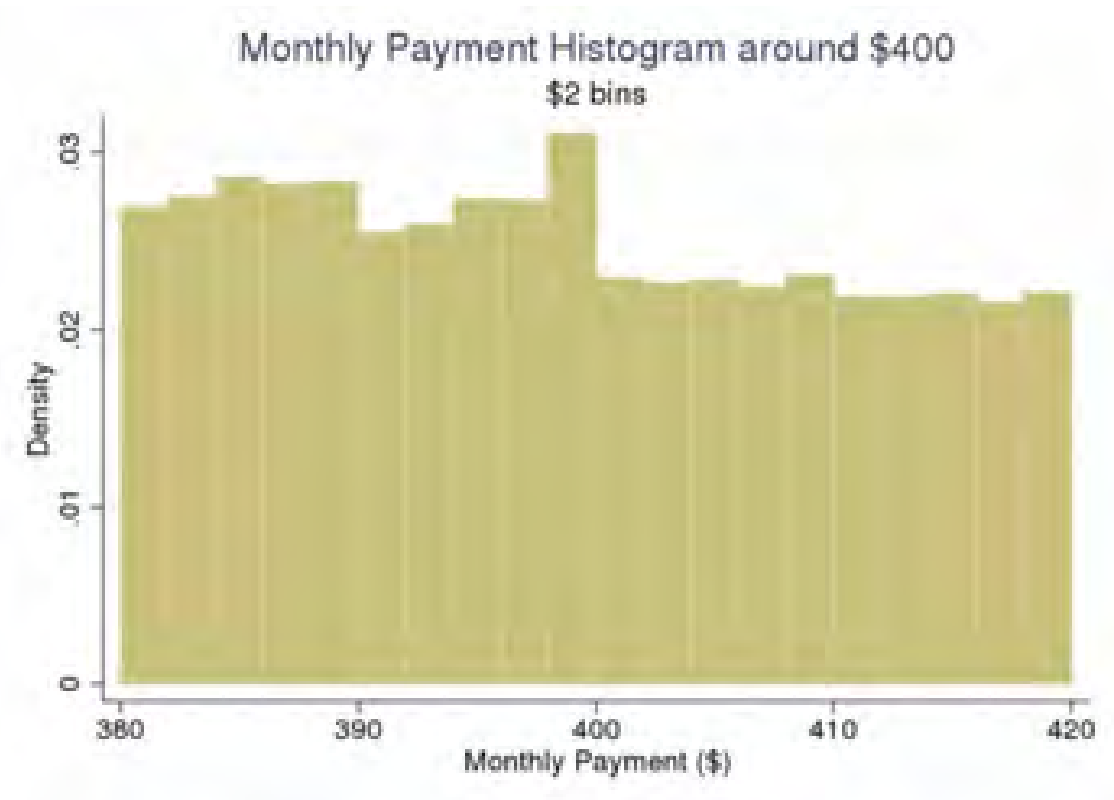


# The Monthly Payment Targeting Phenomenon



# So What About Monthly Payment Targeting?



THE FEDERAL RESERVE TAKES POLICY ACTIONS TO MOVE INTEREST RATES.....



.....BUT CONSUMERS DO NOT CARE ABOUT INTEREST RATES.



PEOPLE CARE A LOT MORE ABOUT MONTHLY PAYMENT AMOUNT.....WHICH IS WHY THEY CARE SO MUCH ABOUT MATURITY.....



.....BUT THE FEDERAL RESERVE (OR OTHER POLICY MAKERS) CANNOT TAKE POLICY ACTIONS TO TARGET MONTHLY PAYMENT AMOUNTS OR MATURITIES



SO WE ALL GREW UP THINKING THE FEDERAL RESERVE CAN MOVE AROUND BORROWER DEMAND THROUGH INTEREST RATES.....



.....BUT, AT LEAST IN THE CASE OF AUTO LOANS, INSTITUTIONS ARE THE ONES THAT IMPACT BORROWER DEMAND

# Auto Loan Summary

01

Auto loan balances are growing quite rapidly (second only to student loans).

02

Delinquencies are ticking up.

03

Growth in auto loans (and associated delinquencies) due to two factors.

a. Increase in lending to subprime borrowers (likely on account of healthy securitization market)

b. Lenders offering longer maturity, borrowers love maturity because it lowers payments

