ERPs."

Another challenge is simply the idea of the government running multiple systems itself. Almost no organization runs just one ERP system, Mucha said. Then there's the fact that public entities frequently house their own information even though those entities might need to work together for the common good. Although Mucha admits that he doesn't know anything about the EY tool, he can imagine great potential for public entities wishing to work together.

"From a business intelligence perspective, you might want to pool that information together ... so if you had an ERP across ERPs, then you could conceivably use data from each one of those individual entity's ERP system in sort of a shared resource," Mucha said.

MacDonald stressed that the blockchain aspect of the PFM is not "technology for technology's sake." Rather, the blockchain platform presents a logical opportunity for technology to address long-standing business challenges within the complexity of a government system.

"It [blockchain] has the ability to work at that network level across organizational boundaries, across different authorities, and so forth," MacDonald said.

According to EY, the PFM has been tested by multiple governments around the world. MacDonald would not reveal all of those governments due to concerns related to privacy and confidentiality. It is public knowledge, however, that Toronto has tested the tool, but Toronto's chief financial officer Heather Taylor could not be reached for further comment.

GOVERNING.COM

BY JED PRESSGROVE / OCTOBER 25, 2019

Charter Schools Are an Opportunity for Impact Investors.

High interest rates are a barrier to buying new facilities, even though such loans have proved a safe bet.

With more than three million students in charter schools nationwide, and an estimated five million families who would send their child to a charter if a spot were available, why aren't many more of them opening? One reason is the higher cost of capital they bear compared with traditional public schools. While both types of school receive public funding for operating expenses, charter schools cannot issue general-obligation bonds to purchase or construct their properties. That forces charter schools to find facilities, and the funds to renovate or build them, on the open market.

Charter schools enter the market at a distinct disadvantage. When they do find a site and draw up plans for a new school building, the organizers often find interest rates far steeper than those enjoyed by traditional public schools—about 1.5 percentage points higher. That's because teachers unions and other advocacy groups dissuade school districts from sharing the proceeds of their bonds or guaranteeing charter-school bonds. The extra interest charter schools pay consumes dollars they could otherwise spend to hire more teachers, increase salaries and buy resources for students.

Yet compared with many real-estate investments, charter schools are an extremely safe bet. A 2011 report on charter-school loan performance from Ernst & Young's Quantitative Economics and Statistics Practice assessed 430 outstanding and paid-off loans totaling \$1.2 billion. Only five loans, which amounted to 1% of the set in dollar terms, ended in foreclosure. And just 0.2% of the total loan amount was reported as being written off. Among outstanding loans, only eight (3.6%) had been delinquent for any period of more than 60 days.

This strong performance makes charter schools an ideal opportunity for impact investing. Impact investors are those who aim to "do well by doing good"—i.e., generate a measurable social benefit along with a commensurate financial return.

While impact investors are already funding auxiliary features of education like tutoring programs, few have gotten involved in core activities like helping schools buy their physical plants. Historically, supplemental funding for schools has come in the form of donations and grants. Yet supporters of charter schools could have a greater impact by making larger, lower-cost loans that would allow the schools' organizers to finance capital expenditures at lower rates of interest than are available on the open market.

Low-interest investors would help charter schools spread and flourish in the long term. The infusion of affordable capital would make it possible to extend spots to many of the students waiting to enroll in charter schools. Millions of dollars in interest could be saved and reinvested to pay teachers and spend on student learning—more spending in the classroom, rather than on it. The discrepancy between charter schools' high cost of capital and their demonstrated stability and low default rate is exactly the sort of gap impact investors should naturally seek to fill.

Investors in social causes have made valuable contributions in recent decades to fields like public health that had long been occupied exclusively by nonprofits, but too many investors seem to focus more on improving their public image instead of finding the areas with the greatest potential impact. This may have dissuaded some from funding charter schools, which have lost some of their luster among political liberals because of the supposed threat they pose to traditional public schools.

Charter schools are an untapped opportunity for impact investors. Investors in charter schools have the satisfaction of knowing that their investments would finance expenses that donors can't cover with gifts, and can rest comfortably in the knowledge that their investments are very likely to pay off. What's more, they can help meet a goal that should be beyond the divisiveness of politics: better education for America's children.

The Wall Street Journal

By Mark Medema

Oct. 27, 2019 4:44 pm ET

Mr. Medema is managing director for the Charter School Facility Center at the National Alliance for Public Charter Schools.

CDFA Releases Annual Volume Cap Report.

Read the Volume Cap Report.

CDFA | Oct. 17

Climate Change Could Make Borrowing Costlier for States and Cities.

As ratings firms begin to focus on climate change, those involved in the market say now is the time for communities to make investments in climate resilience or risk being punished by the financial sector in the future.

(TNS) — Someday soon, analysts will determine that a city or county, or maybe a school district or utility, is so vulnerable to sea level rise, flooding, drought or wildfire that it is an investment risk.

To be sure, no community has yet seen its credit rating downgraded because of climate forecasting. And no one has heard of a government struggling to access capital because of its precarious geographical position.

But as ratings firms begin to focus on climate change, and investors increasingly talk about the issue, those involved in the market say now is the time for communities to make serious investments in climate resilience — or risk being punished by the financial sector in the future.

"We look not just at the vulnerability of state and local governments, but their ability to manage the impact," said Emily Raimes, vice president with Moody's Public Finance Group. "While we'll be looking at the data on rising sea levels and who may be more vulnerable, we'll also be looking at what these governments are doing to mitigate the impact."

Moody's has been especially vocal about its climate change concerns. The firm has issued numerous papers assessing climate risk, and two months ago it purchased a majority stake in Four Twenty Seven, a climate-risk data firm.

Emilie Mazzacurati, Four Twenty Seven's founder and CEO, said that the bond sector's attention to the issue should prompt local governments to make it a priority. "It creates an incentive for them to be better prepared, because it's going to cost them money if they don't."

But some worry that punishing places for their susceptibility to climate change will just make it more difficult for them to finance the infrastructure improvements that might protect them.

"Nobody has yet been penalized for having a bad environmental policy or practice or system," said Tim Schaefer, California's deputy treasurer for public finance. "I don't know how much longer that's going to go on. I'm assuming not much longer."

Assessing Florida's Future

Governments large and small rely on the \$3.8 trillion municipal bond market for much of their infrastructure work. When officials want to build a highway or a school — or a seawall or an emergency operations center — they often issue bonds, bringing in the money needed to complete the project. Investors are repaid with interest over a period that can run for decades or more.

About two-thirds of infrastructure projects in the United States are paid for by municipal bonds, and more than 50,000 states, local governments and other authorities have issued bonds to finance their work.

Governments pay higher interest rates on those bonds when their credit ratings are low. Firms such as Moody's Investors Service and Standard & Poor's Financial Services issue the ratings assessments.

"Investors are in a position of demanding a higher return when they see greater risk," said Kurt Forsgren, managing director of S&P Global Ratings.

Municipal bonds are considered a conservative investment, with a current default rate of around 0.3%, according to Matt Fabian, a partner at Municipal Market Analytics. To date, the bond market has done little to reflect that the risk may be increasing.

"There is almost no impact on muni bond prices with respect to climate change vulnerabilities. Prices do not acknowledge the risk in climate change," he said. "Most investors believe that [climate change] is going to start affecting the market right after their own bonds mature."

As more investors and firms study the risks, however, that might change.

"We are about a year away from climate change beginning to affect the muni market — a little," Fabian said. "Changes on the investor side are going to happen first, [credit] ratings will come second, and issuer behavior will be a distant third."

Some investors already have begun to factor climate change into their decisions. Eric Glass, a portfolio manager with AllianceBernstein, said his portfolio opted to steer clear of a recent three-decade bond in the Florida Keys, which is facing rising sea levels.

"What does [the Florida Keys] look like in 30 years?" Glass said. "I don't know. But I know it's not going to look like what it looks like today. That is a tough calculus to make, and we've decided not to take it."

David Jacobson, vice president of communications for Moody's Public Finance Group, called a downgrade over climate projections a "what-if type of thing." Moody's ratings are based on what its analysts expect a government's creditworthiness to be in the next 12 to 24 months, he said, even though the bonds they issue can run for decades.

"The things that are happening right now or in the next 24 months weigh a whole lot more than things we think will happen in 15 to 20 years," said Lenny Jones, a managing director at Moody's. "We're not scientists."

Credit-rating firms have always acted conservatively, said Justin Marlowe, a professor at the University of Washington who studies public finance. To some critics, that reluctance to downgrade pre-emptively is leaving the market unprepared for the onslaught of climate effects that so many local governments will face.

That's the conundrum facing the municipal bond market right now: If the market fails to be proactive about future risks, it could lead to billions in ill-fated investments in communities at the forefront of climate change. But making it more expensive for governments with environmental liabilities to borrow money could prevent them from making the improvements needed to strengthen their infrastructure.

And just because a city is likely to be struck by sea level rise or wildfire doesn't necessarily mean it will default on its bonds. Further effects like crop yields and population shifts — and their impact on a tax base — could prove even harder to project.

"It's a pretty big step from 'we have economic impacts' to 'this is going to affect their long-term ability to repay their bonds.' There's a really big difference," Mazzacurati said. "[Ratings firms'] focus is really about counties who repay their debt. That's it. There can be really important impacts that are not going to be reflected in the bond rating, and that doesn't mean the bond rating is off."

Disaster Fallout

So far, the few climate-related credit downgrades have come after specific disasters. New Orleans and Port Arthur, Texas, experienced credit downgrades after major hurricanes. And after a fire nearly destroyed Paradise, California, last year, the pool of pension obligation bonds it was a member of saw its credit downgraded.

As New Orleans rebounded, its credit improved. The city adopted a resilience strategy, bolstered its levee system and pursued other projects, such as turning green space into water reservoirs during periods of flooding. Today, the city sees its biggest climate threat as extreme rainfall, which has increased in frequency in recent years and flooded parts of the city.

Leaders in New Orleans are asking voters to approve \$500 million in new bonds, which would pay for infrastructure improvements such as the replacement of outdated pipes, as well as other goals like affordable housing. City officials say it shows New Orleans is "doubling down" on its infrastructure program.

"The environment is changing. More water's coming down in a shorter period, and we have to respond to that," said Norman White, the city's chief financial officer. "Our first responsibility is to the citizens of New Orleans. Fortunately, that lines up with investors."

Coastal cities across the country are building seawalls to stave off rising oceans. Others are elevating roadways to prepare for more frequent flooding. Some are requiring sturdier new construction and retrofitting existing buildings to withstand severe weather events. Communities in drought-prone areas may focus on projects such as water storage, while those with flooding concerns must fortify their sewage infrastructure.

Last year, Moody's surveyed the 50 largest U.S. cities; 28 responded. Among them, they had 240 climate resilience projects, totaling \$47 billion. Some 60% of the projects were to combat flooding.

Florida's Miami-Dade County has been praised by analysts for its infrastructure investments focused on climate preparedness. Ed Marquez, the county's deputy mayor, said future financing is a "concern," but officials are trying to address that with capital plans focused on dealing with the changing climate.

"This is a many-year process as we fix our infrastructure, as we add new infrastructure, as new science comes on board," he said. "Miami is still growing. People are still coming. Investors are buying our bonds. We're telling them what the odds are, but it's odds that they're willing to play."

Statewide, Florida remains in good shape creditwise, despite the challenges many of its communities are facing. Ben Watkins, the state's director of bond finance, said that's likely to continue, even amid hurricanes and rising sea levels. Even the most devastating hurricane seasons have ended up being a "blip on the radar" in terms of Florida's credit health, he said. But concern remains for smaller governments within the state.

"People are dying to come to Florida and coming to Florida to die," he said. "Until that changes, we'll have the economic engines to be able to access credit."

Cities with climate change risks should follow Florida's lead and borrow now for local projects, said Fabian, the analytics researcher.

"As investors get smarter about climate change risk, it will become more expensive for governments with the largest need to borrow," Fabian said. "Their costs to borrow could certainly be higher. Acting earlier is almost always cheaper."

BY ALEX BROWN, STATELINE.ORG | OCTOBER 18, 2019 AT 3:01 AM

City Bonds May Be Hit by Climate Change. Moody's Can Now See How.

- Rating company to gauge how cities tackle environmental risks
- Cities may see downgrades if plans fall too far from average

For Moody's Investors Service, it's no longer enough for cities to have plans addressing their risks from climate change. The company's municipal-bond analysts, armed with data, will soon determine how those strategies compare with others — and may change their credit ratings as a result.

Moody's in July purchased a majority stake in climate research firm Four Twenty Seven Inc., which provides information the company is now using to evaluate how well local governments are girding for threats such as floods, fires and storms.

"We're starting to get a sense of who's really putting in the effort and putting together a quality plan and those that haven't. We're gaining a lot of expertise very quickly," said Eric Hoffmann, a senior vice president. "We're going to incorporate these particular risks and the degree to which the exposure has been mitigated by the hazard mitigation plan into the rating."

Moody's efforts show how the company is trying to distinguish itself among its rivals to meet the needs of municipal-bond buyers who want to assess how extreme weather events, exacerbated by climate change, will affect their investments in local governments. S&P Global Ratings and Fitch Ratings say they account for such threats in their ratings.

Some investors have grown frustrated with the companies — which during the financial crisis a decade ago came under fire for underestimating the risk of toxic mortgage-backed securities — over high ratings for communities vulnerable to risks from rising sea levels and devastating storms. In California alone, the biggest municipal-bond issuer, wildfires have not only become more frequent but more devastating. Last year's Camp Fire, the deadliest in state history, wiped out most of the town of Paradise, killed 85 people and scorched 240 square miles.

"Anytime we see climate risk as being added on top of the credit story and not being integrated into the credit story, we tend to be a little bit more concerned about the value of the rating," said James Lyman, director of research for the municipal fixed income team at Neuberger Berman. "It's not a toggle switch."

Moody's recognizes that environmental risks eventually can lead to strains on local economies if left unaddressed, said Leonard Jones, the rating company's managing director for public finance. "We want entities to have a mitigation or resiliency plan so that they don't face that pressure and their

ratings stay at a quality level," Jones said. "If they can't do anything about it, they're going to face that pressure even sooner."

Moody's approach so far appears inconsistent, and it's clear that it may take a while for its ambitions to be reflected in its thousands of bond ratings. Megan Kilgore, auditor of Columbus, Ohio, said analysts didn't ask about climate risks in the review ahead of the AAA-rated city's bond sale on Oct. 3 even though the company a few weeks earlier had published a report noting that the Midwest has about \$69 billion in debt it rates exposed to high heat stress, the second-most vulnerable U.S. region after the Southeast.

Philadelphia Treasurer Christian Dunbar said that he thinks Moody's — and the other rating companies — will eventually "benchmark" cities on how they gird for similar environmental, social and governance threats and incorporate that into the ratings.

"Over the last year or so, ratings agencies are starting to get more sophisticated in their questioning about ESG and especially about climate risk," Dunbar said.

Bloomberg Markets

By Romy Varghese

October 15, 2019, 5:56 AM PDT

CUSIP Request Volume Sends Mixed Signals for Corporate and Municipal Debt Issuance.

NEW YORK, NY, October 10, 2019 – CUSIP Global Services (CGS) today announced the release of its CUSIP Issuance Trends Report for September 2019. The report, which tracks the issuance of new security identifiers as an early indicator of debt and capital markets activity over the next quarter, found increases in CUSIP request volume for corporate debt and decreases in request volume for municipal debt in September.

CUSIP: Corporate Debt Volumes Rise in September While Muni Volumes Slow.

"The significant monthly growth in requests for new corporate debt identifiers in September is noteworthy," said Gerard Faulkner, Director of Operations for CUSIP Global Services. "While most of this year has been marked by relatively moderate swings in month-to-month request volume volatility, the 38.0% monthly increase in volume for domestic corporate debt identifiers is a sign that corporate issuers are indeed seizing the current interest rate environment to raise capital."

Read Press Release.

MUNIS IN FOCUS: Joe Mysak (Radio)

Joe Mysak, Munis Editor for Bloomberg Briefs, will discuss how the municipal market could see \$400 billion of total supply if the new-issue calendar remains elevated in coming weeks Hosted by Lisa Abramowicz and Paul Sweeney.

Listen to audio.

Bloomberg

October 11, 2019 — 8:58 AM PDT

Pension Obligation Bonds May Soon Have Their Moment.

Issuing bonds to wipe out unfunded liabilities is risky. For some municipalities, it might soon be worth a shot.

In some corners of the finance world, the phrase "pension obligation bonds" is practically a fourletter word. The debt, which raises money to plow into public retirement systems, is deemed risky and dangerous, nothing more than a gamble on future market moves by state and local government leaders who are too clever for their own good.

It's true that some of the most infamous municipal bankruptcies, from Detroit to the California cities of Stockton and San Bernardino, involved pension obligation bonds, or POBs. Indeed, an oft-cited study by the Center for Retirement Research at Boston College found that "the jurisdictions that issue POBs tend to be the financially most vulnerable with little control over the timing." Chicago, which has a junk rating from Moody's Investors Service, floated the idea of using POBs last year.

That kind of deal would be asking for trouble. For one, Chicago pays a hefty premium to borrow, making it tougher for investment returns to exceed the bonds' fixed interest rate and turn the financing into a victory. Also, the city would be buying into a stock market that remains close to all-time highs, just as concerns about a potential economic slowdown are reaching a fever pitch. It doesn't add up.

But consider a scenario 12 months from now in which the U.S. economy enters a recession. That's hardly a bold call: A Federal Reserve Bank of New York model in August put the odds at 1 in 3.

In such an environment, equities, which have become the cornerstone of public pension plans, will likely have slumped as corporate earnings suffer and consumers close their wallets. Benchmark U.S. Treasury yields, already near all-time lows, will head even closer to zero as investors seek safety.

Would POBs make sense financially at that point? Absolutely.

Take South Carolina. As of 2017, its pensions were 54.3% funded, the sixth-worst level in the nation. And yet it maintains a pristine triple-A bond rating from Moody's, so the yield on its 30-year tax-exempt debt is a measly 2%.

Now, POBs must be taxable securities, after the Tax Reform Act of 1986 closed a loophole that exploited an almost risk-free opportunity for states and cities to sell tax-free debt and buy higher-yielding Treasuries. So for South Carolina, that yield would have to be higher. Still, even if the state

could borrow at 3%, is there really much doubt that a broad basket of public stocks, not to mention hedge funds and private equity firms, will beat that mark in the coming decades? From the height of the dot-com bubble in early 2000 until now, the S&P 500 has returned on average 5.4% annually. Since March 2009, it's delivered 17.5% a year. Adding in an allocation to the Bloomberg Barclays U.S. Aggregate Bond Index over either of those periods still leaves returns comfortably above the going rate on U.S. state obligations.

If this sounds like market timing, that's because it is. And with prudent management—and under the right conditions—it's not so much a gamble as an automatic stabilizer.

These massive funds have trillions of dollars in assets and depend on sustained market gains to meet their promises to retired public employees. recession is precisely the time for those focused on the long term to buy risky assets on the cheap. Yet that's exactly when states and cities see tax revenue dry up, affording them little room to ramp up investing. Instead, as they did during the last downturn, governments are inclined to skip pension payments as they grapple with budget shortfalls.

Matt Fabian, a partner with independent research company Municipal Market Analytics, could be called a POB skeptic. He published a report this year with a section titled "Fourteen Pension Obligation Bond Problems." But even he sees some merit in them when they're managed properly. "If there's a correction in the stock market, and you can time it at the bottom, sure," he says. "But think about the political will at that point. That's when you do it, but that's also when you don't do it."

It's true that austerity is still a virtue in many statehouses, unlike at the federal level. But financial advisers should have no trouble doing the math and coming up with scenarios in which selling POBs and investing in a mix of stocks and bonds would be a windfall with a high degree of confidence. Nothing is certain, of course, but using historical performance as a guide is at least informed speculation rather than an outright gamble.

Even when a positive spread between investment returns and the securities' interest rate is all but ensured, opponents of POBs may still have some valid criticisms. For one, issuing the debt is not a substitute for making required contributions. As Fabian points out, "pension bonds are rarely done to help the pension—they're done to help the budget." POBs should be considered a way to go above and beyond typical funding at an opportune time, when the prospects for future gains are greatest.

Another concern is that the transaction substitutes pension debt for comparatively inflexible muni bonds. The Government Finance Officers Association notes that POBs often restrict the option for borrowers to "call" the debt, "which can make it more difficult and costly to refund or restructure." The GFOA also correctly points out that the structures are sometimes tied to swaps and derivatives, and these can get messy. A plain-vanilla approach is the way to go.

In a blunt statement on its website, the GFOA says it "recommends that state and local governments do not issue POBs." Nothing indicates it plans to alter that stance anytime soon. That sort of warning could deter fiscally sound governments from even considering them when the going gets tough.

Moody's takes a somewhat more flexible position. "Our view is the issuance of POBs at the time of the transaction is really credit-neutral," says Tom Aaron, a public pension specialist at the credit-rating company. "But context matters a heck of a lot in terms of whether these things pan out."

In particular, "if the government continues making its full contributions, that's a different story than using the pension bonds as a temporary budget reprieve, because that turns it into an arbitrage play

plus deficit financing," Aaron says. Of course, history has shown that's a big "if."

One thing that's different today is the stark drop in nominal bond yields vs. the end of the last recession. In June 2009, benchmark 30-year tax-free munis yielded about 5%. Now they yield a record low 2%. The GFOA calls POBs "very speculative," but they present a much lower hurdle with interest rates so suppressed.

One need only look at Illinois, which has the worst-funded state pension in the U.S. after years of skipped payments, to see how important it is to funnel money into retirement systems at the right time. Earlier this year, the state resorted to issuing POBs with a top yield of more than 6%. The S&P 500 would hit a new record high a month later. With \$134 billion of unfunded pension liabilities, it's anyone's guess whether the state can find a path to solvency. Meanwhile, New Jersey's Senate president in August claimed his state was "in worse shape than Illinois" because of its massive pension shortfall.

Fortunately, most other states and cities start from a stronger position. And though there's no magic number that defines a well-funded pension plan, clearly any sustained decline in stocks and other risky assets would leave many of them in an uncomfortable hole.

Lower-for-longer interest rates present a unique opportunity for government officials to dig out faster than before. Make no mistake—POBs are not a cure-all. But layered on top of required payments, they just might help defuse the ticking pension time bomb that seems destined to explode.

Bloomberg

By Brian Chappatta

October 10, 2019, 2:00 AM PDT

Warning Signs Flash For Muni Bondbuyers Chasing Riskiest Debt.

- Firm says key measure of distress rises 30% to most since 2015
- Figures reflect results of 'incredible appetite for risk'

There's an alarm bell sounding for investors who've been plowing into the riskiest state and local government bonds.

So far this year, 108 borrowers who raised cash in the \$3.8 trillion municipal market have run into troubles grave enough that they skipped debt payments or violated other financial terms of their bond contracts, like drawing down their cash reserves, according to data compiled by Municipal Market Analytics. That's a 30% jump from the same period in 2018 and the most since 2015.

The figures underscore concern in pockets of Wall Street that the influx of cash from yield-chasing investors is increasing the risk in the municipal market, where real estate developers, nursing home operators and even factory owners can raise money by issuing debt through local government agencies. The demand has pushed junk-bond yields to about 2.4 percentage points more than what top-rated borrowers pay, the smallest penalty since before the financial crisis more than a decade ago.

MMA analyst Matt Fabian said about 41% of the borrowers that ran into distress sold the debt

within the last three years. That marks an increase from the historical average of about 20% to 25% encountering strain so soon.

The number of payment defaults rose at a slower pace than so-called impairments — such as drawing on credit lines to cover interest bills — with 37 this year, an increase of 19%, Fabian and analyst Lisa Washburn said in a report to clients Tuesday. But the jump in impairments may foretell a rise in defaults, since about half of the borrowers that experience impairments eventually wind up reneging on the debt payments, according to Fabian.

"That impairments are rising faster than defaults means that defaults will continue to rise into next year as troubled credit begins to transition to defaults," Fabian said in a telephone interview.

One contributing factor is the "incredible appetite for risk," he said, adding that it is more about that than any shifts in the economy.

"Investors are permitting riskier bonds to come to market," Fabian said. "That's what driving the trend of recent issues getting into trouble faster than normal."

Bloomberg Markets

By Shruti Singh

October 8, 2019, 10:52 AM PDT

Why Democrats Should Be Cautious About Public Banking.

Earlier this month, California passed a bill allowing 10 city governments in the state to establish a public bank. It's only the second state in the U.S. to take the leap — North Dakota has had a public bank for a century — but other states are dabbling in the idea.

In the aftermath of the 2008 financial collapse, when the privately-owned banks of Wall Street are as bloated and vulnerable to crisis as ever, public banking seems like an idea whose time has come: It's being proposed for everything from ending the financial exploitation of low-income Americans to providing the financial engine of a Green New Deal.

But what do public banks get us that private banks don't? If public banking is a tool, what problems is it best at solving? And is it a solution for tackling some of our biggest challenges?

Continue reading.

theweek.com

by Jeff Spross

October 16, 2019

Fitch Ratings: U.S. Toll Roads Still Largely in Cruise Control.

Link to Fitch Ratings' Report(s): <u>Peer Review of U.S. Toll Roads (Attribute Assessments, Metrics and Ratings)</u>

Fitch Ratings-New York-15 October 2019: Roadblocks will remain minimal for U.S. toll road performance in the coming months amid ongoing issues that continue to hamper performance for two rated toll roads, according to Fitch Ratings in its latest U.S. Toll Roads Peer Review.

Fitch has taken four positive rating actions, two negative rating actions, and revised three Outlooks to Positive since its last Peer Review. For the second time in the las two years, Fitch upgraded bonds tied to Texas' Grand Parkway System with performance far exceeding original expectations. 'The addition of new debt for new segments was expected, though Grand Parkway System's revenue is more than sufficient to cover all of its debt obligations through the term,' said Director Scott Monroe. Another bright spot was Colorado's E-470 project bonds, which Fitch also upgraded. 'In addition to its continued strong traffic and revenue growth, E-470 can service its escalating debt service profile with nearly no revenue growth and no need to issue new debt for capital requirements,' said Monroe.

Two toll roads that continue to struggle are Miami's MDX and Dulles Greenway connecting Washington DC and Virginia. House Bill 385 effectively dissolving MDX led to Fitch downgrading the rating on the project bonds. 'The bill is the culmination of an unprecedented degree of state political interference into the affairs of a local tolling authority,' said Monroe. 'MDX's financial profile could deteriorate sharply and be susceptible to further downgrades if House Bill 385 is upheld.' Traffic and revenue are both trending below expectations for Dulles Greenway, prompting Fitch to downgrade the project bonds. 'Limited visibility into future rate-setting and the prospect of future toll increases not yet authorized by regulators will continue to weigh on Dulles Greenway,' said Monroe.

Fitch has also launched its 2019 update to the interactive peer study for U.S. toll roads, the Fitch Analytical Comparative Tool, or FACT, concurrently with the release of today's peer review.

Fitch's 2018 U.S. Toll Road FACT, contains comparative financial data for a portfolio of 41 publicly rated operating U.S. toll road issuers and enables graphical plotting of key metrics by region, facility type, asset type and rating. The database includes six years of data, providing a comprehensive base for historical trend analysis specific to individual issuers or within the peer group at large.

Fitch's latest 'Peer Review of U.S. Toll Roads' and the '2019 Fitch Analytical Comparative Tool – U.S. Toll Roads' are available at 'www.fitchratings.com' or by clicking on the above links.

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EY Launches Blockchain Tool to Help Bring Accountability to Public Finances.

Professional services giant EY (Ernst & Young) is using blockchain tech to assist governments in improving transparency and accountability in the management of public funds.

The firm, one of the Big Four accounting firms, <u>announced</u> the news Wednesday, saying its new "blockchain-enabled" EY OpsChain Public Finance Manager will compare government spending programs with the results of the expenditure, even when the money has passed through different layers of government and public service agencies.

It's claimed to track finances in real time and "create a single source of integrated financial and nonfinancial performance information to support decision-making."

Mark MacDonald, EY's lead of Global Public Finance Management, said in the announcement that transparency, accountability and sound evidence for decision-making are vital in managing public funds. The firm's new tool is aimed to help those in charge of public finances to "assess and improve" their systems, he added.

The product has already been trialed around the world, the firm said, citing one pilot in Toronto where the city used the finance manager solution to track how reconciliations and fund transfers between departments are managed.

The system is built on EY OpsChain, a blockchain platform launched in its second iteration in April with claimed support for up to 20 million transactions per day over private networks. The firm is eyeing a range of use cases for the blockchain platform generally, including in healthcare, the food industry, supply chain and financial management.

coindesk.com

by Daniel Palmer

Oct 16, 2019

EY Launches Public Finance Management Blockchain Solution to Improve Efficiency and Transparency in Governments.

- Solution helps to optimize capacity in core financial management processes
- - Offering provides clarity into how public monies are spent and results delivered
- - EY professionals working with early adopters and piloting with governments worldwide

LONDON, Oct. 16, 2019 /PRNewswire/ — EY announced the launch of EY OpsChain Public Finance Manager (PFM), a blockchain-enabled solution designed to help governments improve their processes for financial management of public funds.

EY OpsChain PFM helps governments drive transparency, provide accountable outcomes for citizens and track budgets, expenditures and results. It uses blockchain technology to match government spending programs with tangible outcomes, even as funding may pass through multiple layers of government and public service agencies.

EY OpsChain PFM blockchain provides clear, accurate and timely information for financial reporting and accountability. The system increases administrative efficiency with the capacity to track funds in real time and create a single source of integrated financial and nonfinancial performance information to support decision-making. The system is built on the EY OpsChain platform.

EY OpsChain PFM has been piloted worldwide, including for the city of Toronto. The city has tested application to the way reconciliations and interdivisional fund transfers are managed, as part of its ongoing financial management transformation efforts. The EY blockchain proof-of-concept for the city of Toronto could transform the way reconciliations and interdivisional fund transfers are managed, increasing transparency between divisions, and facilitating more efficient and effective financial and asset performance reporting.

Mark MacDonald, EY Global Public Finance Management Leader, says:

"Modern public financial management requires focusing on the things that matter most – transparency, accountability and robust evidence for decision-making – all factors that can be enhanced by blockchain technology. EY OpsChain PFM is an exciting new tool that helps public finance leaders to assess and improve their finance management systems. It has been very exciting to work with city leaders who continue to push boundaries and embrace new technologies."

Heather Taylor, City of Toronto Chief Financial Officer, says:

"With a commitment to championing the economic, social and environmental vitality of the city of Toronto, our officials strive to implement technologies that best help us meet our residents' evolving needs. Testing new technologies is part of our ongoing approach to financial management transformation taking place at the city."

As governments around the world are modernizing their cities and digitally transforming their processes, blockchain technology can positively impact processes from tax collection to open data to public spending. For example, as part of the city of Vienna's Open Government Data initiative – which includes data such as public transport routes, train schedules and surrounding communities' voting results – EY Austria professionals previously assisted the city to use blockchain to help facilitate transparency, efficiency and security of the data.

The EY OpChain PFM release builds upon work in the public sector by EY member firms around blockchain technology.

For more information on EY and blockchain, visit ey.com/en gl/blockchain.

More than half of the amount held by households sits in separately managed accounts or mutual funds

A larger-than-ever share of municipal bonds is being managed by professionals, shaking up a market that has traditionally been the domain of mom- and-pop investors.

The rapid expansion of muni money managers, under way for more than a decade, reached a milestone in the past year: More than half of the total amount of muni bonds held by households—a third of the \$4 trillion market—now sits in separately managed accounts or mutual funds.

Investors in these separate accounts typically pay an annual percentage to a portfolio manager tasked with buying and selling bonds, rather than purchasing bonds from a brokerage account for a one-time fee and holding them.

Separate accounts held about \$600 billion in municipal debt at the end of the first quarter, triple the amount in 2010, according to Vikram Rai, head of municipal strategy at Citigroup Inc. In addition, muni mutual funds, which are also overseen by a manager but are pooled funds rather than individual accounts, held \$739 billion, a 52% increase, during the same period, according to the Federal Reserve.

Continue reading.

