



Wharton

UNIVERSITY of PENNSYLVANIA

Interest rates and financial contracting

October 2020

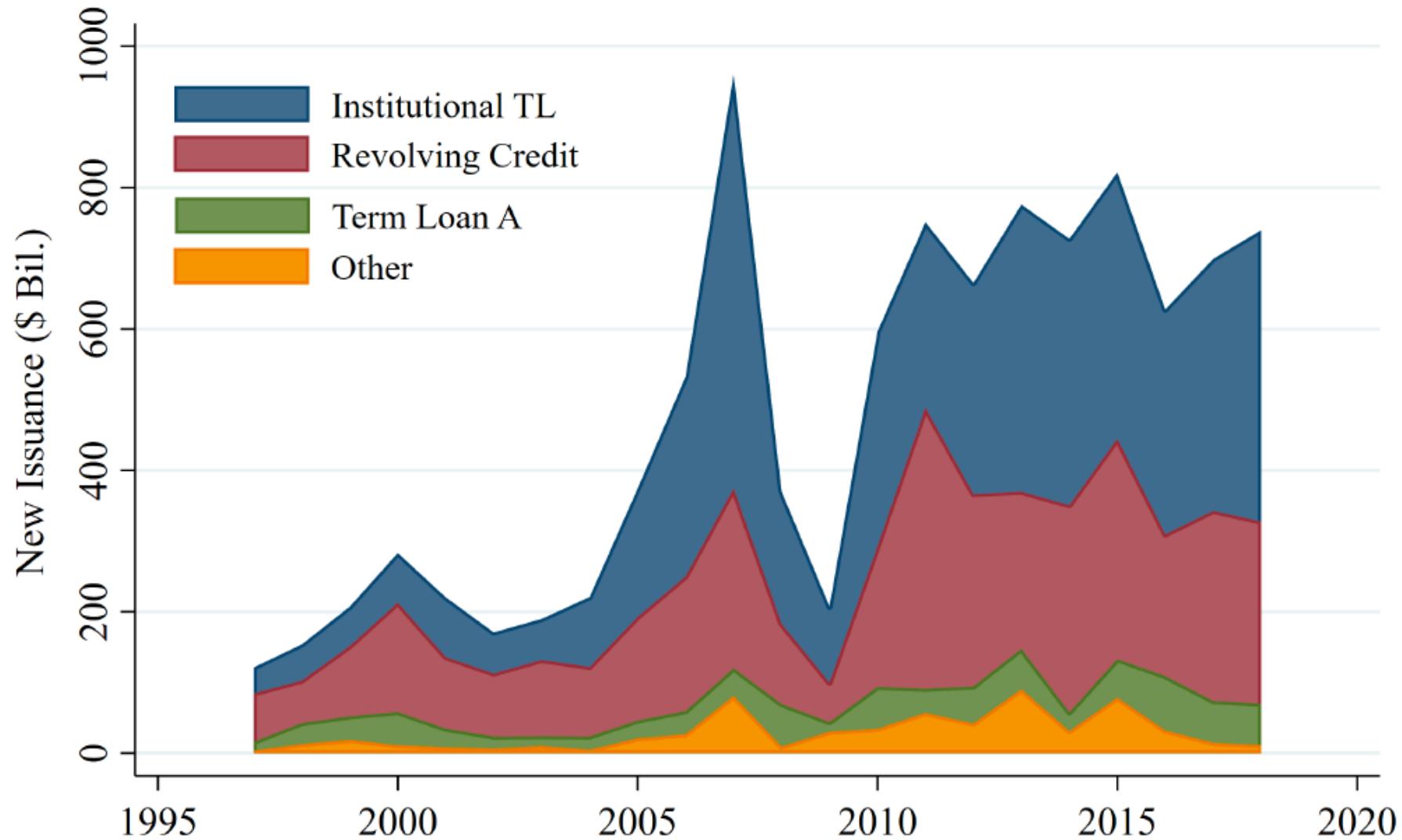
Michael R. Roberts, Wharton and NBER

Michael Schwert, Wharton

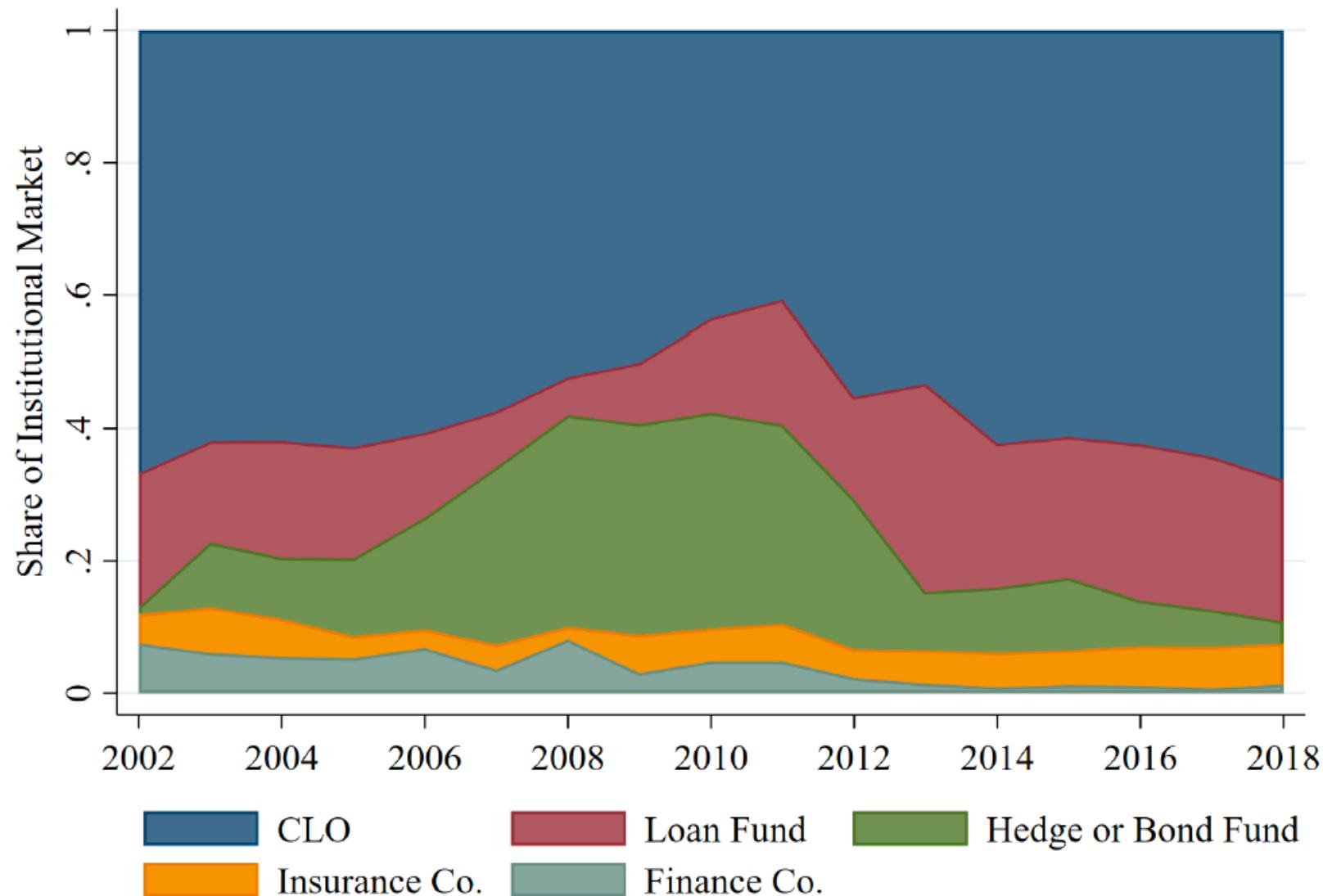
Introduction and Motivation

- Lot of work shows how interest rates (IRs) affect price and quantity of credit
- Few studies show how interest rates affect credit contracts
 - Investor returns and borrower behavior affected by
 - Fees, pricing “features”, covenants, maturity
- Goal:
 - Identify relation between interest rates and contract design
 - Infer risk-preferences and incentives of borrowers and lenders