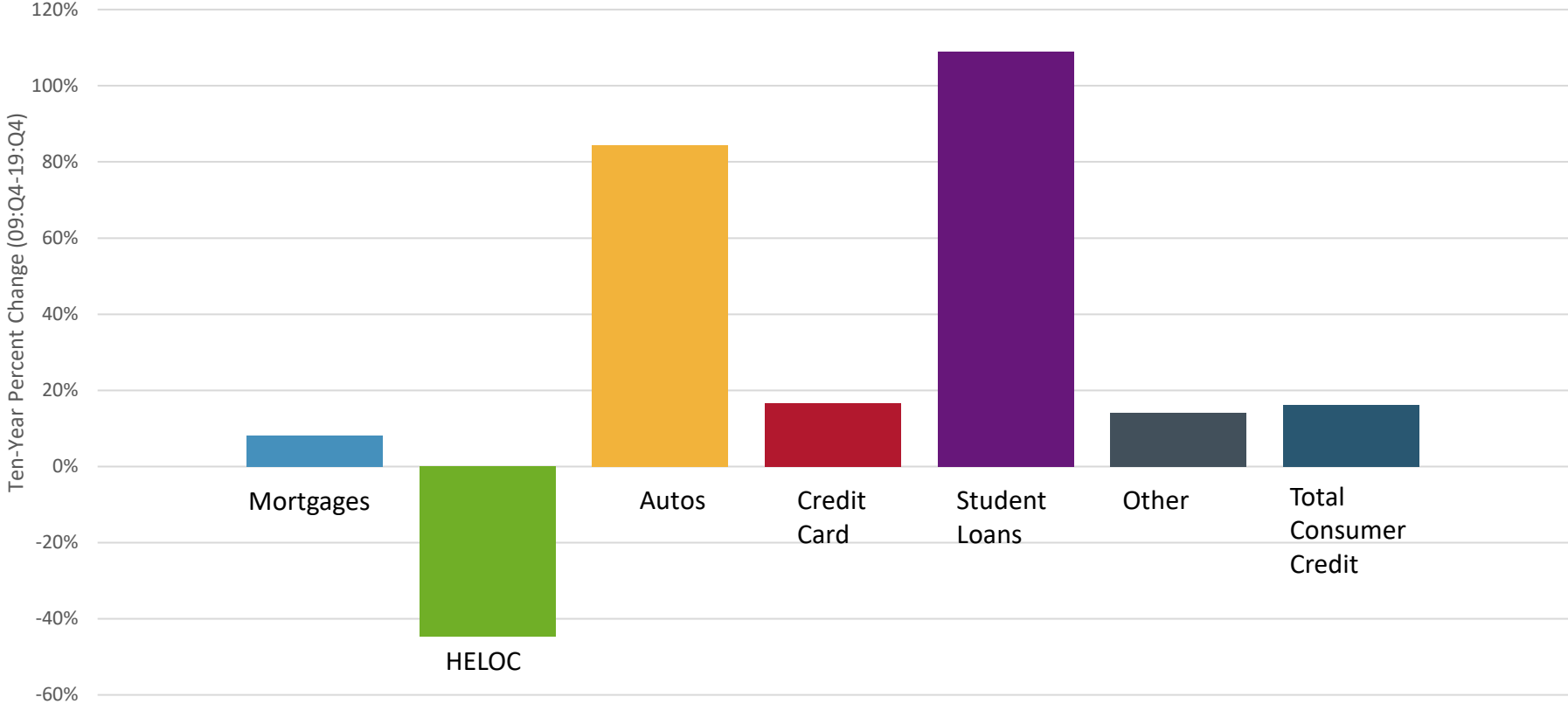
04

This market has policy implications that are not appreciated by policy makers. Lenders have substantial power in shaping aggregate outcomes.

Let's Talk About  
Student Loans: After  
All, Aren't They the  
Source of the Next  
Crisis?

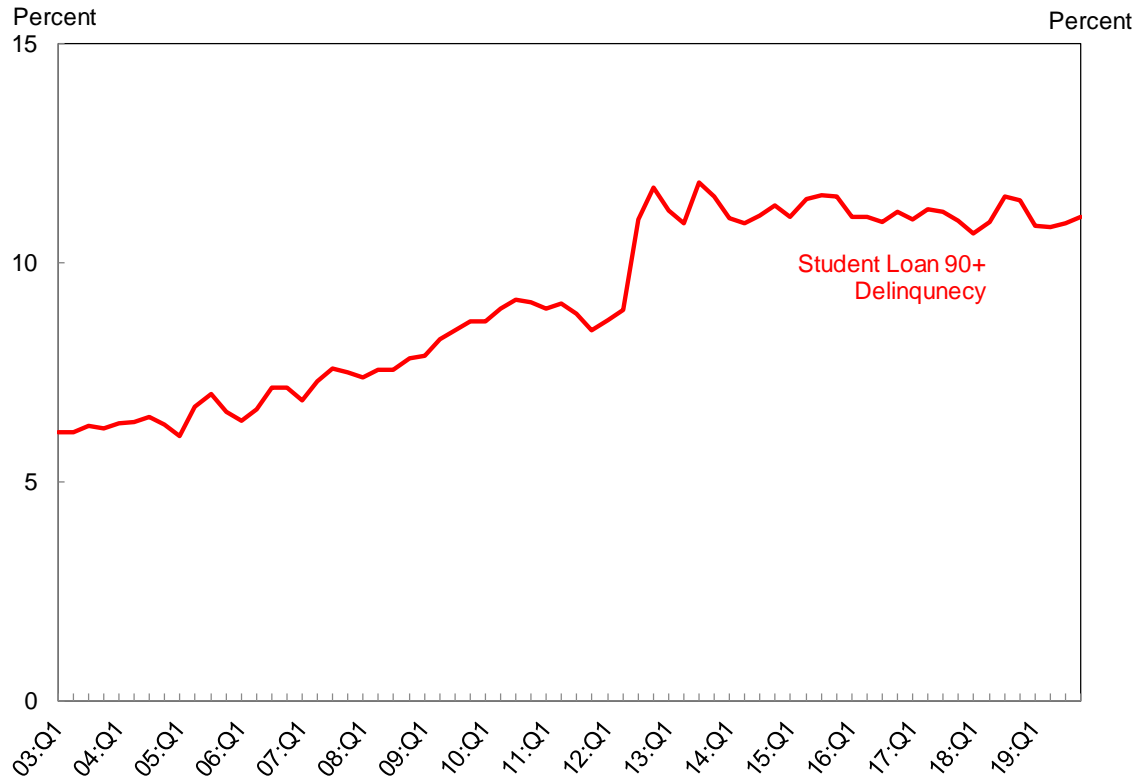
Answer: What kind of  
crisis do you have in  
mind?

# Ten-Year Changes in Consumer Credit



## Out of Pocket Expenses and Tuition Through Time by Sector





Source: New York Fed Consumer Credit Panel/Equifax

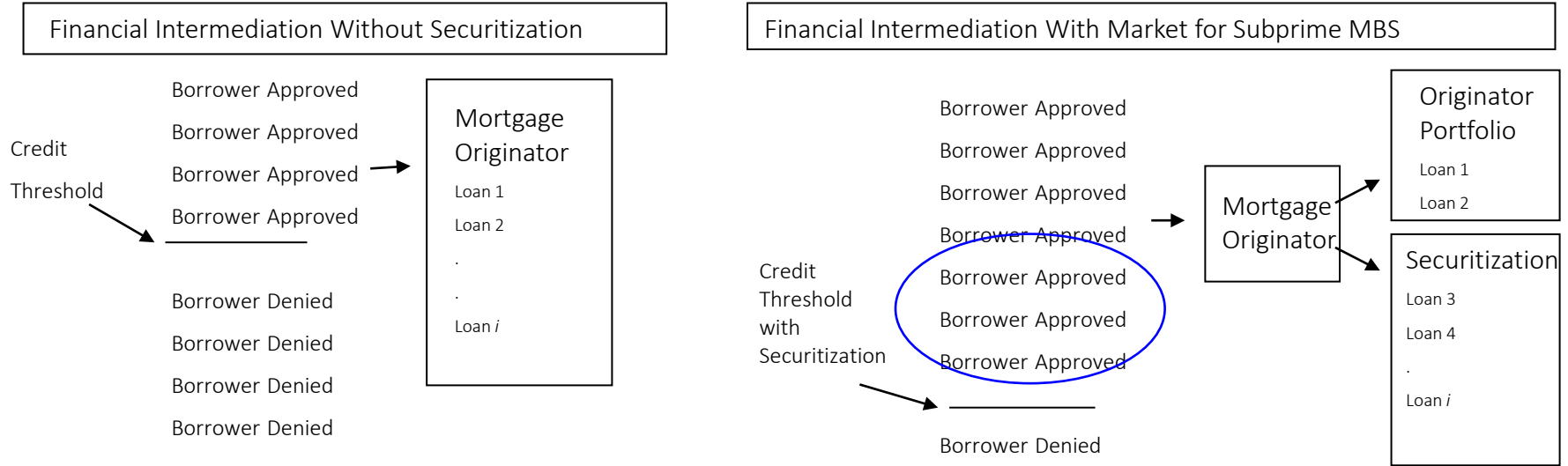
So, will student loans be the source of the next crisis?