The Wall Street Journal

By Heather Gillers and Gunjan Banerji

Updated Oct. 9, 2019 9:57 am ET

Fitch Rtgs: Investment Portfolios Key for Not-for-Profit Hospital Credit

Fitch Ratings-New York-16 October 2019: A hospital's cash and investment portfolio and investment policy can have a significant bearing on creditworthiness given the importance of financial reserves to the ongoing operations of the hospital, says Fitch Ratings. Higher-rated not-fo-profit (NFP) hospitals' large investment portfolios and cash help mitigate the volatility of certain alternative investments. Lower-rated hospitals typically have weaker balance sheets and therefore are less able to weather the volatility of more risky investments, potentially compromising their ability to fund operations through the cycle.

The not-for-profit sector's strong liquidity, relative to debt repayment obligations and business risk, is a key element distinguishing it from for-profit acute healthcare entities. The accumulation of retained earnings including earnings on cash and investment holdings allows many NFP hospitals and health systems to build up substantial unrestricted liquidity. This provides a financial cushion to absorb unforeseen operating challenges that may lead to potential compression in operating margins. In Fitch's view ratings should not change due to normal cyclical variations. Therefore, Fitch reviews the size and allocation of a NFP hospital's combined cash and investment portfolio to provide broad order of magnitude guidance of how public hospitals' liquidity positions might be affected in relation to normal economic expansions and contractions.

Larger systems often have a larger financial cushion and may have qualitative advantages, such as better operating efficiencies and economies of scale, or enhanced competitive positioning, that

temper balance sheet compression if, for example, investment holding performance weakens or is volatile. While not as common, smaller organizations may have a large financial cushion in line with metrics indicative of high-investment-grade ratings that may give them more flexibility to hold more volatile assets in their investment portfolio.

Continue reading.

High-Yield Munis Outperform as Credit Spreads Narrow.

Christopher Brigati, managing director and head of municipals at Advisors Asset Management, discusses the impact of tightening credit spreads on municipal bond investing. He speaks with Bloomberg's Taylor Riggs in this week's "Muni Moment" on "Bloomberg Markets."

Watch video.

Bloomberg Markets | Muni MomentTV Shows

October 16th, 2019, 9:57 AM PDT

Muni Market Moves to Join the 21st Century, But It's in No Rush.

- Bond-trading platforms starting to accept technology advances
- Similar changes transformed dealing in corporate-bond market

The \$3.8 trillion municipal-bond market moves with all the speed of a tortoise.

It's a champion at resisting change. Price quotes weren't easily available until the shockingly recent January 2005, and it wasn't until three years ago that investors were afforded best-execution standards that ensured they weren't getting ripped off — guardrails that U.S. equity markets have had in place for decades.

Now, however, it appears muni world is finally stepping out of the wayback machine and into the 21st century, even if it's in no evident rush to do so. Technological advances, such as electronic trading and analytics, are beginning to transform the relatively Luddite market in much the same way they've altered the \$6.8 trillion corporate-bond market.

Continue reading.

Bloomberg Markets

By Matthew Leising

October 14, 2019, 4:00 AM PDT

Muni Sales Set to Surge Most Since 2017, Extending Supply Boom.

U.S. state and local governments are poised to sell bonds at the fastest pace in almost two years as they take advantage of lower interest rates and strong investor demand.

Municipal bond issuers are expected to sell \$21.4 billion in debt over the next month. This is the highest visible supply since December 2017, when governments rushed deals to market to get ahead of federal tax law changes effective at the start of 2018.

Typically, the 30-day supply metric represents about half of what actually is issued, as deals can be priced with less than a month's notice. Visible supply has averaged about \$10.6 billion in 2019, according to data compiled by Bloomberg.

The upcoming supply will add to the \$289 billion in long-term bonds state and local governments have already sold this year, an 11% increase over the same period in 2018. This week is slated to be the busiest since December 2017, driven by refinancings.

Bloomberg Markets

By Danielle Moran

October 16, 2019, 6:25 AM PDT

<u>USDA Invests in Water and Wastewater Infrastructure Improvements in 31 States.</u>

Investments will Benefit Nearly 300,000 Rural Residents

WASHINGTON, Oct. 16, 2019 - U.S. Department of Agriculture (USDA) Deputy Under Secretary for Rural Development Donald "DJ" LaVoy today announced that USDA is <u>investing \$201 million to improve rural water infrastructure in 31 states</u> (PDF, 250 KB).

"Modern, reliable and accessible infrastructure is critical to economic development and quality of life," LaVoy said. "Under the leadership of President Trump and Agriculture Secretary Perdue, USDA is committed to partnering with rural communities to help them improve their infrastructure, because when rural America thrives, all of America thrives."

USDA is providing the funding through the <u>Water and Waste Disposal Loan and Grant</u> program. Eligible applicants include rural cities, towns and water districts. The funds can be used for drinking water, stormwater drainage and waste disposal systems in rural communities with 10,000 or fewer residents.

USDA is announcing investments today in Alabama, Arkansas, Arizona, California, Colorado, Florida, Iowa, Illinois, Indiana, Kentucky, Maine, Michigan, Missouri, Mississippi, Montana, North Carolina, North Dakota, Nebraska, New Jersey, New Mexico, New York, Oklahoma, Rhode Island, South Carolina, Texas, Utah, Virginia, Vermont, Washington, Wisconsin and Wyoming.

Below are examples of projects announced today.

Bessemer City, N.C., is receiving a \$4.9 million loan and a \$3.2 million grant to improve its water treatment plant and related facilities. The city will add 1,290 linear feet of water line and 2,375 linear feet of gravity sewer line. It also will install 12 manholes along an unstable stream bed to

replace the deteriorated sewer line. The improvements will increase the reliability of the water treatment process and improve water quality.

The Village of Maine, Wis., is receiving a \$515,000 loan and a \$965,000 grant to upgrade the wastewater collection system. Deteriorating manholes will be repaired or replaced, and the Everest Avenue lift station will be relocated. Sewers on the east side of the village will be replaced with new PVC piping, and the manholes will be replaced with ones made out of precast concrete. These improvements will significantly decrease infiltration and inflow into the collection system. The town of Barre in Orleans County, N.Y., has been approved for a \$500,000 loan and a \$601,000 grant to extend public water service to 31 residential customers who have wells that lack safe, potable water. Installing water mains will provide reliable water service to the residents as well as adequate fire protection.

USDA awarded nearly \$1.8 billion for Water and Environmental Program loans and grants during fiscal year 2019. View the interactive <u>RD Apply tool</u> or contact one of USDA Rural Development's <u>state or field offices</u> for application or eligibility information.

In April 2017, President Donald J. Trump established the Interagency Task Force on Agriculture and Rural Prosperity to identify legislative, regulatory and policy changes that could promote agriculture and prosperity in rural communities. In January 2018, Secretary Perdue presented the Task Force's findings to President Trump. These findings included 31 recommendations to align the federal government with state, local and tribal governments to take advantage of opportunities that exist in rural America. Increasing investments in rural infrastructure is a key recommendation of the task force.

To view the report in its entirety, please view the <u>Report to the President of the United States from the Task Force on Agriculture and Rural Prosperity</u> (PDF, 5.4 MB). In addition, to view the categories of the recommendations, please view the <u>Rural Prosperity infographic</u> (PDF, 190 KB).

USDA Rural Development provides loans and grants to help expand economic opportunities and create jobs in rural areas. This assistance supports infrastructure improvements; business development; housing; community facilities such as schools, public safety and health care; and high-speed internet access in rural areas. For more information, visit www.rd.usda.gov.

Release & Contact Info Press Release Release No. 0155.19 Jay Fletcher (202) 690-0498 Weldon Freeman (202) 690-1384

Full Spectrum Fund Investing: A Case Study With Municipal Bonds.

Summary

- Fund and income investors have ready access to a number of different fund structures for their sector allocation such as mutual funds, ETFs, and CEFs.
- We review the key issues surrounding these three fund types using municipal bonds as a case study.
- We find that, historically, municipal CEFs have benefited from a number of tailwinds which have now mostly dissipated. This suggests that investors should have a closer look at open-end funds.

• Within high-yield municipal mutual funds, we like NHMAX and ORNAX which have a good combination of high yield, strong total returns, and attractive risk profile.

Fund investors have a number of investment vehicles at their disposal: mutual funds, ETFs, CEFs, ETNs, interval funds and others with each fund structure providing a different risk/reward trade-off. With market conditions ever-changing, it makes sense for investors to keep an eye on the entire investable fund universe in case one area of the market offers a better deal than another.

In this article, we review the municipal bond sector across the landscape of three fund structures that we actively follow at Systematic Income: mutual funds, closed-end funds and ETFs. Our main takeway is that the tailwinds supporting CEF outperformance after the end of the last recession have mostly dissipated, and investors should take a harder look at mutual funds and ETFs which can deliver similar performance with much better risk control.

Continue reading.

Seeking Alpha

ADS Analytics

Oct. 18, 2019

The Problem With Bringing Muni Bonds to the Masses.

The failure of startup Neighborly underscores the pitfalls of crowdsourcing state and city debt.

The \$3.8 trillion municipal-bond market, which traces its roots back more than two centuries, easily swatted away a startup that sought to "disrupt" the way states and cities issue debt.

Bloomberg News's Amanda Albright <u>chronicled</u> the brief rise and fall of Neighborly Corp., highlighting any number of reasons it failed in its pursuit to bring munis to the masses. For the most part, they were common pitfalls of Bay Area upstarts. Profligate spending? Neighborly embarked on a company trip to Hawaii after its first debt sale. Erratic behavior? It frequently shifted focus away from underwriting, annoying employees who were pulled off projects for new ones and sowing doubts among municipal finance officers. It even faced a lawsuit that accused it of a "racially and sexually hostile environment." 1

In other words, it's tricky to tell whether the company simply did itself in or if the business proposition just won't work. Effectively, defenders of the traditional muni market want to know: Should they be on guard for another Neighborly in the future?

My hunch is that it's certainly possible that other upstarts will try to break into munis, but I doubt they would be much more successful than Neighborly, especially if they tried the same approach.

Continue reading.

Bloomberg Opinion

By Brian Chappatta

Albright on Fall of Muni Startup (Radio)

Amanda Albright, Bloomberg Municipal Bond Reporter, will discuss her column on the fall of a muni startup that wanted to upend Wall Street. Hosted by Lisa Abramowicz and Paul Sweeney.

Play Episode

Bloomberg

October 17, 2019 - 8:06 AM PDT

The Fall of the Muni Startup That Wanted to Upend Wall Street.

- Neighborly sought to bring crowdsourcing to bond underwriting
- Company told employees this month that it couldn't pay them

In early 2017, a San Francisco startup backed by billionaire Laurene Powell Jobs and actor Ashton Kutcher scored the first victory in its campaign to shake up a \$400 billion-a-year business dominated by Wall Street's biggest banks.

The firm, Neighborly Corp., underwrote a \$2 million debt sale for Cambridge, Massachusetts — the home of Harvard University and the Massachusetts Institute of Technology — by selling the securities in \$1,000 lots to residents who wanted to invest in their own community. The company didn't earn a penny in fees. But the successful experiment in the prestigious Boston suburb lent valuable publicity to Neighborly's quixotic quest to make a technological end-run around big mutual funds, insurers and banks by peddling municipal bonds directly to the people.

So employees went to Maui to celebrate.

Continue reading.

Bloomberg Technology

By Amanda Albright

October 16, 2019, 6:57 AM PDT

Ken Fisher Client Pulls \$30 Million in Backlash.

- Fisher Investment clients have divested more than \$1.3 billion
- Boston, Philadelphia and Michigan among pensions to divest

The Iowa Public Employees' Retirement System is yanking the \$386 million it has invested with Ken Fisher after the billionaire made vulgar comments at an industry conference.

The move brings the total amount divested from Fisher Investments to more than \$1.3 billion. Air Products & Chemical Inc. said earlier Friday that it was pulling \$30 million from Fisher.

"It is our opinion that Mr. Fisher's comments have damaged the credibility of the firm and its leadership," the Iowa pension said in a statement. "As a result, the risk to IPERS is that the firm could lose investment talent, and/or it may be unable to recruit high caliber talent in the future."

Continue reading.

Bloomberg Markets

By Janet Lorin

October 18, 2019, 10:23 AM PDT Updated on October 18, 2019, 2:34 PM PDT

Green Bond Market Just Getting Started.

ESG bond funds provide a new channel of investing for socially conscious clients.

The \$50 trillion global bond market might be more than three times the size of the global equity market, but when it comes to adopting environmental, social and governance strategies, the fixed-income market is just getting started.

A lack of uniform definitions and reporting standards makes it difficult to calculate precisely the size of the market, but analysts' estimates peg the green bond market at roughly \$136 billion. And it's growing rapidly.

"We were watching the green bond space for many years and the market was just too small to launch a green bond ETF, then three years ago we noticed the issuance of green bonds started doubling every year," said William Sokol, director of ETF product management at VanEck, which launched the VanEck Vectors Green Bond ETF (GRBN) in October 2017.

Continue reading.

Investment News

By Jeff Benjamin

Oct 5, 2019 @ 6:00 am

Climate Change Could Make Borrowing Costlier for States and Cities.

WASHINGTON — Someday soon, analysts will determine that a city or county, or maybe a school district or utility, is so vulnerable to sea level rise, flooding, drought or wildfire that it is an investment risk.

To be sure, no community has yet seen its credit rating downgraded because of climate forecasting. And no one has heard of a government struggling to access capital because of its precarious

geographical position.

But as ratings firms begin to focus on climate change, and investors increasingly talk about the issue, those involved in the market say now is the time for communities to make serious investments in climate resilience — or risk being punished by the financial sector in the future.

"We look not just at the vulnerability of state and local governments, but their ability to manage the impact," said Emily Raimes, vice president with Moody's Public Finance Group. "While we'll be looking at the data on rising sea levels and who may be more vulnerable, we'll also be looking at what these governments are doing to mitigate the impact."

Moody's has been especially vocal about its climate change concerns. The firm has issued numerous papers assessing climate risk, and two months ago it purchased a majority stake in Four Twenty Seven, a climate-risk data firm.

Emilie Mazzacurati, Four Twenty Seven's founder and CEO, said that the bond sector's attention to the issue should prompt local governments to make it a priority. "It creates an incentive for them to be better prepared, because it's going to cost them money if they don't."

But some worry that punishing places for their susceptibility to climate change will just make it more difficult for them to finance the infrastructure improvements that might protect them.

"Nobody has yet been penalized for having a bad environmental policy or practice or system," said Tim Schaefer, California's deputy treasurer for public finance. "I don't know how much longer that's going to go on. I'm assuming not much longer."

Governments large and small rely on the \$3.8 trillion municipal bond market for much of their infrastructure work. When officials want to build a highway or a school — or a seawall or an emergency operations center — they often issue bonds, bringing in the money needed to complete the project. Investors are repaid with interest over a period that can run for decades or more.

About two-thirds of infrastructure projects in the United States are paid for by municipal bonds, and more than 50,000 states, local governments and other authorities have issued bonds to finance their work.

Governments pay higher interest rates on those bonds when their credit ratings are low. Firms such as Moody's Investors Service and Standard & Poor's Financial Services issue the ratings assessments.

"Investors are in a position of demanding a higher return when they see greater risk," said Kurt Forsgren, managing director of S&P Global Ratings.

Municipal bonds are considered a conservative investment, with a current default rate of around 0.3%, according to Matt Fabian, a partner at Municipal Market Analytics. To date, the bond market has done little to reflect that the risk may be increasing.

"There is almost no impact on muni bond prices with respect to climate change vulnerabilities. Prices do not acknowledge the risk in climate change," he said. "Most investors believe that (climate change) is going to start affecting the market right after their own bonds mature."

As more investors and firms study the risks, however, that might change.

"We are about a year away from climate change beginning to affect the muni market — a little,"

Fabian said. "Changes on the investor side are going to happen first, (credit) ratings will come second, and issuer behavior will be a distant third."

Some investors already have begun to factor climate change into their decisions. Eric Glass, a portfolio manager with AllianceBernstein, said his portfolio opted to steer clear of a recent three-decade bond in the Florida Keys, which is facing rising sea levels.

"What does (the Florida Keys) look like in 30 years?" Glass said. "I don't know. But I know it's not going to look like what it looks like today. That is a tough calculus to make, and we've decided not to take it."

David Jacobson, vice president of communications for Moody's Public Finance Group, called a downgrade over climate projections a "what-if type of thing." Moody's ratings are based on what its analysts expect a government's creditworthiness to be in the next 12 to 24 months, he said, even though the bonds they issue can run for decades.

"The things that are happening right now or in the next 24 months weigh a whole lot more than things we think will happen in 15 to 20 years," said Lenny Jones, a managing director at Moody's. "We're not scientists."

Credit-rating firms have always acted conservatively, said Justin Marlowe, a professor at the University of Washington who studies public finance. To some critics, that reluctance to downgrade pre-emptively is leaving the market unprepared for the onslaught of climate effects that so many local governments will face.

That's the conundrum facing the municipal bond market right now: If the market fails to be proactive about future risks, it could lead to billions in ill-fated investments in communities at the forefront of climate change. But making it more expensive for governments with environmental liabilities to borrow money could prevent them from making the improvements needed to strengthen their infrastructure.

And just because a city is likely to be struck by sea level rise or wildfire doesn't necessarily mean it will default on its bonds. Further effects like crop yields and population shifts — and their impact on a tax base — could prove even harder to project.

"It's a pretty big step from 'we have economic impacts' to 'this is going to affect their long-term ability to repay their bonds.' There's a really big difference," Mazzacurati said. "(Ratings firms') focus is really about counties who repay their debt. That's it. There can be really important impacts that are not going to be reflected in the bond rating, and that doesn't mean the bond rating is off."

So far, the few climate-related credit downgrades have come after specific disasters. New Orleans and Port Arthur, Texas, experienced credit downgrades after major hurricanes. And after a fire nearly destroyed Paradise, California, last year, the pool of pension obligation bonds it was a member of saw its credit downgraded.

As New Orleans rebounded, its credit improved. The city adopted a resilience strategy, bolstered its levee system and pursued other projects, such as turning green space into water reservoirs during periods of flooding. Today, the city sees its biggest climate threat as extreme rainfall, which has increased in frequency in recent years and flooded parts of the city.

Leaders in New Orleans are asking voters to approve \$500 million in new bonds, which would pay for infrastructure improvements such as the replacement of outdated pipes, as well as other goals like affordable housing. City officials say it shows New Orleans is "doubling down" on its

infrastructure program.

"The environment is changing. More water's coming down in a shorter period, and we have to respond to that," said Norman White, the city's chief financial officer. "Our first responsibility is to the citizens of New Orleans. Fortunately, that lines up with investors."

Coastal cities across the country are building seawalls to stave off rising oceans. Others are elevating roadways to prepare for more frequent flooding. Some are requiring sturdier new construction and retrofitting existing buildings to withstand severe weather events. Communities in drought-prone areas may focus on projects such as water storage, while those with flooding concerns must fortify their sewage infrastructure.

Last year, Moody's surveyed the 50 largest U.S. cities; 28 responded. Among them, they had 240 climate resilience projects, totaling \$47 billion. Some 60% of the projects were to combat flooding.

Florida's Miami-Dade County has been praised by analysts for its infrastructure investments focused on climate preparedness. Ed Marquez, the county's deputy mayor, said future financing is a "concern," but officials are trying to address that with capital plans focused on dealing with the changing climate.

"This is a many-year process as we fix our infrastructure, as we add new infrastructure, as new science comes on board," he said. "Miami is still growing. People are still coming. Investors are buying our bonds. We're telling them what the odds are, but it's odds that they're willing to play."

Statewide, Florida remains in good shape creditwise, despite the challenges many of its communities are facing. Ben Watkins, the state's director of bond finance, said that's likely to continue, even amid hurricanes and rising sea levels. Even the most devastating hurricane seasons have ended up being a "blip on the radar" in terms of Florida's credit health, he said. But concern remains for smaller governments within the state.

"People are dying to come to Florida and coming to Florida to die," he said. "Until that changes, we'll have the economic engines to be able to access credit."

Cities with climate change risks should follow Florida's lead and borrow now for local projects, said Fabian, the analytics researcher.

"As investors get smarter about climate change risk, it will become more expensive for governments with the largest need to borrow," Fabian said. "Their costs to borrow could certainly be higher. Acting earlier is almost always cheaper."

Stateline.org

By Alex Brown | Oct 1, 2019

Fitch Ratings Launches ESG Heat Map for Public Finance/Infrastructure.

Link to Fitch Ratings' Report(s): Public Finance/Infrastructure ESG Relevance Map

Fitch Ratings-Hong Kong-02 October 2019: Fitch Ratings has launched an ESG 'heat map' for Public Finance/Infrastructure to provide further insight into the relevance of ESG factors to credit ratings.

The map is designed to help users understand how relevant individual ESG topics are to credit ratings for different sub-sectors across Global Public Finance, Infrastructure and Project Finance issuers.

The heat map shows that ESG risks generally have a low level of direct impact on public finance and infrastructure credit ratings, as found in Fitch's report Introducing ESG Relevance Scores for Public Finance/Infrastructure. Governance is the most influential ESG risk factor across the overall ratings portfolio, accounting for the majority of scores at a level of '4' or '5'.

Rarely does a particular ESG issue affect more than 10% of issuers in a sub-sector. A notable exception is Group Structure for US Life Plan Communities, where the operations and financial status of non-obligated entities have been relevant to the rating for several issuers, in combination with other factors.

For ease of use, the map comes in two forms, an infographic below and an Excel table downloadable from the link above. The Excel table allows users to toggle between different relevance thresholds, which can aid understanding of whether an ESG topic is relevant specifically to an individual issuer or if it applies more generally as a trend affecting many issuers in a given sub-sector.

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Can Standardized Financial Data Help Government Save Money?

A pair of states and the feds are moving to require local governments to submit financial data in a machine-readable format. Here's how it could help cities.

What would happen if the thousands of local governments in the U.S. took their financial information — largely available in PDF format — and put it all in a standardized, machine-readable format?

It would make it a lot easier for citizens, businesses and governments to look at the spending habits and fiscal health of the public sector, for one. According to one line of thinking, it might even reduce the amount that government pays for big bond-funded projects like park and road construction.

Before long, the state of Florida will find out for sure. And the state of California, as well as the federal government, might follow suit.

Florida's governor signed a bill last year that puts the state on a path to requiring its local governments to submit their financial information to the state in eXtensible Business Reporting Language, or XBRL, by September 2022. A similar bill sits on the desk of California's governor, and U.S. legislators are considering two bills that could push along standardization at the federal level.

"An annual corporate financial statement is a good analogy to a local government financial statement, so it's a technology that has a precedent in U.S. regulation," he said.

As government modernizes its technology and seeks to do more with its data, efforts have emerged in several areas to standardize data. For example, Mobility Data Specification, SharedStreets and General Transit Feed Specification have helped governments better use transportation data.

There are quite a few reasons to standardize.

"It allows you to streamline submission and reporting processes, allow for closer to near-real-time information exchange, which could accelerate traditionally slow processes," said Jim St. Clair, chief technology officer for Dinocrates, a company that Florida has chosen to help develop the XBRL standards for its new financial reporting system. "It gives not only the government, but businesses and consumers, greater information to support transactions and processes, as well as analytics, on values and efficiencies and current accounts and lay the foundation for perhaps new processes like an electronic tax reporting system that currently doesn't exist."

It might also make it easier for states to identify troubled local governments and intervene before their financials spiral out of control.

But when it comes to government financial data, there's another very specific reason Joffe wants to see everybody agree on one machine-readable standard: municipal bonds.

Those bonds, which act as a major funding source for the building of parks, roads, schools, water infrastructure and many other things across the country, are a huge investment market: Governments in the U.S. issued about \$3.8 trillion in bonds in 2018. When considering buying a bond, investors will turn — as they would with any other kind of bond — to the credit rating of the government issuing it.

But there's a problem with that. According to Joffe, who has conducted research on the matter, government bonds are often a safer investment than their credit ratings suggest.

"If you have a municipal bond and it's rated AAA, it's actually much safer than a corporate bond ... with the same rating," he said.

In investing, reward reflects risk. So the riskier a bond is, the more money the bond issuer pays for the capital they're receiving.

So in effect, Joffe is saying that government pays more than it should for bond-funded projects. That being the case, making the financial information of governments available for investors — rather than just the credit rating — might just help the public sector lower the cost of serving citizens.

"If that theory is correct, that means that [with better data], more people would be more comfortable with lower-rated bonds," Joffe said.

S&P Guidance | Criteria | Governments | U.S. Public Finance: Assessing U.S. Public Finance Pension And Other Postemployment Obligations For GO Debt, Local Government GO Ratings, And State Ratings.

This document provides additional information and guidance related to our criteria, "GO Debt," published Oct. 12, 2006; "Local Government GO Ratings Methodology And Assumptions," published Sept. 12, 2013; and "U.S. State Ratings Methodology," published Oct. 17, 2016. It is intended to be read in conjunction with those criteria. For a further explanation of guidance documents, please see the description at the end of this article.

Guidance documents provide guidance on various matters, including articulating how we may apply specific aspects of criteria; describing variables or considerations related to criteria that may change over time. This guidance focuses how S&P Global Ratings assesses pension and other postemployment benefit (OPEB) funding assumptions and methods, and their impact on U.S. governments' projected costs and liabilities. Provided are example guidelines that we commonly consider when analyzing the potential for cost acceleration and budget stress. We may adjust guideline numbers as we consider appropriate, such as if market conditions change.

When we refer to "guidelines", we mean that we will consider the degree to which an obligor's assumptions or methods vary in relation to the guidelines. Given no two pension plans are exactly alike, there is no single answer for what "good" assumptions look like. Therefore, we use the figures in the table to analyze these assumptions and methods within the context of an obligor's overall credit profile, including its ability to afford rising costs and proactive management measures to address them.

Specifically, we use these pension and OPEB guidelines when applying the following criteria sections:

- "GO Debt," Financial Indicators, paragraphs 14 and 16; and Debt Factors And Long-Term Liabilities, paragraphs 36-38;
- "U.S. Local Governments General Obligation Ratings: Methodology and Assumptions," Framework for Determining A U.S. Local Government Rating, paragraph 35; Institutional Framework Score, paragraph 37; Management Score, paragraph 50; Budgetary Performance Score, paragraph 68; Debt and Contingent Liabilities Score, paragraph 82; and
- "U.S. State Ratings Methodology," Financial Management, paragraphs 34, 57, 59; Debt and Liability Profile, paragraphs 69-71 and 73.

Continue reading.

S&P Credit FAQ: How S&P Global Ratings Will Implement Pension And OPEB Guidance In U.S. Public Finance State And Local Government Credit Analysis

Elsewhere, we have also provided an overview on our approach to U.S. state and local government

pensions within the context of our three government criteria: See "Credit FAQ: Quick Start Guide To S&P Global Ratings' Approach To U.S. State And Local Government Pensions," published May 13, 2019.

Frequently Asked Questions

What is criteria guidance?

Guidance documents are not criteria, as they do not establish a methodological framework for determining credit ratings. Guidance documents provide guidance on various matters, including articulating how we may apply specific aspects of criteria, describing variables or considerations related to criteria that may change over time, providing additional information on nonfundamental factors that our analysts may consider in the application of criteria, and/or providing additional guidance on the exercise of analytical judgment under our criteria.

When will the guidance become effective?

The guidance is immediately effective upon publication. We will apply the guidance to all new issues and surveillance reviews.

What is covered by the guidance?

This document provides additional information and guidance related to our analysis of pensions and other postemployment benefit (OPEB) liabilities in our criteria, "GO Debt," published Oct. 12, 2006; "Local Government GO Ratings Methodology And Assumptions," published Sept. 12, 2013; and "U.S. State Ratings Methodology," published Oct. 17, 2016. It is intended to be read in conjunction with those criteria.

Will ratings change as a result of the published guidance?

We expect no rating changes due to the publication of guidance, as the purpose of this guidance is to provide clarity on important pension and OPEB factors, including actuarial inputs, which we consider in applying our existing criteria. Our analysts consider the guidelines for assumptions and methods within the context of an obligor's overall credit profile, including its ability to afford rising costs and proactive management measures to address them. Our pension and OPEB analysis includes how these risks factor into an obligor's unique overall credit profile and what strengths or weaknesses arise as a result. Because guidance articulates and provides transparency about application of existing criteria, it does not necessitate a review of existing ratings covered by these criteria.

How will the guidance affect enterprises that participate in government-sponsored plans?

The guidance applies only to entities within the scope of cited government criteria. However, the guidelines on pension and OPEB funding assumptions and methods, and their impact on governments' projected costs and liabilities, may inform our analysis of enterprises participating in government-sponsored plans. For example, the guidelines may inform our expectations about projected funded ratios over time.

Will the guidance change over time?

Yes, it might. Specifically, the market periodically changes, and the discount rate and long-term medical trend guidelines may be adjusted to align with updated capital market assumptions and medical trend models.

Will the rating reports change?

Rating rationales will continue to provide S&P Global Ratings' opinion on key credit factors identified in the three government criteria associated with this guidance. To the extent that a particular actuarial assumption or method rises to the level of a driving factor of our forward-looking view of the entity, we will highlight it in our rating analysis.

Are there certain guidelines that are most important to credit analysis?

Pension and OPEB analytics are one factor of our credit score, and within that context, the discount rate and overall funding discipline are important considerations.

The discount rate is important because it is used in the measurement of the reported funding level. It also correlates with the assumed rate of return, which drives calculations for actuarially determined contributions (ADCs). We also view the government's progress toward paying down its liabilities as an equally important, if not more important, driver for a given entity. Our evaluation of funding discipline and progress includes whether or not a government fully funds its ADC and minimum funding progress (MFP) metric, which assesses progress in paying down liabilities in a given year.

Is S&P Global Ratings adjusting reported pension/OPEB liabilities or ratios based on the discount rate guideline described in the guidance?

No. We incorporate liabilities for ratings as reported under Governmental Accounting Standards Board standards. The discount rate guideline serves to inform our view of potential for escalating contributions and susceptibility to market volatility. In addition, there are many instances where the guideline may not be appropriate for a given plan because of atypical plan characteristics.

The guidelines refer to a "typical plan"; what is an atypical plan?

Examples of atypical plans may include:

- Plans that have automatically adjusting cost of living adjustments or other risk-sharing controls in place to limit contribution escalation,
- Plans with demographics that do not align with the national average,
- Plans that are closed to new entrants, or
- Other factors that lead to different contribution volatility tolerances.

How does S&P Global Ratings evaluate governments that participate in a statewide plan and do not directly govern plan actuarial methods or assumptions?

Our pension assessment incorporates our view of the risk that contributions will escalate, regardless of whether a particular issuer has direct management over actuarial methods or assumptions. If the cost-sharing plan is measuring liabilities using aggressive assumptions or paying unfunded liabilities using aggressive amortization methodologies, then there may be escalating risk that participating employers will be required to increase contributions in the future. We will incorporate our view of each individual entity's ability to plan and manage for potentially rising costs, as well as the pension environment in the state where the entity is located.

Does the guidance address the possibility of a market shock?

Yes. Our discount rate guideline incorporates a reasonable expected limit to contribution volatility when factoring in liquidity and market risks.

Why does S&P Global Ratings use 30 as a factor in the MFP calculation?

The 30 is a factor that leads to a reasonable amount of principal unfunded liability to be paid down in a given year; it does not equate to amortization years. If a plan is meeting the MFP metric, we would expect that the contribution is equivalent to one with an amortization of less than 20 years.

How did S&P Global Ratings arrive at 20 years for the amortization period guideline?

The risk of negative amortization is mitigated when the length of amortization is 20 years or less. Furthermore, a typical U.S. pension plan is likely to have a working population that is expected to average nearly 20 years of employment before retirement, so an amortization of less than 20 years reduces the likelihood of intergenerational inequity, meaning that the funding of an employee's benefits would occur during that employee's tenure.

