

# 2020 Junior Research Prize: Ludwig Straub and Robert Ulbricht

On April 28, 2020, during an online conference held by the Chair, **Gilles Saint-Paul** (PSE-ENS) and **Philippe Trainar** (SCOR) announced that **Ludwig Straub** (Harvard University) and **Robert Ulbricht** (Boston College) were the 2020 laureates of the SCOR-PSE Junior Research Prize for their outstanding research on “Endogenous Uncertainty and Credit Crunches”. We had the opportunity to interview Ludwig and Robert about their award-winning paper and their research path.

## Endogenous Uncertainty and Credit Crunches

Straub, Ludwig, Ulbricht, Robert, **Endogenous Uncertainty and Credit Crunches**, Working Paper, July 2018. [+](#)

Financial crises often provoke deep and long-lasting recessions, as exemplified by the 2008 subprime crisis. The reasons why financial crises are usually larger and more persistent than other types of crises—like oil or trade shocks—is not fully understood yet. Some economists, including Olivier Blanchard, former IMF’s chief economist, point at the role played by uncertainty. **How exactly does uncertainty interact with financial frictions to amplify the initial shock and slow down the subsequent recovery?**

Since the seminal work by Bloom (2009), it is well-known that **uncertainty negatively affects the economy**. Greater uncertainty regarding future business conditions induces firms to delay investments and hiring, thereby delaying the recovery. This is known as the “wait-and-see” effect. Another strand of the literature has analysed the link between uncertainty and recessions the other way around. Its starting point is that economic conditions affects analysts’ ability to forecast the future. It aims at understanding why **uncertainty rises during recessions**. The present work borrows from both approaches, in that it considers a two-way causal interaction between uncertainty and economic conditions.

At the heart of the paper lies the idea that **greater uncertainty and bad economic conditions reinforce each other, channelled through financial constraints and learning dynamics**. The mechanism is as follows. An initial tightening of credit constraints restricts firms’ access to funding. Some firms exit, which results in an increase in uncertainty as investors cannot learn about the productivity of inactive firms. Increased



uncertainty fuels investors’ pessimism, which restrict even more firms’ access to funding, and further amplify the recession. Taken together, this explains why a temporary financial shock can develop into a large and persistent “funding freeze”.

Finally, the authors calibrate their model to the U.S. economy and evaluate the quantitative role played by their mechanism in generating persistent crises. Importantly, they explicitly used micro data on analysts’ forecast to pin down

the learning parameters of the model. They find that endogenous uncertainty is

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crucial to explain the persistence of financial crises: the recession generated by a financial shock has a half-life of 5 quarters in the fixed-uncertainty case while it rises to 11 quarters in the endogenous uncertainty case. Overall, **this work highlights the role played by informational frictions**, which has important policy implications: according to the model, direct transfers to firms should be favoured over banks’ recapitalization.