Depends on how we define crisis....

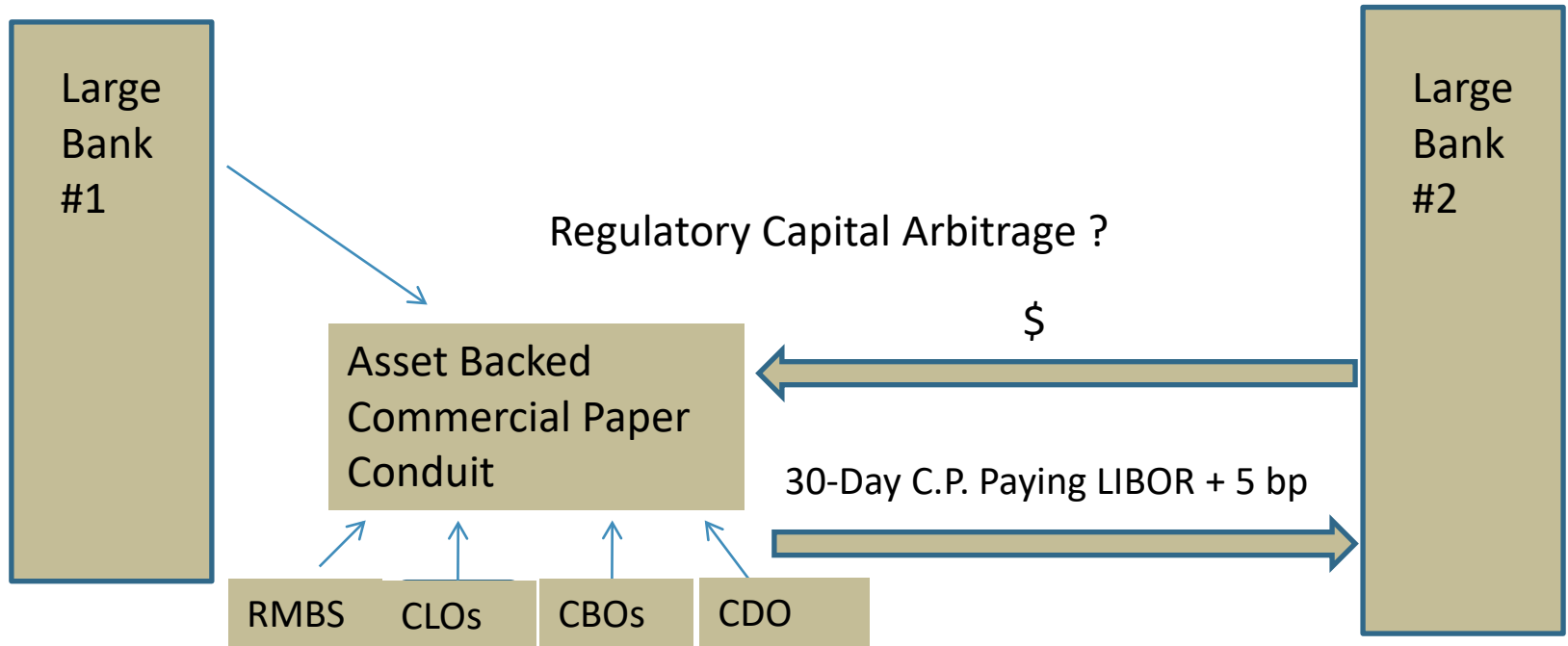
- To answer this question, it is helpful to understand the acute causes of the most recent credit crisis.
- This will help us better appreciate what crises are and how they arise.
- Then we can evaluate whether we are at risk for another.

