FEDERAL RESERVE BANK OF SAN FRANCISCO

"Why Climate Change Matters to Us"

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Introduction

Good morning, everyone. Thank you for being here. I'm happy to see such a full room for today's conference. We're joined by many more on our livestream. To all of you – welcome.

Today, I thought I'd take a few minutes to address a question I've heard a lot over the past few months.

Why is the San Francisco Fed hosting a climate conference?

It's a first for us. It's actually a first for the Federal Reserve System.[1] So why this? Why now?

The answer is simple. It's essential to achieving our mission.

The Federal Reserve's job is to promote a healthy, stable economy. This requires us to consider current and future risks – whether we have a direct influence on them or not. Climate change is one of those risks.

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[1] We are not the first to talk about this. A growing amount of research and discussion has occurred throughout the Federal Reserve System on the impacts of climate change, including Rudebusch (2019), Colacito et al. (2018), Fried et al. (2019), Kahn et al. (2019), Kaplan (2019), and Stiroh (2019), to cite a few.

The risks to our mission

So how does it affect our business? The Fed has three core responsibilities: ensuring a safe and sound payment system, regulating and supervising the banking system, and conducting monetary policy. We're also public servants, who are responsible to the communities we represent. The impacts of a changing climate will affect each of these roles.

Let's first consider the payment system.

Extreme weather events like hurricanes, floods, and wildfires destroy property and disrupt essential services like health care and education. But they also impact how people buy things. Without power, electronic payment methods – debit cards, credit cards, and mobile services like Apple Pay – don't work. So you need cash for *everything*.

We think about this a lot in the Twelfth District. We manage the Cash Product Office for the entire Federal Reserve System. And it's our job to ensure that people have access to cash when and where they need it – in normal times, and particularly in times of crisis when demand spikes.

So we have to understand and prepare for the increase in severe weather events – and for the disruptions that they may cause. This is essential to ensuring that our cash services remain resilient and dependable for all Americans.

The Fed's second core function is the regulation and supervision of the banking system. And climate events are becoming an increasing area of risk for many of the financial firms we supervise.

Higher sea levels, heavier rainfalls, dryer conditions, and the associated fallout can cause catastrophic losses to property and casualty insurers – especially if the majority of their clients are geographically concentrated in the affected region. In 2018 alone, it's estimated that damages from severe weather in the United States cost insurers upwards of $50 billion.[2]

And the impact goes well beyond insurers. Including uninsured damages, that $50 billion number nearly *doubles*.[3] This impacts banks' customers, making it harder for them to satisfy their loan obligations. And this can ultimately stress banks' balance sheets. So ensuring financial institutions are regularly evaluating their exposure to climate-related risks is an increasingly important part of our work.

Finally, climate change can also influence our third function: conducting monetary policy to achieve our congressionally-mandated goals of full employment and price stability.

Early research suggests that increased warming has already started to reduce average output growth in the United States. And future growth may be curtailed even further as temperatures rise.[4] Several of the papers on the program today outline other ways in which the micro- and macro-economic environments may be impacted by climate change. While more work needs to be done to clearly understand these effects, there's little doubt that we need to recognize, examine, and prepare for these risks in order to fulfill our core responsibilities.

Perhaps most importantly, we also have to understand climate risks if we're going to effectively serve the public. In the Twelfth District, sea level changes are disrupting communities from San Diego to Alaska. Preemptive

[2] Insurance Information Institute (2019) and Aon (2019).
[3] NOAA (2019).
[4] See Rudebusch (2019), Tol (2009), Hsiang et al. (2017) and references therein for extensive reviews of the literature.

power outages and wildfires in populated areas of California are a new way of life. Really, every state in our District is somehow affected.

The impact of these events go well beyond their immediate disruptions. They can destroy wealth, exacerbate existing income inequalities, and – in the most severe cases – displace people permanently. Think of Paradise, California.

As a community-engaged organization, we need to understand these outcomes. And we need to work with local governments, businesses, and individuals to increase the resiliency of our communities. [5]

Conclusion

When you put all these pieces together, it becomes pretty clear: climate change is an economic issue we can't afford to ignore.

This isn't just a concern for the Twelfth District. Or even the United States. Countries around the world are dealing with the economic impacts of climate change. And conferences like this are essential to understanding the challenges that lie ahead – for all of us.

Ultimately, this is our job. The San Francisco Fed is a public service organization. We're responsible for the people and the communities we serve. So we have to get out in front of this issue and do what we do best.

Convene the best people and ideas. Study data and conduct research. Talk to the communities we serve – and really listen when they tell us what they need.

[5] See Federal Reserve Bank of San Francisco (2019), Kabel et al. (2017), Dancy (2018), and Carpenter (2013).

With that, I would like to thank our Economic Research Department for planning today's event, and the entire support team for executing it so well. And thanks to all of our distinguished speakers and panelists. I'm really looking forward to your presentations and a robust discussion.

Thank you.

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