Related Criteria

- U.S. State Ratings Methodology, Oct. 17, 2016
- Local Government GO Ratings Methodology And Assumptions, Sept. 12, 2013
- GO Debt, Oct. 12, 2006

Related Research

- Credit FAQ: Quick Start Guide To S&P Global Ratings' Approach To U.S. State And Local Government Pensions, May 13, 2019
- The Increasing Cost Of Governmental Pensions: Discount Rate And Contribution Practices, Sept. 27, 2018
- Looking Forward: The Application Of The Discount Rate In Funding U.S. Government Pensions, Sept. 13, 2018
- Report Explains The Difference Between Criteria And Guidance, Dec. 15, 2017
- Local Government Pension and Other Postemployment Benefits Analysis: A Closer Look, Nov. 8, 2017

This report does not constitute a rating action.

Primary Credit Analysts: Carol H Spain, Todd D Kanaster Secondary Contacts: Jane H Ridley, Geoffrey E Buswick, Robert D Dobbins Sector U.S. Public Finance - U.S. Local Governments - U.S. States

100-Year Muni Bonds Might Just Be the Safest Yield Play.

Income-oriented investors already know that municipal bonds are pricey right now. But taking a longer view—say, a century—could bring benefits.

Municipal bonds are expensive compared to historical averages, and have been all year. The problem is that most other income-generating markets are expensive, too. More than \$14 trillion of global debt currently has negative yield, according to Bloomberg Barclays Indices, and investors' remaining options to earn income bring their own problems.

When global interest rates are this low, investors usually need to take on more risk to earn a steady income on their cash, whether that risk is of corporate default or interest-rate-driven price swings.

Investing in stocks or high-yield debt markets requires a high tolerance for default risk, especially with a global manufacturing slowdown and bond-market recession warnings. Investors worried about recession tend to stick with higher-quality bonds, sacrificing some of the junk-bond market's 6% payout to get more protection against a downturn.

Continue reading.

Barron's

By Alexandra Scaggs

Oct. 4, 2019 3:44 pm ET

Protection from Ransomware Attacks Isn't as Simple as Insurance.

In the wake of high-profile ransomware attacks, local governments are looking to cyberinsurance to mitigate risk. But not all policies are equal and merit close scrutiny, experts say.

Local governments facing an onslaught of ransomware attacks are increasingly turning to insurance to protect them if hackers successfully take control of a city's computer system.

But experts warn that local governments may not be getting the level of protection they need through basic policies. And when insurance companies opt to pay ransoms, rather than cover the (sometimes exorbitant) cost to recover data, they make local governments a bigger target for hackers.

Larger cities may purchase their own individual plans, like Houston did in 2018 when it paid close to \$500,000 for a \$30 million plan that would cover emergency response to cyber security breaches and losses associated with a cyberattack. In contrast, many smaller municipalities receive coverage through pooled plans, such as those offered by associations..

Continue reading.

Route Fifty

By Andrea Noble,

Oct 4, 2019

PROTECT Act Seeks to Bolster Domestic Electric Grid Cybersecurity: McGuireWoods

On Sept. 26, 2019, the Protecting Resources on the Electric Grid with Cybersecurity Technology (PROTECT) Act was introduced in the Senate. An amendment to the Federal Power Act, the PROTECT Act aims to more effectively safeguard and defend the U.S. electric grid from global cyber intruders.

Sponsored by Sen. Lisa Murkowski (R-Alaska), chair of the Committee on Energy and Natural Resources, and introduced by Sens. Joe Manchin (D-W.V.), James Risch (R-Idaho), Maria Cantwell (D-Wash.) and Angus King (I-Maine), the bill is a response to increasing cyberattacks by foreign adversaries and entities on the U.S. electric grid. Some Washington observers believe that, with such bipartisan support, the PROTECT Act is one of the few legislative initiatives that could pass Congress. It may therefore result in a number of important benefits to the U.S. electricity industry.

Key provisions of the PROTECT Act involve tangible, actionable steps to expand the national grid cybersecurity effort. Of particular importance, the PROTECT Act directs the Federal Energy Regulatory Commission (FERC) to conduct a study, followed by rulemaking to provide rate incentives for advanced cybersecurity technology that will enable and incentivize utilities to invest in new technologies to improve cybersecurity defense. Also, the new rule must allow utilities to make "single issue rate filings," which should enable them to obtain the incentives without risk of opening up litigation on all other aspects of their FERC-approved rates. In addition, the PROTECT Act sets forth a Department of Energy grant program for utilities not regulated by FERC, such as electric cooperatives and municipal utilities, to incentivize in those sectors advanced tactics in cybersecurity technology.

The bill is a common-sense measure. It helps further safeguard utilities across the country by supporting the industry in continuously investing in cutting-edge cybersecurity technologies. In addition, it likely would further cultivate the expanding partnership between private industry and the federal government. Although many of the investment expenses and economic incentives likely will be passed on to end users, the bill preserves the protections of the Federal Power Act's requirement that such rates be "just and reasonable." So, it is a win-win opportunity for both utilities and the customers they serve, who ultimately benefit from the enhanced security the bill might produce.

McGuireWoods LLP

by Todd Mullins

October 4, 2019

New Report: U.S. Metro Areas Continue to Drive Nation's Economic Growth, Post Fifth Consecutive Year of Increase

For 18th year, U.S. Conference of Mayors releases annual report, forecasts growth of cities and metro regions

Washington, D.C. – Today, the U.S. Conference of Mayors (USCM) released its 18th annual report and forecast on U.S. Metro Economies, showing that cities and metro regions continue to be the engines of U.S. economic growth. In 2018, these areas were home to 85.9% of the nation's population and 91.1% of real gross domestic product (GDP). The influence and contribution of metro economies to U.S. economic growth increased for the fifth consecutive year.

Compared to 2017, metro regions' share of total employment increased to 88.1%, adding 2.1 million jobs or 94% of all U.S. job gains. The U.S. Metro/City share of U.S. total personal income, 89.3%, and wage income, 91.8%, also continued to increase. The full report, conducted by IHS Markit, can be found here, along with its key findings here.

"This report paints the picture that our cities and metro regions are the clear drivers of the U.S. economy, personal income, and wage growth. Our metro economies enable America to lead the global economy, and we must continue to empower them with policies that foster innovation and inclusivity. Together, we can make smart investments in job training and housing that will keep firing the engines of our cities' growth," said USCM President Bryan K. Barnett, Mayor of Rochester Hills (MI).

"Our cities need to continuously innovate in order to thrive. In Columbus, we have implemented policies to drive sustainable economic development," said Andrew J. Ginther, Mayor of Columbus (OH) and Chair of the Council on Metro Economies and the New American City. "Since 2010, we have led Ohio in job gains, seeing 16% growth. This shows that Washington could stand to learn a thing or two from America's cities."

"For 18 years we have continued to show that it is the cities and the metro economic engines of the United States that are driving the national economy," said Tom Cochran, USCM CEO and Executive Director. "With all due respect to the states, the financial strength of our cities and metro economies will continue to outpace states and many nations. While Washington is divided, stalemated on providing many economic tools and policies needed, mayors today are joined at the hip with the business community, all working together. Wherever America's economy is going, and wherever it is today, it is because of the bipartisan, robust financial energy of mayors and metro city leadership across our nation."

Key findings of the report include:

U.S. Metro Performance in 2018

- Metropolitan areas dominated US economic growth in 2018 and continue to drive the US economy. They were home to 85.9% of the nation's population, 91.1% of real gross domestic product (GDP).
- US Metro share of total employment increased to 88.1% as metros added 2.1 million jobs, accounting for 94% of all US job gains.
- The metro shares of US total personal income, 89.3%, and wage income, 91.8%, also increased again in 2018.
- Many US metros have larger economies than states. New York's gross metropolitan product (GMP), the largest among metros at \$1.85 trillion, exceeds the Gross State Product (GSP) of Texas, and Los Angeles's exceeds that of Florida, the fourth-ranked state in GSP.
- The GMP of 38 US metros each surpassed \$100 billion in 2018, and we project that Virginia Beach-Norfolk-Newport News will as well in 2019.
- Comparing metro economies to the nations of the world provides further evidence of the importance of US metros as drivers of the global economy. New York's GMP would rank 10th among the nations of the world, ahead of Canada and Russia. Twelve of the world's 50 highest-producing economies are US metropolitan areas.

Employment and GDP Forecast

- As US unemployment falls to 3.5% in 2019, 75 metros (19.7%) will have rates less than 3%, and 252 (66.1%) will have unemployment rates under 4%. Real GMP growth will exceed 3% in 112 metros (29.4%) in 2019, but in only 18 metros in 2020 (4.7%).
- Real GDP growth is projected to slow from 2.9% in 2018 to 2.3% in 2019, 2.1% in 2020, and 1.9% in 2021.
- The downshift in GDP growth is expected to contribute to a continued slowing trend in employment gains.
- We forecast total US employment growth of 1.5% in 2019, down from 1.7% in 2018. In 2020, job

The United States Conference of Mayors

Now Is a Really Good Time to Get Into Munis, Neuberger's Iselin Says.

James Iselin, Neuberger Berman Group managing director, discusses the outlook for the municipal bond market with Bloomberg's Taylor Riggs on "Bloomberg Markets."

Watch video.

Bloomberg MarketsTV Shows

October 2nd, 2019, 8:05 AM PDT

Even Cash Flooding Muni Market Can't Stop Worst Loss Since 2018.

- September was worst month for returns in almost two years
- Marks a stepback from rally that roared this year as rates cut

Not even a continuously flowing spigot of investor cash was strong enough to prevent the \$3.8 trillion municipal-bond market from snapping this year's rally.

State and local government debt is headed toward a 0.82% loss in September, the first down month of the year and the biggest decline since January 2018, according to Bloomberg Barclays indexes. The drop came as Treasuries sold off and as new debt sales weighed on performance, with supply of bonds 46% higher than it was the same month a year earlier as governments raced to capture lower interest rates, according to data compiled by Bloomberg.

Barclays Plc strategists led by Mikhail Foux said they're "cautious near-term," given that expectations for a rate cut in October may be too optimistic and the market could stay volatile.

The tax-free securities are still headed for a 6.7% return this year, the best year for the asset class since 2014. Investors have plowed billions into municipal-bond mutual funds as investors seek to reduce their tax burden.

The pullback has left state and local government debt cheaper, relative to Treasuries, than it was earlier this year. Ten-year tax-exempt debt is yielding about 88% of Treasuries, up from as little as 71% in May. That was the lowest that gauge of relative value had hit since at least 2001, indicating that valuations were historically high.

Typically, municipal bonds cheapen compared with Treasuries in September and October before getting a boost from investors positioning themselves for the next year, they said in a Sept. 27 note.

"The story will likely repeat itself in 2019," the strategists said.

Bloomberg Markets

By Amanda Albright

September 30, 2019, 10:30 AM PDT

— With assistance by Maria Elena Vizcaino

Understanding Private Activity Bonds.

In the fixed-income world, a private activity bond (PAB) is tax-exempt security issued by or on behalf of a local or state government. For bond investors, PABs can provide higher yields than other bonds due to their unique tax treatment.

A PAB is issued by local governments for the purpose of extending special financing benefits for qualified projects. In general, PABs finance projects for a private user, which means the local government doesn't usually pledge its credit. In this way, they are used to attracting private investments for projects that have public or common utility.

For municipal security to be considered a PAB, it must meet two conditions set out in Section 141 of the Internal Revenue Code.

The first condition is that more than 10% of the proceeds must be used for a private business project and that at least 10% of the payments of the principal or interest comes from property used for private business use.

Secondly, a PAB requires "the amount of proceeds of the issue used to make loans to non-governmental borrowers exceeds the lesser of 5 percent of the proceeds or \$5 million, which is the "private loan financing test," according to MSRB.

Continue reading.

municipalbonds.com

Sam Bourgi

Oct 02, 2019

Statement from EPA Administrator Andrew Wheeler on the Water Infrastructure Funding Transfer Act.

WASHINGTON (Oct. 7, 2019) — Today, as we continue to celebrate Children's Health Month, U.S. Environmental Protection Agency (EPA) Administrator Andrew Wheeler released the following statement on the Water Infrastructure Funding Transfer Act, which was signed into law by President Trump on Friday, adding flexibility to the State Revolving Funds (SRF) program to help finance projects that reduce lead in drinking water.

"President Trump has made reducing lead exposure a top priority across his administration, and his signature of this new law is yet another example of the ways we are providing communities with additional tools to protect their drinking water," said EPA Administrator Andrew Wheeler. "This new law gives our state and local partners an important flexible financing option to fund projects that will

reduce lead in drinking water and protect public health, especially the health of our nation's children."

Background

The Water Infrastructure Funding Transfer Act allows transfers from the Clean Water State Revolving Fund (CWSRF) to the Drinking Water State Revolving Fund (DWSRF) during a one-year period ending on October 4, 2020, in an amount up to 5% of the state's cumulative CWSRF federal grant dollars. The transferred funds may be used to provide financial support in the form of forgiveness of principal, negative interest loans or grants (or any combination). This authority is in addition to the existing transfer authority under the Safe Drinking Water Act.

In December of 2018, the Administration unveiled its Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts. This plan includes robust actions across the federal government, including EPA's development of innovative approaches to help finance projects that reduce exposure to lead or other contaminants in drinking water. For example, in 2018 and 2019, EPA's Water Infrastructure Finance and Innovation Act (WIFIA) program prioritized projects that address lead and other contaminants in drinking water systems. In 2018, the program invited 12 projects that will reduce exposure to lead and other contaminants to apply for WIFIA financing. Additionally, EPA is issuing grants under the Water Infrastructure Improvements for the Nation Act to fund lead reduction projects and to support the voluntary testing of drinking water in schools and childcare centers. EPA has also supported the use of the DWSRF to help finance lead mitigation projects.

Contact Information: EPA Press Office (press@epa.gov)

Will the Supreme Court Strike Down Inclusionary Zoning?

A Marin County lawsuit has conservatives and housing advocates preparing to face off over the constitutionality of a powerful affordable housing tool.

Marin County is committed to building affordable housing. Indeed, the most exclusive county in California doesn't have much choice.

Back in May, authorities in Marin entered into a new <u>voluntary compliance agreement</u> with the U.S. Department of Housing and Urban Development to build new low-income housing outside areas where black or brown residents make up the majority. This is now the county's second big push since 2010 to satisfy the government's demand that it work on desegregating its affordable housing.

Fair housing is a challenge for Marin, an enclave of million-dollar bungalows across the Golden Gate Bridge from San Francisco. According to a nonprofit project called Race Counts, it has the highest racial disparities of any county in California. That's in part because Marin County doesn't want to build any housing. Homeowners here are at the forefront of NIMBY efforts to stop plans for new construction, whether they're local, regional, or statewide.

Continue reading.

CITY LAB

A New Framework for Infrastructure Reform.

If the nation were to start from scratch on our infrastructure priorities, what would that look like?

That was the question Brookings Metro fellow Adie Tomer posed to the House Committee on the Budget on Wednesday, September 25 during a hearing on the country's infrastructure needs and opportunities.

Tomer's testimony examined the gulf between the issues that U.S. infrastructure has historically focused on and the modern-day objectives that should now be the priority.

"Consider what motivated the federal policy frameworks we follow today," said Tomer. "Their authors crafted policies that responded to the challenges of their time—issues like connecting cities across state lines, delivering telephone and cable service, and stopping sewage dumping." The nation's continued focus on these "legacy frameworks" prevents us from tackling the challenges of today and inviting a much-needed re-evaluation of our infrastructure objectives.

Tomer cites four big national issues that a newfound infrastructure policy could help correct—climate change, wealth inequality, industrial competitiveness, and regional economic divergence. And that correction, Tomer notes, will not be accomplished through the default and oversimplified method of our infrastructure policy to date—spending more. Instead, it will come from smart policy and a critical re-examination of the role infrastructure reform can play in wider national issues.

Take climate change, for instance: in his written testimony, Tomer writes that prioritizing density in our land use will mitigate the impacts of development and transportation emissions on our environment. He proposes, among other policies, a National Land Value Tax and Impact Fee to incentivize resilient growth and affordable, environmentally sound housing and transportation options.

Even seemingly unrelated economic issues can be addressed through a more holistic approach to infrastructure policy. Many U.S. households spend huge portions of their income on housing, transportation, and other infrastructure-adjacent expenses such as broadband access. We could confront the nation's precarious income and wealth inequality by way of decreasing these expenses, through programs Tomer proposes such as a new benefits system for infrastructure needs and dynamic transportation pricing. The widening economic divergence between different regions of the country, recently examined in a blog post by Brookings's Mark Muro and Jacob Whiton, could also be treated via a re-evaluation of our infrastructure priorities.

"Congress and your partners in the general public have a truly special opportunity," Tomer told the committee. But the apparent political consensus on accomplishing big infrastructure reform shouldn't be squandered on the same obsolete objectives, he concluded: "This all starts with a fresh perspective."

To read his full testimony, click here.

The Brookings Institute

by Adie Tomer

September 30, 2019

<u>Pipeline Developers Beware: Third Circuit Disallows Eminent Domain Over</u> State Lands Under Natural Gas Act - Duane Morris

In a unanimous, precedential opinion issued on September 10, 2019, the United States Court of Appeals for the Third Circuit held that the Natural Gas Act (NGA), 15 U.S.C. § 717, et seq., does not abrogate state sovereign immunity and does not give private pipeline companies the power in federal court proceedings to condemn property owned by states. See In re PennEast Pipeline Co., F.3d, Nos. 19-1191 through 19-1232, 2019 WL 4265190 (3d Cir. Sept. 10, 2019). This decision—the first on this topic by any federal appellate court—may have far-reaching implications for pipeline development and other infrastructure projects in Pennsylvania, New Jersey, Delaware and beyond.

The Third Circuit's decision redefines the relationships among private parties, states and the federal government in this region with respect to pipeline development. The opinion also gives states, and potentially private parties, a new tool with which to obstruct future pipeline projects. Although the precedential value of the decision could be short-lived if, for example, the Third Circuit agrees to rehear the case en banc or the Supreme Court of the United States grants a petition for certiorari and reverses, the opinion will likely have an immediate impact on parties' strategies in developing and opposing energy infrastructure development in the Northeast. Pipeline companies should therefore consider the potential ramifications of the Third Circuit's decision for ongoing and future pipeline projects in this area.

Background

The case arose after PennEast Pipeline Company, LLC obtained Certificates of Public Convenience and Necessity from the Federal Energy Regulatory Commission (FERC) to build a natural gas pipeline from Luzerne County, Pennsylvania, to Mercer County, New Jersey. Under the NGA, once a private pipeline company obtains such certificates and meets other requirements, the company can acquire "necessary right[s]-of-way" for such pipelines through "the exercise of the right of eminent domain." 15 U.S.C. § 717f(h). PennEast sought to use this provision to condemn 131 properties along the proposed pipeline route. Although most of the properties through which PennEast planned to build were owned by private or other nonstate parties, the state of New Jersey claimed an interest in 42 of the properties. Specifically, New Jersey asserted possessory interests in two of those properties and nonpossessory interests, in the nature of conservation and farmland preservation easements, in another 40 properties.

PennEast filed complaints in the U.S. District Court for the District of New Jersey seeking orders of condemnation and other relief. The state objected to PennEast's actions with respect to the 42 properties in which the state claimed an interest, arguing that the state's sovereign immunity barred such suits from proceeding in federal court. The district court disagreed, holding that the NGA vested power in private pipeline companies like PennEast to use the federal government's power of eminent domain to condemn state lands.

The Court Distinguishes Between the Power of Eminent Domain and the Power to Obviate

State Immunity

On appeal, the Third Circuit reversed the district court in a forceful opinion. The court first explained that the district court and PennEast failed to differentiate between the powers at issue in the case: "the federal government's eminent domain power and its exemption from Eleventh Amendment immunity." Opinion at 15. The issue presented by New Jersey's objection to federal jurisdiction was, the court explained, whether there was any authority allowing a private company to hale a state into federal court. This issue was wholly separate, in the court's view, from whether the NGA delegated eminent domain power to PennEast.

Once focused on the question of a state's sovereign immunity, the court explained that it is unlikely that the federal government can delegate its power to abrogate a state's sovereign immunity. Nevertheless, relying on the canon of constitutional avoidance, the court determined it did not need to decide that issue. The court instead held that, even assuming such power could be delegated, the NGA lacked unequivocal language demonstrating that such delegation was intended by Congress. Accordingly, the court held, private parties cannot condemn land in which the state has an interest—whether that interest is possessory or nonpossessory—through proceedings initiated in federal court.

Notably, the court failed to address why a state's nonpossessory interests in land, including the conservation and farmland preservation easements here, implicate sovereign immunity to the same extent as land held by a state in fee simple. Instead, the court treated all of the state's interests equally, without explanation or analysis, and directed the district court to dismiss all 42 condemnation complaints challenged on appeal.

The Third Circuit's Decision Leaves Unresolved Whether Pipeline Siting Must Avoid State Lands Altogether

Although the court claimed that it was "not insensitive" to the concern that states now have "unconstrained veto power over interstate pipelines," and to the disruption to the natural gas industry that the court's decision may cause, see Opinion at 33, the court did little to guide pipeline companies in the future. For example, the court noted that the federal government may be able to bring condemnation claims on behalf of pipeline companies in federal court against states, as such actions would not run afoul of the Eleventh Amendment. The court, however, did not grapple with the language in the NGA giving eminent domain power to holders of certificates of public convenience, not to FERC. The court instead offhandedly noted that the federal government may need to employ some other procedural mechanism separate from the NGA to condemn state lands for pipeline development. The court, however, did not provide any guidance as to what that procedural mechanism might be.

The NGA provides for this possibility, under 15 U.S.C. § 717f(h) (holders of Certificates of Public Convenience and Necessity may acquire needed properties by eminent domain in federal district court "or in the State courts"); however, states generally cannot be sued in their own courts without waiving sovereign immunity. Thus, pipeline companies may run into similar obstacles in state courts as this decision creates in federal courts. If courts consider the state government to be immune from condemnation suits in state court, the result may be that pipelines can never be constructed under state lands without the state's consent.

Although the court held that private companies can no longer condemn land in which a state has an interest in federal court proceedings, such companies may still retain the ability to initiate federal court proceedings to condemn land controlled by political subdivisions of a state, such as counties or

municipalities. Political subdivisions do not enjoy Eleventh Amendment immunity, and courts have generally been reluctant to extend state immunities to political subdivisions. Nevertheless, political subdivisions may attempt to use the court's analysis in this case in future challenges to the condemnation power of private pipeline companies.

Considerations for the Future

Going forward, pipeline companies may want to consider avoiding the use of eminent domain to acquire state-owned lands when siting pipelines, thereby circumventing the question of state sovereign immunity altogether. In many cases, this would result in more condemnations of private and municipal property, which may have negative political ramifications for states that refuse to consent to pipeline development on state lands. Pipeline companies may similarly face political repercussions from increased use of eminent domain on privately and municipally owned properties.

Pipeline companies should also be cautious when siting in states where there is substantial public or political sentiment against pipeline development. Private citizens and environmental groups may respond to this opinion by offering conservation easements to states, on favorable terms, for the sole purpose of thwarting pipelines. Although New Jersey, in the In re PennEast case, asserted that it had spent more than \$1 billion obtaining conservation and preservation easements such as those implicated by the PennEast project, property owners may be much more willing to convey such interests in the future as a result of the Third Circuit's decision if they believe that such an action could hinder pipeline development. Pipeline companies would be advised to consult legal counsel and to formulate arguments to combat such attempts in order to prevent the Third Circuit's interpretation of the NGA from nullifying the otherwise broad eminent domain power granted to pipeline companies by Congress.

The Third Circuit is the first federal appellate court to consider whether private parties can sue a state in federal court as part of a condemnation proceeding. However, other circuits will likely face similar issues soon. In fact, another pipeline company, Columbia Gas Transmission, LLC, has just appealed a Maryland district court order holding that Eleventh Amendment immunity prevents federal court jurisdiction over condemnation proceedings against state property. This appeal will be heard by the Fourth Circuit, which may choose to follow the Third Circuit's lead or may reverse the district court, resulting in a split among the circuits. The Supreme Court may wait to grant a petition for certiorari on this question until such a split occurs (by the Fourth Circuit or any other circuit court), or may accept review of the Third Circuit's decision in the near future. Pipeline companies therefore should carefully monitor developments in the Third and Fourth Circuit cases, as well as future litigation addressing the many questions the Third Circuit's decision left open.

by Robert L. Byer, George J. Kroculick, David Amerikaner and Leah Mintz

September 25, 2019

Duane Morris LLP

Building Demand in US Water Quality Trading Markets.

IN BRIEF

 WATER QUALITY TRADING MARKETS ALLOW THE OPERATORS OF POINT SOURCES OF WATER POLLUTION — such as sewage treatment plants or factories — to offset that pollution by purchasing credits representing reductions elsewhere.

- BUT DESPITE THE PRESENCE OF FUNCTIONING PROGRAMS ACROSS THE COUNTRY, the overall volume of trading remains low.
- TO EXPAND TRADING, STAKEHOLDERS NEED TO ADDRESS THE LACK OF NUMERIC DISCHARGE LIMITS, transaction costs, risk aversion, and the absence of empirical data on programs.

Environmental credit trading programs have gained traction for pollutants like carbon emissions, at least in concept. Is water quality trading the next frontier? The mechanism offers the possibility of more flexible and cost-effective water quality control, but in contrast to some environmental credits, markets have struggled to gain momentum.

Water quality trading markets allow the operators of point sources of water pollution — such as sewage treatment plants or factories — to offset that pollution by purchasing credits representing reductions elsewhere. Just as the purchase of a carbon offset gives its buyer credit for reducing their carbon footprint, a water quality trading market allows participants to buy and sell the credit for reduction of water pollution into a given water body.

Trading is a tool that may be well-suited to address the evolving nature of water pollution in the United States.

"The Clean Water Act was written at a time when the major pollution in our waterways was coming from pipes," said Kristiana Teige Witherill, clean water project manager at the Willamette Partnership, a nonprofit focused on market-based conservation in the American West. "Today, depending on what watershed you're looking at, 80 to 90% of pollution is coming from non-point sources, not coming from the end of a pipe."

After establishing parameters for water quality trading in 2003, the Environmental Protection Agency (EPA) <u>reiterated</u> its support for the tool in a statement in February. A 2017 Government Accountability Office (GAO) report tallied 19 water quality trading programs operating in 2014 in a diverse set of 11 U.S. states, from California to Idaho to Florida.

But despite the presence of functioning programs across the country, the GAO noted that the overall volume of trading remains low. "According to stakeholders, two key factors have affected participation in nutrient credit trading — the presence of discharge limits for nutrients and the challenges of measuring the results of nonpoint sources' nutrient reduction activities," the report stated.

Now, proponents of water quality trading are working to bring more participants into the fold. What can be done to scale up use of trading?

How Water Quality Trading Works

Under the U.S. Clean Water Act, states are responsible for regulating the quality of water discharged into water bodies. Water quality trading markets provide an alternate way for any point source regulated by the National Pollutant Discharge Elimination System to meet requirements set by states through the act.

Water quality trading credits most often deal with nitrogen and phosphorus pollution, but they can be generated for other purposes as well. To protect temperature-sensitive salmon species, for example, Oregon has a functioning trading market for water temperature, according to Witherill. Less commonly, markets can also facilitate trades for credits that represent reduced stormwater

quantity.

Credits are frequently generated through reduced pollution from agricultural land, but can also come from point-source sites that have exceeded pollution-reduction requirements. States are responsible for approving and verifying credits.

Water quality trading has the potential to provide massive increases in the cost-effectiveness of pollution reduction. According to the World Resources Institute, reducing nitrogen pollution through water treatment plant upgrades costs an average of about \$15 per pound of nitrogen, but under \$5 per pound through planting cover crops on farms.

Generating Demand

The GAO's 2017 report stated that in the year they surveyed, 2014, the majority of trading occurred in Connecticut, Pennsylvania and Virginia. In those states, most point sources didn't purchase credits, resulting in a substantial share of generated credits going unused. State officials told the GAO, however, that trading programs still provided other benefits, like flexibility in complying with water quality regulations.

"I would say that there are a number of programs across the country that are working well, like here in Oregon where we have a number of facilities and municipalities that are successfully using water quality trading," Witherill said. "But I think we haven't yet reached a tipping point where water trading becomes a mainstream solution for meeting water quality regulations."

Often, the issue centers around the question of bringing buyers to the table.

In October 2018, the National Network on Water Quality Trading — facilitated by the Willamette Partnership — published its report "Breaking Down Barriers: Priority Actions for Advancing Water Quality Trading." The group aimed "to diagnose why, in contrast to other environmental markets, interest in water quality trading and demand for water quality credits has been slow."

Along with discharge limits, the "Breaking Down Barriers" report points to transaction costs, risk aversion, and the absence of empirical data on programs as deterrents to trading. When it comes to discharge limits, the regulatory structure of a given state plays a big role. Under the Clean Water Act some states, but not others, have set specific quantitative limits on pollution.

"In places like Wisconsin that have numeric criteria for nutrients, they have a really strong driver for cities and municipalities to be looking at options like water quality trading," Witherill said. "It's kind of a precondition for it to have some kind of regulatory driver."

Wisconsin has a statewide trading program for the variety of pollutants regulated by the state Department of Natural Resources, but the difficulty of conducting trades has limited its use, according to Wisconsin Public Radio. Critics of the program's current design have blamed low participation on inflexible rules and trouble connecting buyers and sellers.

In the absence of a "regulatory driver" like quantitative pollution limits, water quality trading programs have limited options for attracting buyers.

The Ohio River Basin Trading Program, run by the Electric Power Research Institute (EPRI), manages a trading market in Ohio, Indiana and Kentucky. The program aims to address nutrient pollution into the Ohio River — and ultimately, the Gulf of Mexico — by generating credits from conservation practices on agricultural land. According to Program Manager Jessica Fox, the Ohio River Basin Trading Project has over 100,000 of the \$12 to \$14 credits — each representing a pound

of verified reduced nitrogen or phosphorus discharge — "on the shelf" waiting to be sold.

EPRI has sold credits to power companies, a university and individuals, Fox said, but not at the volume necessary to make the program self-sustaining. "When every transaction requires me to take a business trip," she said, "that's not going to work. It has to be more liquid than that."

There are other preconditions needed for water quality trading in addition to quantitative criteria, the "Breaking Down Barriers" report argues. First, unless the technology required for polluters to meet limits is expensive or nonexistent, managers of point sources are unlikely to turn to trading. Regulatory agencies must also support purchasers interested in pursuing credits. "We've also seen that the utilities who pursue water quality trading often have a champion supporting the program within their own organization," the report stated.

Building Markets and Confidence

Through stakeholder interviews and other research, the "Breaking Down Barriers" authors identified seven steps that stand to increase use of trading. They advocate for simplifying trading programs; making sure state regulators have the capacity and resources they need; clarifying the policies of EPA and states; reducing buyer risk, real and perceived; addressing the legal risk that stems from a lack of case law on trading; developing more direction for stormwater trading; and building relationships.

For its part, the Ohio River Basin Trading Program is looking to stimulate more demand of its own accord. In May, EPRI announced a partnership with First Climate, a firm that specializes in selling environmental credits, to sell credits on international markets and make them available to a wider range of domestic buyers. Before, the trading program wasn't able to accommodate transactions of less than \$25,000, according to Fox. Through First Climate, however, the program is taking a more retail approach to trading.

"You can go on now, and you can buy one credit with a credit card or Paypal account," Fox said. The program has a calculator online that individuals can use to determine their personal nitrogen footprint, and provides buyers a photo of the farmer who generated their credit. It even sells t-shirts.

"It's kind of like 'adopt a sea lion,'" she said. "It's getting it to be a more publicly accessible thing."

First Climate and EPRI are also pitching large corporate buyers on water quality credits as a way to meet voluntary sustainability commitments.

But as trading programs continue to try to break into the mainstream, Willamette's Witherill cautioned that they are just one tool in the toolbox for "expanding the number of options utilities have to invest in their watersheds," she said. "Maybe that doesn't necessarily look exactly like water quality trading, maybe that looks like a source water protection program or some kind of groundwater irrigation management."

On the policy front, Fox also wonders if EPA could do more to support markets. The agency's February memo was "a huge signal that the administration is strongly behind water quality trading," she said, but it doesn't actually change implementation on the ground.

One possibility worth exploring, Fox said, would be whether EPA could allow states to use their own share of funds from joint federal-state programs — such as Clean Water State Revolving Funds, for example — to buy credits.

"Any way to incent the buyer side is a great solution," she said.