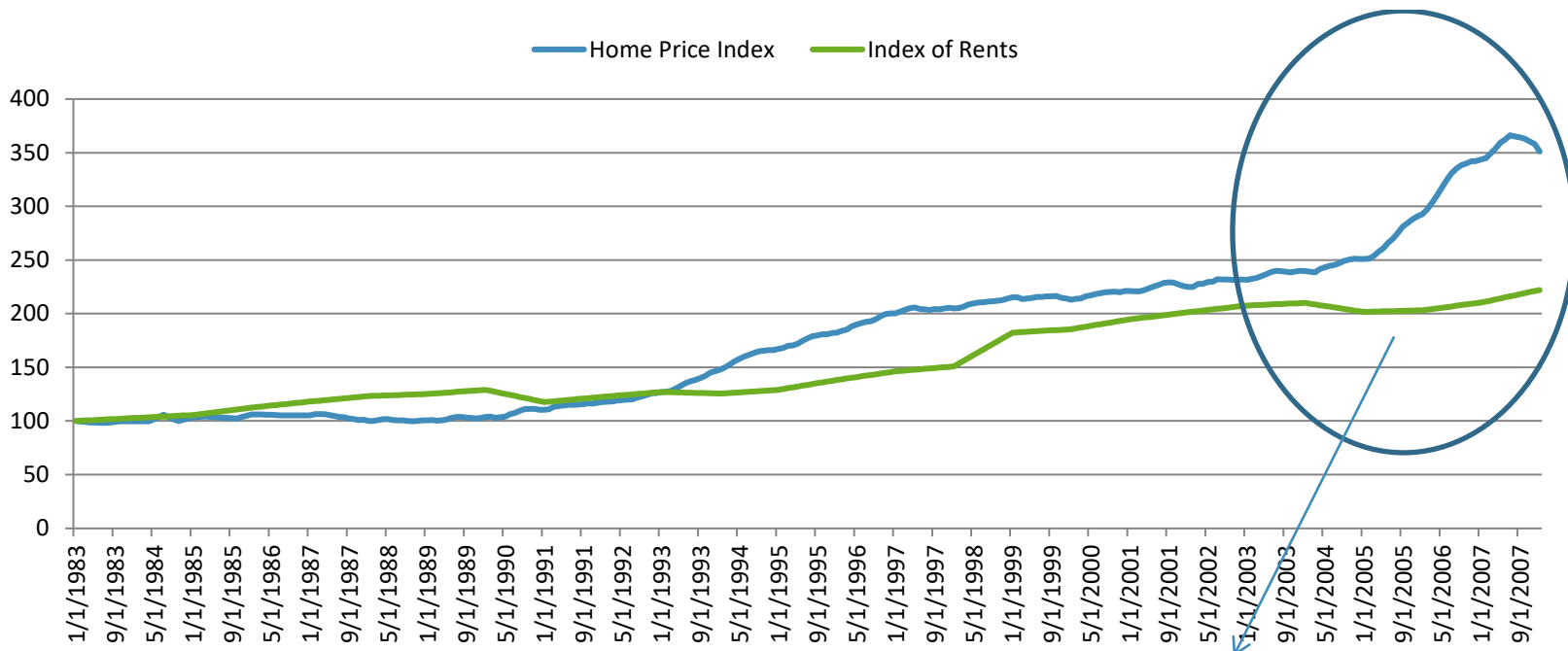


# Securitization Impacts Credit Standards: Subprime Booms



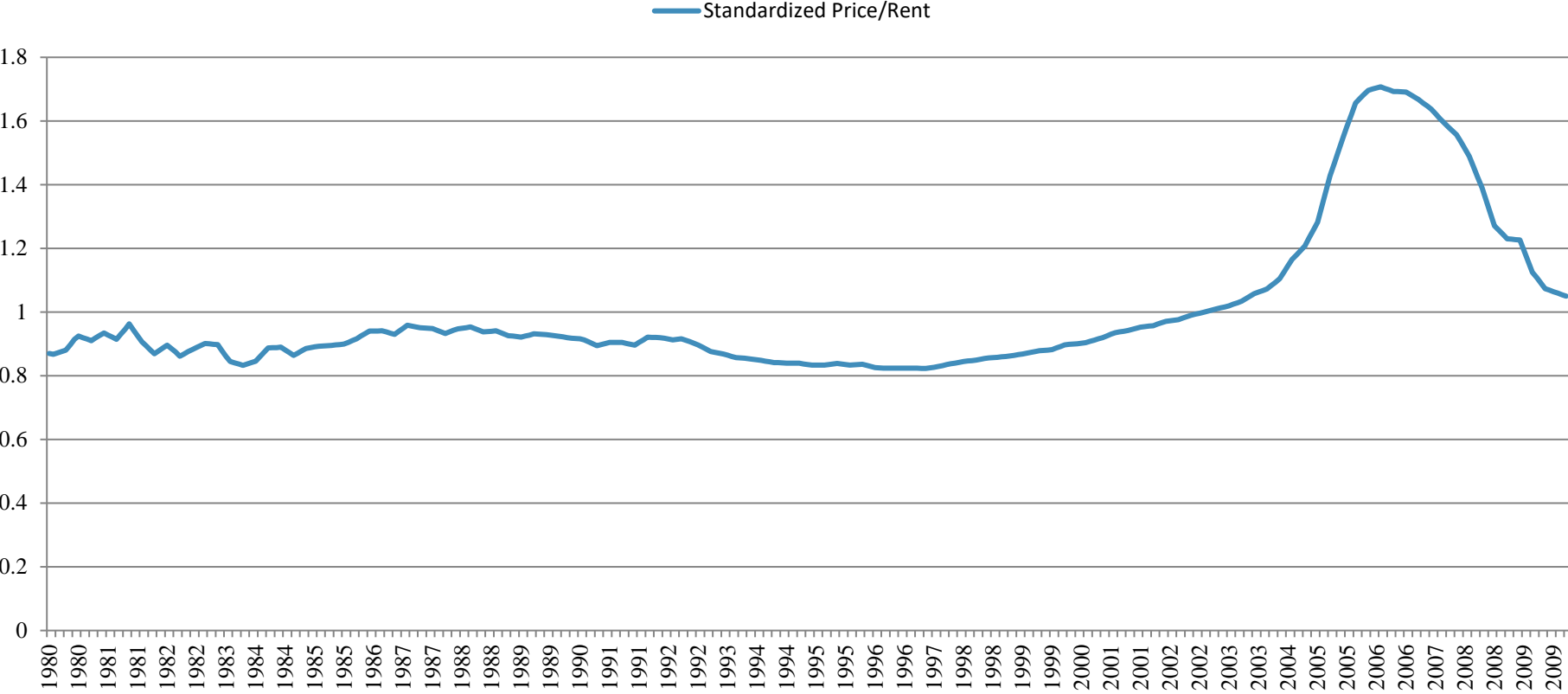
# Financial Sector Used Securitization Deals as Collateral in Financing Arrangement...



