

# **Investment Funds and the Corporate-Bond Market in the Covid-19 Crisis**

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## Background

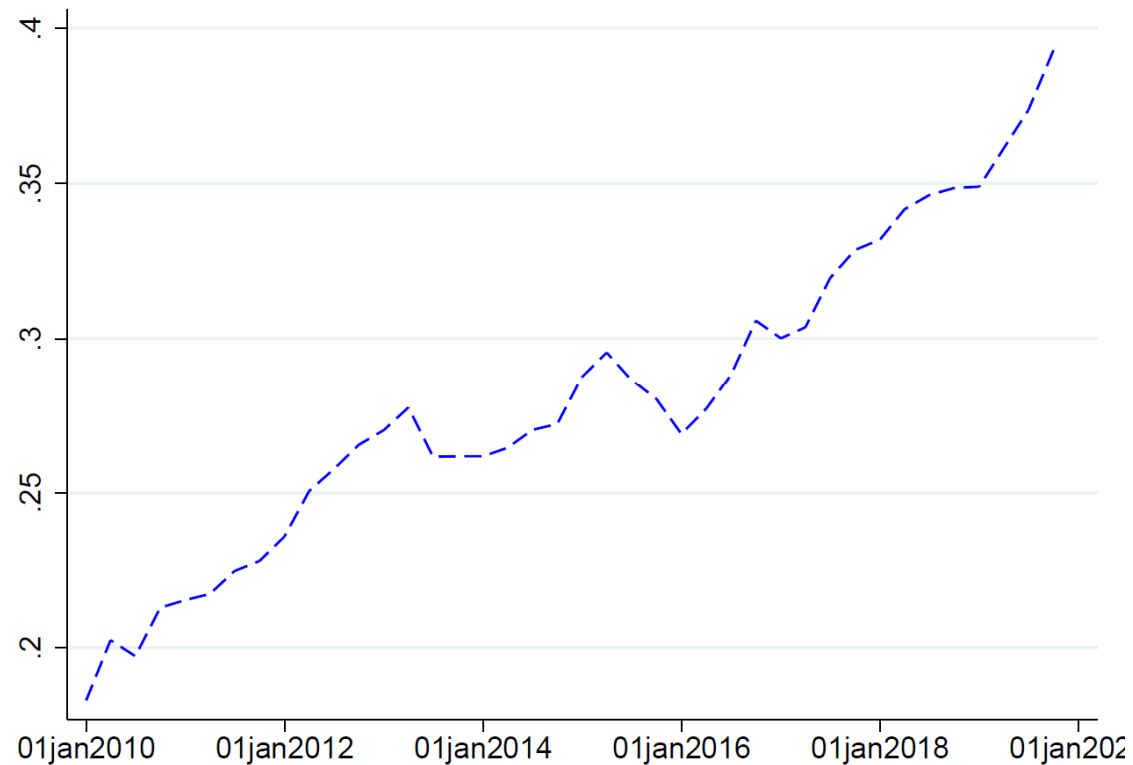
- Investment funds – including mutual funds and ETFs – became a dominant force in the corporate-bond market since the global financial crisis of 2008-2009
- Due to liquidity mismatch – holding illiquid assets, but providing high level of liquidity to their investors – they are exposed to “run” type behavior from their investors
  - Chen, Goldstein, and Jiang (2010); Goldstein, Jiang, and Ng (2017)
- This has been the focus of major concerns among policymakers, leading to changes in regulation over the last few years
  - For example, SEC allowing swing pricing in US mutual funds starting in November 2018
- Now, following the market turmoil of the Covid-19 crisis, is a good time to examine the fragility of the corporate-bond markets and the investment funds in this time of stress

