

Early Autopsies of the Effects of the Pandemic on the Financial System

Banks: Li, Strahan, Zhang

Capital Markets: Haddad, Moreira, Muir

Banks: 2020 is not 2008

- “In March 2020, banks faced the largest increase in liquidity demands ever observed.”
- “Unprecedented stress test on the ability of the banks to supply liquidity.”

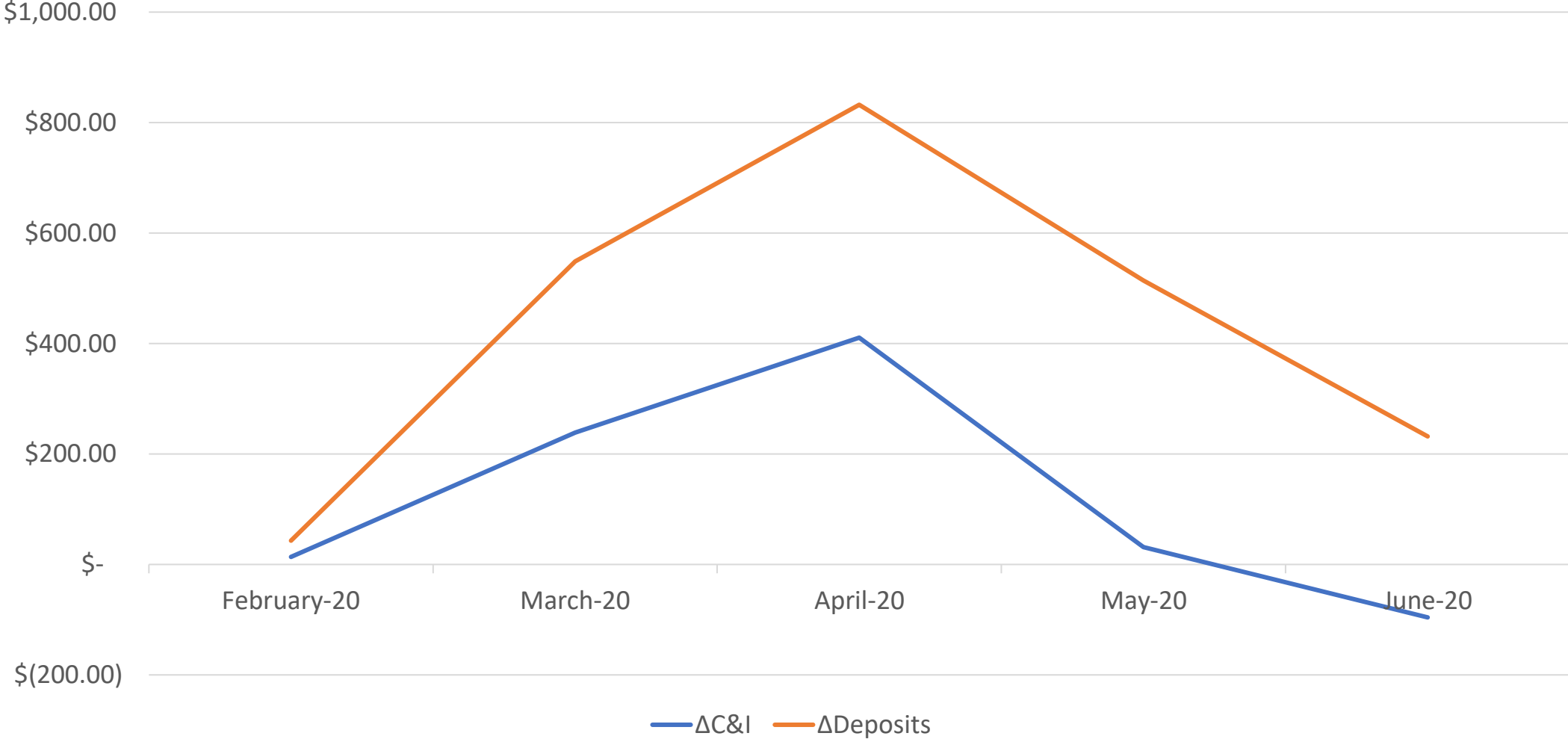
Quick Overview

- Regressions: LHS variable is $\Delta \text{C\&I Loans}_{i,t} / \text{Assets}_{i,Q4, 2019}$
- Battery of tests:
 - Bank characteristics matter? Large banks had more drawdowns; drawdowns larger at banks where employment and COVID deaths higher.
 - Bank financial conditions matter? No. No evidence that capital constrained banks; core deposits not relevant.
- “Our results suggest that banks passed this stress test.”