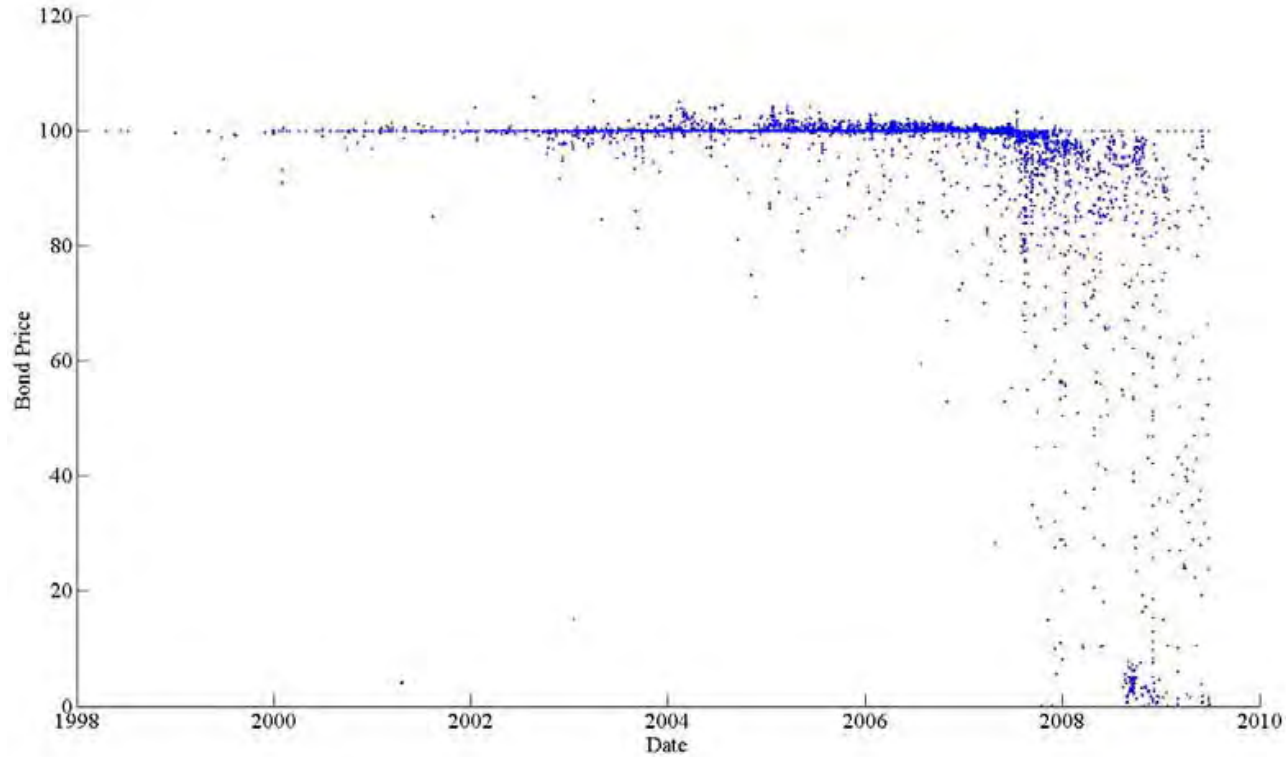


House Prices Relative to Rents – 30%, 40%, 50%, 60% above long-run average!  
 Not a coincidence based on factors influencing ratings of RMBS deals.