Conservation Finance Network

by Chris Lewis

September 25, 2019

Cities Are Buying Bond Insurance That May Be Giving Them Nothing.

- Bond insurance didn't result in lower yields, study finds
- Companies say study is flawed and failed to capture benefits

Around noon one Wednesday in July, two school districts from California's Central Valley auctioned off their bonds to Wall Street underwriters.

Both had the same credit rating. The deals were of similar size. They were being issued for the same purpose of refinancing higher-cost debt, and each gave banks the option to include the cost of insuring the bonds against default to help get them the lowest possible interest rates.

There was one key difference, though. The Washington Unified School District's debt was sold without insurance. But the winning bidder for Stanislaus Union School District's bonds included a \$17,800 policy from Build America Mutual Assurance Co. to guarantee against the remote risk that the money won't be paid back. That extra layer of security for investors was supposed to save the district money by making buyers willing to accept lower yields.

It didn't.

When the results of the auctions came in, the Stanislaus district wound up with slightly higher rates than Washington on every single bond with the same maturity, suggesting it got little or nothing in return for its money.

The sales underscore doubts about the business model of the bond-insurance industry, which once backed more than half of the nation's municipal debt issues until the biggest companies were roiled by the financial crisis more than a decade ago. A study by researchers from Pennsylvania State University and the University of Georgia found that buying such insurance is a bad deal for the vast majority of governments: Between 2009 and 2016, those that insured their general-obligation bonds paid a total of about \$260 million more in borrowing costs than their model suggested they should have, even before the costs of the policies are factored in.

"We tortured the data every which way to Tuesday trying to find some evidence that this insurance wrap was lowering offering yields and we just can't," said Kimberly Cornaggia, an assistant professor of finance at Penn State's Smeal College of Business and one of the study's authors.

Flawed Study

Build America Mutual and Assured Guaranty Ltd. disputed the study's results, saying the analysis was flawed because it failed to account for market movements between bond pricings and included AAA and AA rated governments that rarely buy insurance. Both said the results are in conflict with the savings that lower-rated local governments and their financial advisers see from buying bond insurance.

"BAM members choose insurance because it generates net savings on their transactions, period,"

said Grant Dewey, the head of Municipal Capital Markets at Build America Mutual. "Their underwriters and municipal advisers calculate and confirm that every day by evaluating spreads on comparable transactions and by comparing investor demand for insured and uninsured bonds."

He said the comparison of the two California districts doesn't adequately capture the savings, since Stanislaus's sale, unlike Washington's, included some longer-maturing securities that typically get the most benefit from insurance. Nathalie Wells, chief business official for the Stanislaus district, didn't respond to requests for comment.

The bond insurance industry has shrunk to a shadow of its former self since the credit crisis, when MBIA Inc., Ambac Financial Group Inc. and Assured Guaranty were stripped of their AAA ratings because of losses tied to toxic mortgage-backed securities. The major credit rating companies also adjusted their methods in response to an outcry from public officials who said they had been consistently rating states and cities too low, leaving them buying guarantees from insurance companies that were at far bigger risk of defaulting.

At its peak in 2005, insurance covered 57% of new municipal bond issues. This year, insurers guaranteed about 6% of the \$265 billion of fixed-rate debt issued. Assured Guaranty and Build America Mutual, the industry's two main companies, are rated AA by S&P Global Ratings, the third-highest rank.

No Benefits Seen

The results of the study by Cornaggia, her Penn State colleague Giang Nguyen and the University of Georgia's John Hund suggest the business should be even smaller. About two-thirds of insured general-obligation bonds issued between 2008 and 2016 had A ratings — a level high enough that they didn't reap any savings from buying insurance over that time, according to the authors' calculations. About 8% had even higher grades.

The researchers studied a sample of more than 700,000 general-obligation bonds issued between 1985 and 2016.

Over the 30-year period, municipalities saved \$496 million on their interest bills by paying for insurance, since for much of that time they benefited from the high ratings of the insurance companies they paid. Still, that savings was a fraction of the estimated \$17 billion in premiums collected from state and local governments by just two big insurers, MBIA and Ambac, from 1995 to 2008, according to the scholars.

Prior to the financial crisis, "if you bought insurance from a triple-A rated insurance company, it got priced like a triple-A bond, but as soon as those insurance companies are single-A or even double-A rated that's not triple-A certification and the investors just aren't as interested," Cornaggia said.

The study's authors determined how much insurance costs or saves a municipality by using a model that factored in characteristics like bond size, issue size, state, credit rating, use of proceeds, maturity, and coupon to predict what the yield on a particular insured bond would be without insurance.

If the yield on the insured bond was higher than the yield on an uninsured bond with the same characteristics predicted by the model, the municipality was considered to have lost money, according to the authors.

Yet some of the findings are puzzling. For example, it shows that insurance, on average, lowered borrowing costs for Aa2 rated bonds over 30 years, but didn't save money for lower-rated Aa3 and

A1 bonds. Cornaggia said she couldn't explain why.

"We are agnostic empiricists," she said.

Municipalities aren't the only ones buying overpriced insurance, Cornaggia said, comparing it to fabric stain coverage sold at furniture stores or warranties on televisions. The difference with bond insurance is that the beneficiaries of the policy — investors — aren't paying the premiums.

"The person making the decision about whether to insure the bond isn't actually the taxpayers, it's an agent making a decision on behalf of those principals," she said. "I do think there's a risk aversion on the part of the municipal officer making the decision."

Bloomberg Markets

By Martin Z Braun

September 26, 2019, 6:30 AM PDT

GASB Proposes Guidance On Replacement Of Interbank Offered Rates With New Reference Rates.

Norwalk, CT, September 26, 2019 — The Governmental Accounting Standards Board (GASB) today proposed new accounting and financial reporting guidance to assist state and local governments in the transition away from existing interbank offered rates (IBORs) to other reference rates.

Some governments have entered into agreements in which variable payments made or received depend on an IBOR, most notably the London Interbank Offered Rate (LIBOR). As a result of global reference rate reform, LIBOR is expected to cease to exist in its current form in 2021. That is prompting governments to amend or replace financial instruments tied to LIBOR.

The provisions of Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*, require that governments terminate hedge accounting if they change a critical term of a hedging derivative instrument, such as the reference rate of its variable payment. In addition, replacement of the rate on which variable payments depend in a lease contract would require, under Statement No. 87, Leases, that a government apply the provisions for lease modifications, including remeasurement of the lease liability or lease receivable.

The objective of the Exposure Draft, Replacement of Interbank Offered Rates, is to address the accounting and financial reporting implications that result from IBOR replacement. The proposed Statement would:

- Allow governments to continue using hedge accounting for certain hedging derivative instruments that are amended or replaced to change the reference rate from an IBOR
- Clarify the hedge accounting termination provisions when an IBOR is replaced as the reference rate of a hedged item
- Clarify that the uncertainty associated with reference rate reform does not, by itself, affect the probability that an expected transaction will occur
- Remove LIBOR as an appropriate benchmark interest rate for the qualitative evaluation of the effectiveness of an interest rate swap

- Add the Secured Overnight Financing Rate and the Effective Federal Funds Rate as appropriate benchmark interest rates
- · Clarify the definition of reference rate, and
- Provide an exception to the lease modifications guidance in Statement 87 for certain IBOR-related lease contract amendments.

Removal of LIBOR as an appropriate benchmark interest rate as proposed would be effective for reporting periods beginning after December 15, 2020. All other requirements of this proposed Statement would be effective for reporting periods beginning after June 15, 2020. Earlier application would be encouraged.

The Exposure Draft is available on the GASB website, www.gasb.org. The GASB invites stakeholders to review the proposal and provide comments by November 27, 2019.

<u>Uniform Commercial Code Financing Statement is Integral in Bond Defaults.</u>

Proper attention to the unsexy "Uniform" Commercial Code financing statement may well be the single most consequential checklist item in a secured bond financing from the perspective of bondholder recovery in a default situation. Bizarrely, no transaction participant takes express responsibility for the initial filing of the UCC financing statement at a bond closing, and frequently no transaction participant other than the issuer or conduit obligor takes responsibility for the filing of required post-closing continuation statements. From a bondholder perspective, it is somewhat akin to expecting the fox to guard the chicken coop.

The result: a non-trivial number of transactions in which the lien promised to bondholders is never perfected, or becomes unperfected after the bonds are issued, in which case the lien is ineffective against other creditors with the consequence that bondholders that purchased bonds on the premise of secured status receive the greatly reduced recovery of unsecured creditors.

There are a few relatively simple — and largely costless — steps that bondholders with sufficient leverage can insist upon before placing their purchase orders on a secured bond transaction to protect their investment and decrease the possibility that their investment will be unsecured when it matters most.

UCC Perfection Requirements

Each state and/or U.S. territory has its own version of the UCC, and some versions may have atypical provisions. Generally, however, the principles below are applicable in most jurisdictions.

The UCC governs the creation and perfection of security interests in personal property, including accounts and their proceeds and revenues, gross revenues, net revenues and receipts, which are not UCC terms. The UCC generally is inapplicable to a security interest created by a state governmental unit to the extent another state statute expressly governs the creation, perfection, priority, or enforcement of such security interest. Noncompliance with the UCC may not imperil secured creditor status with respect to security provided by a municipal issuer if such issuer's enabling statute provides for an alternative to the UCC's requirements as to, for example, creation or perfection of a lien and such alternative requirements have been satisfied. However, on a conduit bond issue, the UCC almost always applies to the security interest provided by the non-governmental conduit borrower, and noncompliance may result in unsecured status of the claim against the only party responsible for repayment of the bonds.

Most UCC noncompliance issues arise from the failure to properly perfect a security interest. A security interest in accounts and their proceeds must be perfected by the filing of a financing statement. A financing statement is sufficient for perfection purposes only if it provides the name of the obligor and the name of the secured party; and describes the collateral covered by the financing statement. A description of collateral is sufficient if it "reasonably identifies" what is described or if it describes the collateral as "all assets" or "all personal property."

Certain events occurring after the filing of an initial financing statement may result in loss of perfected status.

For example, if the debtor/obligor's name changes such that a search under the name in the original financing statement would not disclose financing statements filed under the debtor's new name, the financing statement is ineffective to perfect a security interest in collateral acquired by the debtor more than four months after the name change, unless an amendment to the financing statement providing the new name is filed within four months after the name change.

In addition, a filed financing statement generally is effective for a period of five years after the date of filing, and lapses (and therefore perfection lapses) if a UCC continuation statement is not filed within the six-month period preceding the end of the five-year period. Timely filing of a continuation statement extends the effectiveness of the financing statement for additional five year periods.

A Short List of Perfection Safeguards

The UCC's requirements are technical and often unforgiving of unintended and arguably small inaccuracies, and the adverse consequences of noncompliance can be financially disastrous for a lender or bondholder. There are various steps bondholders can take that can eliminate or substantially reduce the risk of a UCC mishap.

1. Insist on a Disclosed and Meaningful Perfection Opinion

In most secured bond issues, the underwriters, as a closing condition, require a legal opinion as to the status of the liens securing the bonds. On non-conduit bond issues, the opinion regarding the lien may be included in the bond counsel opinion, and may be published in the official statement for the bonds. In the case of conduit bond issues, the key liens typically are addressed in the opinion of the conduit obligor's counsel, which typically is not published in the official statement. Given the importance of secured status on a secured transaction, bondholders should insist that the offering document include the legal opinions relating to lien perfection to be delivered at closing.

If disclosed, the legal opinions will often reveal common deficiencies that can and should be addressed, if noted by the bondholders, prior to closing. On a non-conduit deal, the opinion will often state that the lien or pledge provided by the issuer is "valid", which does not address perfection. The opinion should state that the lien is valid and perfected.

On conduit deals, the opinion of conduit obligor's counsel often says "upon filing of the UCC financing statement in [applicable UCC registry], the lien in the [revenues/other personal property collateral] will be perfected to the extent that such lien is capable of being perfected under the UCC by the filing of a financing statement." Such an opinion is not a perfection opinion, just an opinion that if the UCC is filed, the lien will be perfected. If the filing does not occur, the bondholders will be unsecured and, if damaged by such status, left with little recourse but to seek recovery from some solvent party to the transaction based on some purported implied duty to file the financing statement and subject to statute of limitations and other defenses. Such a situation is entirely avoidable through insistence that the UCC financing statement be filed prior to closing, which the

UCC expressly authorizes.

2. Insist on a "Public Finance Transaction" Financing Statement When Applicable

UCC financing statement mishaps can occur either because of an inadequate or unfiled initial financing statement or because of lapse of a filed financing statement due to failure to file a timely continuation statement. For any bond issue with at least one maturity of at least 20 years secured by a security interest governed by the UCC of a state that provides for public finance transaction financing statements, the statement should state that it is filed in connection with a public finance transaction and, in a conduit transaction, the secured obligation, be it the loan agreement or a master note, should run to the governmental issuer and be assigned to the bond trustee versus running directly to the bond trustee. Neither of these requirements is difficult or costs anything, and it makes continuation a non-issue for 30 years (versus the standard 5 years) — long enough for virtually all bond issues, taking into account likely refinancings.

3. Insist that the Bond Documents Require that the Bond Trustee or Master Trustee File Continuation Statements, and that Name Changes be Addressed

Because bond trustees traditionally have asserted that they are unwilling to take on the potential liability associated with assuming and then failing to fulfill a duty to file continuation statements, many indentures or master indentures place the responsibility for filing continuation statements on the issuer or conduit obligor. But there is no adverse consequence to an issuer or borrower for failing to continue a continuation statement.

There are trustees that will agree to undertake the obligation to timely file such continuation statements, in reliance on internal tickler systems. Insistence by bondholders on the use of such trustees contributes to the creation of a market standard that will encourage more reluctant trustees to join the club. In addition, bondholders should insist that reporting provisions in bond documents require the reporting on EMMA of any name change to the issuer or any obligor, accompanied by an opinion of counsel that UCC financing statements have been amended as required to continue perfection of the applicable liens.

4. In Times of Trouble, Review the UCC Financing Statements

Issuers and conduit obligors rarely file for bankruptcy out of the blue. Once a filing occurs, bondholders can be assured that counsel for the debtor and competing creditors will pore over the UCC financing statement filing status, and the contents of UCC financing statements, seeking to find some omission or flaw that can be argued to void or render ineffective all or a portion of the lien securing the bonds. Most financing statement mishaps can be cured by filing a new, correct financing statement if such cure occurs prior to the commencement of the preference period preceding a bankruptcy filing, typically 90 days. These days, financing statements are readily available online. As red flags arise concerning an issuer's or obligor's financial health, it behooves substantial bondholders to ask internal or external counsel to conduct a UCC financing statement review for the applicable issuer or obligor.

The Bond Buyer

by Len Weiser-Varon

September 23 2019

Len Weiser-Varon a member of Mintz Levin's Public Finance practice with a specialty in workouts and restructurings.

NASACT 2019 Annual Conference Recap.

NASACT President D. Clark Partridge, state comptroller of Arizona, and our Arizona co-hosts, Legislative Auditor Lindsey Perry and State Treasurer Kimberly Yee, welcomed almost 500 to Scottsdale for the association's 104th annual conference.

Read the Recap.

National Association of State Auditors, Comptrollers and Treasurers

Fitch Ratings: Scale May Translate to Better Ratings for U.S. NFP Hospitals

Link to Fitch Ratings' Report(s): Size and Scale Factor into Hospital Ratings

Fitch Ratings-New York-26 September 2019: Increased M&A activity among U.S. not-for-profit hospitals does not necessarily translate into an instant fix for profitability, according to Fitch Ratings in a new report.

M&A among not-for-profit hospitals is here to stay, driven by the belief that scale is the only way to succeed in a rapidly transforming and innovative sector. "Historically, people went to hospitals out of necessity, not for convenience," said Senior Director Olga Beck. "Now hospitals need to offer a wide array of services with patients demanding that it be adjusted to fit their busy lives."

A recent Fitch analysis of its rated hospitals, however, shows that bigger is not instantly better in terms of profitability over the short term. In fact, profitability at the median level is virtually identical for larger, medium sized and smaller health systems. The same holds true for other key metrics like days cash on hand and net adjusted debt to adjusted EBITDA.

Where size and scale do matter is in a hospital's longer-term financial picture. While not necessarily more profitable than its smaller counterparts, larger hospitals are in a much better position structurally to fend off a future economic downturn. "Increased size and scale absolutely enhance a hospital's stability at virtually every measurable data point," said Beck. "With the tools available to them, Fitch expects that in the long run, large systems should be able to prove their advantages by exhibiting less volatility in times of stress and/or acquiring essentiality with a strong clinical reputation in very high-acuity care that provides them with a broad patient base."

'Size and Scale Factor into Hospital Ratings' is available at 'www.fitchratings.com' or by clicking on the link.

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Additional information is available on www.fitchratings.com

Fitch 2019 Late Cycle Roundtable: Key Risks for U.S. States in a Potential Downturn

How will potential federal fiscal deterioration affect U.S. states? In this latest installment of the Late Cycle Roundtable series, Katie Falconi, Americas Regional Credit Officer, leads a discussion on how rising budget deficits and public spending could affect U.S. public finance issuers.

Watch the Roundtable.

Hunt for Tax Havens Fuels \$47 Billion Stampede Into Muni Debt.

- Muni-bond inflows are greater than in 54-week record in 2016
- · 'Voracious' appetite as fallout over tax overhaul continues

Municipal bonds have never been at risk of becoming the next big thing for bubble-chasing investors, like crypto currencies or tech IPOs.

But 2019 has been marked by an unusually large stampede into the \$3.8 trillion state and local government debt market because of a motive that's nearly as old as civilization itself: avoiding taxes.

Municipal-bond mutual funds and exchange traded funds have pulled in about \$46.9 billion over the last 38 straight weeks. That's the biggest cash haul since 2010 and eclipses the \$38.1 billion they picked up during the 54-week stretch that ended in 2016, according to Refinitiv's Lipper US Fund Flows data.

Several factors are helping to feed the demand, including interest-rate cuts that have pushed up the price of outstanding bonds and sent the market to its biggest gain since 2014. But a major reason is the tax overhaul that capped the federal deduction of state and local taxes, which caused some Americans to use their investments as a way to drive down what they owe.

"Munis have become more of a pure investment. It's a tax vehicle for many," said Peter Block, head of municipal bond strategy at Ramirez & Co., who described the appetite for tax shelters as "voracious."

"Clearly it's taking off as a tax strategy for the advisory community," Block said.

While the muni market has weakened recently, it's still delivered returns of about 6.7% this year, and it has fared better than others as prices retreated after August's big rally. The muni market's one-month loss of 0.84% compares with the 0.95% loss for Treasuries and the 0.75% loss for corporate bonds, according to Bloomberg Barclays indexes.

Meanwhile, offerings of new municipal bonds this year haven't kept pace with demand because the tax overhaul did away with a major refinancing tactic and states and cities remain hesitant to run up debt. But for those who do sell, they can lock in borrowing costs near historical lows.

"You have this limited supply of bonds- great for you guys to issue debt," Terry Goode, a senior portfolio manager at Wells Capital Management, told municipal representatives at a Bond Buyer conference in San Francisco on Tuesday. "And people like me are clamoring for those particular bonds."

Bloomberg Markets

By Romy Varghese

September 27, 2019, 10:30 AM PDT

— With assistance by Maria Elena Vizcaino

U.S. States Won't Join Century Bond Club Even If They Want To.

- California, New York have debt maturities limited by law
- · Citigroup says even those who could may be 'uncomfortable'

The U.S. Treasury is considering whether to join a number of European governments that have embarked on a bond-market experiment by selling debt that doesn't come due for a century.

But don't expect America's state governments to follow suit.

Even if they wanted to put off repaying their debts for 100 years, many states are prevented from doing so because of constitutional or statutory limits that impose a type of fiscal discipline.

In California, the nation's biggest municipal-bond issuer, the constitution bars the state from selling debt that matures after 50 years. In New York, statute limits that to 30 years. For the most part, Hawaii can't borrow for longer than 25. Utah and Delaware are capped at two decades. And in Maryland, it's even shorter: general-obligation bonds have to mature in 15 years or less.

"That's not an option for us even if we wanted to consider it," said Christian Lund, Maryland's debt management director.

That suggests that so-called century bonds will remain a rare presence in the \$3.8 trillion municipal-securities market, despite a recent uptick in such sales by universities. Both New Jersey's Rutgers University and the University of Virginia this year sold bonds that don't mature until 2119.

Martin Luby, a public finance professor at the University of Texas at Austin's Lyndon B. Johnson School of Public Affairs, said states are concerned about the injustice of kicking the bill for today's public works projects to unborn generations. And states typically try to structure bond issues so they're not still paying off the debt even after the project it financed is no longer in use.

"States don't want to burden future taxpayers," he said. "There is also this uncertainty on whether they are going to be able to pay for this asset in 50 years or 100 years."

Citigroup Inc., one of the biggest underwriters, doesn't expect a surge of century bond issuance

even from governments that may have legal authority to do so, the bank's analysts led by Vikram Rai said in a note to clients Monday. Rai said "most issuers will be uncomfortable taking such a strident view on duration."

Tennessee is one of them. The state doesn't have a constitutional barrier to selling extremely long-dated debt. But it does have a policy that limits the maturity of its bonds to 20 years after they're issued or a related project is completed, whichever is soonest, unless state officials decide otherwise.

When asked if Tennessee would consider joining the century bond club, John Dunn, a spokesman for the state comptroller, was succinct in his emailed response: "This is an easy one for the state of Tennessee. The answer is NO."

Bloomberg Markets

By Danielle Moran

September 24, 2019, 9:29 AM PDT

— With assistance by Romy Varghese

BondLink Partners with IHS Markit for Muni Bond Transparency.

An alliance between one company that profiles bond issuers and another that facilitates bond sales aims to make it easier for investors to view a government's credit information before buying.

A new partnership between two financial-service companies has proposed to make the municipal bond market more transparent for investors.

According to a <u>news release</u> last week, the partnership is between <u>BondLink</u>, a cloud software company in Boston that builds websites for governments to share information with potential investors, and <u>Ipreo by IHS Markit</u>, a London-based financial data and analytics company formerly known just as Ipreo, before it was acquired by IHS Markit, a competitor, in August 2018. Ipreo by IHS Markit makes software for selling bonds, and through this partnership, potential investors who buy through Ipreo will have access to credit information about issuers via BondLink.

In an email, BondLink co-founder and CEO Colin MacNaught said the partnership could make bond issuers more transparent, giving investors easy access to information they need to evaluate potential bond deals.

"Issuers who focus on their digital presence by taking advantage of integrations like this can attract more investors and gain a competitive edge, and we're proud to partner with Ipreo by IHS Markit," he wrote.

The news release said BondLink also has an agreement with Fidelity Investments to put information about issuers on Fidelity.com.

These relationships could boost the profile of BondLink, which has raised \$12 million in seed funding since its launch in 2016 and been used by the states of Florida and Georgia and the city of Chicago.

GOVTECH

<u>S&P: Long-Term Credit Challenges Facing U.S. State And Local Governments In Coal-Producing Regions</u>

Table of Contents

- U.S. Coal Production Outlook Looks Bleak
- Environmental: Transitioning To More Renewable Energy Sources
- Social: Weakening Demographic Trends And Workforce Constraints
- Governance: Issues Facing Management Due To Coal's Domestic Decline
- Isolating The Coal Industry's Financial Impact On U.S. State Governments
- Related Research

For nearly a decade, U.S. coal production has been on the decline. Global efforts to stem emissions of carbon dioxide from fossil fuels and the availability of cheap alternative renewable energy sources will limit future growth of coal production. In S&P Global Ratings' opinion, reliance on coal-related revenue and economic activity, absent diversification, may result in long-term credit deterioration for some U.S. government entities.

Analyzing the credit impact of declining coal production involves our assessment of environmental, social, and governance (ESG) factors. S&P Global Ratings has a long record of incorporating ESG factors into its analysis of public finance entities. (For more information, see our report, "Through The ESG Lens: How Environmental, Social, And Governance Factors Are Incorporated Into U.S. Public Finance Ratings," published Oct. 10, 2018, on RatingsDirect.) In our state government analysis, we assess the effects on the coal industry as the U.S. transitions to more renewable energy sources, the weak demographic trends of coal-reliant areas, and management's ability to address the resulting fiscal effects of this decline.

Continue reading.

Bond Interest Rates Dropped for Public Hospitals Under ACA, Study Finds.

Public hospital borrowing costs significantly decreased under the ACA, according to a study cited by Yahoo Finance.

The <u>study</u>, released by University of Illinois at Chicago's Government Finance Research Center, found that short and medium-term yields on municipal hospital bonds have dipped 39 basis points [relative to a control group of nonhospital bonds] since the U.S. Supreme Court upheld the federal health law in 2012, the Yahoo report stated. This means public hospitals saved \$3 million per bond issue on interest rates.

Dermot Murphy, co-author of the study and a UIC associate professor of finance, told Yahoo Finance investors originally were skeptical.

"For all they knew, the ACA might be repealed next month," he said. "After the Supreme Court ruling in 2012, however, investors got a shot of confidence that the [legislation] was more likely to

remain the law of the land."

After the 2012 ACA decision, investors were more confident, leading to lower interest rates for municipal hospital bonds, the study found. According to Yahoo Finance, the study also found that bond yields dropped another 17 basis points in states that expanded Medicaid under the ACA.

"Political uncertainty surrounding the ACA still remains a concern for municipal bond investors in the long run, even if legal uncertainty was significantly reduced following the Supreme Court ruling," Mr. Murphy said.

Becker's Hospital Review

by Kelly Gooch

September 27th, 2019

Everyone Is Running Up Debt Except America's States and Cities.

- · Amount of muni debt owed drops for the fourth straight quarter
- Contrasts with rising debt of federal government, households

America's states and cities may be the only ones that aren't running up their credit cards.

The outstanding debt of U.S. state and local governments shrank for the fourth straight quarter in the three months ended in June, dropping by \$14.6 billion to about \$3.8 trillion, according to Federal Reserve Board figures released Friday. That stands in contrast the federal government, households and businesses, all of which stepped up their borrowing.

States and cities have paid down their debt since 2010

The figures underscore the fiscal restraint that has reigned in the nation's statehouses since the Great Recession, which forced governments to cut jobs and slash spending to make up for the massive budget shortfalls they were left with when the economy collapsed. Even with the interest rates on municipal bonds at the lowest since at least the early 1960s, states and cities have been hesitant to borrow and are saving for the next downturn instead. As a result, the municipal-securities market is smaller than it was in 2010.

That has been a good thing for bondholders, with the subdued pace of new debt sales providing a tailwind for the market. While the pace of borrowing typically picks up in the last few months of the year, Bank of America Corp. analysts said Friday that it shouldn't cause any trouble: investors will receive about \$42 billion in interest and principal payments through the end of October, roughly enough to buy all the new bonds that will be sold.

Bloomberg Markets

By William Selway

September 20, 2019, 10:31 AM PDT

Local Muni Dealers Die Off as Wall Street Lands Most Deals.

- Number of muni underwriters has dropped by more than a third
- Declining fees, new regulations seen spurring drop since 2010

The small-town bond dealer is a dying breed.

Spurred by declining fees, mergers and regulations ushered in after the financial crisis, the number of banks underwriting U.S. state and local government debt has shrunk by more than a third in a little less than a decade, according to data compiled by Bloomberg. This year, there were 101 firms that handled at least one municipal-bond deal, down from 152 in 2010.

The steep drop illustrates how increasing competition is reshaping the \$3.8 trillion municipal-securities market, presenting a challenge to regional firms as the business becomes increasingly consolidated in the hands of Wall Street's biggest banks. Such local underwriters were heavily affected by changes inaugurated by the Dodd-Frank law, which curbed the ability of banks to pitch debt deals to their clients, as well as the steadily eroding fees — or spreads — that states and cities pay to issue new bonds.

The firms that have dropped out in the last decade include Sterne Agee Group, Stone & Youngberg and Cain Brothers, all of which were acquired by rivals. Another, William Blair, shut down its municipal bond business in 2017.

"You have lower spreads, lower volume of issuance, more profitable business elsewhere and new regulations of municipal advisers that have kept broker dealers from knocking on the door of issuers," said Bart Hildreth, a public finance professor at Georgia State University and former member of the Municipal Securities Rulemaking Board. "All of that is making this business more concentrated. The smaller regional firms are being bought up, so that's leading to the consolidation of the industry, which is lowering the number of broker dealers."

The underwriting business is dominated by the 10 biggest banks, which handle about three quarters of new bond offerings, the data shows. And the top 20 manage nearly 90% of the total, leaving only a small share for the lower-tier firms. Since January, there are 27 managers that have handled five or fewer deals, and nine that have underwritten just one.

At the same time, the average fee has dropped to \$4.95 for every \$1,000 of bonds sold, down from \$6.26 in 2010.

The shift in the municipal bond business mirrors one in the broader financial industry, which has steered more work to big mutual funds and banks with the broadest reach.

"The firms that thrive have the best primary issuance platform and distribution capabilities — you kind of have to have the full gamut in my opinion to really have a thriving platform," said Devin Ryan, an equity analyst that covers banks at JMP Securities. He expects the trend of consolidation in the municipal market to continue as "economies of scale and economies of diversification" win out over smaller, regionally-based businesses.

Those pressures are already driving some consolidation. Stifel Financial Corp. in August agreed to buy George K. Baum & Co., a regional underwriter, after previously buying First Empire Securities, a firm based in Hauppauge, New York. In 2012, Raymond James bought Morgan Keegan to bolster its business in the Southeast.

Of the 20 firms that were in the market last year but haven't underwritten a deal so far this year, 10

managed only a single issue in 2018. The handful of firms that managed more than five deals last year but have since done zero, include Neighborly Securities, a startup that has since shifted its focus to Internet broadband.

In the public finance market "there is an ecosystem of many smaller regional players that, in my opinion, there will be far fewer of them over the next decade than there are today," said Ryan, JMP's equity analyst. "It can still be quite a good business. But it is a business that is absolutely consolidated, and I would expect that you will probably continue to see that especially on the smaller end of the market."

Bloomberg Markets

By Danielle Moran

September 17, 2019, 4:00 AM PDT Updated on September 17, 2019, 7:12 AM PDT

— With assistance by Sowjana Sivaloganathan

Muni Bonds Face Climate Change. And Investors Are Ignoring the Risks.

The municipal-bond market has long been considered a haven: U.S. investors could buy bonds issued by states, cities, counties, and agencies and enjoy steady, tax-free income and rock-bottom default rates. More recently, overseas investors—particularly those combating negative yields at home—have been drawn to U.S. munis for their positive yields and a currency that's rising against theirs.

But there's a long-term risk looming in this \$3.8 trillion market: Climate change raises the credit risk of an issuer by damaging its assets and tax base. Within a decade, absent efforts to curb emissions, according to BlackRock, more than 15% of the S&P National Municipal Bonds index will come from metropolitan issuers that probably will suffer climate-related losses of 0.5% to 1% of gross domestic product a year.

Probable losers include the Gulf Coast, the South Atlantic seaboard, and Arizona. Florida tops the list of danger zones; BlackRock estimates that Miami eventually could lose up to 4.5% of GDP a year.

Continue reading.

Barron's

By Leslie P. Norton

Sept. 20, 2019 4:19 pm ET

Muni-Bond Sales Surging as Yields Tumble to Lowest Since 1960s.

- August, September are busiest months since Dec. 2017's record
- Valuations have retreated from record highs as pace picks up

U.S. state and local governments are selling bonds at the fastest pace since the record-setting flood in December 2017, seizing on a slide in interest rates that has pushed their borrowing costs to the lowest in more than half a century.

The volume of new debt sales in September is poised to rival or exceed the \$38 billion that was issued in August, which was the busiest month since governments rushed to the market before President Donald Trump's tax law pulled the subsidies from a key refinancing tactic. Governments have sold about \$28 billion of long-term debt in September, a 33% increase from the same period a year ago, and more than \$10 billion is already scheduled to be offered over the next week, according to data compiled by Bloomberg.

"Thanks to back-to-back-to-back big weeks of new issue volume, September borrowing is on track to be the biggest single month of issuance since December 2017," Patrick Luby, senior municipal strategist at CreditSights, wrote in a note to clients Monday.

