The states facing off against nature

The words climate change and municipal bonds are not often uttered in the same phrase. Yet increasingly, investors in the latter have started thinking more about the former.

From BNY Mellon Investment Management, this is Not Fixed Thinking, a podcast that brings together diverse insights on the stories behind fixed income investments. As investors, we often think stocks are sexier or more relatable, while bonds are characterized more often as the designated driver of capital markets. In short, they seem a little bit boring, but that belittles the multifaceted and at times complex nature of fixed income. In this series, we will talk with experts from across BNY Mellon Investment Management to dig into the vast depth and breadth of the bond market and the stories and themes driving it.

In New York, I'm your host Liz Young, Director of Market Strategy. Good to have everyone along.

Today I'm in conversation with Dan Rabasco, Head of Municipal Bonds at Mellon, and Kurt Custard, Chief Investment Officer at Newton Investment Management. We'll be discussing the rise of extreme weather events and the potential challenges and opportunities of attributing their risk to investments. Extreme weather is on the rise. In the US alone, 2017 and ’18 saw three hurricanes that reeked damage worth a combined $203 billion.1 What impact is this increase in extreme weather events likely to have on investing? Will investors start to price assets differently as they take climate change into consideration? And could previously desirable real estate in coastal states start to look like less of an asset? Above all, what are states doing to tackle this?

Dan: Now the States aren't standing still, you know, when the Federal Government pulled out and abdicated its responsibilities under the Paris Accords the States stepped up on a, kind of a strategic level but maybe that's a misnomer but you know to cut down on emissions, sustainability, those types of things. You had California, New York, Washington come right out of the gate and form the Climate Alliance, US Climate Alliance. They've been joined by other states to the point now there's 25 states in that group and they push back on what the Federal Government's doing.

So, they said we're going to abide by the Paris accords there's no turning back, we have to you know pick up the banner. Also, there's a Mayor's Climate Action Agenda that was also formed in 2018, you've got 397 Mayors part of that.

And one of the things that they talk about is we want to use electric vehicles; we want to get emissions down. It's good business for the auto companies, it's good for our communities in taking a stand against climate change. So, the local level knows they are on the front lines for climate change.

And I think one other thing that 29 states along with the District of Columbia and the territories are doing, they've set renewable energy standards anywhere where they want a percentage of their electric generation be renewable sources from 10 to 50 percent. So that's also a push.

And I think overall these states that I've mentioned are trying to reduce CO2 emissions, you know, reduce the 2005 level of emissions by 25% by the year 2025, that's what they're looking to do.

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1 United States Climate Alliance, 2017 Annual Report
So, they're taking a stand on this, but it boils down to what's going to happen in terms of resiliency, what are they doing to protect their communities. And there's various plans in effect.

**Liz:** So, if we accept that climate change is happening, what are some ways it's going to affect assets around the world? It's clearly not just a factor in investing, but in geopolitics. How should investors think about climate change over the near term and the long term?

**Curt:** I think that climate change is going to strand a whole bunch of assets nobody expects to be stranded. So, whether you're talking about farms in the mid-west that have droughts, whether you're talking about Miami real estate. I don't know if anybody saw the New York City plan for climate change? They're talking about having to build a dyke around Manhattan to prevent against water ingress.

So, it is a real deal and it's something that I think is going to affect supply chains, insurance rates and ultimately you know dovetails back to geopolitical risk. I mean you have countries that are low lying. Holland will be under water, the country of Holland will be under water in a four-degree world; their current dyke system won't support it. That's a big deal, alright, and that will cause geopolitical tension. So, I, I think over the next 20 years this is going to be something that, that all investors are going to have to focus on.

**Liz:** Dan, when it comes to local government investment, are there opportunities as well as challenges?

**Dan:** Well New York City has a plan roughly 10 billion dollars, and again it's a plan, 10 billion dollars to push the coastline of lower Manhattan out by 500 feet, to protect that part of the city. Additionally, they're doing things for Staten Island fortifying that. 10 billion dollars is a big figure and where I'm going with this is it's necessarily going to have to be debt financed, I mean there's going to have to be debt assurance to take care of these, you know, hardening of infrastructure programmes that are being put into effect. And that's one of the things where there's probably an opportunity for investors. If you have an entity, a municipality, a state, local government that's got a solid economy, that's diverse, that's got good reserves, that has strong revenue trends and at the same time has a plan to safeguard the community through infrastructure improvements, getting ready for climate change as it becomes more impactful and more severe, it could be an opportunity to invest in those.