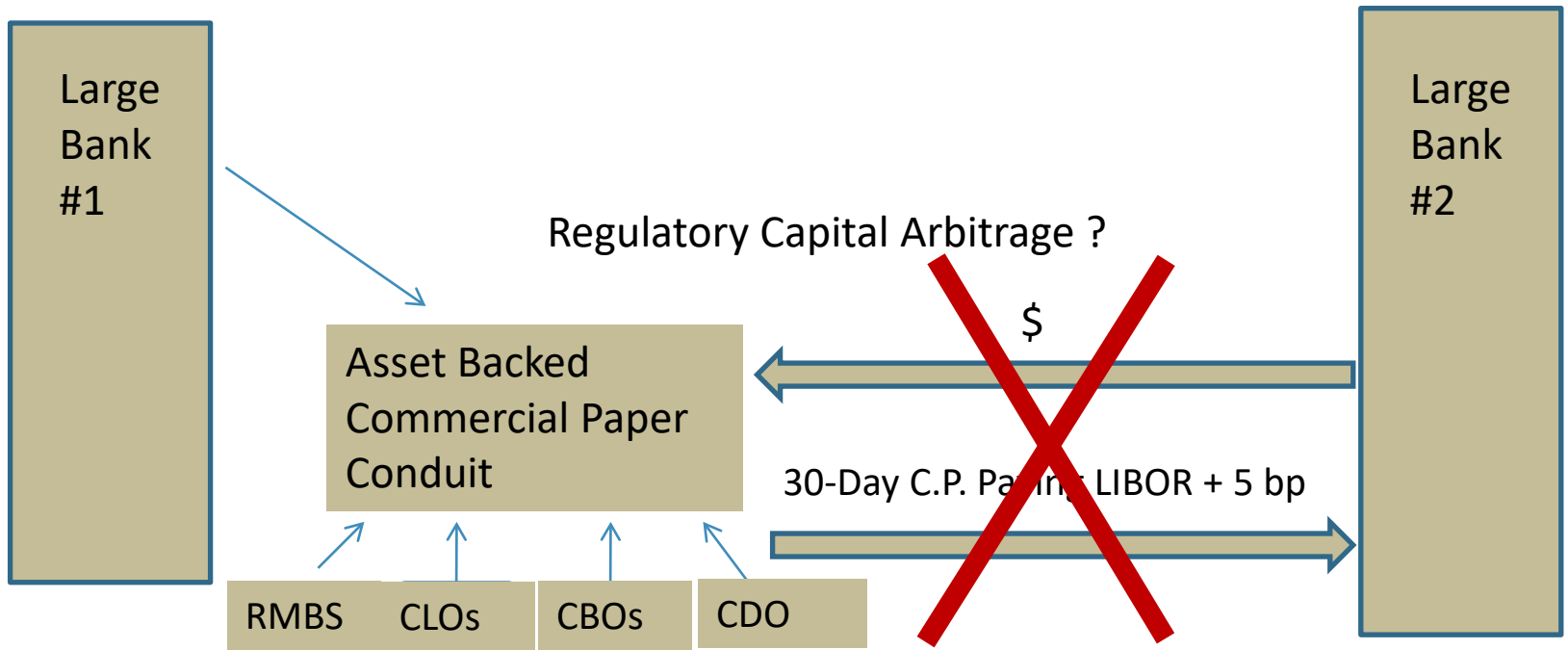
# House Prices Two Years Later



# Market Price of Subprime Bonds

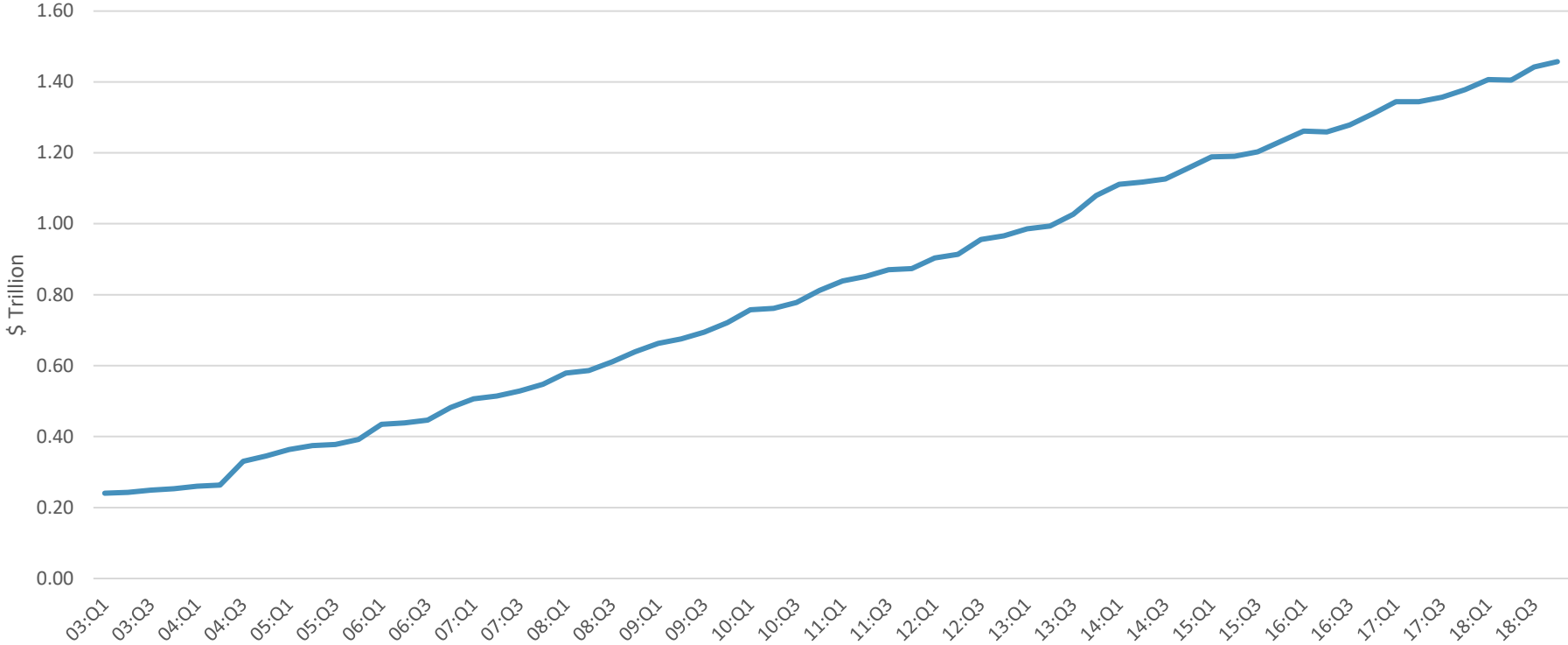


# Financial Sector Used Securitization Deals as Collateral in Financing Arrangement....

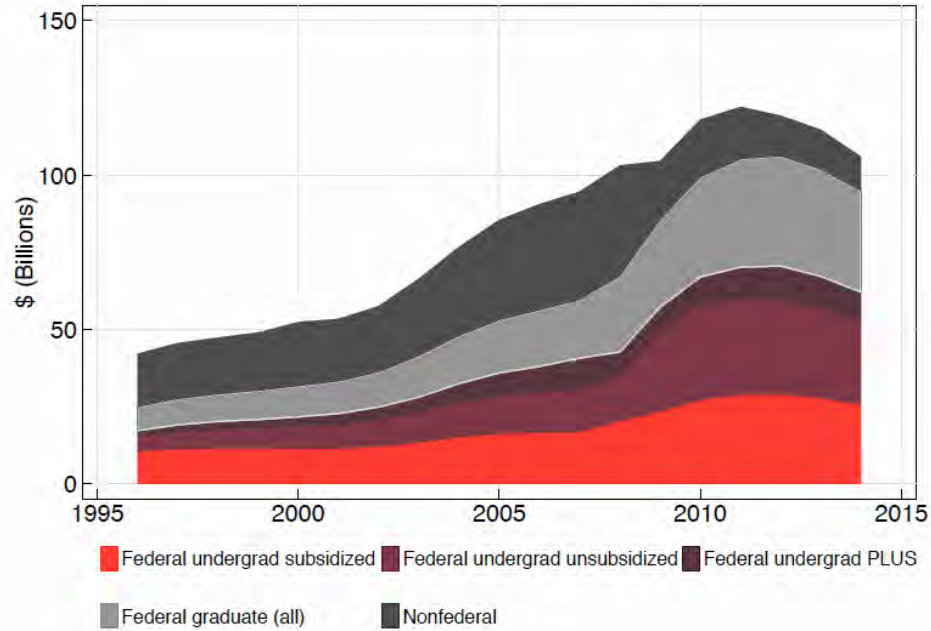


# So Where is the Next Crisis Going to Come From? Student Loans?

Outstanding Student Loan Balance



# Who is the Largest Student Loan Lender?





# Larger Student Loan Balances are Associated With...

✗ HIGHER TUITION- IN A CAUSAL WAY, NOT JUST AS A RESULT OF

✗ LESS LIKELY TO RELOCATE FOR A JOB

✗ LESS LIKELY TO PURCHASE NEW HOMES

✗ STUDENTS LESS LIKELY TO FORM FAMILIES

✗ STUDENTS LESS LIKELY TO GO TO GRADUATE SCHOOL

# Student Loan Summary

01

Student loan balances have risen at an average annual rate of 12.8% over past 15 years, but have slowed to a growth rate of 7.5% average annual growth over past 5 years.

02

Delinquencies are holding steady, thanks to income-based repayment plans.

03

Student loan amounts and tuition prices are perniciously linked.

04

Crisis is in the lives of individual borrowers steeped in debt. Not likely to trigger a tornado-like economic crisis, more like slow moving “global warming” type of crisis.