## Initial Findings

- Corporate-bond markets in the U.S. suffered severe stress in March 2020, leading to a dramatic increase in spreads and decrease in liquidity
- Investment funds in the corporate-bond market experienced massive outflows, which are far greater than anything seen since they became such a major player in the market
- Flows were sustained for a few weeks across different types of funds (e.g., investment-grade and high-yield); although timing is not the same for all
- It seems that a couple of policy announcements by the Federal Reserve about direct interventions in corporate-bond markets were crucial for alleviating the stress
  - March 23: PMCCF and SMCCF; purchase of investment-grade bonds on primary and secondary markets
  - April 9: Extend PMCCF and SMCCF to \$850bn (from less than \$300bn); extend SMCCF to purchase high-yield bonds if they were investment-grade as of March 22
- I will now show key developments along these lines in a few charts, based on work in progress with Antonio Falato and Ali Hortacsu

## The Growing Importance of Investment Funds in the Corporate Bond Market (Aggregate Net Asset Value divided by Size of Market)

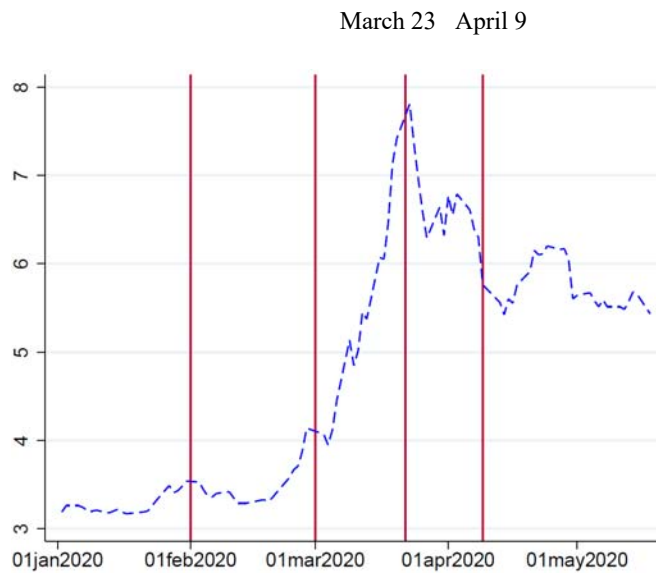
Data Source: Flow of Funds



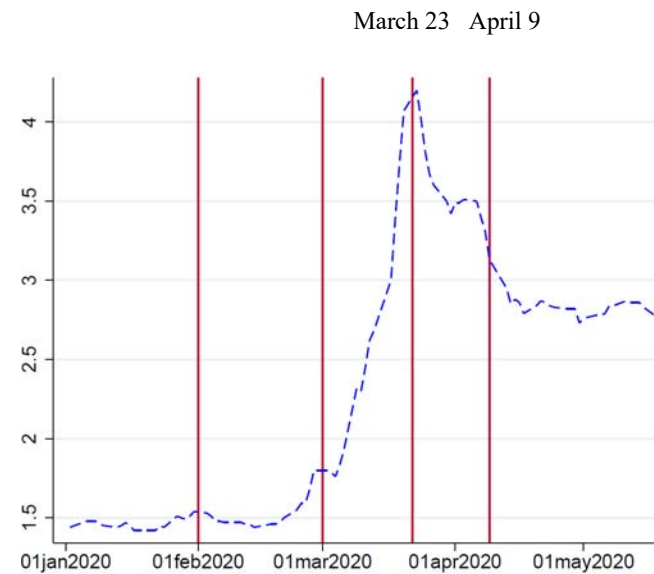
# Signs of Stress in Corporate Bond Market over the Crisis Period