It's true there was a run on the banks - -

--to deposit money.

Inflow and Outflow Changes: Deposits and C&I Loans



Source: Fed H.8

The Figure

- At least in aggregate, banks had plenty of money.
- Both C&I loans and deposits go up, but then both decline. Why?
- Households withdraw to pay bills?
- Why do firms pay back their loans? Which industries?

U.S. banks are 'swimming in money' as deposits increase by \$2 trillion amid the coronavirus

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Business

Banks Have a Mountain of Deposits So They Don't Need PPP Funding

BY MICHAEL...

Banks at a loss what to do with glut of deposits

Fiscal Support

- In April deposits grew by \$850 billion, more than the previous record for an entire year.
- Due to fiscal programs personal income increased by 10.5% in April.
- Savings rate hit a record 33%.

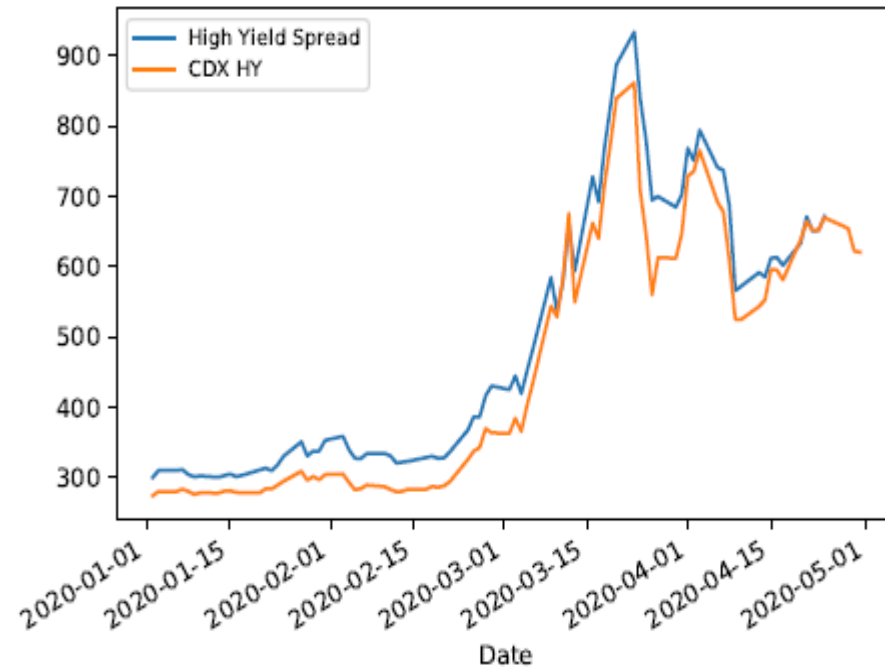
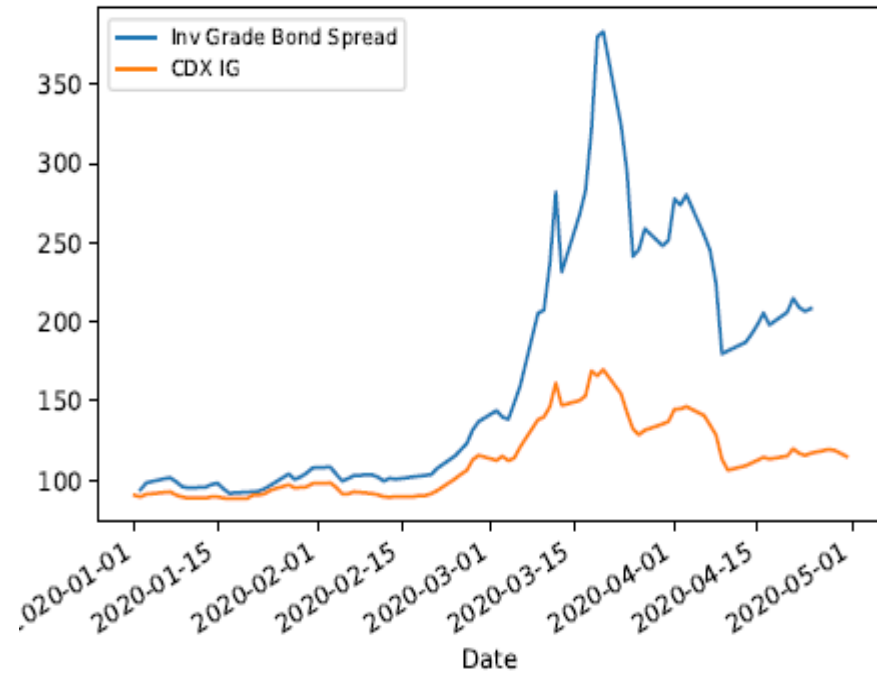
Suggestions