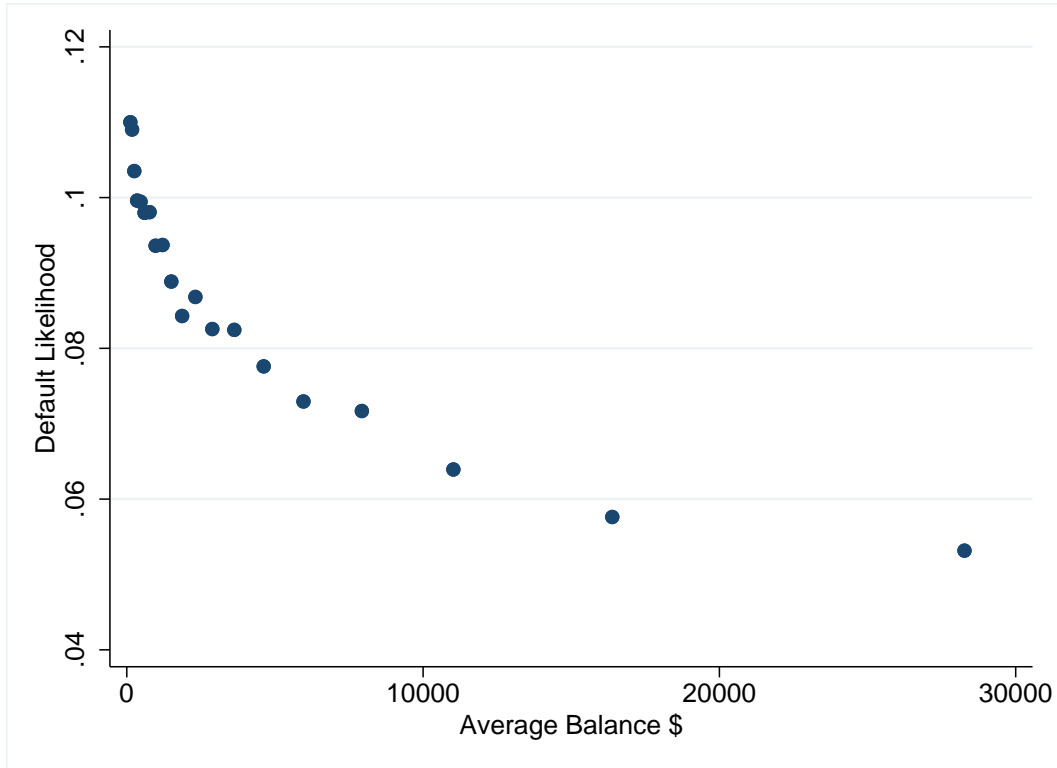
# What is the Future of Credit Modeling?

Answer: Borrowers rarely default when they have the ability to pay, so let's model borrowers ability to pay when making credit decisions.

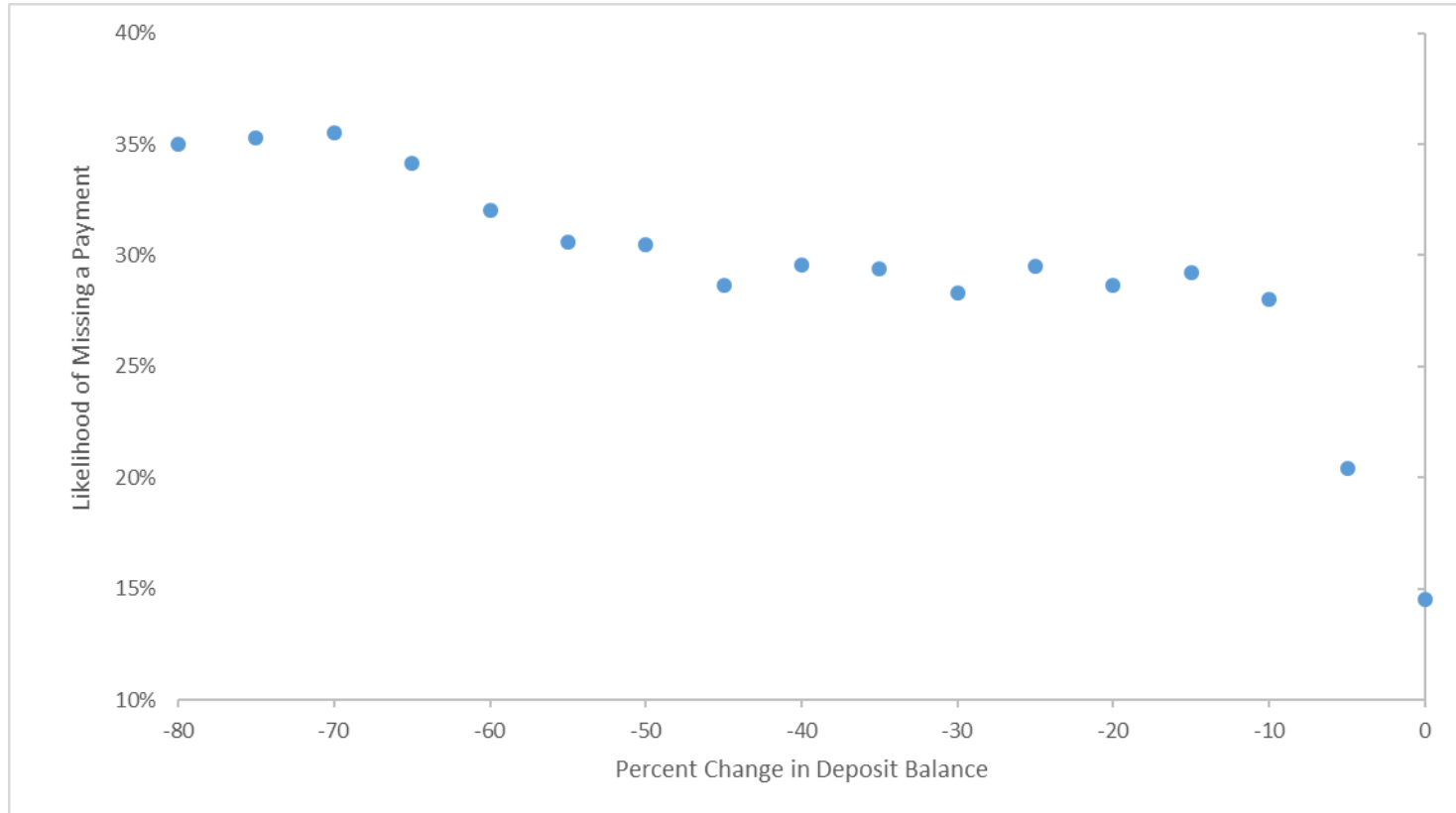
# The Concept of Leading Indicators

- The stock market is a leading indicator of the health of the economy.
- Unemployment rate is a lagging indicator of health of the economy.
- What are leading and lagging indicators in credit modeling?