Data Source: ICE indices

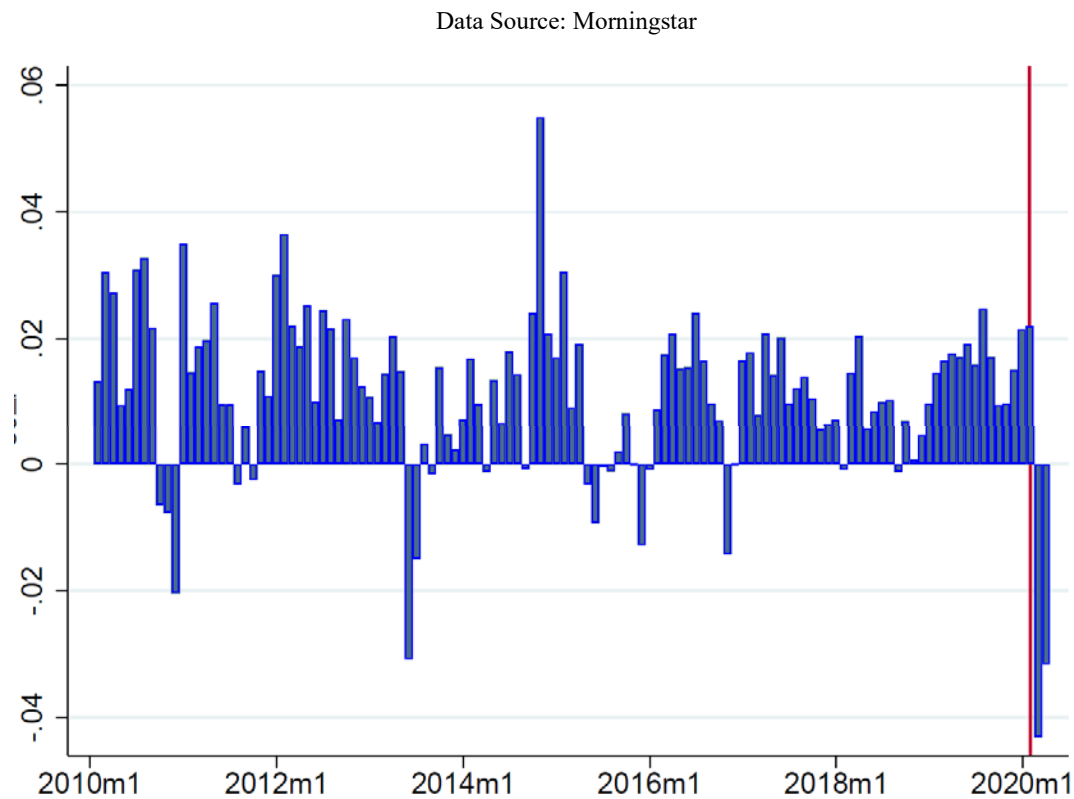
High-yield Spreads



Investment-Grade Spreads

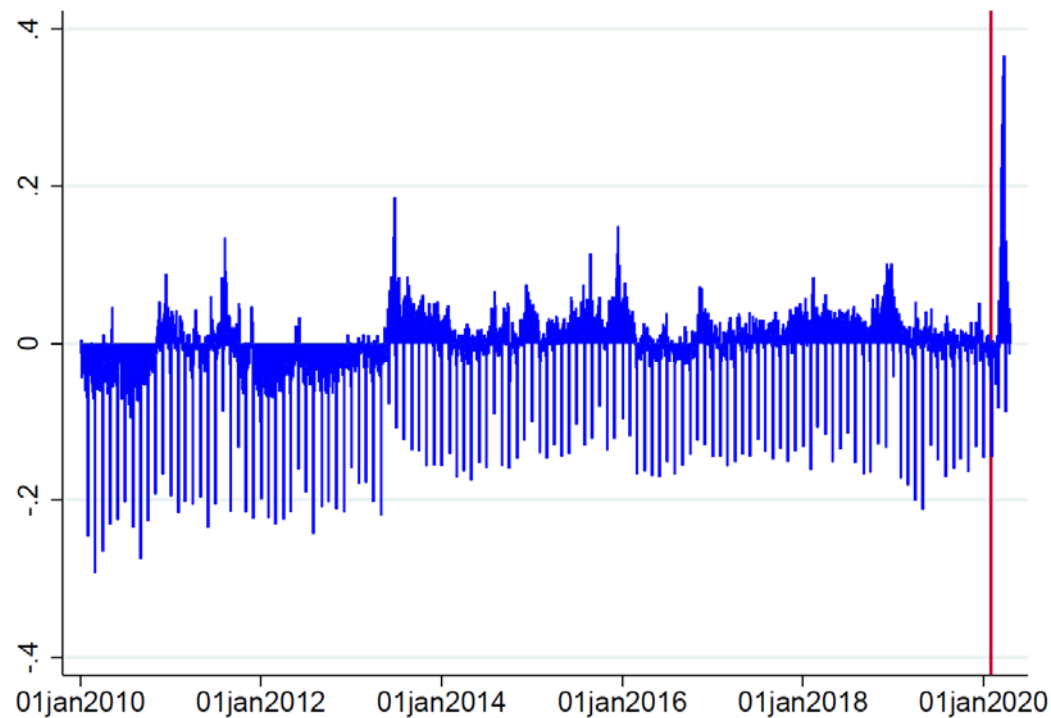


## Long Term Perspective on Monthly