The increase is a welcome shift for money managers and underwriters who had seen the pace of debt sales slow over the past two years, and it comes as the Bond Buyer 20 Index, a key measure of yields, holds at its lowest since at least 1961.

With cash steadily flowing into municipal-debt mutual funds every week since January, the dearth earlier this year pushed tax-exempt bond prices to record highs relative to Treasuries. But those valuations have since weakened, in part because of an anticipated pick up in the pace of new sales over the next few months.

"The calendar is clearly building," said Jeffrey Lipton, head of municipal research at Oppenheimer & Co. "We are at a point right now where issuers are looking at these very compelling low rates and we are approaching the end of the year."

Bloomberg Markets

By Danielle Moran

September 23, 2019, 10:29 AM PDT

Muni Market Not Immune From Illiquidity Fears, Says Bond Star.

The municipal bond market has proven a haven for some investors seeking solace from the more difficult areas of the wider fixed income universe but it is not immune from all its problems.

Citywire A-rated manager David Hammer, who runs several municipal bond funds at Pimco, said liquidity in the municipal bond market has declined in recent years. He said this is exacerbated by the increased use of daily liquidity funds.

'So there's a growing mismatch between the available liquidity and investors that might demand that liquidity. As a result, during outflow cycles in the muni market, what we've experienced are overshoots where valuations' prices really overshoot fundamentals.'

Further pressure has come in the form of outflow cycles, which are largely driven by mass market concerns. 'Back in 2010 and '11 following Meredith Whitney's proclamation on 60 Minutes that there would be billions of municipal defaults caused an outflow cycle.

'In 2013, after the fed-induced taper tantrum, that coincided in the muni market with a down grade of Puerto Rico and also Detroit filing for bankruptcy, so we saw a prolonged outflow cycle,' he said.

His colleague Rachel Betton highlighted how similar pressure was exerted on munis during the 2016 Presidential election in the US. The combined fears of lower taxes and higher interest rates forced many investors to axe muni exposure, she said.

'In these sell-offs, most muni funds have to raise cash to meet redemptions. We don't see outflow cycles going away. In fact, we think they are probably becoming more common and potentially more severe,' she added.

One way municipal bond managers could capitalise on market opportunity, the pair said, is through the use of interval funds. These strategies are less liquid but are aimed primarily at longer-term investors who are aware of how they function during market downturns.

'That puts us as portfolio managers in a better position to take advantage of these outflow cycles, make opportunistic purchases, and create long-term value for investors that expect to be allocated to the muni market for a prolonged period of time,' Hammer added.

On a three-year basis, Hammer has returned 9.8% in US dollar terms across a total of nine funds. The average manager in the Bonds – US Dollar Municipal sector returned 8.5% over the same timeframe.

By Chris Sloley

18 Sep, 2019

Muni-Bond Investors Embrace Higher-Risk Issuers.

High-yield municipal funds rake in \$14 billion as investors flock to lower-rated deals

Investors are flocking to riskier corners of the traditionally safe municipal bond market in a search for yield.

They are buying hundreds of millions of dollars of debt issues from unrated and below-investmengrade borrowers such as energy projects and upstart charter schools.

It is a shift within a part of the bond market commonly considered almost as safe as Treasurys. Municipal-bond payments are often backed by taxes or revenue from essential services. The bonds are known for low default rates and prized by investors for stable returns and interest payments that are typically tax-free.

Continue reading.

The Wall Street Journal

By Gunjan Banerji and Heather Gillers

Sept. 21, 2019 9:50 am ET

Fitch Rtgs: U.S. LPCs Experience Drop in Liquidity Metrics, But Maintain Healthy Operations in FY18

Link to Fitch Ratings' Report(s): <u>2019 Median Ratios for Not-For-Profit Life Plan</u> Communities

Fitch Ratings-New York-19 September 2019: Volatile equity markets and increased capital spending pressured liquidity metrics for U.S. life plan communities (LPCs) in fiscal 2018, while core operations remained solid, according to Fitch Ratings in a new report.

2018 median ratios for Fitch's investment-grade LPCs show solid core operating performance, though it is trending lower (5.9% in 2018 from 7.2% in 2017). Lower rated LPCs also saw net operating margins fall for the second straight year to 3.8% in 2018 from 5.1% in 2017. Days cash on hand also fell for investment-grade LPCs.

Meanwhile, capital spending has increased dramatically for the sector as a whole this year with the still-strong housing market fueling demand and higher occupancy rates for independent living units. 'Fitch expects LPCs to continue to plan and pursue renovation and expansion projects in 2019,' said Director Ryan Pami. While capital spending is up, the same cannot be said for realized gains. Less than expected returns dampened the excess margin to 2.1% from 3.3% YoY.

Fitch upgraded ratings on four LPCs, downgraded five and affirmed all of its other rated entities during the first half of 2019. Fitch envisions continued operating stability by and large through the remainder of 2019. That said, 'increased leverage and project risk from expansions or campus repositioning projects will continue to drive negative rating actions for LPCs,' said Pami. 'Furthermore, pressure on the post-acute care census in skilled nursing facilities could hamper operating performance.'

'2019 Median Ratios for Not-For-Profit Life Plan Communities' is available at 'www.fitchratings.com' or by clicking on the above link.

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Fitch Ratings: Pre-Recession Peak Enplanements Not Just for Large U.S. Airports Anymore

Link to Fitch Ratings' Report(s): <u>Enplanements Grow Across All U.S. Hub Sizes (Pre-Recession Enplanement Levels No Longer for Large Hubs Only)</u>

Fitch Ratings-Austin-16 September 2019: Enplanement levels for U.S. airports are now at their highest in over a decade, though the improvement is more striking for smaller hubs that had tougher hills to climb following the recession according to Fitch Ratings in a new report. Still unknown however, is if this improvement is sustainable for smaller airports in the longer term.

Enplanement levels are up after another record-breaking year in 2018 with enplanements reaching one billion, up nearly 5% from 965 million in 2017. While large airports were able to more easily shrug off recessionary headwinds, small and medium hub airports across the U.S. generally exhibited higher volatility during the 2008-2009 downturn and took longer to recover to prerecession levels. Nearly all small and medium hub airports are now growing beyond pre-recession levels with only a few outlier smaller airports that are not yet realizing a full recovery.

Growth at some small and medium hubs has accelerated in recent years thanks in large part to new air services introduced by ultra-low cost carriers such as Spirit, Frontier and Allegiant Air. That said, 'sustainability of operations for these ultra-low cost carriers is more uncertain than for legacy carriers and is potentially more dependent on yield and route profitability,' said Jeffrey Lack, Director at Fitch Ratings.

Deciding to add service to a new or underserved market may not translate into permanent gains for some of these ultra-low-cost carriers. This is true even in markets with proven demand. 'Small airports will need to plan very cautiously once airport incentives are eliminated, though the smaller market share for these ultra-low-cost carriers nationwide limits this risk for airports,' said Lack.

'Enplanement Growth Across All U.S. Hub Sizes' is available at 'www.fitchratings.com' or by clicking on the link.

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Fitch Rtgs: U.S. Fiscal Weakening Could Hit Public Finance, Financial Credits

Link to Fitch Ratings' Report(s): <u>The Coming Storm: Effects of U.S. Fiscal Deterioration on Key Sectors</u>

Fitch Ratings-New York-18 September 2019: Low borrowing costs have helped to temper political concerns over rising federal budget deficits and debt in recent years. However, Fitch Ratings believes that public finances could emerge as a greater issue for U.S. policymakers in the event that borrowing costs rise or if the deficit increases sharply during a future downturn. In that scenario, elected officials could feel pressure to cut spending, which could pose a challenge to segments of the U.S. economy that rely on federal outlays. This in turn could broadly influence credit quality in a number of sectors, including U.S. public finance, financial institutions, and industrials.

Long-term U.S. federal debt projections have increased in recent years, despite the economy benefiting from a record long economic expansion. U.S. general government debt is already the highest among 'AAA'-rated sovereigns, and Fitch's debt sustainability analysis indicates that it could exceed 120% of GDP by 2028. This estimate is based on gradual increases in borrowing costs, widening primary deficits, and average growth just below the U.S.'s 2% potential growth rate. Federal spending will be challenged by these worsening fiscal dynamics.

Transfers to states and local governments represented 18% of total federal expenditures in 2018. These transfers stand out as being among the largest potential casualties of reduced federal spending and uncertainty related to federal policy decisions remains a key risk for state credit profiles.

Healthcare – primarily for the Medicaid program – comprises the largest portion of federal transfers to state and local government. It also is a major factor contributing to the variation in states' dependence on federal transfers as a source of revenue. Even though Medicaid is a mandatory congressional appropriation, meaningful changes to its funding structure cannot be ruled out over the long term, which could reduce overall federal Medicaid funding and raise fiscal burdens on states that choose to offset federal declines.

State operating budgets are structured to fund services provided by lower levels of government rather than the state government offering those services directly. This acts as a key source of financial flexibility for states but also a key risk for local governments and related public enterprises. Higher education has typically been targeted by states experiencing fiscal challenges, as cuts to state support for public universities through the Great Recession and its aftermath underscore. School districts also stand out in this area, given their high reliance on state funding, which usually accounts for more than 50% of total state-to-local transfers.

The effect of longer term federal deficit reduction on state and local government ratings would depend on the extent of the cuts, the types of functions targeted and the flexibility Fitch expects specific governments to have to counteract federal action. To maintain ratings, state and local governments would need to demonstrate their ability to manage through a federal deficit reduction in a manner that retains an appropriate level of financial flexibility.

Federal budget decisions are expected to be less of a direct risk for government-sponsored enterprises, such as Fannie Mae and Freddie Mac and those belonging to the Federal Home Loan

Bank System and the Farm Credit System. Federal loan programs channelled via private-sector U.S. financial institutions would be at risk to the extent that a downturn increases net subsidy costs to the government. While income from this activity is negligible for large and diversified lenders, it may be more significant for smaller institutions.

For analysis of how U.S. federal fiscal deterioration could affect credits across a range of sectors in U.S. public finance, financial institutions and corporates, see Fitch Ratings' report: "The Coming Storm: Effects of U.S. Fiscal Deterioration on Key Sectors".

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Pensions, Recession Pose Risks to State and Local Governments.

Tom Kozlik, municipal strategy and credit head at Hilltop Securities, discusses pension funding liabilities for state and local governments and how a recession could impact state governments. He speaks with Bloomberg's Taylor Riggs on this week's "Muni Moment" on "Bloomberg Markets."

Watch video.

Bloomberg Markets Muni MomentTV Shows

First 'High-Tech Census' Raises Stakes for Local Government.

Much of the discussion about the 2020 U.S. Census has been dominated by President Trump's push to add a citizenship question, as well as critics who say he's doing so to undermine the count. But officials across the country are also grappling with conducting a Census in a country and world that have drastically changed in the past decade due to an acceleration of technology and new online threats.

Basically, when the 2020 U.S. Census arrives next spring, it will be seeking to accurately count a vastly different country than the one it surveyed 10 years ago.

The reference day used for the Census will again be April 1, as it has been since 1930, and the geographic space the Census covers will be the same. So too will the people, for the most part. What has changed since the federal government took its last sweeping decennial count of the population, however, is the way society engages with, shares, uses and values information.

The United States has counted its citizenry every 10 years since 1790, collecting data that includes age, gender, ethnicity and address, among other fields. Once the count is finished, the information is used by the federal government to plan how to best serve residents in a number of ways, including funding for health care, education, transportation, employment services and more. It is also used to help determine where to build vital infrastructure such as schools, roads and hospitals. Then there's political representation: Census data helps determine how many congressional seats certain areas get to represent them at the state and federal levels.

Funding and political representation have been at the forefront of recent conversations about why the Census matters. But what is perhaps less talked about is how the modern value of data — and the way local and state governments use it in tech and innovation offices — has made getting an accurate count all the more important.

Unlike 10 years ago, we now live in a world in which more local governments are using data to guide their decisions. Some of the actual data in that equation is often derived from the Census, increasing the stakes for communities this time around.

At the same time, the public's relationship with willingly surrendering data has become fraught. Hacks and data breaches are common, and the national climate is one in which many people are more reticent to share the exact information the Census seeks. At the same time, experts say bad actors online may be using the Census as a point of attack, warning about everything from foreign powers launching misinformation campaigns to petty criminals setting up fake websites to steal personal information for financial gain. Meanwhile, younger generations like millennials are all but unreachable via traditional methods of correspondence like phone, mail or door-to-door visits.

What this all adds up to is a far more complicated — and more high-stakes — environment for the U.S. Census Bureau to work within. But there are ways that local, county and state governments can assist. They are, after all, far more knowledgeable about the people being counted in their communities than their federal counterparts.

What it comes down to, experts say, is understanding how the count will be taken, why it matters and what needs to be done to reach people and ensure they will be counted.

THE 'FIRST HIGH-TECH CENSUS'

When it comes to understanding how the count is taken, it is perhaps most important for local and state governments to realize there has been a major change for 2020: For the first time ever, residents can fill out the Census online. For whatever reason, however, this has been misconstrued by some to mean that all citizens will be required to do this, and that the old methods — mail, phone and in-person visits — have been abandoned. Terri Ann Lowenthal is a nationally recognized Census expert who was the staff director of the U.S. House of Representatives Census oversight subcommittee from 1987 to 1994. She also covered the Census Bureau for the 2008 Obama Presidential Transition Team. This year, she is advising many state and city Census support efforts.

Within that work, Lowenthal has identified frequent misgivings over the idea that this will be the nation's first fully digital Census, misgivings that she says are perhaps unfounded, owing to vague terminology.

"I think the term 'digital Census' suggests to many people that the response part of the Census will be done only online," Lowenthal said, "and that in fact has created a lot of worry at the community and local government level. The Census Bureau itself never used the term 'digital Census.'"

Lowenthal instead uses the phrase "first high-tech Census," meaning that Internet response is now an option for filling out the survey, but it is by no means the only way to respond. As a result, concerns at the local level that the Census will leave behind residents without access to the Internet are unfounded. Misunderstanding aside, Lowenthal says there are advantages to this high-tech Census.

"No one argues with the need to modernize the Census," Lowenthal said. "I find it ironic that people could buy Girl Scout cookies online before they could respond to the nation's decennial Census online. Technology makes the Census more cost effective. Responding online is the least expensive way to gather data, and the Census Bureau is using technology not only to collect data, but also to prepare for the Census. ... It has to know where every housing unit is, because the Census doesn't just count people — it has to put them in the right location."

Things like satellite imaging, construction permit databases for residential housing and other new data sets that have been collected or digitized in the past decade all stand to make the Census Bureau's work easier by giving them a better idea of where people live. The Census also has new access to administrative records that can help them count people who don't respond, although that is far from ideal. That all is the upshot of technology.

Conversely, having an online option to answer the Census creates potential for phishing attacks in which criminals trick the public into surrendering personal info. It also opens the country up as a whole to disinformation campaigns from foreign actors seeking to disrupt our political processes by fouling up the count.

"There is significant concern among local officials — and understandably so — that social media will be a conduit for rapidly spreading false information about the Census," Lowenthal said. "For example, in relation to who should respond and how Census data can and cannot be used."

Local governments can help the Census Bureau here by drowning out falsities with accurate information, and by designing messaging campaigns with their own communities in mind that will effectively tell people the things they must know to stay safe and get counted correctly.

The other focus of local governments when it comes to messaging, experts say, should be making sure their communities know why it is so important to get accurate Census data.

The idea that the Census is important because it influences funding and representation is perhaps an over-simplification. Andrew Reamer is a research professor at the George Washington Public Policy Institute at The George Washington University in Washington, D.C. He is a nationally recognized expert in what Census data is used for, and specifically how it affects funding.

Reamer said that it is very rare for the Census data itself to directly influence exact dollar amounts for funding. What happens is that for the next 10 years, other data sets that are derived from the Census actually dictate these things. This also has the potential to vary by state, with some states' federal funding allocation written into state law based on Census-derived data. What also might be unknown to most folks — both in government and within communities — is that Census-derived data influences private-sector decisions.

"Businesses use data derived from the Census to find out where to locate operations," Reamer said. "Target and Starbucks never locate a new operation without looking at the Census data. They have to understand how many people live in an area, what are their characteristics, how much money they have. If you're Target, you don't have cookie-cutter stores. Data will affect what you have inside, how you market, and how you advertise."

For some, it might be enough to learn that if they don't fill out their Census, the state highway authority might not have enough federal funding to repair roads. For others, however, it might ultimately be more effective to stress that not responding to the Census could determine whether or not they have a Starbucks at the end of their block that they can walk to.

This all comes back to the idea that state and local governments know how best to reach the people in their areas, or, failing that, know how to recruit volunteers and staff who can. In fact, across the country, many state and local government leaders are doing their best to support the federal Census Bureau by acting as conveners, and by working with nonprofits and other groups who know the people even better than they do.

SUPPORTING THE COUNT

San Jose, Calif., Mayor Sam Liccardo understands what's at stake for his city with the Census, estimating that for every person missed, his community could lose roughly \$2,000.

As a leader of a city that consists of 40 percent residents born in another country, he also understands the challenges of crafting messaging for specific communities. This has been a focus of the city hall's work there to support the count, as has working with groups outside of government.

"We're doing some customary things and some unorthodox things," Liccardo said. "I think cities throughout the country are finding ways to message in multiple languages, to find trusted third parties such as churches and nonprofit organizations that can communicate the importance of the Census in their communities, and engaging many partners to ensure that we're all working together."

Some of the unique things that San Jose has been doing include working with partners to create a texting app that can help locate residences that aren't on the map. This is technology that helps partners like nonprofits and faith-based organizations take to the streets and identify signs of unorthodox housing situations, such as families living in garages, accessory dwelling units or other makeshift homes within a community affected by the soaring cost of living in Silicon Valley. With the

texting app, San Jose has been able to geolocate these units on the map. They can then use that data in the future to better organize Census support efforts.

Part of the city's work with community groups includes clearly communicating that data being gathered for the Census won't be used for other governmental purposes. "We have a lot of distrust to overcome as a result of the actions in Washington," Liccardo said.

San Jose is also leveraging unique partnerships with tech businesses in the area, including a particularly interesting one with Niantic, the company that makes the popular augmented reality game, Pokemon Go. In the past, Niantic has hosted events within Pokemon Go that require players going to a special area in the city to find rare Pokemon, areas that just so happen to be where they can also register to vote. That effort was a success in San Jose, and Liccardo says something similar may be helpful to spark engagement again for the Census, especially with the often-elusive millennial generation.

"Nobody ever thought Pikachu would be a partner of local government," the mayor said, "but we go where the people are."

San Jose is just one example, but it speaks to the idea that local government and the groups it works with are well-suited to help the Census by leveraging their intimate knowledge of communities to get the word out, emphasizing why this is important while helping to drown out misinformation campaigns. While the modern era is an increasingly complex one for a federal agency tasked with accurate data collection, there are also new cost-efficient tools that can be leveraged to help. The more that local governments embrace and understand that now, well in advance of the actual count, the better off their communities will be not just on April 1, but in the following decade that depends on Census data.

GOVERNING.COM

by Sarah Anderson

SEPTEMBER 17, 2019 AT 3:01 AM

<u>S&P Credit FAQ: How To Say Goodbye To LIBOR Without Creating Market Chaos</u>

Just like the nail-biting countdowns of yore (Y2K anyone?) there is a new date to be skittish about: Dec. 31, 2021. After that date, the London Inter Bank Offered Rate (LIBOR)-one of the more popular reference rates to calculate interest payments on a host of financial instruments-will likely disappear. The clock is ticking, and with roughly \$400 trillion of financial contracts using LIBOR (cumulative of all major currencies) currently outstanding, the stakes associated with this transition are high.

Working groups across regions have formed, and although many countries have already determined the planned replacement for their local interbank offering rate (IBOR), a slew of issues remain.

We believe institutions we rate will need to prepare their transition for the end of LIBOR over the next year and a half. In the Q&A below, S&P Global Ratings explains the dynamics of replacing LIBOR, including the operational and credit issues that may arise during the transition.

S&P Fifteen Largest U.S. City Pensions See Modest Gains In 2018, But Recession Risk And Rising OPEB Cost Challenges Persist

Table of Contents

- High Fixed Costs Are Set To Crowd Out Other Spending Priorities
- GASB 74, 75 Add OPEB Transparency As Costs Appear Likely to Rise
- Pension Reform Efforts Keep Funded Ratios Stable As Recession Risk Looms
- Issuer-Specific Economic Fundamentals Are Key To Affordability
- Recent Trends Among Largest Plans
- Measuring Static Funding And Minimum Funding Progress Of The Largest Plans
- Investment Returns, Demographics, And Market Risk Of The Largest Plans
- Recent Pension Developments In The Largest Cities
- Survey Methodology

Since the Great Recession, municipal defined-benefit pension plans have taken center stage as one of the key sources of long-term credit risk in what has historically been a remarkably stable, low-risk asset class. The 2008 financial crisis and subsequent economic downturn led to steep declines in asset values for U.S. municipal pension funds, followed by a period of inconsistent and often below-target investment performance. S&P Global Ratings believes that these issues have frequently been exacerbated by underfunding, where many municipalities continue to contribute less than actuarially recommended rates to their pension funds and where states have often failed to update statutory formulas in a timely manner to better align with actuarial recommendations. As funding levels have consequently been pressured, so too has the post-recession economic recovery been among the weakest in history, creating more acute budgetary pressure directly related to pension and other postemployment benefits (OPEBs) for many local governments, while focusing market attention ever more sharply on the risks that postretirement obligations pose for local government budgets and credit quality.

In this year's annual survey of the 15 largest American cities, S&P Global Ratings continues to see a picture that is decidedly mixed in terms of where the largest cities stand with respect to their pension and OPEB liabilities. Primary fixed costs—covering pensions and OPEB as well as debt service payments—are generally high and in many cases poised to rise considerably in the coming years due to poor pension funding levels, actuarial assumptions and methods that defer meaningful funding progress into the future, and movement toward the adoption of more conservative actuarial assumptions that revise funding levels downward and require higher employer contributions. We expect that cities with poorly funded pension plans will continue to struggle with cost pressures, as rising pension payments compete for the dollars needed to fund priority services and infrastructure investment. On the other hand, we continue to observe many cities that are proactively addressing their pension and OPEB liabilities through meaningful reforms that, though often more costly in the short term, will better position them in the long run to meet their obligations without impairing their fiscal health.

This year, we take stock of some of the key trends we have traditionally focused on in our survey of the largest U.S. cities' pensions—cost trends and affordability, funding levels, and ongoing pension reform efforts—while highlighting some new themes that we think deserve emphasis, including what we expect will be greater focus on OPEB obligations; the potential effects of a recession on funding

levels and costs; and the quantitative measurement of funding progress, enabling a more precise pinpointing of funding shortfalls and the risk of cost acceleration.

Continue reading.

Oklahoma Pension Fund Cyber Attack Shows Rising Risk for Munis.

- Hackers stole \$4.2M from law enforcement retirement system
- Cybersecurity readiness can affect credit ratings, S&P says

Oklahoma has joined the ranks of state and local governments struck by hackers, fueling concerns about the escalating risk of such attacks on municipalities.

The Federal Bureau of Investigation is probing the cyber theft of \$4.2 million from the Oklahoma Law Enforcement Retirement System, the pension fund for highway troopers, state agents, park rangers and other officers. The fund has recovered some of the money and told retirees benefits would remain intact. But the hack illustrates the state's vulnerability to bigger attacks that could carry far larger financial risks.

"Your ability to pay debt is based on trust, if the trust isn't there, it's going to be hard for everyone," said Geoffrey Buswick, an analyst for S&P Global Ratings, who has written about the risk these attacks pose for public entities. "If you have your head in the sand when it comes to cybersecurity, we're going to look at that for our rating."

The Oklahoma hack is the latest in a series of cyber breaches that show how exposed municipalities across the country are to online crime, a risk factor that rating companies are paying closer attention to as these incidents become more common. So far in 2019, municipalities have reported 73 ransomware attacks, up from 54 in 2018, according to data collected by a researcher at Recorded Future, a cybersecurity company.

Public pensions are already under stress from an uncertain investing environment and, in many cases, the growth of unfunded liabilities. State and local government retirement plans have between \$1.6 trillion and \$4 trillion less than what they need to cover all benefits that have been promised, depending on the interest rate used to value liabilities.

Money is constantly moving in local governments' servers to pay vendors, contractors or employees among other recurring transactions, making them a lucrative target for hackers.

In May, Baltimore residents faced disrupted services after hackers penetrated the city's systems in the second such cyberattack in less than two years. Moody's Investors Service called the incident "credit negative," citing "significant out-of-pocket expenses" expected after such a breach. Even so, Moody's didn't expect the city's financial position to be materially affected.

Greenville, North Carolina suffered a cyber attack in April, and hackers hit Atlanta in March 2018, costing the city an estimated \$17 million to fix, which was about 2.6% of its budget, according to Boston-based Breckinridge Capital Advisors.

The Oklahoma pension fund, which has almost 1,500 retirees, was attacked after an employee's email account was hacked, according to the Oklahoman newspaper. Duane Michael, the fund's executive director, told the newspaper that the money was illegally diverted.

Michael told the Oklahoman that his employees are getting training to prevent another breach. Jake Lowrey, a spokesman for the Oklahoma state agency that manages the hacked email account, declined to comment.

While the hackers took a small fraction of the Oklahoma pension's \$1 billion in total assets, the theft still leaves a negative impression, according to S&P's Buswick. There's no clear-cut solution to avoid hacks, he said. Instead, it's a matter of governments identifying their weak spots, planning a reaction and determining a process for recovery.

S&P hasn't downgraded an entity based solely on cybersecurity concerns yet, Buswick said. But in April, the agency lowered its outlook to negative on Princeton Community Hospital in West Virginia after the impact of a 2017 cyberattack was reflected in its unrestricted reserves.

Moody's rates Oklahoma Aa2, or the third-highest level of investment grade, and S&P has an equivalent AA on the state. The \$4.2 million loss from last month's hack isn't likely to drive a credit decision for such a large borrower, Buswick said.

Still bondholders are paying attention. While the cyber risks are hard to assess in a "meaningful" manner, they're part of investment analysis, said Matthew Stephan, the senior analyst for municipal market research at Columbia Management LLC. Protocols for these scenarios aren't always outlined for investors or written about in analysts' reports, he said.

"We kind of treat it like a low probability event -- like a 500-year weather event," he said, noting that the incidents don't typically affect the long-term price of bonds.

Other firms, like Breckinridge, include cybersecurity as part of its environmental, social and governance analysis.

"The market has become aware, investors have become aware, the media has become aware of cybersecurity issues," said Andrew Teras, a senior analyst for Breckinridge. "It's just one element of many that we're looking at but that's true of anything. We think it's very material — we consider it, and we know is a risk."

Bloomberg Cybersecurity

By Maria Elena Vizcaino

September 13, 2019, 6:36 AM PDT

How Louisiana Responded to Its Recent Ransomware Attacks.

Through quick response and an existing cyberthreat response system, the state managed to stave off what could have been a much more disastrous attack that would have affected twice as many communities.

In July, after a large-scale ransomware attack struck school districts throughout Louisiana, Governor John Bel Edwards issued a first-ever statewide emergency declaration related to a cyberincident.

The attack — which state CIO Dickie Howze describes as a "single, coordinated" one — infected five separate districts and could have brought down more than half a dozen others were it not for

officials' quick response.

That response, largely coordinated by the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), was something of a first for Louisiana and included the deployment of emergency personnel and resources, as well as coordination with other state, federal and private-sector professionals.

Chief among the constellation of partners making up GOHSEP was the state's IT department, the Office of Technology Services (OTS), which worked alongside other state partners like the National Guard and State Police to pursue solutions during the crisis.

Now, several months after the attacks, the state is still recovering. Speaking with Government Technology, Howze reflected on this tactical outing, revealing that Louisiana's response efforts prevented even more widespread damage that could have taken place.

"A total of 12 districts were targeted," said Howze. "We were successful in preventing encryption — in other words, we found — ransomware in existence in seven other districts. And by following [our] procedure we were able to unplug and clean, therefore preventing those districts from becoming encrypted."

After an initial forensic analysis by the Louisiana State Police fusion center determined that the attacks were, indeed, ransomware, Edwards' emergency declaration specifically authorized OTS and other state agencies and groups to respond and send resources to affected communities, Howze said.

Containment — the act of identifying, isolating and circumventing the downstream spread of malware — is a critical task in cyberevents, <u>experts say</u>. Thus, after the initial confirmation of infection, a critical maneuver for OTS was the development of a containment task list directed at potentially affected systems. This six-phase plan, created in a little more than 24 hours by the state's CISO Dustin Glover, starts with a simple directive: "Unplug your computer," Howze said.

"The way ransomware works, they infiltrate and they don't encrypt until they have crawled the network to gain access to as many devices as they can gain access to and then they flip the switch and encrypt," Howze said. "So we felt it was in the state's best interest to put this out there and say, 'Hey, immediately do the following, and check yourself out.'"

At the same time that the containment list was being developed, OTS was helping channel people and resources towards the affected communities, while coordinating with partners like the Louisiana National Guard, the FBI, and private-sector helpers like Microsoft. The Guard supplied many of the resources that OTS was authorized to use, while public- and private-sector officials alike helped inspect and analyze affected systems, Howze said.

In large part, such a coordinated response would not have been possible were it not for the prioritization of cybersecurity by the Edwards administration.

Two years ago, Edwards formed the <u>Cybersecurity Commission</u> — a public-private partnership made up of cyberprofessionals dedicated to developing and advancing a statewide defensive posture. The commission, which brings together a wide assortment of academic, professional and government figures, works together with OTS and other state partners in the event of a cyberattack.

At the same time, Edwards also created emergency support function 17 — meant to be deployed in the event of a critical cyberincident — which activates OST and other partners as part of GOHSEP.

So while July's attack was large in scale, the response by state authorities may have helped make it a smaller event than it could have been. A recent report by Moody's Investor Service used the incident as a case study for how statewide emergency declarations are strategic ways to cut down on fallout.

Looking towards the future, the governor has asked Howze and others to survey communities throughout Louisiana in an attempt to identify potential vulnerabilities and work towards improving the state's overall defensive posture. In today's threat environment there's a lot to look out for, Howze said.

"We continue to invest in our environment; we continue to diligently manage and monitor," Howze said. "We deal with millions of attempts a day ... For lack of a better term, it's still a full-court press for us."

GOVTECH.COM

BY LUCAS ROPEK / SEPTEMBER 20, 2019

Should Cities Ever Pay Ransom to Hackers?

Some say paying hackers to release hijacked data encourages more attacks. Others say it can be the responsible thing to do.

Cities across the U.S. face a growing threat from ransomware, where cybercriminals infiltrate computer systems and hijack data, vowing to delete critical files unless they receive payment.

It is difficult to say exactly how many such attacks have taken place in recent years, as there is no centralized agency that tracks them and many go unreported. But research firm Recorded Future says it has tracked 71 ransomware attacks against state and local governments so far this year, compared with 54 in 2018. (The firm counts a recent coordinated attack in Texas affecting 22 municipalities as a single incident.)

Once hackers have control of a city's files, local leaders have a decision to make: Do they pay the bounty in the hopes of resolving the problem quickly, or forge ahead with the time and expense of a disaster-recovery effort?

The Federal Bureau of Investigation advises against paying hackers, saying it only encourages more attacks, and the U.S. Conference of Mayors in July adopted a resolution opposing ransom payments.

But some security professionals say there may be times when municipalities have few options other than to pay, especially if the systems taken hostage are critical to public health and safety and can't be restored quickly.

Craig Shue, an associate professor of computer science and cybersecurity at Worcester Polytechnic Institute in Worcester, Mass., says there are cases where paying a ransom is reasonable. Frank Cilluffo, director of Auburn University's McCrary Institute for Cyber and Critical Infrastructure Security, says it is always a bad idea.

YES: Sometimes, the benefits of paying a ransom outweigh the costs By Craig Shue

Some cybersecurity experts oppose the payment of ransomware demands under any circumstance, saying it serves only to embolden hackers and spur more attacks. While those are credible concerns, there are clear cases where paying a ransom is the responsible, even morally ethical, thing for a local government to do.