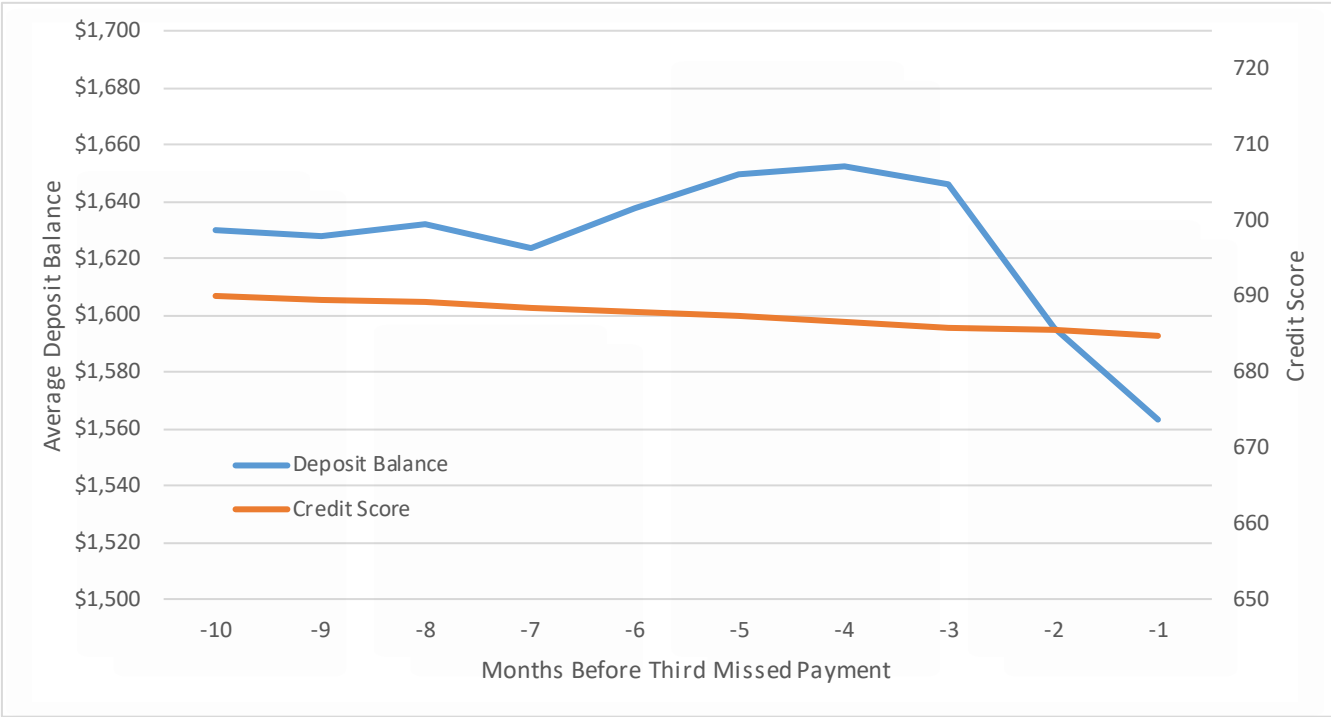
# Deposit Balances and Auto Delinquencies



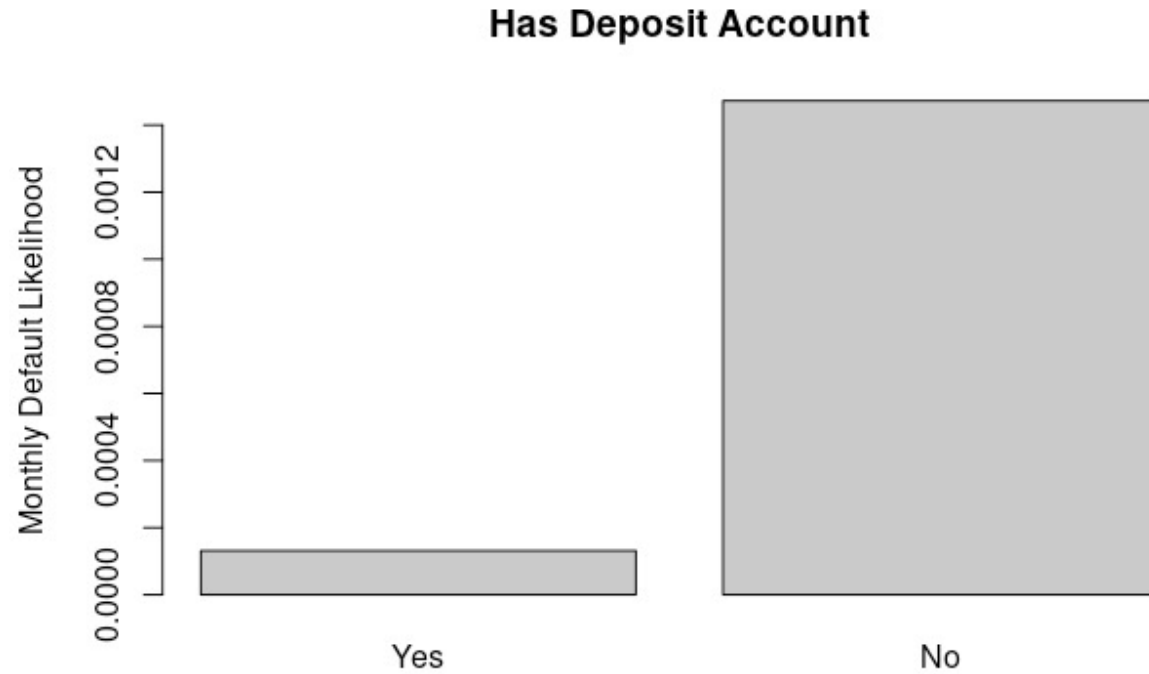
# Deposit Balance and Likelihood of Missing Payments



# Ability-to-Pay Credit Modeling



# Deposits and Credit Risk





# The Evidence is Piling Up....

## Mortgage Payments and Default

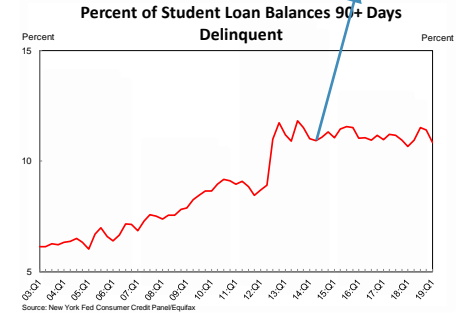
“We find that principal reductions that increase wealth without affecting liquidity have no effect, while maturity extensions that increase only liquidity have large effects. This suggests that liquidity drives default and consumption decisions for borrowers”

- Noel and Ganong

University of Chicago



### THE INTRODUCTION OF INCOME BASED PAYMENT PLANS IN STUDENT LOANS



**CONSUMERS FIXATE ON MONTHLY PAYMENT AMOUNTS BECAUSE THAT IS HOW THEY BUDGET**



Thank You

Taylor Nadauld, PhD  
Chief Economist

*March 13, 2020*