Aggregate Net Flows (Fraction of Lagged Net Asset)



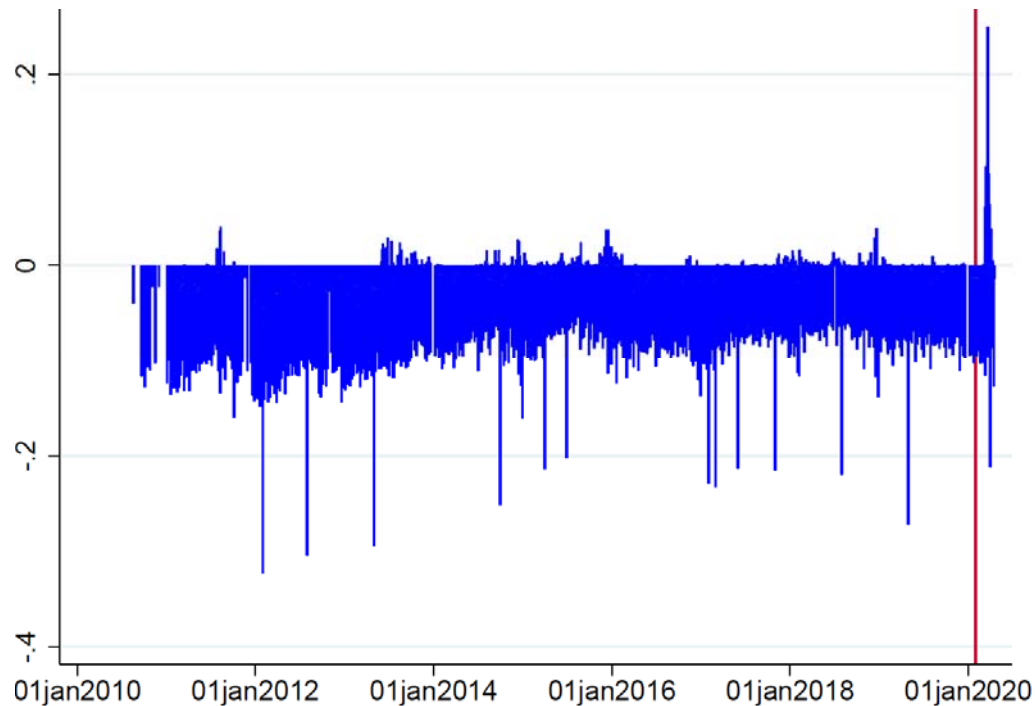
## Shock Hits Across the Board: Daily Net Fraction of Funds with Large (top decile) Outflows (vs. Inflows)

