Debt and financial instability
What we know and what we don’t know

SIPA, Columbia University

Moritz Schularick
What we know from 150 years of macroeconomic history

- Crises are typically “credit booms gone bust”
- Empirically the best early warning signal for growing crisis risk is rapid credit growth
- Predictive power rises further with asset price booms and deteriorating liquidity position of the banking system
- The heart of crisis dynamics: sudden repricing of a large pool of leveraged and mispriced assets (often real estate)
The Great Mortgaging

Graph showing the ratio of bank lending to GDP from 1870 to 2010. The graph compares nonmortgage lending (dashed blue line) and mortgage lending (solid red line).
Financial fragility: 20% house price drop

Negative home equity by income group

percent of aggregate income

bottom 50%
50−90%
top10%
What we don’t know

Why excessive risk-taking?

The moral hazard view

■ Incentive and agency problems lead to excessive risk-taking of rational agents

■ Correlation between “skin in the game” and financial riskiness: increase capital

■ But evidence that higher capital ratios make financial systems safer is mixed (Jorda et al 2017)

The Minsky/Kindleberger view

■ Crises are caused by spurts of credit-fueled over-optimism and then sudden collapses of mispriced assets (e.g., Gennaioli, Shleifer, Vishny (2013); Baron and Xiong (2016))

■ Everyone in the market is caught in the same heuristic bubble.

■ Use macro-prudential and monetary policy to lean against the wind.
The **Jordà-Schularick-Taylor Macrohistory Database** is the result of an extensive data collection effort over several years. In one place it brings together macroeconomic data that previously had been dispersed across a variety of sources. On this website we provide convenient no-cost open access under license to the most extensive long-run macro-financial dataset to date. Commercial data providers are strictly forbidden to integrate all or parts of the dataset into their services or sell the data (see Terms of Use and Licence Terms below).

The database covers 17 advanced economies since 1870 on an annual basis. It comprises 25 real and nominal variables. Among these, there are time series that had been hitherto unavailable to researchers, among them financial variables such as bank credit to the non-financial private sector, mortgage lending and long-term house prices. The database captures the near-universe of advanced-country macroeconomic and asset price dynamics, covering on average over 90 percent of advanced-economy output and over 50 percent of world output.

Assembling the database, we relied on the input from colleagues, coauthors and doctoral students in many countries, and consulted a broad range of historical sources and various publications of statistical offices and central banks. For some countries we extended existing data series, for others we relied on previously unpublished collection efforts by others. Yet in a non-negligible number of cases we had to go back to archival sources including documents from governments, central banks and private banks. Typically, we combined information from various sources and spliced series to create long-run datasets spanning the entire 1870–2015 period for the first time. The table below lists the available series.