**Liz:** So, what are some of the approaches a few of these municipalities are taking?

**Dan:** Are insurers, private insurers going to foot the bill? Florida had set up a quasi-state agency called Citizens Property Insurance to fill the gap when all the private insurers left the state after the hurricanes in the nineties. They had an assessment on property tax bills to build up reserves to basically insure for the state. So, we've seen that story where insurers will leave. There're swathes of California that can't get insurance because of the wildfires, and we haven't talked about wildfires at all but that's another obvious impact from climate change with PG&E going bankrupt and all that.

So, I think that's where if you're doing your own independent research, you're doing your quantitative work, you're looking at the fundamental credits of these municipalities and are they doing something that you can protect yourself to the downside as you go forward. And then the whole thing about, "Oh it's way off in the future, why should we care?" Well is it going to go from you know, let's say take NASA's figure the flooding 26 inches of rising sea level is that going to happen the year 2100? 2099? No. It's going to continue to get more severe, the impacts, as time goes by.

**Liz:** Investors watching climate change are looking for some things in particular, but should their key strategy be the same as it is for investors looking at any risk factor?

**Dan:** I think the overall key is diversification here, right? You don't want to be, you know, emphasising a lot of credits in a certain region that'll be impacted by floods, drought or wildfires. Diversify geographically, diversify by state, diversify by sector. Shy away from local GOs, you know, with their property tax focus, the tax base, maybe not as much in the way of diverse economies or financial wherewithal and you know look at revenue bonds, you know, they're well protected from climate change. Essential service type revenue bonds those are the ones
where you're not going to have that interruption in revenue. People need water, people need electricity, they're going to get that up and running quickly and so, you know, I think those are some of the keys to investing.

Thanks to Dan and Curt for their discussion on potential ways to mitigate the investment risks created by extreme weather. This final note on the way out today, if you think you should be watching the fixed income markets more closely, you're not wrong.

At BNY Mellon Investment Management, as the third-largest fixed income manager globally, we are here to help you consider the impact of the changing investment landscape on your fixed income allocations.

Visit im.bnymellon.com/notfixedthinking for more information.

From BNY Mellon Investment Management, I'm Liz Young

Definitions

**Paris Accords** The Paris Agreement (French: Accord de Paris) is an agreement within the United Nations Framework Convention on Climate Change (UNFCCC), dealing with greenhouse-gas-emissions mitigation, adaptation, and finance, signed in 2016. In June 2017, U.S. President Donald Trump announced his intention to withdraw the United States from the agreement.

**United States Climate Alliance** The United States Climate Alliance is a bipartisan coalition of around 25 governors committed to reducing greenhouse gas emissions consistent with the goals of the Paris Agreement. The Alliance is led by state governments and is focused on state-to-state cooperation to accelerate the deployment of climate solutions needed to help each achieve their climate goals.

**Mayor’s National Climate Action Agenda** Mayors National Climate Action Agenda, or Climate Mayors, is an association of United States mayors with the stated goal of reducing greenhouse gas emissions. Founded by Los Angeles mayor Eric Garcetti, former Houston mayor Annise Parker, and former Philadelphia mayor Michael Nutter, the group represents 427 cities and nearly 20% of the U.S. population.

**Revenue Bonds** Revenue bonds are municipal bonds that finance income-producing projects and are secured by a specified revenue source.

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2 Pensions & Investments as of December 31, 2018

IMPORTANT INFORMATION

No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment.

Bonds are subject to interest rate, credit, liquidity, call and market risks, to varying degrees. Generally, all other factors being equal, bond prices are inversely related to interest-rate changes and rate increases can cause price declines.

The amount of public information available about municipal securities is generally less than that for corporate equities or bonds. Legislative changes, state and local economic and business developments, may adversely affect the yield and/or value of municipal securities. Other factors include the general conditions of the municipal securities market, the size of the particular offering, maturity of the obligation, and the rating of the issue. Income for national municipal funds may be subject to state and local taxes. Income may be subject to state and local taxes for out-of-state residents. Some income may be subject to the federal alternative minimum tax for certain investors. Capital gains, if any, are taxable. Diversification cannot assure a profit or protect against loss.

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