

ABSTRACTS SESSION #17

1. **"The Effects of Climate Change on Labor and Capital Reallocation"** Paula Bustos (CEMFI), co-authored with Christoph Albert, and Jacopo Ponticelli

We study the effects of climate change on labor and capital reallocation across regions, sectors and firms. We use newly digitized administrative reports on extreme weather events occurred in Brazil during the last two decades and a meteorological measure of excess dryness relative to historical averages to estimate the effects of droughts in the local economy of affected areas, on the magnitude of the labor and capital flows they generate and on factor allocation in destination regions. We document two main results. In the short run, local economies insure themselves against negative weather shocks via financial integration with other regions. However, in the long run, affected regions experience capital outflows driven by a reduction in loans, consistent with a permanent decrease in investment opportunities. Second, we find that abnormal dryness affects the structure of both the local economy and the economy of areas connected via migrant networks. Directly affected areas experience a sharp reduction in population and employment, concentrated in agriculture and services. While local manufacturing absorbs some of the displaced workers, these regions experience large out-migration flows. Regions receiving climate migrants expand employment in agriculture and services, but not in manufacturing. Using social security data, we provide evidence that labor market frictions direct migrants to firms connected to migrant social networks, which are mostly outside the manufacturing sector. This has implications for the composition of economic activity and the firm size distribution in destination regions.

2. **"The Expectations Channel of Climate Change: Implications for Monetary Policy"** Raphael Schoenle (Brandeis University), co-authored with Alexander Dietrich, and Gernot Mueller

We measure expectations about the short-run economic impact of climate change in a representative survey of US consumers. Respondents expect not much of an impact on GDP growth, but perceive a high probability of costly, rare disasters—suggesting they are salient of climate change. Furthermore, expectations vary systematically with socioeconomic characteristics, media consumption, various information treatments and over time. We calibrate a New Keynesian model to key results of the survey and spell out two implications for monetary policy. First, climate-change related disaster expectations lower the natural rate of interest substantially. Second, time-variation in disaster expectations contributes to cyclical fluctuations.

3. **"Climate-Change Risks and the Transmission of Monetary Policy"** Takeshi Shinohara (Bank of Japan), co-authored with Takuji Fueki and Mototsugu Shintani

This paper explores how the attention to climate change risk influences the transmission of monetary policy shocks. To this end, we build indexes representing climaterelated uncertainties based on text analysis of newspaper in the U.S. and Japan. Using data for the U.S. and Japan, we estimate a local projection model with a smooth regime-switching mechanism between high and low attention to climate change risks. These regimes are characterized by potentially different effects of monetary policy shocks. Our findings are twofold. First, we find that the impact of monetary policy shocks is significantly regime-dependent on the attention to climate change risks. Second, the transmission of monetary policy shocks become weaker as the attention on climate risks are higher.