US Loan Originations by Loan Type (Markit)

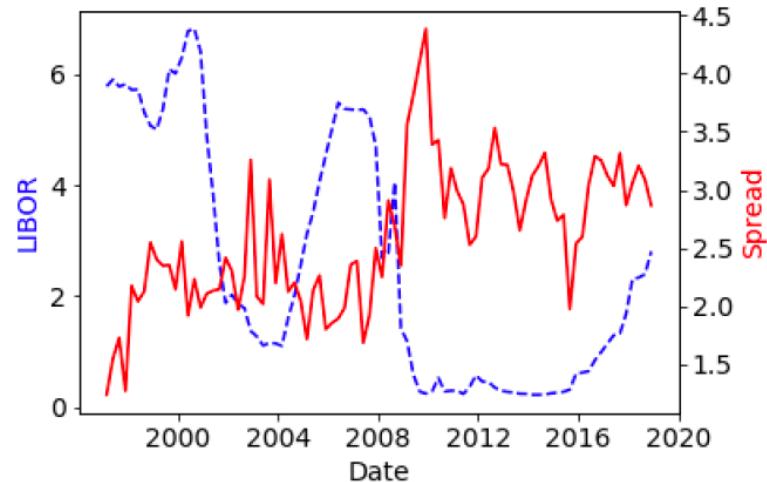


Distribution of Institutional Investors

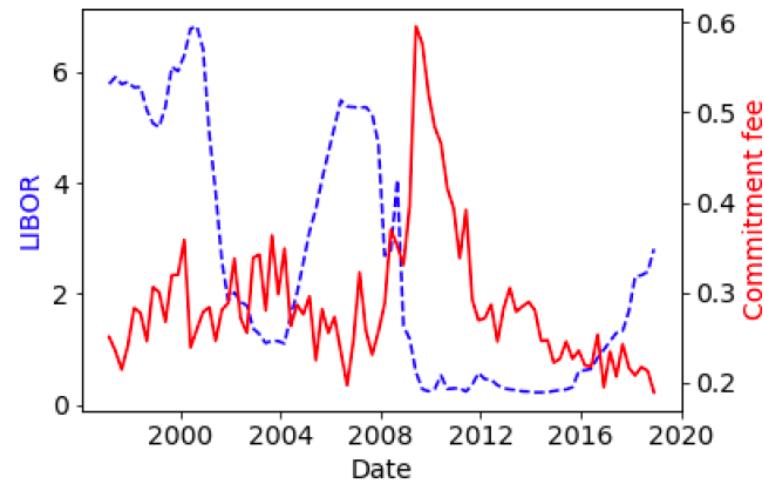


Loan pricing

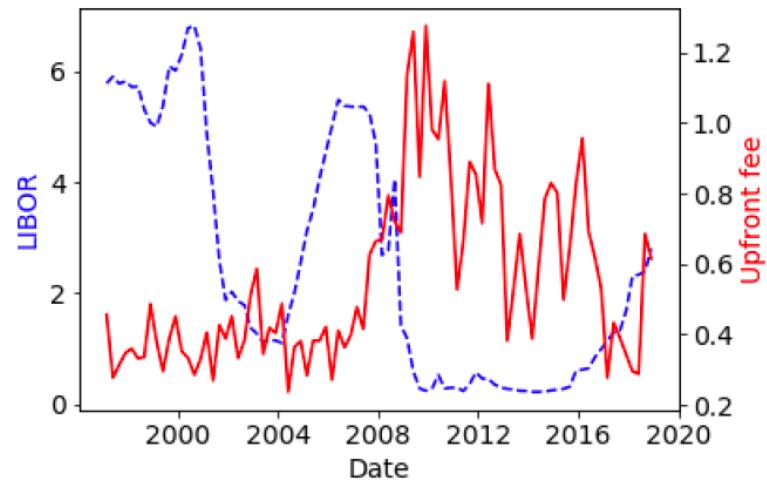
Panel A: Loan Spread



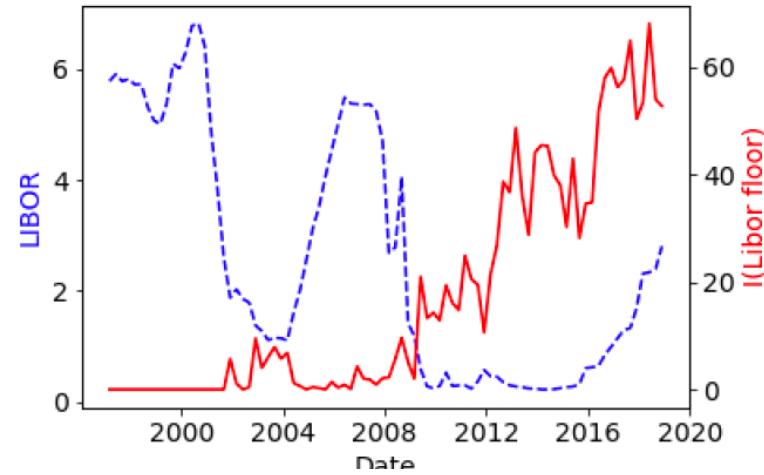
Panel B: Commitment Fee



Panel C: Upfront Fee

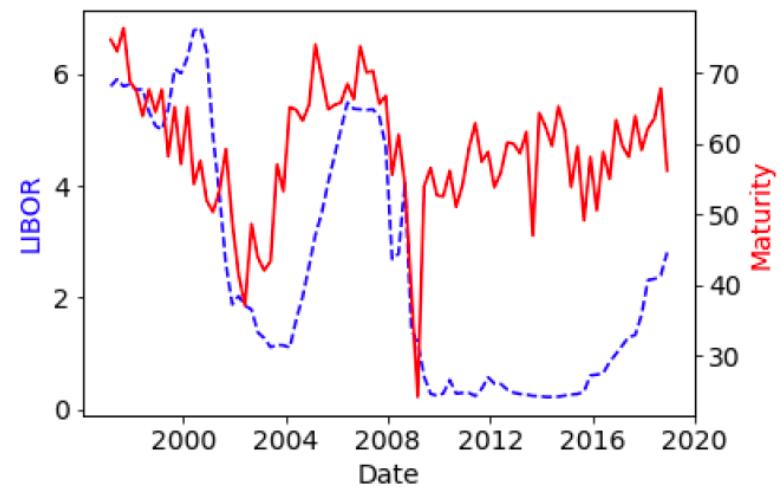


Panel D: Inclusion of LIBOR Floor

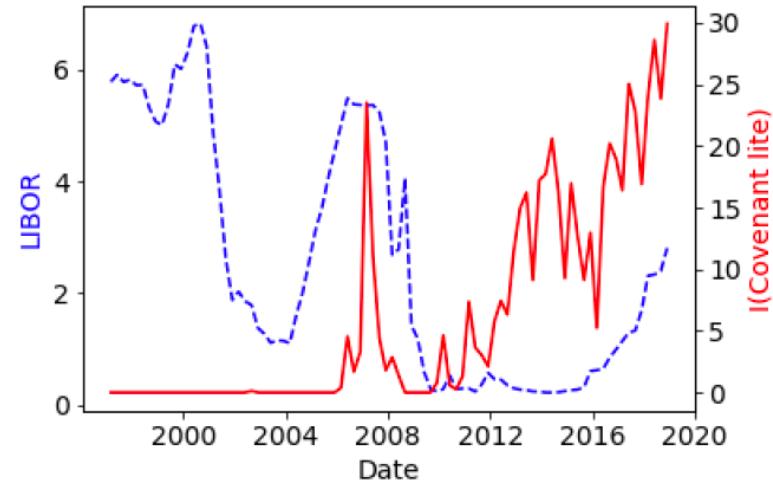


Nonprice features

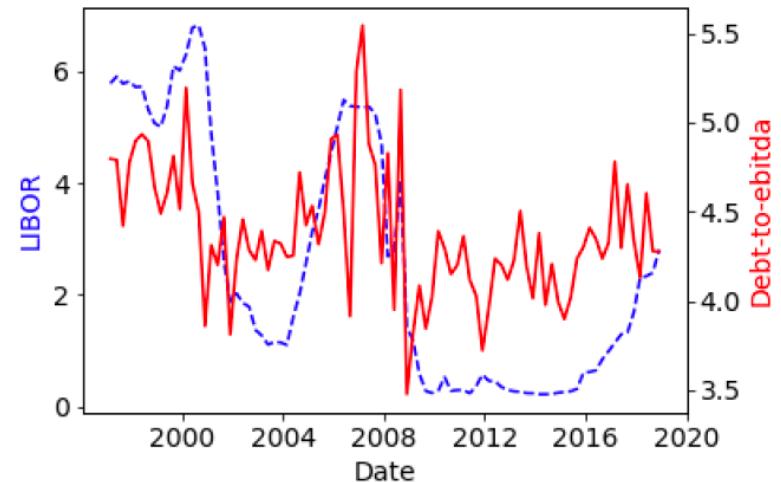
Panel A: Maturity