When deciding what to do, municipal leaders need to look carefully at the costs and benefits and then take whatever action yields the greatest benefits to all. Under such a utilitarian analysis, to ethically pay a ransom, municipal leaders must be without any better options. Further, the benefits from the payment must meet or exceed the harm that paying a ransom incurs. Importantly, this analysis must include the harm to society, such as the risk that paying a ransom could fund more ransomware development or acts of terrorism.

Companies that have to send employees to potentially dangerous locations, where abduction is a real risk, often perform similar calculations. Sometimes those calculations lead them—or the individuals themselves—to purchase kidnap-and-ransom insurance, recognizing that in some circumstances the best option may be to pay a ransom to preserve human life.

So under what circumstances might paying a ransom be a rational decision for a city or municipality?

Local governments manage information that is vital to keeping people safe. Losing control of data related to water safety, fire risks, emergency medical services or law enforcement could have immediate and significant consequences. If a local government must make a small ransom payment to save a person's life or many people's lives, or to protect public health, one could argue the benefit may outweigh the cost.

Local governments also keep vital records such as birth certificates, property deeds and court documents that citizens may need to prove identity, ownership of property or even child custody. Given the great harm associated with the loss of this data, attempting to recover the records quickly though a ransom payment may be the most ethical thing for local leaders to do.

Then there is data that local governments need to continue operating. If a municipality's financial records are encrypted in a ransomware attack, the government may not know what debt it owes or what funds it is entitled to collect. While trying to reconstruct these financial records from outside sources, the government may not be able to function. The cost of a ransom payment, in comparison, might seem small.

Unfortunately, hackers often set deadlines for ransoms to be paid, which may force leaders to make decisions with limited or imperfect knowledge. There also is the risk that paying the ransom won't work—that is, the payment won't result in the data being unlocked or it will lead to a demand for more money. But the alternative—simply banning ransomware payments outright—ignores the nuances of ransom decisions and eliminates flexibility for decision makers.

I agree with those who say that local governments should do everything in their power to be better prepared in case of an attack. For instance, some local governments have joined in a pledge to not pay ransomware demands. Such promises tell government employees that they must take appropriate precautions to ensure they can achieve their missions without ransomed data, through system backups or other disaster-recovery approaches. In effect, the city decides to treat the ransomware attack as equivalent to the attacker irrevocably deleting the data.

All local leaders should aspire to and achieve such a standard, as no-ransom pledges may discourage some attackers who specifically target local governments for payment. But the reality is that not all

cities and towns have the resources to secure their data fully or rebuild their servers if attacked. System backups are complicated, requiring information-technology experts, and some local governments don't have IT people on staff and can't afford to hire them.

It isn't illegal to pay ransom in most cases, but local leaders should report such demands to law enforcement. They also should be transparent with their citizens; however, it may be prudent to decrypt ransomed data before public disclosure to avoid price increases or other demands from the ransomer.

Every organization hopes to avoid being the recipient of a ransom demand. But rather than simply condemn ransom payments universally, we owe these leaders advice on how to make rational, ethical decisions.

NO: Paying a ransom will only encourage more hackers to attack in the future By Frank Cilluffo

From the early days of our republic, history has shown that paying ransom is a bad idea.

Consider the case of the Barbary pirates, when countries would make payments known as "tributes" to guarantee safe passage for ships through the Mediterranean. The practice gave rise to a vicious circle, wherein one payoff would simply spur another attack and demand, instead of securing passage. President Thomas Jefferson thus ended the payments after his inauguration in 1801, and set a precedent: Ransom wouldn't be paid because it encourages more attacks and strengthens criminal groups.

The same logic holds true for ransomware demands today and is why states and local governments shouldn't pay.

Already this year, dozens of local governments in the U.S. have fallen victim to ransomware, and the magnitude of the threat underscores why it must be eliminated altogether. This can only be done with a unified front across all sectors. While paying ransom is enticing as a quick fix, allowing institutions to forgo costs associated with system repair, it doesn't get at the root of the problem—and may exacerbate it if systems are left insecure and vulnerable to more hacking. Compounding the problem is that only one-quarter of all ransomware attacks are reported, which inhibits law enforcement from fully assessing and responding to the problem.

Not paying ransom is comparable to the strategy used in terrorist hostage situations. International commitments forbid governments from making payments to terrorists because it encourages more kidnappings and higher amounts in the long run. It also finances international terrorist organizations, thereby increasing terrorist threats everywhere. Similarly, evidence points to ransomware payments going to state sponsors of terrorism, like North Korea and Iran, which then plow earnings back into their operations to improve and refine malware.

Paying ransomware demands therefore directly sabotages U.S. national security by funding our adversaries to perpetrate more sophisticated attacks—a gift that keeps on giving.

Like terrorism, ransomware endangers lives by threatening systems that exist to protect us. But even in the toughest of cases, local governments have to stand firm. Otherwise, we provide cybercriminals with an incentive to keep doing what they are doing, with the result being that many more lives may be lost or placed in jeopardy. What's more, paying ransom doesn't guarantee the return of the captured data. In fact, only about half of those who fell victim to attacks in 2017 were able to recover their data after paying the demand. A Kansas hospital in 2016, for example, paid the

requested ransom—but then received an order for more money instead of the decryption key.

So, what can we do? Most important, local governments should focus on prevention and resilience. The best strategy for institutions is to act now to improve cybersecurity—before an attack occurs—thereby making the ransomware debate irrelevant. Establishing system backups and updating and patching software are both easier and cheaper than paying off criminals. In several notable cases, such as the attacks on San Francisco's MTA and the city of Sarasota, Fla., ransom payments weren't even considered because data and information systems were properly secured beforehand. This should be every organization's goal.

It is also important for cities and states to communicate with law enforcement, as officials can facilitate the adoption of measures to be used both before and (if necessary) after an attack. The FBI increasingly has succeeded at identifying ransomware actors and indicators, which enables officials to pinpoint vulnerabilities and help organizations deter hackers. But this can only happen if ransomware incidents are reported.

Establishing mechanisms through the Department of Homeland Security that provide aid and funding to local and state governments for cybersecurity and resiliency efforts would help support victims and alleviate the pressure to pay. Designating ransomware operators as transnational criminal organizations would provide officials with more tools and authority to prevent, deter and punish offenders.

While it's understandable for institutions to want to quickly regain access to data to maintain continuity of operations, it is essential to derail and deter the growing cycle of attacks through a unified front. This is a national emergency and we need to treat it like one.

Technology and the means to perpetrate crimes may change, but human nature remains consistent. From old crimes to new ones, the same thing holds true: Ransom and ransomware wouldn't exist if we didn't pay.

The Wall Street Journal

Sept. 17, 2019 10:02 pm ET

Dr. Shue is an associate professor of computer science and cybersecurity at Worcester Polytechnic Institute in Worcester, Mass. Email him at reports@wsj.com.

Mr. Cilluffo is the director of Auburn University's McCrary Institute for Cyber and Critical Infrastructure Security. Email him at reports@wsj.com.

How Two Smaller Legacy Cities Are Adopting Green Infrastructure.

Climate change has raised temperatures and intensified flooding across New England. Providence and Worcester experiment with strategies to alleviate the worst effects.

As rain sheeted across the 150,000-square-foot roof of a transit facility in one of the most flood-prone neighborhoods in Worcester, Massachusetts, things looked ominous. But instead of posing a threat, that stormwater slithered into a jumble of purple coneflower, Joe Pye weed, Russian sage, and other flood- and drought-tolerant plants growing between the complex and nearby Quinsigamond Avenue.

The transit facility, built on a remediated brownfield, represents a \$90-million investment for this small city. Green infrastructure elements like that rain-absorbing bioswale were considered a must, according to William Lehtola, chair of the Worcester Regional Transit Authority Advisory Board: "We want to provide the best possible environment for the city and our customers and employees," he said. "Not just in our buses, but in our facilities too."

As smaller legacy cities such as Worcester and nearby Providence, Rhode Island, continue the grueling work of rebounding from the severe economic and population losses suffered since their manufacturing heydays, the green approach is gaining traction. Despite challenges ranging from financial constraints to deteriorating infrastructure, many legacy cities have realized that investing in — and, in some cases, mandating — green infrastructure yields multiple benefits. Projects such as rain gardens, bioswales, urban farming, and tree planting, whether introduced on a small scale or implemented citywide, are an effective way to revitalize public spaces, manage stormwater, improve public health, and deal with the impacts of climate change, from increased heat to floods.

Continue reading.

NEXT CITY

by Cyrus Moulton

Sep 16, 2019

The City of Detroit Bankruptcy.

A crippling general obligation (GO) debt, the highest unemployment rate among major U.S. cities, increased crime rates, property abandonment issues and a constant population decline led the City of Detroit to file for Chapter 9 bankruptcy in 2013. As a matter of fact, Detroit became the largest city in the U.S. ever to file for protection under Chapter 9.

In this article, we will take a closer look at the causes that led the City to go bankrupt and how the problem may be widespread throughout the United States.

To learn more about the provisions under Chapter 9, click here.

Continue reading.

municipalbonds.com

by Jayden Sangha

Sep 18, 2019

Morgan Stanley Robot Learns by Reading Unreadable Muni Documents.

- Morgan Stanley runs official statements through a new program
- Too few words show risks of a default for some sectors

They're longer than classics like Henry David Thoreau's "Walden" and modern hits like J.K. Rowling's "Harry Potter and the Prisoner of Azkaban" but nowhere nearly as engaging.

Yet each week, American state and local governments crank out the doorstops by the dozens, creating a dismal stack of soporific homework for money managers studying whether or not to buy their bonds.

So Morgan Stanley, one of Wall Street's biggest investment banks, experimented with farming out the job of reading 120,000-word bond prospectuses to robots, seeing if the results could yield a sort of CliffsNotes that may separate the signal from the noise.

Strategists Michael Zezas and Mark Schmidt ran 150 official statements through a machine-learning program. They said it revealed some patterns that could help investors avoid credit-rating downgrades or defaults without reading through hundreds of pages of reports.

They focused on bonds issued by local agencies that are backed by riskier projects like continuingcare retirement centers, hospitals and speculative real estate developments. That's where doing close research is most important because local governments almost never default on their own bonds. Here's some lessons:

More words, better odds: Official statements for continuing-care retirement centers that didn't default averaged 20,194 words longer than those that did, they found. The tendency also held true for so-called dirt bonds sold for real estate projects.

Executive bios: Speculative developments tend to rely on the word "Mr." to highlight the management of the project, since the riskier deals need to play up their executives' skills as a key selling point.

Boring is better: Higher-quality debt tended to have more references to the financial statement than defaulted or downgraded debt. The more "boring" the documents, the better, the strategists said.

It was Morgan Stanley's first time using natural language processing on municipal-bond issuers' official statements, Zezas said in an email. The bank reported the results to clients to show how Morgan Stanley takes a quantitative approach to its research.

He said they used relatively new techniques and principles outlined by a Stanford University professor, who experimented with it as a way to sift through the huge amounts of information involved in modern political affairs.

Zezas said the bank plans to further test its conclusions. Their next step is to gather more official statements, get more data and solicit feedback from clients. The bank said the findings could help analysts when they are asked to provide a quick take on a new bond deal, not serve as their computerized replacements.

"We don't recommend cursory credit analysis," Zezas and Schmidt said in their report to clients. "However, sometimes a simple rule-of-thumb can help."

Bloomberg Markets

By Amanda Albright

September 16, 2019, 6:07 AM PDT

— With assistance by Jeremy R Cooke

Corporate and Municipal CUSIP Request Volume Bounces Back in August.

NEW YORK, NY, September 12, 2019 – CUSIP Global Services (CGS) today announced the release of its CUSIP Issuance Trends Report for August 2019. The report, which tracks the issuance of new security identifiers as an early indicator of debt and capital markets activity over the next quarter, found increases in CUSIP request volume across most major asset classes in August.

Read Report.

Falling Yields Unleash Flood of Muni 'Century Bonds'

Universities, state and local governments rush to lock in ultralow rates for decades

U.S. state and local governments, along with universities, are joining companies in a dash to issue debt and lock in low rates, sometimes for up to 100 years.

Rutgers University funded various capital projects by selling roughly \$300 million in debt this week that doesn't mature for a century. The New Jersey-based school adds to a list that includes the University of Virginia and University of Pennsylvania, which have also sold so-called century bonds in recent weeks.

"The market presented UVA with a historic opportunity," said Jennifer Wagner Davis, the school's executive vice president and chief operating officer.

Continue reading.

The Wall Street Journal

By Gunjan Banerji

Sept. 13, 2019 5:30 am ET

When Wall Street Flips Municipal Bonds, Towns and Schools Pay the Price.

A Journal analysis of trading data suggests new bonds often are underpriced, which means taxpayers will pay more in interest

When the West Contra Costa Unified School District in California needed money to repair and upgrade deteriorating classrooms, it hired Piper Jaffray Cos. to sell \$191 million of municipal bonds.

As far as school officials knew, the March 2016 sale went off flawlessly, enabling the district to refinance older debt and tackle tasks such as removing asbestos and upgrading science labs.

However, within a day of the initial sale, the original buyers sold, or "flipped," \$35 million of the district's bonds for a profit of \$306,000, a Wall Street Journal analysis of trading in the bonds found.

Continue reading.

The Wall Street Journal

By Tom McGinty and Heather Gillers

Sept. 12, 2019 11:41 am ET

Moody's: Cyberattacks Could Cause Significant Financial Disruption for Hospitals.

Cyberattacks pose a greater fiscal and credit risk to nonprofit hospitals than any other sector of municipal finance due to the increasingly interconnected nature of hospital operations and information technology.

Hospitals with strong risk management strategies will be better positioned to respond to these operational and financial disruptions, according to a report from Moody's Investors Service.

Small hospitals face the biggest risk, because many lack the necessary cybersecurity resources and will be less able to absorb any financial impact, according to report authors Jennifer Barr, a Moody's analyst, and Lisa Goldstein, Moody's associate managing director.

According to the assessment, the not-for-profit hospital sector's overall cyberrisk is high. Other sectors that have high overall cyberrisk are banks, securities firms and market infrastructure providers because they also rely heavily on technology for their operations.

Data breaches have become a reality for healthcare organizations due to the value of protected health information. In the most critical cases, these data breaches endanger revenue, posing a material risk to financial performance.

To date, Moody's-rated hospitals, representing \$250 billion in rated debt, have had sufficient financial resources to absorb the impact of a cyberattack. So far, those impacts have been limited to paying fines when patient data are compromised, with minimal disruptions to operations.

But that could change as cyberthreats evolve and become more sophisticated. Security incidents that result in operational disruptions, like ransomware, present the greatest risk to hospitals, and those disruptive attacks are on the rise, according to Moody's.

Such attacks compromise patient care and expose hospitals to financial losses and lawsuits. Connected medical devices such as insulin pumps, defibrillators and cardiac monitors as well as hospitals' electronic medical record (EMR) systems are points of potential infiltration. Efforts to improve interoperability between organizations, devices and vendors will likely increase this risk, Moody's said.

As the industry continues to push toward digitalization and increased data sharing, the number of infiltration points for cyberattacks will grow.

"Among the biggest risks are attacks against connected medical devices such as insulin pumps, defibrillators and cardiac monitors, which are now entrenched in remote monitoring and require constant updating and patching," the report authors wrote. "The biggest issue for hospitals will be threats that jeopardize patient safety and result in harm or death, exposing hospitals to malpractice accusations and lawsuits."

Ransomware and cyberattacks that compromise hospital electronic health record systems will cause the greatest disruption, affecting hospitals' revenue cycles and disrupting cash flow in the most severe cases, according to the report.

The 2016 ransomware attack at Hollywood Presbyterian Medical Center in Los Angeles had its EMR compromised for several days, resulting in the hospital paying a \$17,000 Bitcoin ransom to release the network. The 2017 WannaCry cyberattack on U.K. hospitals resulted in a major IT disruption, causing diversions and delays or cancellations in patient care.

As a result of these threats, hospital management will feel pressured to allocate more resources to protect data and limit system vulnerabilities. Currently, less than 6% of an organization's IT budget is allocated to cybersecurity, according to the Healthcare Information and Management Systems Society. As cyberrisk becomes increasingly important, hospitals will likely increase their investments to shore up cybersecurity programs.

Hospital management teams are developing contingency plans and employing dedicated cybersecurity staff to address threats. Risk management measures include contingency planning, disaster response and obtaining cyberinsurance.

The capacity to take these steps, however, will vary across the hospital sector.

"Small hospitals, particularly critical access hospitals, that lack the resources for a dedicated cybersecurity expert will be more vulnerable. A lack of qualified talent will also remain an industry challenge and require additional investment, leaving less room for investment in other operational areas," the report authors said.

While risk management strategies will help mitigate operational and financial disruptions, malpractice and other legal issues will still be a risk when there is patient harm, Moody's said.

Hospitals remain vulnerable given the overall complexity of their systems and of healthcare delivery as well as the increasing number of attacks.

Fierce Healthcare

by Heather Landi | Sep 12, 2019 3:47pm

Making Sense of Municipal Budgets.

When it comes time to begin the development of your jurisdiction's annual budget, which song immediately pops into your head: "It's the Most Wonderful Time of the Year" or "Don't Cry Out Loud"?

We suspect that the answer to this question will be the same whether asked of staff or elected officials.

For most, the budget process is viewed as an accounting exercise that involves a multitude of spreadsheets, request forms and formulas all leading to a "balanced budget". Oftentimes, the process seems to be cloaked in mystery because no one is quite sure what happens between the time budget requests are submitted and the point at which a draft budget is presented for review. From our experience as a Finance Director and an Elected Official, it felt like a laborious effort that

detracted from our actual job responsibilities andwasted a lot of time and paper. The end result is a final Approved Budget document that is full of numbers and graphs, which often falls short of clearly communicating how resources are being allocated to achieve the goals of the organization and meet the needs of community.

Continue reading.

By NLC Guest Writer on September 11, 2019

How The Wall Street Journal Analyzed Trading and Profit in the Municipal-Bond Market.

The Journal looked at municipal-bond trades from April 2013 through December 2017

To analyze trading in newly issued municipal bonds, the Journal obtained the following data sets:

Trading data from the Municipal Securities Rulemaking Board

This data set includes all municipal-bond trades from April 2013 through December 2017. There were about 28.5 million trades during the period of the analysis.

Each trade record includes:

- The bond's Cusip (Committee on Uniform Security Identification Procedures), a nine-character alphanumeric code used to identify securities including stocks and bonds.
- A description of the bond that typically includes the name of the issuer
- The interest rate paid on the bond, known as the coupon.
- The maturity date, which is the date on which the issuer will repay the face value of the bond to holders.
- The type of trade, denoted by one of three letters. (S = Sale to a customer by a dealer. D = Trade between two dealers. P = Purchase from a customer by a dealer.)
- The face value, also known as par value, of the traded bond.
- The price of the trade.
- The yield to maturity, or annual interest earnings, that the bond buyer would receive, expressed as a percentage and calculated based on the price of the trade and the interest rate and maturity date of the bond.

Continue reading.

The Wall Street Journal

By Tom McGinty

Sept. 12, 2019 11:30 am ET

U.S. Public Power Rating Criteria Update (The First 150 Days)

Read the Report.

The Muni-Bond Market's Best Days May Be Over for Rest of 2019.

- Supply boost, low interest rates weigh on market: Barclays
- 'Who wants to be aggressive at current rates?' analyst says

The best days for the municipal-bond market in 2019 are probably behind it.

A surprise boost in state and local government debt sales this month, low interest rates and investors' desire to lock in the market's biggest returns since 2014 suggest that tax-exempt bonds may lag Treasuries for the remainder of the year, according to Barclays Plc strategists led by Mikhail Foux.

With interest rates not far from a more than half century low, states and cities are seizing on the moment to borrow, creating headwinds for a market that had benefited from a slowdown in new debt sales since late 2017. States and local governments have sold \$19 billion of fixed-rated bonds so far this month and plan to issue another \$17 billion over the next 30 days, according to data compiled by Bloomberg.

Continue reading.

Bloomberg Markets

By Martin Z Braun

September 10, 2019, 10:32 AM PDT

Oklahoma Pension Fund Cyber Attack Shows Rising Risk for Munis.

- Hackers stole \$4.2M from law enforcement retirement system
- Cybersecurity readiness can affect credit ratings, S&P says

Oklahoma has joined the ranks of state and local governments struck by hackers, fueling concerns about the escalating risk of such attacks on municipalities.

The Federal Bureau of Investigation is probing the cyber theft of \$4.2 million from the Oklahoma Law Enforcement Retirement System, the pension fund for highway troopers, state agents, park rangers and other officers. The fund has recovered some of the money and told retirees benefits would remain intact. But the hack illustrates the state's vulnerability to bigger attacks that could carry far larger financial risks.

"Your ability to pay debt is based on trust, if the trust isn't there, it's going to be hard for everyone," said Geoffrey Buswick, an analyst for S&P Global Ratings, who has written about the risk these attacks pose for public entities. "If you have your head in the sand when it comes to cybersecurity,

we're going to look at that for our rating."

Continue reading.

Bloomberg Cybersecurity

By Maria Elena Vizcaino

September 13, 2019, 6:36 AM PDT

Study Points to Past Pay-to-Play in Public Pensions.

The behavior was effectively curbed by the SEC's 2010 rule banning quid pro quo transactions, according to academic research.

At least up until 2010, state political donations by asset management executives appear to have been rewarded with public pension mandates, according to a <u>new paper</u> from researchers at the University of San Diego and University of Arizona.

Donations to a state government official or political action committee were linked to higher levels of government pension fund business in a study of about 22,000 investment advisory firms registered with the U.S. Securities and Exchange Commission between 2001 and 2016. A donor's client base had half a percentage point more government accounts — a number equating to about 390 moremandates for the average firm, according to authors William Beggs, a finance professor at the University of San Diego, and Thuong Harvison, a PhD candidate at the University of Arizona.

"Political donations yield a materially large number of government clients on an absolute number of accounts basis," they wrote. "Since public pension plan allocations tend to be large with regard to asset levels... this suggests that political donations may have a large economic impact on an advisor's fee revenues."

The authors suggested that asset management executives made campaign contributions to "politicians who will gain the authority to appoint trustees to public pension plans in order to win business managing plan assets." These pension trustees typically have final approval over the selection and termination of plan service providers, including asset managers.

According to the paper, the link between donations and pension mandates was most pronounced for firms offering pension consulting services, managers catering to institutional clients, and firms headquartered in states with "a high concentration of public pension plans and a culture of political corruption."

The relationship between political donations and public pension mandates was observed up until 2010, when the SEC adopted a new antifraud rule making it illegal for investment advisors to receive business from government entities within two years after making a related political contribution. The rule went into effect on March 14, 2011, effectively banning pay-to-play practices.

"We find the prevalence of pay-to-play activities declines after the adoption of SEC's rule," the authors wrote. They also observed "a sharp drop" in political contributions made by managers with a significant share of government clients following the rule's enactment.

"The SEC's rule on pay-to-play activities for investment advisors appears to have been successful in curbing the prevalence of this type of quid pro quo activity in the investment management industry," they concluded.

Institutional Investor

by Amy Whyte

September 13, 2019

Fly High With Tax-Free Airport Revenue Bonds.

Summary

- Revenue bonds aren't burdened by unfunded pension liabilities like General Obligations.
- Airport bonds often yield more than GOs.
- Airport bonds are safe and very essential.

With state and local governments becoming more and more entrenched with unfunded pension liabilities, traditional muni investors should look to safer alternatives. We consider revenue bonds the safest, because they offer haven from the pension timebombs. More specifically, Airport revenue bonds, if done right, can add safety to your portfolio without sacrificing yield. Airport bonds can be a much safer alternative to traditional general obligation bonds because they aren't strangled by unfunded pension liabilities. Airports are also extraordinarily essential and usually have very little industry competition. Additionally, airport revs often yield more than their general obligation counterparts.

Major US airports issue bonds to fund ongoing improvement projects. Most of these bond issues are backed by all the diverse sources of airport revenues. They include revenue from airlines, rental car companies, concessions, and passenger facility charges (PFC). Passenger facility charges are the most important. Every airline passenger must pay, so it provides a very stable revenue stream. The fee goes toward the upkeep and maintenance of airports, including bond payments, and is set up and capped according to US federal law.

Continue reading.

Seeking Alpha

by Alexander Anderson

Sep. 10, 2019 11:22 PM ET

Report Recommends Changes to US EPA's General Permit for Industrial Stormwater Discharges Ahead of Reissuance: Squire Patton Boggs

Stormwater permitting requirements for many industrial facilities are set forth in US EPA's <u>Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP)</u> or state permits based on the MSGP. US EPA <u>last issued</u> the permit in 2015, which expires on June 4,

2020. While the <u>current Administration</u> does not appear to be predisposed to the implementation of more onerous environmental permitting requirements, an EPA-funded report has recommended transformative changes to the MSGP. The Agency's decision whether to incorporate those recommendations into the reissuance of the MSGP will determine whether industrial facilities will need to implement additional stormwater monitoring and control measures in the coming years.

As we <u>previously reported</u>, in late 2016, US EPA had reached a <u>settlement agreement</u> with a group of environmental organizations that <u>petitioned for review</u> of the 2015 MSGP. The environmental groups believed that US EPA issued the 2015 MSGP without considering critical conclusions related to the MSGP that the National Research Council (NRC) had reached in a <u>2009 report</u>.

Pursuant to the settlement agreement, US EPA agreed to sponsor and fund another report evaluating certain potential improvements for the Agency's next issuance of the MSGP. Earlier this year, the National Academies of Sciences, Engineering, and Medicine released the envisioned report, titled Improving the EPA Multi-Sector General Permit for Industrial Stormwater Discharges (the NASEM Report).

The NASEM Report provides a number of recommendations for US EPA to consider as it finalizes reissuance of the MSGP. For example, the NASEM Report recommends extending coverage of the MSGP beyond facilities that are strictly defined as part of the industrial sector (such as school bus transportation facilities, gas stations, outdoor material storage and handling operations, and timber lots). This idea of establishing permitting for a broader range of stormwater discharges may be legally imposed upon US EPA. US District Courts in Maryland (with the Fourth Circuit appeal being voluntarily dismissed) and California have already held stormwater discharges from commercial, industrial, and institutional sources are broadly required to be permitted or prohibited under Section 402(p) of the Clean Water Act.

The NASEM Report also reviewed existing monitoring requirements in the MSGP and found that they are "particularly dated and have not been substantially updated over time." Accordingly, benchmark monitoring for total suspended solids (TSS), pH, and chemical oxygen demand (COD) or total organic carbon (TOC) is recommended for all industrial sectors. This would replace the less structured visual-only monitoring and would eliminate the current sampling waiver available to industrial dischargers that have met benchmarks for four consecutive quarters.

Additionally, the NASEM Report recommends that new scientific information be utilized for implementing (and periodically reviewing) sector-specific benchmark monitoring for parameters with the potential to affect stormwater from that industrial sector, such as polycyclic aromatic hydrocarbons (PAH), selenium, arsenic, and iron. Generally, under the existing MSGP, a benchmark exceedance is not considered a permit violation unless no corrective action is taken to prevent future exceedances. Yet, benchmark exceedances can be utilized for determining facility-specific stormwater control measures that could be costly for some industrial dischargers.

The NASEM Report also addresses the utilization of stormwater retention and infiltration as a stormwater control measure. The MSGP considers retention and infiltration of stormwater to be a control measure as these divert portions of stormwater that a facility would otherwise discharge to surface waters. Stormwater retention and infiltration is generally favored for most urban runoff (e.g., from parking lots and roofs) as a method for diverting stormwater from municipal sewer systems. However, the NASEM Report points out that runoff from industrial facilities is different because such runoff has the potential to contain contaminants that pose a risk to groundwater upon infiltration. To account for both these benefits and risks, the NASEM Report encourages US EPA to maintain retention and infiltration as a control measure in the MSGP but to also establish site-specific factors designed to ensure groundwater protection. If US EPA takes up this

recommendation, industrial facilities could be subject to monitoring, permitting, or even some type of treatment requirements if retention and infiltration are utilized as a stormwater control measure for the site.

In the Report, NASEM is clear that it does not analyze the financial costs of its recommendations and leaves that work for US EPA when reissuing the MSGP. The settlement agreement for the 2015 MSGP litigation requires that US EPA consider all of the report's recommendations when revising the MSGP making the Report's lack of cost considerations potentially problematic to the regulated community. Under the current Administration, which has prioritized deregulation and minimally intrusive permitting, skepticism about the level of consideration that will be given to the transformative recommendations of the NASEM Report is fair. Facilities permitted under the MSGP will not have to wait long to know whether permitting obligations are going to change, because the settlement agreement requires US EPA to finalize a draft of the next MSGP permit before the end of November 2019. Squire Patton Boggs will continue to monitor and provide updates on this issue.

by Erik D. Lange

September 13 2019

Squire Patton Boggs

EPA Taps Public for Comment on Water Reuse Plans.

Water scarcity is a growing concern for the EPA, as discussed in depth in its National Water Reuse Action Plan issued this week.

The plan outlines ways that the EPA can work with state and local governments to promote water reuse and support research into new technologies. Due to various pressures, 80 percent of U.S. states anticipate water shortages in some parts of their states in the next decade. Over the past several decades, agriculture, industry, and communities have faced water crises and responded through innovative water reuse plans. According to the agency, water reuse can increase water security, sustainability, and resilience.

The drafted plan distributed this month proposes several actions to address a spectrum of issues, and opens the public comment period to identify the most pressing actions to be taken in the near future. The plan seeks to draw business and municipal partners to support the desired effect of water reuse being considered more universally acceptable. The plan suggests that sources of water for potential reuse can include municipal wastewater, industry process and cooling water, stormwater, agriculture runoff and return flows, and oil and gas produced waters. These source waters can be reused after they are treated and determined to be fit for whatever purpose is necessary, including but not limited to use as drinking water.

According to the EPA, these source waters can and should be reused in agriculture and irrigation, groundwater storage and recharge, industrial processes, onsite and non-potable use, saltwater intrusion barriers, and environmental restoration. Although drinking water is not the focus of the plan, it is possible that reclaimed water could be treated and made potable. Drafted in view of the decades-long droughts in California, and the crises wrought by tropical storms and other natural disasters, the EPA's plan demonstrates that it considers water reuse to be an important prong of its current outlook.

Goldberg Segalla LLP

The Conservation Fund Announces Commencement Of Green Bond Offering.

ARLINGTON, Va., Sept. 3, 2019 /PRNewswire/ — The Conservation Fund (TCF) announced today that it is commencing an offering of taxable Green Bonds (the "Bonds") of approximately \$100 to \$150 million. The Bonds will be issued by TCF and Sustainable Conservation, Inc., a wholly-owned subsidiary as co-issuer (SCI and, together with TCF, "The Fund"). Proceeds from the offering will be used primarily to increase the scale of its "Working Forest Fund®" conservation initiative, dedicated to mitigating climate change, strengthening rural economies and protecting natural ecosystems by the permanent conservation of at-risk forest landscapes. Goldman Sachs & Co. LLC is serving as sole underwriter of the bond.

"The bond proceeds, combined with significant new philanthropic capital, will allow us to accelerate our efforts to conserve America's essential working forests," said Larry Selzer, CEO of The Conservation Fund. "By combining the power of the marketplace with the passion of philanthropy we aim to make a real difference in our nation's efforts to protect forests, address climate change and lift up rural economies."

"The Conservation Fund's Green Bond Framework is credible and impactful, and it aligns with the major components of the Green Bond Principles," said Heather Lang, Executive Director of Sustainalytics' Sustainable Finance Solutions. "Through its use of green bond proceeds, the Fund is demonstrating a deep commitment to conserve lands and working forests, creating significant environmental benefits."

TCF, a nonprofit organization, was founded in 1985 and is headquartered in Arlington, VA. Working with public, private and nonprofit partners, TCF's mission is to protect America's legacy of land and water resources through land acquisition, community engagement, and sustainable economic development, emphasizing the integration of economic and environmental goals.

The offering is being made pursuant to a preliminary offering memorandum. Potential investors should read the entirety of the preliminary offering memorandum as a basis for making any investment decision with respect to the Bonds.