- The LHS variable should be $\frac{Inflows_{i,t} - Outflows_{i,t}}{TA_{i,t}}$.
- But first a bar chart of this variable with bank size bins would immediately let us get a glimpse of what happened.
- Want to know if bank characteristics mattered for this net change.
- Locations where people got support may not be in the locations of the biggest banks, where there were the most drawdowns.

Capital Markets: 2020 is like 2008?

- “. . .significant dislocations at the safer end of the credit spectrum.”
- “Disruptions most extreme in investment-grade bonds.”

The Puzzle



Authors' Explanation

- “selling pressure”
- “selling pressure particularly large and persistent”
- “. . . Selling the most liquid assets first”

What does “Selling Pressure” Mean?

- The buy-side didn't show up? Why?
- Are we to believe that there was no cash on the sidelines?
- Dealers not the relevant agents.

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MARKETS

Investors Are Sitting on the Biggest Pile of Cash Ever

Investors Are Ready On The Sidelines
As Hunt For Distressed Assets Gears
Up

“Selling Pressure” = “Adverse Selection Fear”

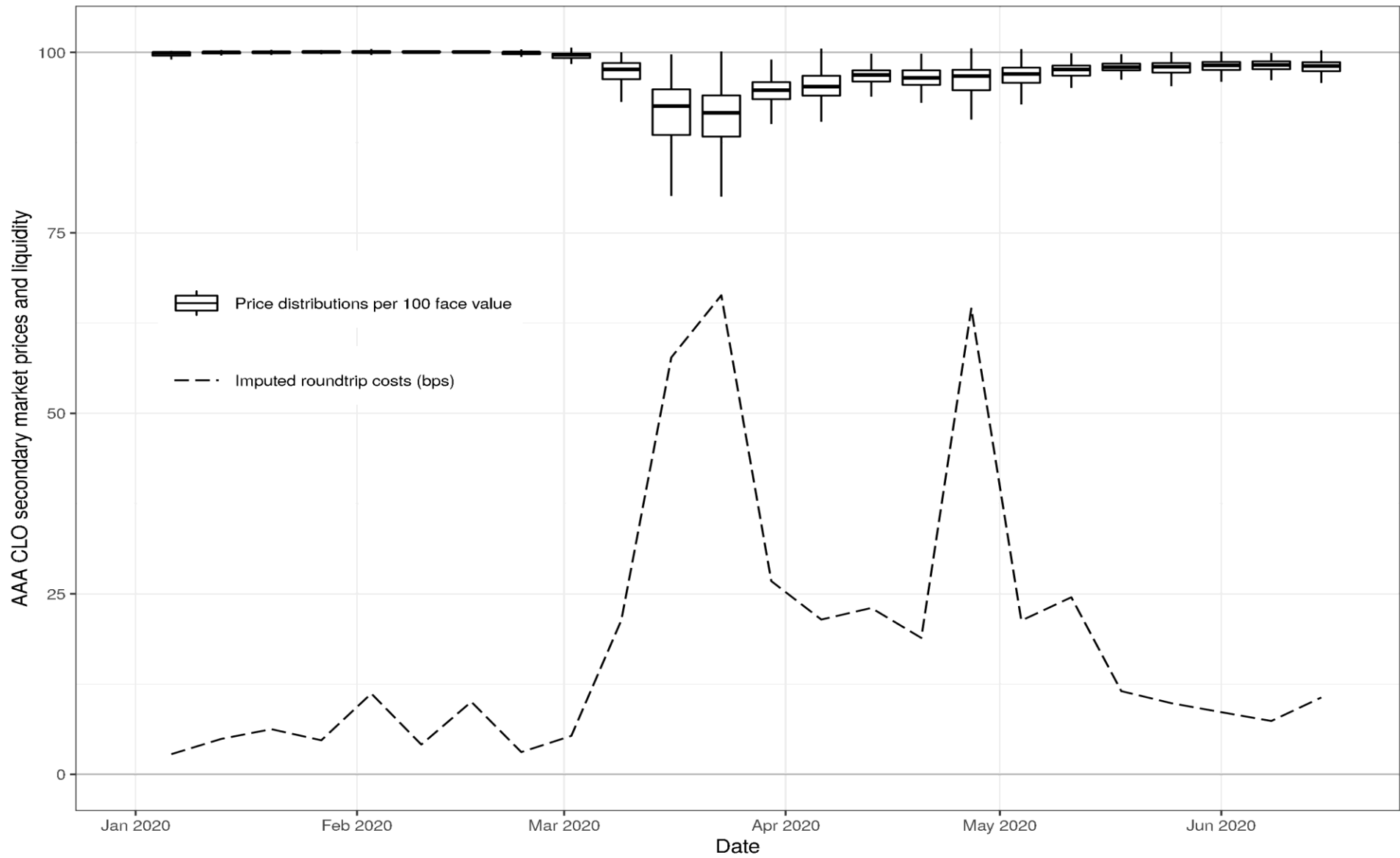
Table 2: Individual Firm Bond Yield Changes and Own Stock Return Correlations