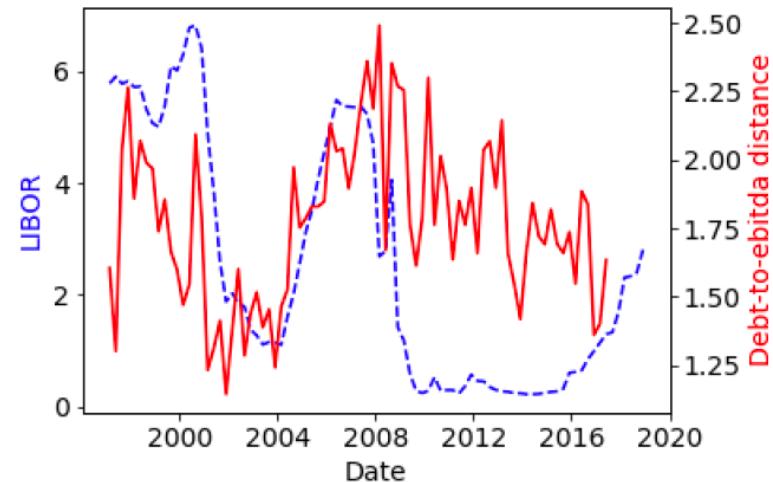
Panel B: Covenant-Lite Status



Panel C: Debt-to-EBITDA Covenant



Panel D: Distance to Covenant Threshold



What does this mean?

- Loans reallocate risk and provide incentives
 - Low rates are bad for banks, good for borrowers
 - Borrowers insure banks with higher spreads **and floors**
 - If rates turn up, high spreads become problematic
 - 1% decline in rates → 0.76% - 0.69% decline in cost of debt
 - Effects more pronounced in “at-risk-banks”
 - Reflects variation in hedging demand by banks
 - Nonprice terms
 - Cov-lite implies lots of operating but little financing latitude

What does this mean for Sweden?

- Why is commercial lending in Sweden different?
 - Bank business models?
 - Regulatory environments?
 - Savings rate?
- Is search for yield in Sweden different?
 - In US, synthetic AAA securities key for banks, insurance, pension
- Are the US/UK markets harbingers for Sweden?
 - Will (are) Swedish banks become balance sheet constrained?
- Is the 0-lower bound a “cliff” or “steeper descent”?
 - What are long-term ramifications of low rates? Japan?