Data Source: Morningstar



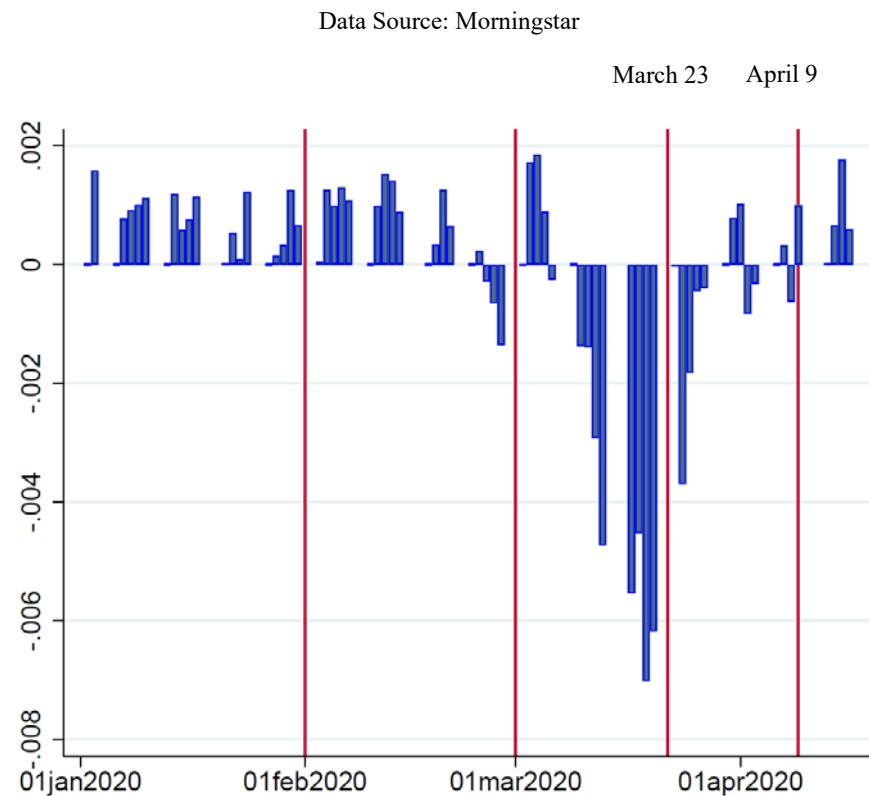
## Funds Face Sustained Outflows: Daily Net Fraction of Funds with Large (top decile) Outflows (vs. inflows) in Two Consecutive Days

Data Source: Morningstar





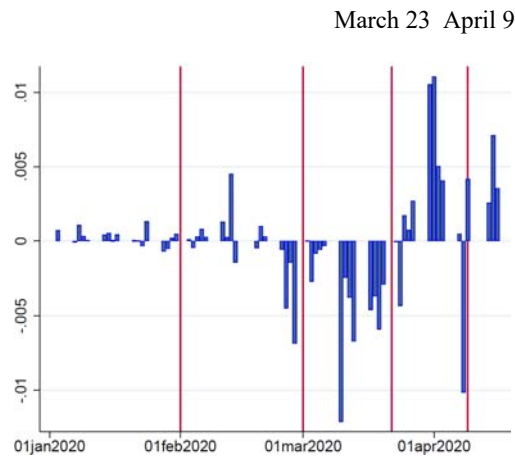
## Evolution of Flows over the Crisis: Daily Aggregate Net Flows (Fraction of Lagged Net Asset)



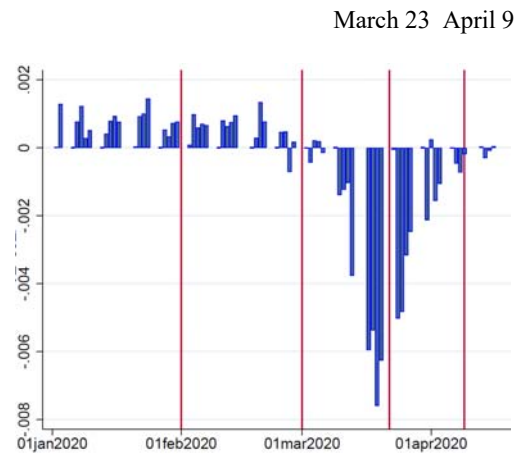
# Tracking the Evolution of Flows across Different Types of Funds (Fraction of Lagged Net Asset)