	S&P Bond Rating (1986-1990)					
Variable	AAA	AA	A	BBB	BB	B
$\Delta T_{j,t}$	0.5987 ^a	0.5513 ^a	0.5371 ^a	0.4923 ^a	-0.0506	-0.008
$R_{j,t+1}$	0.2173	0.0370	0.0551	0.0290	-0.2296 ^a	-0.0839
$R_{j,t}$	-0.1963	-0.0878 ^b	-0.1033 ^a	-0.3489	-0.5011 ^a	-0.4079 ^a
$R_{j,t-1}$	-0.2015	-0.1981 ^a	-0.2483 ^a	-0.3313	-0.3309 ^a	-0.1656 ^a
N	672	11,605	17,289	10,127	2,344	
R²	0.61	0.50	0.41	0.40	0.04	

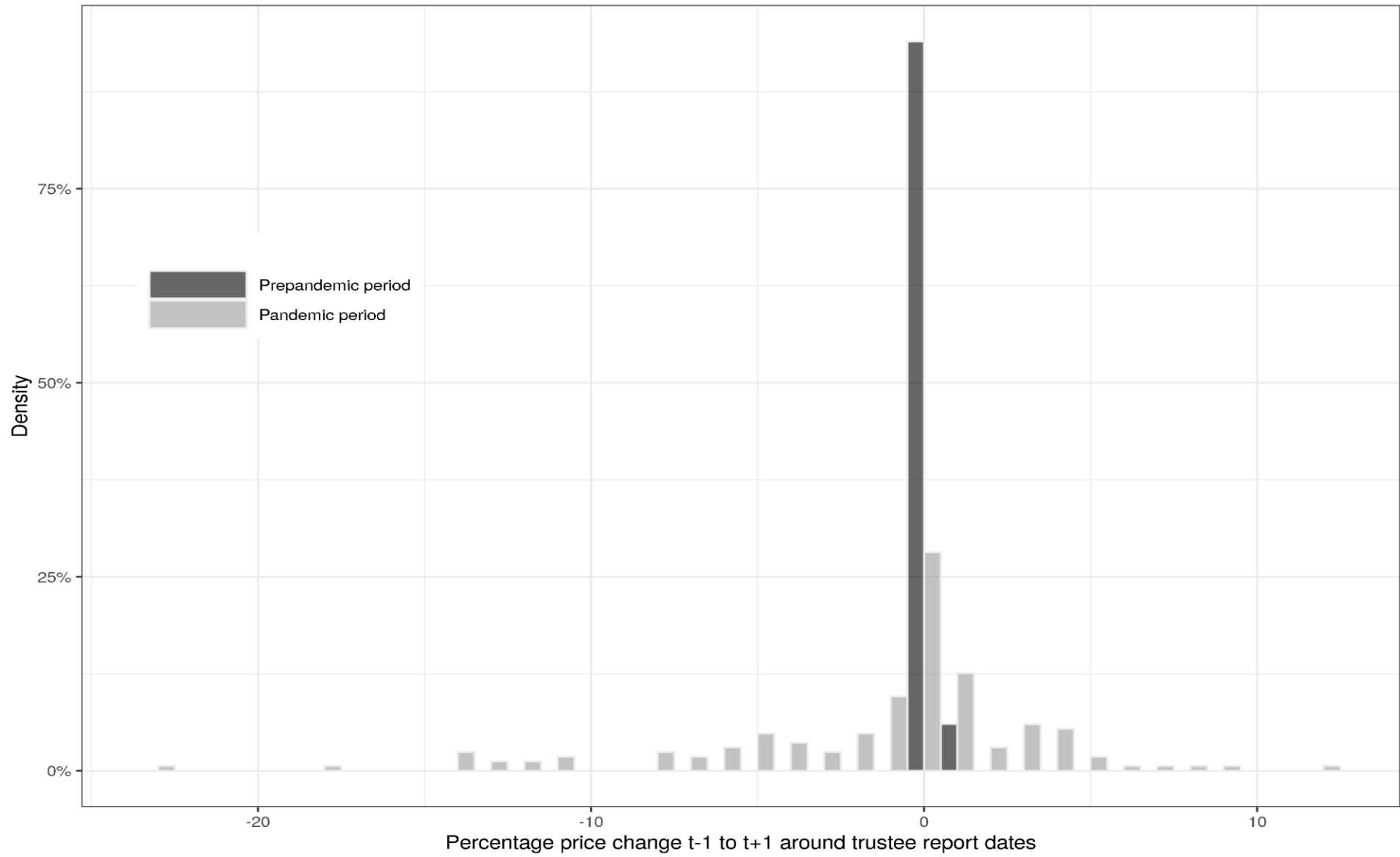
ΔY_{jt} is the change in bond j 's yield-to-maturity from $t-1$ to t ; ΔT_{jt} is the change in a similar maturity U.S. Treasury bond yield from $t-1$ to t ; R_{jt} is the return on bond j 's issuing firm's stock from $t-1$ to t , and so on.