This press release does not constitute an offer to sell or a solicitation of an offer to buy any securities nor will there be any sales of the Bonds in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

Forward-Looking Statements

This release may contain statements about future events and expectations that are forward-looking statements. Such statements are generally identifiable by the terminology used such as "plan," "expect," "estimate," "budget," "intend," "projection" or other similar words. A number of important factors, including factors affecting the Fund's operations and financial condition, could cause actual results to differ materially from those stated in such forward-looking statements.

All forward-looking statements speak only as of the date of this press release even if subsequently made available by the Fund on its website or otherwise. The Fund disclaims any obligation to update or revise any forward-looking statements that may be made to reflect new information or future events or circumstances that arise after the date made or to reflect the occurrence of unanticipated events, other than as required by law.

PR Newswire

Green is Good - Green Bonds Continue Growth.

Green bonds are hot. According to the Climate Bonds Initiative, global green bond issuances in 2019 exceeded \$150 billion USD through August and forecasts have increased to \$250 billion USD for the year. If these forecasts are met – or the market even comes close – 2019 will easily mark the largest annual green bond issuance to date.

The green bond market matches investors looking to support projects with specific environmental or "green" attributes with borrowers who want to finance those projects. This unique ability to connect market participants during a period of increasing concern for climate-related risks has driven this market's impressive growth over the past decade. In fact, the green bond market continues to attract increased interest and has become one of the most visible examples of the rapid growth and acceptance of environmental, social and governance, or ESG, investing. As the global green bond market continues to grow and develop rapidly, a brief overview of green bond fundamentals is timely for those wanting to learn more about this dynamic market.

A brief history

Emerging in 2007, the green bond market developed on a voluntary and self-regulatory basis. Prior to the advent of green bonds, global bond markets had financed, and continue to finance, substantial investments in projects with environmental benefits. However, the landscape shifted in 2007 when the European Investment Bank issued a €600 million "Climate Awareness Bond" and in 2008 when World Bank issued \$300 million USD Green Bonds. The groundbreaking aspect of those transactions was providing investors a product that targets capital to projects with specific attributes. In these cases, the projects had green attributes. And while innovative financing techniques continue to emerge within the green bond market, the overall story is less about new financing vehicles than it is a movement to facilitate purpose-driven investment strategies.

Growing concern for climate-related issues, particularly in Europe, made green bonds an attractive investment opportunity and the market steadily grew and began to receive mainstream acceptance in 2013 and 2014. In an attempt to provide guidance to market participants, the International Capital Markets Association released the first version of its Green Bond Principles in 2014. The Green Bond Principles is one of the most widely referenced set of green bond guidelines, and it sets forth best practices for green bond issues in an effort to increase transparency and legitimacy for the self-regulated market. Another notable institution in the green bond market, the Climate Bonds Initiative, has created a labelling program for green bonds that integrates the Green Bond Principles and conforms to the requirements of the Paris Agreement.

Green bonds have now expanded across global financial markets. From 2007 to 2018, nearly \$580 billion of green bonds were issued globally, and growth is accelerating in 2019. And although European issuers continue to lead the way based on volume, green bonds are rapidly growing in the

Americas and Asia.

What is a green bond?

Green bonds are not currently subject to a universal standard or definition. The fundamental characteristic of a green bond is that the bond proceeds are used for projects that possess green attributes. Green bonds raise funds for new and existing projects. In fact, many green bonds raise funds in advance of knowing the specific projects to which the capital will be allocated. In cases such as these, the issuer's framework and criteria for allocating funds is critical. Although some issuers may be reluctant to place overly restrictive parameters around their allocation decisions, more general or ambiguous selection criteria increases the potential for criticism. Thus the "Use of Proceeds" section of a prospectus and restrictions on use in any transaction documents are central to evaluating any green bond.

Issuers decide whether to label their bonds as green. While not required, many issuers seek the additional legitimacy of independent verification or certification and engage third-parties to review the green attributes of the bonds and the anticipated impact of the investment. Other than the targeted use of proceeds and any ancillary services related to verifying and certifying the use of proceeds, green bonds are quite similar to other bonds.

Green bonds finance a broad range of assets with a majority going to energy, building, transportation and water-related projects. Issuers of green bonds include sovereigns, local governments, government-backed entities and financial and corporate entities.

Measuring impact

One of the most scrutinized areas of the green bond market is assessing the environmental impact of green bond issuances. Green bond issuers must determine whether to (i) hire a third party to review the initial bond offering, (ii) undertake any ongoing reporting obligations and (iii) engage third-parties to verify any ongoing reporting obligations. Although generally relatively modest, agreeing to such actions does add to offering expenses and employee time commitments. Offsetting these costs is the fact that verification and continued reporting provide greater transparency and assure investors that funds are deployed as expected and do, in fact, make a positive environmental impact. Verification and continued reporting also reduce the risk of "greenwashing," the practice of using funds from green bonds for non-green purposes. These additional actions also help to promote the integrity of the green bond market and may very well become more common, or even required in certain jurisdictions, as the green bond market continues to mature.

Why issue a green bond?

In addition to the environmental benefits derived from the projects financed, green bonds carry important tangible and intangible benefits for both issuers and investors. For issuers, green bonds:

- diversify an investor base green bonds are sought by a growing class of investors, several of which have environmental or other investment mandates
- increased demand green bonds tend to have wider margins of oversubscription than comparable conventional bond offerings
- investor communication green bonds demonstrate the issuer's commitment to values that investors, not to mention citizens, customers, shareholders and other stakeholders, find important
- price recent evidence suggests that green bonds may be developing a small pricing advantage, or "greenium," over comparable non-green bonds.

For investors, green bonds:

- meet investment objectives a growing number of investors have aspirational or mandatory green investment objectives
- financial performance green bonds offer risk-adjusted returns generally consistent with more conventional bonds
- potential liquidity green bonds have demonstrated stronger secondary market performance than conventional bonds.

A Look Ahead

As the green bond market continues to mature and attract increasing amounts of capital, regulators in several jurisdictions have moved to shape and align definitions and qualifications to promote legitimacy and consistency. For example, the European Union's Technical Expert Group on Sustainable Finance issued a report in July 2019 including recommendations to create standards and labels for green financial products. The resulting program, if adopted, would create a voluntary, non-legislative EU Green Bond Standard seeking to standardize comparability and credibility of the green bond market.

Not coincidentally, the green bond market's rapid growth is occurring as nations and corporations and seek to reduce carbon emissions. As global pressures for decarbonization continue to increase, we expect that the green bond market will continue to expand and play a critical role in the growth of green finance more generally. As investors increasingly seek the dual promise of positive financial and social returns, green bonds offer a promising method to cater to that appetite.

September 12, 2019

Eversheds Sutherland (US) LLP

BondLink and Ipreo by IHS Markit Form Alliance to Boost Transparency for Bond Investors.

BOSTON, Sept. 16, 2019 /PRNewswire/ — BondLink, the pioneer enterprise software company providing debt management & investor relations software to issuers in the \$4 trillion municipal bond market, today announced an alliance with Ipreo by IHS Markit, a leading provider of solutions for municipal bond issuance. The alliance will enable institutional bond investors to access BondLink's issuer credit data using technology from Ipreo by IHS Markit.

"We're proud to align with Ipreo by IHS Markit to enhance transparency between issuers and investors in the municipal bond market," said Colin MacNaught, BondLink CEO & Co-Founder.

"Ipreo by IHS Markit is an incredible technology leader and plays a central role in the new issuance process. Working together, we can make critical issuer data more easily accessible to institutional investors in real-time as they evaluate new bond deals."

"Our product suite drives efficiencies for banks and bond investors during the new issuance process. We're excited to collaborate with BondLink to make issuer data more accessible for investors," said Will MacPherson, managing director at Ipreo by IHS Markit.

In addition to this alliance, BondLink has a data agreement with Fidelity Investments to host issuer

information for retail investors using Fidelity.com to buy municipal bonds. Together, these collaborations facilitate a more efficient bond market by promoting transparency through enhanced technology.

About BondLink

Led by founders Colin MacNaught, CEO, and Carl Query, CTO, BondLink's cloud-based debt management & investor relations platform provides efficiencies to issuers and investors in the \$4 trillion municipal bond market. Enhanced investor disclosure and access is supported by market regulators, as well as issuer and investor trade associations. Academic research also shows that better, more accessible disclosure can lead to lower costs for issuers. Headquartered in Boston, BondLink is backed by top investors, including Franklin Templeton Investments, one of the largest municipal bond funds in the country.

To learn more, please visit www.BondLink.com.

Muni Bonds Ride the Wave of the Treasury Market Rally.

Catherine Stienstra, head of municipal investments at Columbia Threadneedle Investments, discusses the impact of low interest rates on the municipal bond market. She speaks with Bloomberg's Vonnie Quinn in this week's "Muni Moment" on "Bloomberg Markets."

Watch video.

Bloomberg Markets | Muni MomentTV Shows

September 11th, 2019, 8:34 AM PDT

Look to Insured Munis for High Quality and Attractive Income.

MacKay Municipal Managers have said that insured municipal bonds are like having a belt with suspenders. What does that mean? Investment-grade municipal bonds are already high-quality investments, with historically lower default rates than similarly rated corporate bonds. When you wrap the bonds in insurance it adds an extra layer of protection so that in the event an issuer files for bankruptcy and can no longer service the debt, the insurance company will step in and pay the coupon and principal. Essentially, there are two entities available to pay back bondholders.

This doesn't mean insured municipal bonds are safer than Treasuries (the two remaining municipal bond insurers writing new business were most recently rated AA), but what they lack in a top-notch rating they make up for in better long-term historical performance and attractive tax-equivalent yield. That yield component will continue to be important now that the Federal Reserve has cut rates and may continue to do so, making the hunt for yield top of mind for investors.

Figure 1 shows how insured municipal bonds have performed compared to Treasuries since the start of 2018. The shaded areas represent time periods that the S&P 500 Index saw significant drawdowns; as expected, during these periods Treasuries outperformed. However, even with four volatile time periods over 19 months, insured municipal bonds still outperformed Treasuries by a

cumulative 300bps, and with generally less drawdown (as shown in Figure 2).

Continue reading.

by SPECIAL TO ETF TRENDS on SEPTEMBER 15, 2019

By Maria Rahni, CFA Product Management, New York Life Investments

How to Safely Beef Up Bond Returns.

It's easy to see why yield-seeking investors might be demoralized: The rate on 10-year Treasuries, which stood above 3% last autumn, had fallen recently to a mere 1.8%. And things could very well get worse, according to financial advisor Ira Mark.

"It wouldn't surprise me if we retest the low of the [10-year] U.S. Treasury that was hit in July 2016—1.35%," says Mark, Barron's 30th-ranked advisor in New York. But yields of up to 5% are available for those willing to take on a bit more risk, he adds.

A 27-year veteran investor, Mark is unusual among financial advisors in emphasizing fixed income over stocks. He typically recommends that clients use investment-grade bonds or other debt instruments for 75% of their portfolio. For the equity portion, he likes high-quality stocks with a history of increasing their dividends. "It's a slow and steady way to build a portfolio and offer consistent" returns, he says.

Among Mark's favorite investments are high-credit-quality municipal kicker bonds. These bonds typically offer <u>strong yield</u> to compensate investors for uncertainty about their call date. They get their name because the yield received by the investor increases, or "kicks," if the issuer declines to buy them back when their call dates arrive.

Mark recommends essential-service revenue bonds—those issued to pay for tunnels, bridges, airports, water systems, and the like. Consumers can't really opt out of using such infrastructure, and that's a pretty good hedge against the possibility of the bonds defaulting. "I have always told clients that you don't negotiate at the Midtown Tunnel; you pay the toll to go in and out of Manhattan" from New York's borough of Queens, Mark says. "Those tolls pay the debt services on the bonds, and, if need be, they can raise those tolls."

Kicker munis have an unusual price structure that frightens off some individual investors: They're sold for more than their par value, meaning that the issuer pays less than the bonds' face value when repurchasing them. But Mark finds that their returns still can beat those of regular corporates.

Among his current holding is a Port Authority of New York and New Jersey bond that matures in 2040. Rated AA- (Standard & Poor's fourth-highest rating), it will yield 1.75% if held to call in May 2025, and 3.77% if held to maturity. Both numbers factor in the premium-pricing issue. The income is free of local, state, and federal taxes for residents of New York or New Jersey. A North Texas Thruway Authority muni bond, meanwhile, yields 2.20% if called at the start of 2027 and 3.89% if held to maturity.

Mark also likes preferred stock, which generally pays a fixed dividend. Preferreds are higher in the credit structure than common shares; in a bankruptcy, their owners would come just behind bondholders in the pecking order for repayment. Recent issues, including one from Bank of America,

sport yields in the 5% range.

Such high yields compensate investors for taking on interest-rate risk. If rates rise, the value of fixed-income investments, including preferred shares, falls. But global investors have flocked to Treasuries as an alternative to their own countries' even lower-yielding government bonds, and Mark thinks that dynamic could help suppress U.S. rates for several more years.

Aside from their attractive yields, preferreds offer a tax advantage. Most pay "qualified" dividends, which are taxed at a top federal rate of 23.8%—versus the top rate of 37% on income from corporate bonds.

What's more, current supply-and-demand dynamics bode well for preferreds' potential price appreciation. Financial institutions, the biggest issuers, have scaled back issuance over the past several years.

How much of each investment should investors own? Mark recommends using munis for 60% of a fixed-income portfolio, preferreds for 30%, and short-term Treasuries for 10%.

But if kicker bonds and preferreds are so attractive, why own a slug of Treasuries, too? First, Mark says, 30-, 60-, and 90-day Treasuries out-yield most other cash alternatives. Second, they're exempt from state income tax, adding after-tax return for residents of states with income taxes. And third, the easily liquidated paper is "dry powder to take advantage of future opportunities," he observes. For many investors, that's a winning combination.

Barron's

By Steve Garmhausen

Sept. 13, 2019 7:00 am ET

How a Municipal Bond Fund Team Digs Deep for Value.

Investing in the many municipal bonds that finance mundane things like the local sewage-treatment plant can often require more expertise than buying headline-grabbing hot stocks like Facebook or Amazon.com .

With more than 55,000 active muni issuers in the marketplace, John Miller, a co-manager of the Nuveen Strategic Municipal Opportunities fund (ticker: NSAOX), has plenty of work to do.

"These issuers might have several different bond deals outstanding at any given point in time," Miller says. "So, the total number of individual muni bonds is approaching two million." An average bond issuance size is just \$25 million, he notes. That means researching individual bonds can be challenging.

Continue reading.

Barron's

By Lewis Braham

Sept. 12, 2019 8:00 am ET

S&P Credit FAQ: Are Covered Bonds Becoming More Sustainable?

Since S&P Global Ratings published its last green covered bond report, the issuance of environmental and social themed covered bonds has steadily risen (see "What's Behind The Rise In Green Covered Bond Issuance?," published on June 26, 2018). While growth in the overall sustainable covered bond segment has perhaps not fully met the some market participants' high expectations, social themed covered bonds have emerged as a new flavor of covered bonds over the past year, as issuers are looking to align their public sector and mortgage loans with broader social objectives.

This credit FAQ describes the recent developments, opportunities, and challenges facing the sustainable covered bond market, the nature of the collateral backing social bonds, and how we measure the social impact. We also consider the benefits of the covered bond structure in enabling environmental and social finance, how the structure supports good governance, and describe how we capture green and social factors and overall environmental, social, and governance (ESG) performance in our credit rating criteria.

- What's Changed In The Sustainable Covered Bond Market Over 2018-2019?
- What Are The Challenges For Sustainable Covered Bonds?
- Why Has Sustainable Covered Bond Issuance Increased?
- How Suitable Are Covered Bonds As Assets For Sustainable Financing?
- How Do Social Covered Bonds Report Their Impact?
- How Does S&P Global Ratings Consider ESG Factors In Its Covered Bond Ratings?
- How Do Social Factors Influence Credit Risk?
- Related Criteria
- Related Research

Read the full FAQ.

S&P Pension Brief: Credit Effects Of Municipal Pension Plans Approaching Asset Depletion

Table of Contents

- What Could Asset Depletion Mean For Pension Plans?
- How Might Asset Depletion Affect Ratings?
- How Likely Is Asset Depletion And How Can Plans Avoid It?
- Actions Taken To Date
- Related Research

Some public pension plans around the country have raised concerns about whether they might completely run out of money set aside to fund pension benefits. The reasons for such a scenario vary from poor funding discipline, to investments not meeting target rates of return, to newly negotiated benefits, to demographic changes in membership. Having to fully address obligations on a paya-you-go (paygo) basis can add volatility and cost to budgets, just as the credit cycle may be turning. Increasingly, these poorly funded plans are addressing the possibility and repercussions of asset depletion.

This Pension Brief addresses S&P Global Ratings' views on the following questions:

- What could asset depletion mean for pension plans?
- How might asset depletion affect issuer credit ratings?
- How likely is asset depletion and what can be done to avoid it?

Sponsor governments have not typically considered plan contributions tantamount to debt and so, in times of budgetary stress, there has been leniency for pension contributions that provide short-term budgetary relief. The actual benefit payments, on the other hand, must be paid out to the members to avoid reneging on plan obligations, so contributions under paygo funding must be paid each year. Typical plan design puts the responsibility and risk on plan sponsors (the employer and any external contributors such as the state) to fund benefits in excess of a fixed employee contribution.

Continue reading.

<u>S&P Credit Conditions: U.S. State And Local Governments Will Need To Keep</u> Their Hands On The Wheel

Table of Contents

- Is The National Economy Floating Over To The Slow Lane?
- Risk Of Recession Is Speeding Up
- Next Stop: ESG
- Mixed Housing Messages Drive Uncertainty And Uneven Trends
- Comparing the Regions: Recurring Themes

The second quarter of 2019 showed ongoing stability in state and local government ratings despite some signs of a weakening national economy such as a slowdown in single-family building permits. S&P Global's economists project GDP growth will slow during the rest of 2019 following first-quarter growth of 3.2%, and are targeting an annual growth rate in 2019 of 2.5%. However, we expect credit quality to generally remain stable, although there may be some areas more susceptible to looming pressures.

We are in the midst of the longest expansion on record, but with slower growth comes the challenge for local governments to provide the services for a changing world when revenues may not be keeping pace.

Continue reading.

<u>S&P Credit FAQ: How The Proposed Global Not-For-Profit Transportation</u> <u>Criteria Could Affect Mass Transit Ratings</u>

On July 30, 2019, S&P Global Ratings published a request for comment (RFC) on proposed updates to its methodology "U.S. And Canadian Not-For-Profit Transportation Infrastructure Enterprises: Methodologies And Assumptions," published March 12, 2018. The proposed updates, in "Request For Comment: Global Not-For-Profit Transportation Infrastructure Enterprises: Methodologies And Assumptions," would expand the scope of these criteria to issuers globally and add mass transit

systems in our definition of transportation infrastructure enterprises (TIEs). This article answers frequently asked questions related to the proposed criteria updates.

Continue reading.

<u>S&P Request for Comment: Global Not-For-Profit Transportation</u> <u>Infrastructure Enterprises: Methodologies And Assumptions</u>

Table of Contents

OVERVIEW AND SCOPE
KEY PUBLICATION INFORMATION
IMPACT ON OUTSTANDING RATINGS
QUESTIONS
RESPONSE DEADLINE

PROPOSED METHODOLOGY

A. Framework

B. Analytical Considerations

C. Primary Credit Factors

ADDITIONAL INFORMATION

APPENDIX 1: GLOSSARY

APPENDIX 2: COVERAGE

APPENDIX 3: AIRPORT CREDIT METRICS APPENDIX 4: PARKING CREDIT METRICS APPENDIX 5: PORT CREDIT METRICS

APPENDIX 6: TOLL ROAD CREDIT METRICS

APPENDIX 7: MASS TRANSIT SYSTEM CREDIT METRICS

RELATED CRITERIA AND RESEARCH

OVERVIEW AND SCOPE

- 1. S&P Global Ratings is proposing to publish an update to its methodology "U.S. And Canadian Not-For-Profit Transportation Infrastructure Enterprises: Methodologies And Assumptions," March 12, 2018. The proposed updates expand the scope of these criteria to issuers globally and include mass transit systems in our definition of transportation infrastructure enterprises (TIEs). As a result of the proposed updates, the new criteria would supersede:
- U.S. And Canadian Not-For-Profit Transportation Infrastructure Enterprises: Methodologies And Assumptions, March 12, 2018; and
- Mass Transit Enterprise Ratings, Dec. 18, 2013.
- 2. The proposed criteria would apply to TIEs or projects of an independent authority, a municipality, province, or comparable political subdivision, and whose debt is secured by revenue of the enterprise on a senior or subordinate basis. See Additional Information paragraphs for more details on scope.
- 3. These proposed criteria provide additional transparency and comparability to help market participants better understand our approach in assigning ratings, to enhance the forward-looking nature of these ratings, and to enhance the global comparability of our ratings through a clear, comprehensive, and globally consistent criteria framework. This proposed criteria article is related

to our criteria article "Principles Of Credit Ratings", published Feb. 16, 2011.

Continue reading.

BlackRock Says the Key Gauge of Muni Bond Prices May Be Broken.

- The ratio of muni yields to Treasuries is closely watched
- But firm's strategist says main buyers aren't driven by it

The world's largest money manager says one of the most meaningful measures in the municipalbond market is starting to mean a lot less.

That's because a steady influx of cash earlier this year pushed some state and local government debt yields to record lows relative to U.S. Treasuries. In normal times, the decline of that ratio — which is closely watched by professional investors — would signal that the securities had become significantly overpriced.

But Sean Carney, the head of municipal strategy at BlackRock Inc., which oversees nearly \$7 trillion in assets, said in an interview that the buy-and-hold investors who dominate the municipal market are more interested in the tax breaks and the protection the securities offer from stock market swings. That may help explain why retail buyers have poured more than \$43 billion into municipal-bond mutual funds even as prices hit record highs against Treasuries this year.

"There's less predictive power to muni-Treasury ratios today," said Carney, who like others on Wall Street still watches it.

Corporations like banks and insurance companies do pay attention to the gauge, Carney said. But those companies aren't driving the municipal-bond market rally right now. Some have even slashed their holdings because the 2017 tax overhaul that reduced corporate tax rates, which makes tax-exempt debt less attractive compared with other securities.

"Everybody likes to get caught up in muni-Treasury ratios," Carney said. "They mean a lot when you're looking for a non-traditional buyer to buy munis. When it's retail that's driving it — and it's retail driving this rally — they tend not to care as much about ratios."

This may mean that tax-exempt bonds have more room to run regardless of whether municipals are considered cheap or expensive, Carney said. Tax-exempt debt has returned about 7.7% this year, according to the Bloomberg Barclays index. While that's less than Treasuries or corporate bonds, it's still the biggest gain since 2014.

For those who do still care about the gauge, the ratio of 10-year municipal yields to Treasuries is hovering around 86%, up from as little as 72% in May.

Maybe that means they're cheap. Or maybe not.

Bloomberg Markets

By Amanda Albright

September 4, 2019, 9:54 AM PDT

BlackRock Sees Supply and Demand Driving Municipal Bond Rally.

Sean Carney, head of municipal strategy at BlackRock, discusses the municipal bond market posting its best returns since 2014. He speaks with Bloomberg's Taylor Riggs in this week's "Muni Moment" on "Bloomberg Markets."

Watch video.

Bloomberg MarketsTV Shows

September 4th, 2019, 10:09 AM PDT

Bondholders Burned in Denver Show Rare Risk From Bull Market,

- Denver project highlights risks to buyers of premium bonds
- Par buyback clause means some investors may lose over 10%

Denver International Airport's decision to terminate a contract with private developers to build a "Great Hall" at one of its terminals is proving costly to investors who bought about \$190 million municipal bonds to help finance the project.

The securities were sold at a premium and borrowing provisions allow Great Hall Partners LLC to redeem the debt at par plus accrued interest upon cancellation of the development agreement. Because the debt was trading for 115 cents on the dollar, the prices swiftly dropped by more than 10% after the airport announced last month that it was terminating a \$1.8 billion contract with the consortium to renovate the main terminal and operate retail concessions for three decades.

It follows an instance last year when for-profit health system HCA Healthcare Inc. bought Mission Health System, an Asheville, North Carolina-based non-profit, triggering a par call on Mission's premium bonds. The losses imposed by Denver Great Hall and Mission could cause buyers to shun new deals with similar provisions.

"This should be a wake-up call for the industry," said Fred Cohen, former director of municipal bond trading at AllianceBernstein Holding LP. "Buyers haven't focused on it because it hasn't happened that often, but it happens every once in a while and investors pay the price."

The steep price drop illustrates a rarely seen risk in the \$3.8 trillion municipal-bond market that's grown as tumbling interest rates push prices of many securities well above face value. Since many investors still want debt that carry 5% coupons because it's the easiest to resell, more than 70% of the \$232 billion of municipal bonds issued this year have been sold at a premium, according to data compiled by Bloomberg.

Investors should demand that borrowers issuing new premium bonds agree to pay the amortized cost of the debt, reflecting how much money they've lent to the issuer, rather than par in the event of an extraordinary redemption, Cohen said.

Disappointed

Denver officials in August notified the partnership that includes Ferrovial Airports International Ltd, Saunders Construction Inc. and JLC Infrastructure, that it was terminating the development agreement for the Great Hall Project in the airport's Jeppesen Terminal, which had been beset by delays and cost overruns.

Nuveen LLC held about \$20 million of the Great Hall bonds as of July 31. John Miller, who oversees more than \$150 billion state and local government bonds as head of municipal investments, said the firm was disappointed at Denver International Airport's decision to terminate the agreement.

The action "will result in bondholders being damaged and the equity participant possibly benefiting from a make whole equity call. It is unknown how much the developer will be paid to go away as a result of the termination payment, meanwhile, bondholders may be offered par," Miller said in an email. "DIA believes the best course of action is to take over as developer because the project has experienced significant delays and cost overruns. While the majority of bondholders have supported DIA deals in the past, its purported course of action is not a viable solution for bondholders as this action would hurt long-term investors in the airport."

Adam Banker, a spokesman for Fidelity Investments, which owned about \$20 million of the bonds at the end of July, said the company doesn't comment on specific holdings.

The decision to terminate the contract was in the best interest of the airport, passengers and the airport's investors, said Stacey Stegman, an airport spokeswoman.

"The bottom line is that these are not the city's or airport's bonds," Stegman wrote in an email. "In the case of termination, a 'termination for convenience' placed Great Hall Partners' bondholders/accredited investors in the best position."

The city will make a termination payment to Great Hall Partners and the Public Finance Authority which issued the debt and it will be their responsibility to pay bondholders, she said.

Prices on the biggest maturity of the bonds, a \$132 million block maturing in 2049, dropped to 104 cents on the dollar from 115 cents the day before. The partnership issued the maturity in December 2017 at 113 cents on the dollar. As of mid August the amortized cost of \$132 million Denver Great Hall bonds maturing in 2049 was about 111 cents on the dollar or \$147 million.

Redemption Provisions

Buyers have accepted "extraordinary" redemption provisions at par not only because they're triggered infrequently, but because of a bull market for tax exempt debt where demand far exceeds supply, Cohen said. Investors have poured \$43 billion into municipal bond funds through August, an almost five-fold increase compared to the same period last year. State and local debt issuance has increased about 9%.

Premium bonds are desirable for institutional investors because they outperform discount bonds when rates rise and are less costly to trade. In general, revenue bonds issued for specific projects such as hospitals, have extraordinary redemption provisions, while general obligation bonds don't, Cohen said.

Bloomberg Markets

By Martin Z Braun

— With assistance by Amanda Albright

What Is a Dedicated Tax-Backed Municipal Debt?

A string of municipal bankruptcies following the 2008 financial crisis forced many investors to question the utility of municipal bonds in their portfolio. Whether warranted or not, these concerns have given rise to dedicated tax bonds.

A dedicated tax bond, as far as municipal debt is concerned, refers to a variety of bond issues whose primary repayment method is secured by government tax or fee revenues. So long as a municipality generates tax and other forms of revenue, bondholders can feel certain that they will be repaid. The majority of debt issuers are supported by income tax, sales tax or gas tax, among others. The projects usually financed by this type of debt include economic growth initiatives.

To be sure, most general obligation (GO) bonds have an unlimited tax pledge. However, municipalities must use a portion of their tax revenues to cover frequent operating costs. Dedicated tax bonds, on the other hand, have revenue streams specially assigned to servicing debt. As such, they differ from traditional GO bonds and limited-tax GO bonds, which are backed by a limited amount of taxes.

Although dedicated tax-backed municipal bonds are more secure during economic downturns, there's little recourse for bondholders to access other funds from the issuer. However, since these bonds are backed by state revenues, the prospect of default is extremely slim.

Continue reading.

municipalbonds.com

by Sam Bourgi

Sep 04, 2019

XBRL US 2nd Release of CAFR Taxonomy for Municipal Reporting in Public Exposure Review.

NEW YORK-(BUSINESS WIRE)-Sep 5, 2019-

XBRL US announced today that it is conducting a 60-day public review and comment period for the second release of the Demonstration Comprehensive Annual Financial Report (CAFR) Taxonomy. The taxonomy, developed by the XBRL US State and Local Government Disclosure Modernization Working Group, includes the CAFR's Statement of Net Position, Statement of Activities, Governmental Fund Balance Sheet, and Governmental Fund Statement of Revenues, Expenditures and Changes in Fund Balances. The public review will also contain a limited number of concepts from pension and other post-employment benefit footnotes that are planned for a future taxonomy update.

This second release of the CAFR Demonstration Taxonomy incorporates feedback received during the first public review which ended on March 18, 2019. Municipalities, analysts, investors, data and software providers are invited to review and comment on the new release during the second public exposure period, which will close on October 28, 2019.

XBRL US also announced that Will County, Illinois, is the first local government to publish their financial statement data in standardized, XBRL format on their public website, using the CAFR Demonstration Taxonomy. View the Will County financials:

https://www.willcountyauditor.com/financial-and-statistical-reports

"Open, honest, transparent government, is important to the residents of Will County," said Duffy Blackburn, CPA, Auditor of Will County, "Financials prepared using data standards give our citizens, investors, and government agencies access to standardized, machine-readable data to better gauge financial health, and make more timely, informed decisions."

Dr. Shannon Sohl of Northern Illinois University's Center for Governmental Studies, and Vice Chair of the XBRL US State and Local Working Group, added, "Users of Will County's digital CAFR will also see other elements found in annual financial reports (AFR's) produced for the Illinois Office of the Comptroller (IOC) to demonstrate the possibility of producing a single annual report, eliminating redundant reporting for local governments to reduce the reporting lag, increase efficiency and transparency."

Approximately 30,000 state and local governments in the United States produce audited financial reports annually. Because this data is not standardized or machine-readable, the ability to aggregate data and compare the financial performance of governmental entities is limited. The state of Florida led the effort towards greater standardization in local government reporting with the passage of House Bill 1073 in March 2018, which mandates data standards for local government; and by the state of California, which has introduced Senate Bill 598, which requires the creation of a Commission to investigate and report on the implementation of data standards for state and local government financial reporting. SB 598 was approved by the State Senate in June and by three State Assembly committees this summer.

"We're pleased to see Florida, California and Will County take the lead in adopting open government financial reporting data standards, and we look forward to supporting other early adopters of XBRL-based CAFRs," said Marc Joffe, Senior Policy Analyst at Reason Foundation and Chair of the XBRL US State and Local Disclosure Modernization Working Group.

Materials available for reviewers include the Taxonomy, in XML and spreadsheet format, a Taxonomy Architecture Guide, and six sample instance documents. Those reviewing the taxonomy will have an opportunity to post comments related to individual elements and the structure of the taxonomy.

The XBRL US State & Local Working Group is also hosting Municipal Finance Data Forum Midwest, on October 3 in Naperville, IL. Learn more and register: https://xbrl.us/events/muniforum-20191003/

Members of the XBRL US State and Local Working Group include Aquorn Inc., Bond Intelligence, DataTracks, Crowe LLP, Ez-XBRL Solutions, Gray CPA Consulting, Intrinio, IRIS Business Services LLC, Lehigh University, Middle Tennessee State University, Neighborly Investments, Novaworks LLC, Reason Foundation, Thales Consulting (CAFROnline), Touro College, Truth In Accounting, Northern Illinois University, the University of Maryland, the University of South Florida, and Workiva. Observers to the Working Group include NASACT (the National Association of State Auditors, Comptrollers and Treasurers) and the U.S. Census, among other organizations.

