

ABSTRACTS SESSION #16

1. **"Climate Stress Testing"** Hyeyoon Jung (Federal Reserve Bank of New York), coauthored with Robert Engle, Richard Berner
Climate change could impose systemic risks upon the financial sector, either via disruptions of economic activity resulting from the physical impacts of climate change or changes in policies as the economy transitions to a less carbon-intensive environment. We develop a stress testing procedure to test the resilience of financial institutions to climate-related risks. Specifically, we introduce a measure called CRISK, systemic climate risk, which is the expected capital shortfall of a financial institution in a climate stress scenario. We use the measure to study the climate-related risk exposure of large global banks in the collapse in fossil-fuel prices in 2020.

2. **"Carbon taxes and the geography of fossil lending"**
Alexander Popov (European Central Bank), co-authored with Luc Laeven
Using data on syndicated loans, we find that the introduction of a carbon tax is associated with an increase in domestic banks' lending to coal, oil, and gas companies in foreign countries. This effect is particularly pronounced for banks with large prior fossil-lending exposures, while bank capital and profitability do not play a role. Moreover, banks reallocate a relatively larger share of their fossil loan portfolio to countries with less strict environmental regulation and bank supervision. Our findings speak to the importance of a global carbon tax to prevent the reallocation of carbon emissions across national borders via financial markets.

3. **"Climate Risk Attention and Cryptocurrencies"** Carmine Russo (University of Naples Federico II)
This paper investigates the relationship between climate risk awareness and cryptocurrencies returns. By analyzing the daily time series of returns of 28 cryptocurrencies over the period April 2013-June 2021, I find that crypto returns tend to increase when climate risk awareness rises. These results suggest that investors consider cryptocurrencies a safe haven when climate risk is more salient, despite the negative impact of crypto mining on the environment.