Source: Kwan (1996). a, b indicate significance at the 0.1% and 1% levels, respectively.

- Order books for new-issue investment-grade bonds fill up, on average, 1-2 hours. Equity issues take a road show of weeks to months.
- Bonds traded over-the-counter: no price that aggregates info.
- No analyst reports. Johnston, Markov and Ramnath (2009) study a large sample of companies and debt analyst reports. They find that “. . . the amount of resources devoted to debt research depends on the debt’s price sensitivity to information about the value of the asset. Intuitively, the sensitivity of the price of debt determines how much one can profit from information about the company’s assets in the debt market”.
- In their sample of 5,920 debt reports “we do not observe any debt reports for most company-years”.



Source: Foley-Fisher, Gorton, Verani 2020



Source: Foley-Fisher, Gorton, Verani 2020

The Basis

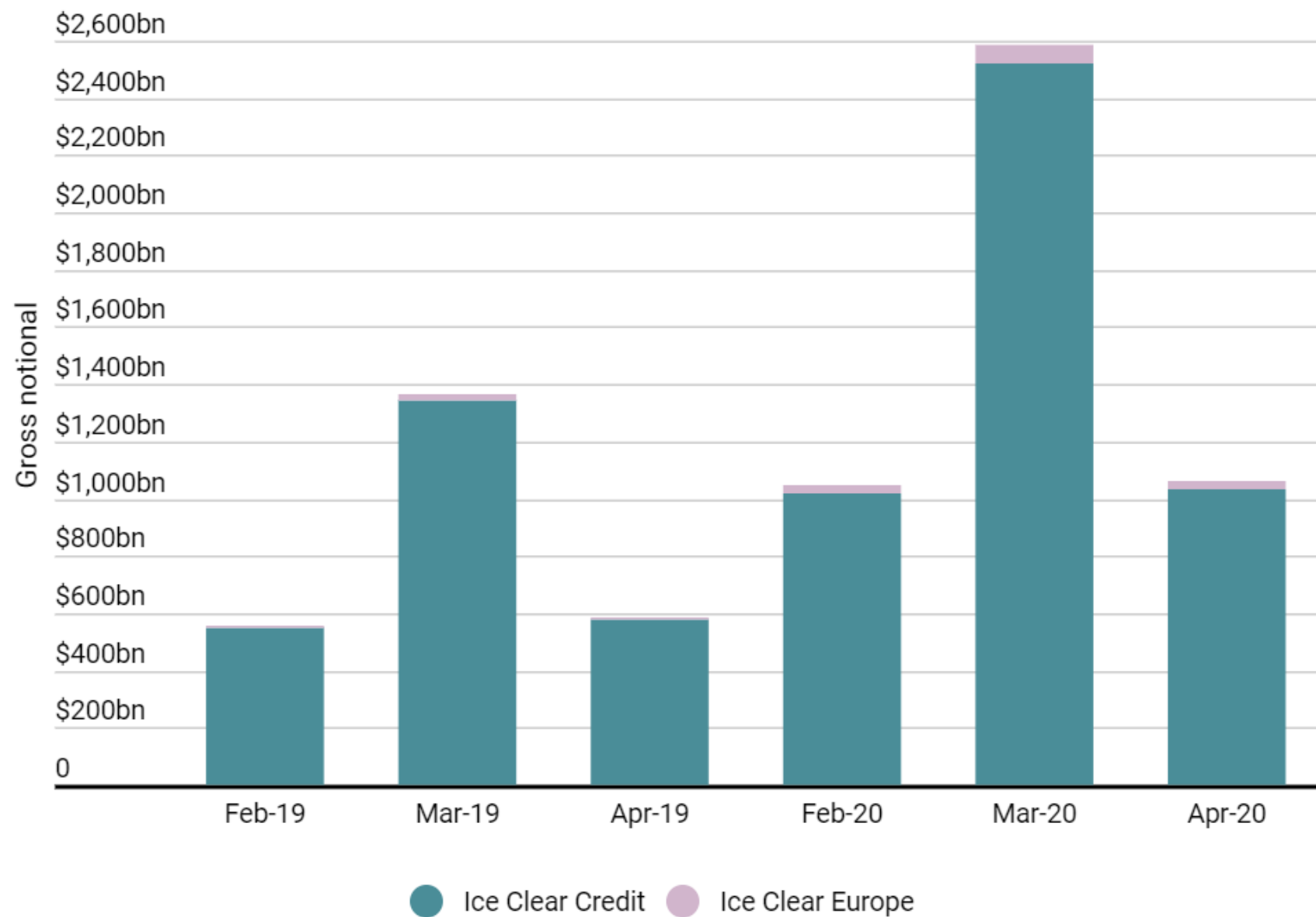
- Theoretically, the CDS-bond basis should be close to zero, and, over the past fifteen years, the median basis has been -19 bps for IG and -42 bps for HY.
- A negative basis suggests that buying exposure to credit risk through bonds is cheaper than obtaining exposure through CDS.
- In March, the basis widened substantially to reach levels of around --175 bps for IG bonds (and -550 bps for HY bonds) on March 23 **before narrowing** by around 80 (410) bps subsequently.
- For comparison, during the 2007-09 financial crisis IG and HY CDS-bond bases reached -274 bps and -720 bps.