About XBRL US

XBRL US is the non-profit consortium for XBRL business reporting standards in the U.S. and represents the business information supply chain. Its mission is to support the implementation of business reporting standards through the development of taxonomies for use by U.S. public and private sectors, with a goal of interoperability between sectors, and by promoting XBRL adoption through marketplace collaboration. XBRL US has developed taxonomies for U.S. GAAP, credit rating and mutual fund reporting under contract with the U.S. Securities and Exchange Commission and has developed industry-specific taxonomies for corporate actions, solar financing, and surety processing. http://xbrl.us

Access the public review: https://xbrl.us/xbrl-taxonomy/2019-cafr/

Learn about the State and Local Working Group: https://xbrl.us/home/government/state-and-loc-l-government/

Learn more about the Municipal Finance Data Forum: https://xbrl.us/events/muniforum-20191003/

View the Will County, Illinois financials: https://www.willcountyauditor.com/financial-and-statistic-l-reports

View source version on businesswire.com/news/home/20190905005876/en/

Michelle Savage, michelle.savage@xbrl.us, 917 747 1714

Ohio Supreme Court: Municipal Bond Buyers Do Not Automatically Acquire Right To Sue.

Ohio law does not automatically transfer to the buyer of a municipal bond the seller's right to sue a financial institution overseeing the repayment of the bonds, the Ohio Supreme Court ruled.

A Supreme Court majority decided Aug. 22 that unless the right to file a lawsuit is expressly assigned to the buyer when a bond is purchased, the buyer does not acquire the right. Writing for the Court majority, Justice Melody J. Stewart stated that purchasers of distressed bonds incorrectly concluded that R.C. 1308.16 gave them the right to sue Huntington Bank for breach of contract. Huntington served as a trustee overseeing the nearly \$6.6 million in revenue bonds issued for a Lucas County nursing home that went bankrupt.

Chief Justice Maureen O'Connor and Justices Judith L. French and Michael P. Donnelly joined Justice Stewart's opinion.

Justice Patrick F. Fischer concurred in the judgment. Justice Sharon L. Kennedy concurred in judgment only with a written opinion joined by Justice R. Patrick DeWine.

In 1998, Lucas County issued \$6.59 million in revenue bonds to back construction of the Villa North Health Care and Rehabilitation Center. The agreement exempted the bonds from federal taxes but made it clear that Lucas County was not obligated to pay back the borrowed money. Rather, it would pay the bondholders only what it received from the project's owner, the Foundation for the Elderly.

Huntington Bank entered into an agreement with the county, known as a "trust indenture," in which the bank would earn a fee for collecting the bond payments and distributing the funds to the bondholders.

The project ran into difficulties. In 2003, the foundation defaulted on about \$420,000 in principal and interest payments. A new entity, Benchmark Health Care of Toledo, assumed the nursing home lease, but it also defaulted by the end of 2003. In May 2004, Huntington informed the bondholders that Benchmark filed for reorganization through Chapter 11 bankruptcy. After two attempts at reorganization, the plan failed in 2009, and Huntington foreclosed on the property.

An investor, through a fund named Paul Cheatham IRA, began purchasing the Villa North bonds in 2003 as part of a risky investment strategy. His investment advisers identified distressed, nontaxable bonds and urge investors to buy them at a discount. The buyers purchased the bonds with the hopes that any problems causing the value of the bonds to drop would be remedied and the bonds' value eventually would increase. Cheatham IRA continued to purchase Villa North bonds, paying 32 cents on the dollar, after Benchmark filed for bankruptcy.

In the end, Huntington was able to collect only about \$340,000, paying bondholders 5 cents on the dollar.

Cheatham IRA filed a class action lawsuit against Huntington Bank, alleging the bank breached the trust indenture, and that Huntington could have done more to protect the bondholders against the mismanagement of the Villa North project. Cheatham asked the Lucas County Common Pleas Court to certify a class of more than 50 bondholders, and the bank objected.

The trial court ruled that Cheatham IRA did not have the same rights to sue as the original bondholders and that they could not be joined together as a class. The court stated that many of the alleged breaches by Huntington occurred before the fund bought the bonds, and that R.C. 1308.16(A) did not transfer to the subsequent bondholders the right to sue for acts that occurred before they bought the bonds.

Cheatham IRA appealed to the Sixth District Court of Appeals, which reversed the trial court and ruled that the fund did acquire the right to sue Huntington. The bank appealed the decision to the Supreme Court, which agreed to hear the case.

Justice Stewart explained that under common law, only the person injured can sue to recover from an injury, unless that person expressly transfers the right to another. The Sixth District found that in the case of securities, Ohio law made an exception, and that R.C. 1308.16(A) gives the purchaser of a security "all rights in the security that that the transferor had or had power to transfer." The Sixth District interpreted "all rights" to include the right of the original bondholder to sue for breach of contract based on a breach that occurred when the original bondholder owned the bond. In this case, Cheatham IRA acquired to right to sue when it bought the bonds, even if the "injury" occurred before they bought the bonds, the appeals court ruled.

The Supreme Court disagreed. The opinion explained that a "chose in action," which includes the right to sue, belongs to the owner of a piece of property. The right to sue does not automatically transfer to a buyer of property, such as a bond. If the agreement to sell does not expressly include the seller's assignment of the right to sue to the buyer, no right transfers, the Court stated.

The majority opinion noted that R.C. 1308.16(A) is Ohio's version of the Uniform Commercial Code's (UCC) section 8-302. Nearly every state adopted similar versions of the UCC to bring uniformity to business laws, and the Court stated the UCC is considered to "make uniform the law among the

various jurisdictions." No other jurisdiction has interpreted UCC 8-302 as overruling the common law rule that a right to sue does automatically transfer, the Court stated.

"The Cheatham IRA has been clear that its claim is based on Huntington's alleged failure to act upon notice of the initial default. Only those who owned the bonds at the time of the original default could bring an action for that breach of the trust indenture," the opinion stated.

The Court majority also stated that it expressed no opinion on allegations made by Cheatham IRA against Huntington for actions that occurred after the fund bought the bonds.

In her concurring opinion, Justice Kennedy stated that the Court need look no further than the "plain and unambiguous language of R.C. 1308.16(A)" to conclude that a buyer of a municipal bond does not automatically acquire the right to sue.

R.C. 1308.16(A) provides that a purchaser of a security acquires "all rights in the security that the transferor had or had power to transfer." While the phrase "rights in a security" is not defined in R.C. Chapter 1308, Justice Kennedy wrote that the common dictionary definitions of the words lead to only one interpretation — that the buyer of the bond can acquire only the legally recognized title to the bond that the seller had the power to transfer.

The opinion further stated that "rights in a security" does not encompass the "trust indenture." A trust indenture is an agreement governing a trustee's conduct and the trust beneficiaries' rights. It is not a security. To find the right to sue based on a violation of the trust indenture, the Court would have to read the term "related to" into the phrase "all rights in the security," which statutory construction does not permit, she concluded.

The Highland County Press

September 5, 2019

Avoid Muni Bonds Issued By New Jersey, California And New York, Invest Elsewhere.

How often have you heard a value equity manager say his sector is overdone? Or have you ever heard a growth manager shout from the rooftops that growth stocks are overvalued? Probably not.

Well, as a bond manager I will break the rules and tell you municipal bonds issued by high-tax states are overvalued. Grotesquely overvalued.

These nose-bleed-high municipal bond prices in California, New York, New Jersey, Oregon and Minnesota are literally erasing the tax advantages they were intended to create. Remember, high prices equal limbo low yields.

In fact, yields in the high-tax states are so low that most investors in those states who invest in 1-10 years will be better off either investing in municipals out of their state of residence or investing in taxable corporate bonds.

Continue reading.

Forbes

The Power of Scarcity.

The fast food world gave us an interesting case study in supply and demand last week. By now you've no doubt heard about The Chicken Sandwich, the surprise superstar menu item from Popeyes Louisiana Kitchen that's launched 1,000 blog posts, op-eds and thought pieces. According to reports, the Cajun restaurant sold out of its entire seven-week inventory in just over two weeks.

As what often happens when demand outpaces supply this dramatically, the value of the Popeyes sandwich has exploded on the secondary market. One Maryland man managed to sell his for \$100, an incredible 2,400 percent markup over the retail price of \$3.99.

There are a few lessons investors can learn here—one of them being that people put a premium on scarcity.

Continue reading.

Forbes

Frank Holmes

Sep 3, 2019

Public Finance And Public Policy: Insights From 5 Experts

In Boston there is always one harbinger of fall you can count on. No, it's not the changing colors of the tree leaves. It's the plethora of moving vans and overstuffed cars crowding the streets as students make their way into dorms and back to class.

It's back to school for their professors as well. While traditional academicians almost without exception have Ph.D. after their names, there is emerging a new group, the "Practitioner Professor": men and women who have spent their lives building accomplished careers in their field are now coming into the classroom to share their knowledge as well as reflect on it themselves.

Interestingly, one area that has benefited by this growing trend is public finance. There are numerous schools of public policy around the nation, but very few actually offer classes much less degrees or certifications focused on public finance or the municipal bond market.

Continue reading.

Forbes

Barnet Sherman

Sep 3, 2019, 09:14am

Munis in Focus: Joe Mysak on Ridership (Radio)

Munis Editor for Bloomberg Briefs, on why the falling of ridership hasn't stopped municipalities from investing in mass transit. Hosted by Lisa Abramowicz and Paul Sweeney.

Running time 06:15

Play Episode

Bloomberg

September 6, 2019

Addicted to Fines.

Small towns in much of the country are dangerously dependent on punitive fines and fees.

Flashing police lights are a common sight all along Interstate 75 in rural south Georgia. On one recent afternoon in Turner County, sheriff's deputies pulled over a vehicle heading northbound and another just a few miles up on the opposite side of the interstate. In the small community of Norman Park, an officer was clocking cars near the edge of town. In Warwick to the north, a police cruiser waited in the middle of a five-lane throughway.

These places have one thing in common: They issue a lot of tickets, and they finance their governments by doing it. Like many other rural jurisdictions, towns in south Georgia have suffered decades of a slow economic decline that's left them without much of a tax base. But they see a large amount of through-traffic from semi-trucks and Florida-bound tourists. And they've grown reliant on ticketing them to meet their expenses. "Georgia is a classic example of a place where you have these inextricable ties between the police, the town and the court," says Lisa Foster, co-director of the Fines and Fees Justice Center. "Any city that's short on revenue is going to be tempted to use the judicial system."

This is by no means just a Georgia phenomenon. Throughout the country, smaller cities and towns generate major dollars from different types of fines, sometimes accounting for more than half of their revenues. Some places are known for being speed traps. Others prop up their budgets using traffic cameras, parking citations or code enforcement violations.

Continue reading.

GOVERNING.COM

BY MIKE MACIAG | SEPTEMBER 2019

How To Build Your Own Bond Portfolio.

Summary

- The best way to build a bond portfolio is to start by thinking about the risks.
- Treasury—all interest rate risk. Investment-grade corporates—some credit risk, some interest rate risk. High-yield corporates—mostly credit risk (they behave like stocks).
- The other thing you need to consider is the length of maturity you want. The idea is to spread your risk along the interest rate curve.
- Short-term bonds = less interest rate risk and less credit risk. Long-term bonds = more interest rate risk and more credit risk.
- The key here is diversification. And yes, this is more art than science. But the bond market is much larger than the stock market. For many reasons, it is not clever to avoid it altogether.

Continue reading.

Seeking Alpha

by Jared Dillian

Sep. 8, 2019

EVENT RECAP: Institutional Fixed Income Roundtable

On Thursday, August 22nd, over 50 fixed income leaders from BDA member firms attended BDA's Institutional Fixed Income Roundtable at the Ritz-Carlton in Dallas, TX.

Attendees heard from taxable and municipal market experts, engaged in active discussions on fixed income market disintermediation, new liquidity providers, market dynamics and trends, issuance expectations, and the buy-side outlook. Following the Roundtable, participants enjoyed a cocktail and networking reception.

Below is a recap of the key issues discussed at each session.

Fixed Income Overview: Challenges and Opportunities

Discussion Leader: Dan Collins, Managing Director, Head of Fixed Income Market & Portfolio Strategy, Wells Fargo Securities

- Issuance of Treasuries are ramping up, and that trend should continue;
- The impacts of potentially negative rates and a flat-to-inverted yield curve;
- Debt to GDP ratio is concerning, but servicing of the debt is not an issue currently;
- While there are some geopolitical headwinds, there are no reasons to see a recession in the next 12 months

Legislative, Regulatory & Political Update

Discussion Leaders: Kelli McMorrow, Senior VP, Bond Dealers of America; Brett Bolton, VP, Bond Dealers of America

- BDA staff discussed the current political climate and expectations for the 2020 election cycle
- Bolton discussed BDA advocacy actions in response to the Fall 2018 request for guidance regarding private placement activities by municipal advisors
- The BDA response can be viewed here

- Staff also discussed prior meetings with the SEC and the MSRB on the issue, as well as continued work on a second letter to the SEC, and an upcoming Washington, DC fly-in to discuss the request with the SEC and leaders on Capitol Hill highlighting investor protection concerns
- McMorrow provided an update on other legislative and regulatory priorities such as FINRA Rule 4210 and GSE reform. A BDA working group is drafting a white paper on "Main Street" brokerdealer priorities in GSE reform.
- McMorrow and Bolton also gave an update on specific priority issues for the BDA –such as GSE reform, the reinstatement of municipal advance refundings, and rasing the BQ debt limit.

Market Disintermediation/New Liquidity Providers/Buy-Side Trends & Expectations

Discussion Leader: Ken Monahan, VP, Market Structure & Technology, Greenwich Associates

Presentation materials are available here

- Where is the liquidity in the future? And are the sources as distinct as they see?
- Who are the other market participants? And who are the other non-dealer market-makers? And how much of an increasing role are they playing in fixed income?
- Is auto-execution a future goal, or already here?
- This structure is common in FX and Treasuries, but remains an open question as to whether it will succeed in credit.

Bond Dealers of America

August 27, 2019

A Hot Job Market Is Causing Labor Pains for State Governments.

Peanut season is nearly upon South Carolina and, like governments across the country, the state has been scrambling to hire.

Its Department of Agriculture is lifting pay for crop inspectors to \$13 to \$16 an hour from the previous \$9.50 to \$11.50, and creating an "aide" version of the position that requires less education and experience. It is even tweaking the title to make it sound more appealing: what used to be "temporary inspector" is now a "peanut grading inspector." All this in a bid to find the 125 people it needs to help ensure peanut safety during the September to November harvest.

It is an example of what's happening nationwide. Public agencies that perform crucial functions are struggling to compete as unemployment hovers near its lowest level in a half-century. The public sector has been posting record job openings, and state governments have lost about 20,000 employees since mid-2018, based on Bureau of Labor Statistics data.

Continue reading.

The New York Times

By Jeanna Smialek

Aug. 30, 2019

The Community Reinvestment Act: What Do We Know, and What Do We Need to Know?

Abstract

The Community Reinvestment Act (CRA) was enacted in 1977 to encourage depository institutions to meet the credit needs of their communities. In 2018, the Office of the Comptroller of the Currency put out an advance notice of proposed rulemaking to gather feedback on how the CRA could be modernized. The 1,485 comment letters make clear there is no consensus on what modernization means. We argue that any revision of the regulations would be more effective if it is grounded in facts about current CRA lending. Using 2016 Home Mortgage Disclosure Act data and 2016 Federal Financial Institutions Examination Council loan files, we assess what we know about CRA lending from existing data sources and what we could analyze if we had more data and increased transparency on the data that are already collected.

Download Article.

The Urban Institute

Laurie Goodman, Jun Zhu & John Walsh

August 30, 2019

Muni Bond Demand Withstands Record-Low 30-Year Yield: Invesco

Stephanie Larosiliere, senior municipal strategist at Invesco, examines the impact of a record-low 30-Year yield on the municipal bond market. She speaks with Bloomberg's Taylor Riggs in this week's "Muni Moment" on "Bloomberg Markets."

Watch video.

Bloomberg Markets TV Shows

August 28th, 2019, 8:07 AM PDT

Cost of Infrastructure Fixes Is Going Up.

As a stalemate in Washington lingers, unsafe conditions contribute to a rise in property damage

As a stalemate lingers between President Trump and congressional Democrats over moving forward on an infrastructure package, the price of fixing U.S. roads and bridges is going up in dollars and lives.

The number of public transit safety incidents on streets, highways and bridges rose by 13% between 2015 and 2018, in part because of unsafe conditions. The amount of property damage caused by

those accidents increased by almost 20%, according to an analysis of the National Transit Database.

Additionally, the National Highway Traffic Safety Administration in 2018 reported 36,750 traffic fatalities on roads, or about 101 deaths a day, up from 97 a day in 2015. The need for road improvements contributed to some of those deaths, experts say.

Continue reading.

The Wall Street Journal

By Likhitha Butchireddygari

Updated Sept. 2, 2019 12:15 pm ET

Revolving Water Fund Pilots PFS Approach for Water Quality Improvements.

IN BRIEF

IN MAY 2019, THE REVOLVING WATER FUND AND THE CITY OF NEWARK, DELAWARE, ANNOUNCED THE CLOSING of the first ever pay-for-success transaction funding on-farm agricultural restoration activities to reduce nutrient and sediment flow into waterways.

THE REVOLVING WATER FUND POOLS CAPITAL TO SUPPORT UPSTREAM RESTORATIONS. IT AIMS TO QUANTIFY THE POLLUTION REDUCTIONS from these restoration activities, then package and sell the reductions to municipalities in the watershed seeking to cost-effectively comply with water quality standards.

IF NEWARK IS ABLE TO DEMONSTRATE TO REGULATORS THAT THEY HAVE REDUCED THEIR NUTRIENT AND SEDIMENT LOADS, NEWARK WILL PAY BACK THE FUND. The compensation will cover the costs of the project team, fund further restoration activities, and may eventually also pay back future private investors.

In May 2019, the Revolving Water Fund and the city of Newark, Delaware, announced the closing of the first ever pay-for-success transaction funding on-farm agricultural restoration activities to reduce nutrient and sediment flow into waterways.

The traditional water fund model, which has been used around the world, pools philanthropic and donor capital to support upstream restorations. The Revolving Water Fund (a collaboration between i2 Capital and The Nature Conservancy in Delaware) innovates on this model by also aiming to quantify the pollution reductions from these restoration activities, then packaging and selling the reductions to municipalities in the watershed seeking to cost-effectively comply with water quality standards enforced under the Clean Water Act.

In the Revolving Water Fund's Newark pilot, capital from the fund pays for on-farm restoration activities upstream in the Brandywine-Christina watershed. After "purchasing" these restoration activities, if Newark is able to demonstrate to regulators that they have reduced their nutrient and sediment loads, Newark will pay back the Revolving Water Fund. The compensation will revolve back into the fund, cover the costs of the project team, fund further restoration activities, and

eventually also pay back private investors in the future who may invest if the pilot proves successful.

The Revolving Water Fund was the result of years of cooperation between NGOs and regulators in the Delaware River watershed, as well as strategic infusions of philanthropic and federal grant funding to develop the model and bring it to the pilot stage. If successful, the ability to achieve regulatory compliance for water quality would be a first for the water fund model.

"Our goal is to produce pollution reductions in a way that the per-ton cost of sediment removed is covered by an offtake agreement that is economically viable to the community," said Ashley Allen, founder and CEO of i2 Capital. The Revolving Water Fund team also hopes that increasing regulator confidence in the model, ideally to be validated through the pilot, will create private investor comfort with and interest in the revolving water fund concept.

Watershed-Scale Vision

The Brandywine-Christina watershed, in the southwest region of the Delaware River watershed, covers 565 square miles from Pennsylvania through Delaware. While the area is mainly rural and agricultural, the Brandywine-Christina watershed provides drinking water to over 500,000 people each day. It also faces development pressures from the nearby cities of Wilmington and Philadelphia.

Yet 400 miles of streams in the watershed are impaired, mainly due to agricultural and sediment runoff. This means that cities like Newark, which gets the majority of its water from the Brandywine-Christina, have to spend substantial municipal resources on treating the impaired water so that it is drinkable and complies with water quality regulations. This challenge is common across the Delaware River watershed.

In the face of these water quality challenges, in 2013 the William Penn Foundation launched their Delaware River Watershed Initiative. The Initiative is a \$100 million commitment over 10 years to improve water quality in eight subwatersheds that make up the Delaware River watershed. The foundation selected NGOs in each subwatershed to create joint workplans for addressing local goals, such as nutrient reduction and improved water quality.

The Nature Conservancy (TNC) of Delaware and the University of Delaware were selected by William Penn Foundation to be collaborators within the Brandywine-Christina Watershed. Drawing from their experience from engaging with landowners implementing on-farm conservation practices in the watershed, the organizations set out to build the network needed for a revolving water fund to operate.

"One of the challenges [with developing the revolving water fund] is finding enough willing landowners to partner with on implementation of the practices," said Richie Jones, former Delaware state director of TNC. "That's the importance of on-the-ground partners who are building those relationships to implement the work being paid for."

Partnerships established through the Delaware River Watershed Initiative laid the groundwork for the on-the-ground project pipeline that the revolving water fund relies on. This gave i2 Capital the momentum to apply for a USDA Natural Resource Conservation Service Conservation Innovation Grant (CIG) to support scaled implementation of the model, which they received in 2017. The CIG funding allowed i2 Capital and TNC to bring Quantified Ventures, Environmental Incentives and the Stroud Water Research Center to the project.

"The CIG came at the perfect time, because we had done all the stakeholder outreach, and the political environment and systems were in place, thanks in large part to the William Penn

Foundation and its Delaware Watershed Restoration Initiative," said Jones. The Bunting Foundation provided the startup capital for the revolving fund. Now, through pilot projects like the one with Newark, the team needs to test if they can cover the costs of staffing the program and implementing projects while also generating a return on capital back into the revolving fund.

Regulatory Challenges Create Opportunity

The Revolving Water Fund aims to tap into the regulations in Delaware and Pennsylvania that require municipalities to reduce the nutrient and sediment pollution loads in their waterways. These forms of contamination are regulated through total maximum daily load limits (TMDLs) and municipal separate storm sewer system (MS4) permits. The fund's argument is that municipalities can achieve their regulatory goals for protecting water quality through conservation activities on agricultural lands. Basically, to stop the water from getting impaired upstream before it reaches the municipality.

"Regulators will be on board with this if you can prove the water fund moves money to the highest-efficiency, lower-cost avenues of compliance, which then gives investors confidence because they know that regulators already understand what we are trying to accomplish," said Jones.

Regulatory approval of the revolving water fund approach as a way for municipalities to meet their TMDL and MS4 permits is a big step in allowing the model to be replicated more widely. Recognizing this, the Revolving Water Fund team developed a pollution reduction calculator to measure the impact of on-farm conservation activities. This provided a tool for engaging with regulators early on, as the team worked with regulators on several versions before settling on a model that both sides felt comfortable with.

"We are getting the Delaware Department of Natural Resources and Environmental Control [DNREC] and Pennsylvania Department of Environmental Protection, the two regulators, to look at how we are addressing clean water methodologies and recognizing them as consistent with the regulatory parameters that exist or need to be expanded," said i2's Allen.

New Ability to Invest Upstream

"Newark has been trying to do source water protection work, but it's been a little ad hoc," said Tom Coleman, city manager of Newark. The city had to rely on NGO partners to help them find projects, he said, which is often not the most efficient use of funding.

The city of Newark is home to the University of Delaware and is the third largest city in the state, with a population of over 30,000. The city's dense urban center has meant that source water protection projects within the city limits are few and far between. In the past, Newark faced a decision between two expensive choices for meeting regulatory requirements: building water treatment systems or implementing source water protection projects on the limited urban land available.

Now the revolving water fund makes it possible for Newark to spend money on projects across state lines in rural regions of Pennsylvania, rather than use the little land available within the city on projects that would have lesser impact. This new capacity enables Newark to essentially purchase source water protection practices — on agricultural land upstream in the Brandywine-Christina watershed — that are cheaper and more effective than projects on the highly urbanized land within city limits.

"In Newark we could only really do wetland ponds and flood mitigation, and downtown land is very

expensive," said Coleman. "It's more efficient to look upstream, it adds more tools to our toolbox."

By buying into the water fund, Newark can access cheaper source water protection practices that reduce runoff on agricultural lands in Pennsylvania, such as cover crops, grass swales and riparian restoration.

"It's no small feat to have Newark paying for agricultural restoration in Pennsylvania, but we've both spent a lot of time working with DNREC to get them comfortable," Jones said of the city and TNC's efforts.

The Revolving Water Fund also offers new flexibility for municipalities like Newark by creating a pipeline of projects that a city can pay for based on their water quality needs. Through the pilot, Newark can budget long-term to pay for water quality improvements based on need, rather than their current method of funding projects only when they are available or when funding is available.

"When the Revolving Water Fund started to get fleshed out, we were excited that it would have another organization doing the legwork to find and prioritize the projects and understand their potential water quality improvements," Coleman said.

Proving the Model

"Proof of concept is where the field [of conservation finance] hasn't yet had sufficient movement," said Allen. "Proving out this three-part operation is the precursor to raising a larger fund, which will provide the liquidity and velocity for more projects."

With the Newark pilot and future pilots, The Revolving Water Fund team wants to prove their model works across a range of contexts and states. But first, a pilot needs to successfully demonstrate the nuts and bolts of a deal – contracts for supply and offtake, regulatory approval, and investment – before the model can be replicated.

"We envision this as a private debt instrument that basically provides the ability to produce a product up-front, with the debt capital providing risk reduction," said Allen. "In this case, the private investor will take that risk, and the municipality will only pay for the product once it has the assurance that the product will work – that is, it meets regulatory approval, is scoped and will be in the ground."

Looking Ahead

"We're in phase one of implementation with the pilots, and the next phase is deploying larger-scale capital," said Jones. "The opportunity is that we can hopefully aggregate the municipalities that want to do this."

For example, Jones imagines they could use the revolving fund model to create an aggregated lending facility for a group of municipalities to get a lower interest rate when purchasing restoration activities. Companies that rely heavily on the use of water within the watershed could also be tapped as payors for the revolving fund.

This aggregation could also create opportunities for easier access to the Environmental Protection Agency's State Revolving Funds (SRFs) for clean water projects, as SRFs could lend more to the Revolving Water Fund in a large lump sum. This is easier than giving smaller loans to each individual municipality, since it requires less administration in total.

"It would be interesting to have SRF money involved in this cycle, whether that's on product development or the offtake side, a takeout for initial private investors or (probably more compelling)

as liquidity for the municipal offtake," said Allen.

As the Revolving Water Fund proves out its first pilot and looks to further projects, the team sees further applications beyond nutrient reductions.

"The next frontier for the water fund is around climate resilience," said Jones. "How do we build in flood resiliency in watersheds like Brandywine-Christina, and could we use agriculture lands to retain water?"

Conservation Finance Network

by Allegra Wrocklage

August 28, 2019

Fitch Ratings Responds to Investors' Muni Debt Questions Following Chapter 9 Ruling.

Fitch Ratings-New York-21 August 2019: Though the First Circuit Court's Chapter 9 ruling centered around a transportation authority in Puerto Rico, the wide-reaching nature of the ruling necessitates a change to how special revenue and 'true sale' municipal debt is analyzed, according to Fitch Ratings during a webinar it held earlier this month.

The webinar followed Fitch's release of a criteria exposure draft that proposes to introduce a ratings cap for special revenue debt and true sale structures relative to a municipality's Issuer Default Rating (IDR). The cap would be a total of up to six notches above the IDR depending on the strength of the legal security, and follows a March First Circuit Court Chapter 9 ruling related to Puerto Rico debt.

The public finance markets by and large were caught by surprise by the landmark ruling, which involved the Puerto Rico Highways & Transportation Authority. 'Since municipal bankruptcies are rare and typically resolved through negotiation, related case law is extremely limited,' said Managing Director Amy Laskey. 'The lack of precedent heightens the importance of the recent court decisions in the Puerto Rico matter.'

Fitch is proposing to apply its amended methodology to true sale structures, even though the First Circuit Decision did not address them. 'The legislative history surrounding the revision of Chapter 9 appeared to provide such a strong case that special revenue bondholders would continue to be paid during the pendency of a bankruptcy as long as pledged revenues were sufficient,' said Laskey. 'Now that the First Circuit's ruling has injected uncertainty into the payment of special revenue debt, we feel compelled to revisit the certainty of other legal protections as well.'

The criteria changes would be expected to affect fewer than 20 ratings. The limited rating impact results primarily from the very strong credit quality of U.S. municipalities, which are generally rated at least in the 'AA' category. With this strong baseline, a security rating cap of three-to-six notches above the issuer rating is not an actual constraint in the vast majority of cases. Fitch has six U.S. public finance ratings currently on Rating Watch Negative following the court ruling, which it expects to resolve once the criteria report is finalized.

Answers to the questions that Fitch analysts were asked during the webinar are detailed in the

special report, 'What Investors Want to Know: Fitch's Proposed Change to the Evaluation of Local Government Security Ratings', which was released today and is available at 'www.fitchratings.com'.

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Additional information is available on www.fitchratings.com

CDFA Releases Conduit Bond Fee Study.

Read the Study.

CDFA | Aug. 22, 2019

'It's Just Dirt': Anything Goes in Today's Muni Bond Market

- Yields on riskiest muni-debt drop to 4%, the lowest on record
- That is pushing investors into increasingly exotic deals

Last month, a risky, new deal hit the municipal-bond market. It came from a small borrower in Colorado that was looking to finance the construction of 1,200 luxury homes in the foothills of the Rocky Mountains.

It was an odd time for such a project. Denver's decade-long housing boom was beginning to show signs of cooling and, moreover, rival developers had already raised record sums to turn vast tracts of land into new communities. "There's no houses to see," said Nicholas Foley, a municipal-bond fund manager at Segall Bryant & Hamill in Denver. "It's just dirt."

No matter. The buy orders poured in anyways and, in the end, about \$20 million worth of bonds had been sold for yields as low as 4.75% on 30-year maturities — similar to the rates that investors once only reserved for relatively risk-free market behemoths like California or New York.

Continue reading.

Bloomberg Markets

Muni-Bond Refinancing Surges as Yields Hold Near a Record Low.

- 'Whole conversation with the issuer community has been reset'
- 30-year yield hit 1.9% last week, lowest since at least 2011

Like homeowners racing to lock in lower interest rates, state and local governments in August sold \$8.5 billion in bonds to refinance outstanding debt, the fastest pace since October, according to data compiled by Bloomberg. That's because the costs for governments to borrow have plummeted in the last month, when yields fell after the Federal Reserve cut rates for the first time in more than a decade on concern about a global economic slowdown and stock market swings increased the allure of the safest assets.

"The whole conversation with the issuer community has been reset in the last 30-days," Charles Peck, head of public finance at Wells Fargo & Co., said in an interview on Bloomberg TV.

"Most of 2019 has been characterized by a lack of a sense of urgency in the issuer community to get to market in anticipating that rates will stay at these crazy low levels," Peck said. "All of that changed when the 30-year Treasury rate hit 2%, tax-exempt rates hit the lowest point in almost every tenor and reinvestment rates are at their highest point in recent memory."

Refunding Boom

The jump is a welcome shift for Wall Street underwriters and mutual-funds that have cash they need to invest. Both have been eager for new bond deals since the pace slowed after the 2017 tax-cut law eliminated a refinancing tactic that accounted for billions of dollars of new bond sales each year.

Sweta Singh, a portfolio manager at Wilkins Investment Counsel, Inc. said that it's a "no brainier" for issuers to refinance since both tax-exempt and taxable rates are so low. Yields on 30-yearbenchmark bonds last week dropped to as little as 1.9%, the lowest since at least 2011, according to Bloomberg's BVAL index. It's currently about 1.93%.

"Whether it's new money or refunding, it absolutely makes sense for the issuer to come to market knowing these rate levels and how much demand there is," she said. "It completely makes sense."

Bloomberg Markets

By Danielle Moran

August 22, 2019, 10:30 AM PDT

— With assistance by Taylor Riggs