

# Lemon Cycles

Feng Dong  
Tsinghua

Ernest Liu  
Princeton

July 1, 2020

## Abstract

We build a dynamic model of endogenous credit cycles and show credit booms may cause subsequent busts. Productive firms trade assets in a pooled market featuring information asymmetry to improve capital allocations, yet a credit boom—due to either an exogenous relaxation of the borrowing limit or an endogenous rise in asset prices—attracts the creation of low-quality assets, which accumulate over-time and worsen the functioning of the market. A sufficient buildup of low-quality assets leads to a financial crisis: the market unravels, trading activities freeze, and asset prices collapse. The market eventually reopens as the crisis cleans up low-quality assets. The endogenous boom-bust cycles may be recurrent and are especially volatile if the borrowing limit is lax. We show macro-financial policies that “lean against the wind” of credit booms can improve welfare and market stability.

*Keywords:* Dynamic Adverse Selection, Credit Expansion, Building-up Systemic Risk, Booms and Busts, Macroprudential Policy.

*JEL Classification:* D82, E32, E44, G01