Bond-CDS basis keeps investors interested

Indeed, traders are trading the basis but haven't closed it yet.

Question of how big is the universe of buyers of basis vs the universe of sellers of those bonds and other sellers of the CDS.

4. Cleared US dollar credit default swaps



Trading the Basis: Free Money?

- Puzzle figure strongly suggests we can all get rich. We buy the bond, say at a yield of 4% and we buy protection on the bond costing say 150 bps. It's a no-brainer - - - or is it?
- Protection sellers have the same problem as bond buyers. They must avoid the lemons.
- Which requires analysis of investment-grade firms, which they haven't been doing.
- HY is info-sensitive and info is constantly produced, so the HY basis closes quickly.

Fed Interventions

- Spreads spiked in March to levels not seen since the financial crisis, but then declined significantly after the March 23 announcement, particularly for IG bonds that are targeted by the Fed's Corporate Credit Facilities.
- Why is that? Because the Fed does not do any credit analysis. The Fed is willing to buy lemons, which is optimal (Gorton & Ordoñez, "Fighting Crises with Secrets", forthcoming AEJ Macro).

Suggestions

- “Selling pressure” is a nebulous term. Need to know the mechanism.
- Redo Kwan regressions before and after the pandemic.
- Plot the standard deviation of the cross section of prices by bond rating.
- “. . . Selling the most liquid assets first” - - -this is testable since TRACE has time stamps.