Data Source: Morningstar

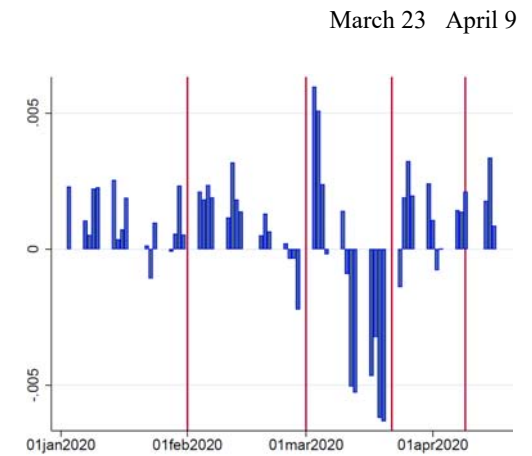
High-yield Funds



Investment-Grade Funds



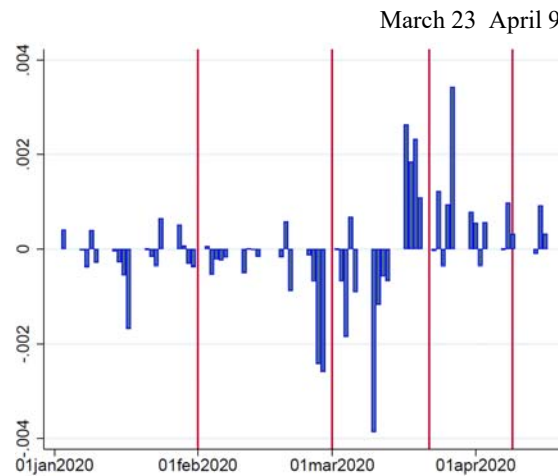
ETFs



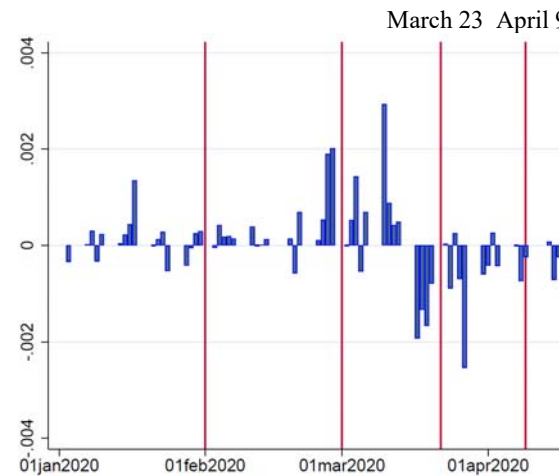
# Tracking the Evolution of Flows across Illiquid vs. Liquid Funds (Measured Based on Price Interquartile Range)

Data Source: Morningstar, eMAXX, Trace

**Illiquid Funds (Top Quartile)**



**Liquid Funds (Bottom Quartile)**



## Conclusion

- Investment funds have become dominant in corporate-bond markets and are prone to fragility
- The Covid-19 crisis imposed severe stress on them leading to massive outflows
- Massive intervention by the Federal Reserve seems to have been critical for alleviating the problem
- Going forward, one should not count on such intervention, and the fragilities of the market and the funds have to be investigated
- Possible policies:
  - Improving liquidity of underlying corporate bond assets
  - Reducing liquidity available to investors
    - Swing pricing has only recently been introduced in the U.S. and is not widely adopted yet
    - Evidence from other countries suggests it has been quite effective: Jin, Kacperczyk, Kahraman, and Suntheim (2020)