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Financial Fragility in the COVID-19 Crisis: The Case of Investment Funds in Corporate Bond Markets

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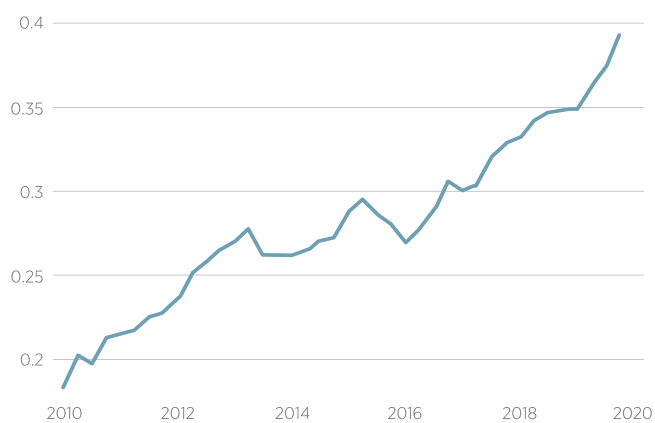
By providing a liquidity backstop for their bond holdings, the Federal Reserve bond purchase program helped to reverse corporate bond fund outflows during the COVID-19 crisis, especially for the most fragile funds.

In the decade following the financial crisis of 2008, investment funds in corporate bond markets became prominent market players and generated concerns of financial fragility. Figure 1 demonstrates the dramatic growth of their assets under management relative to the size of the corporate bond market since the 2008-2009 crisis. Increased bank regulation has pushed some of the activities from banks to non-bank intermediaries, heightening fears among regulators. Just in 2019, Mark Carney, the governor of the Bank of England, warned that investment funds that include illiquid assets but allow investors to take out their money whenever they like were "built on a lie" and could pose a big risk to the financial sector. However, despite these concerns, the last decade did not feature major stress events to test the resilience of corporate-bond investment funds. Hence, there is a dearth of systematic evidence on their resilience in large-stress events.

Figure 1 • The Growing Importance of Funds in the Corporate Bond Market

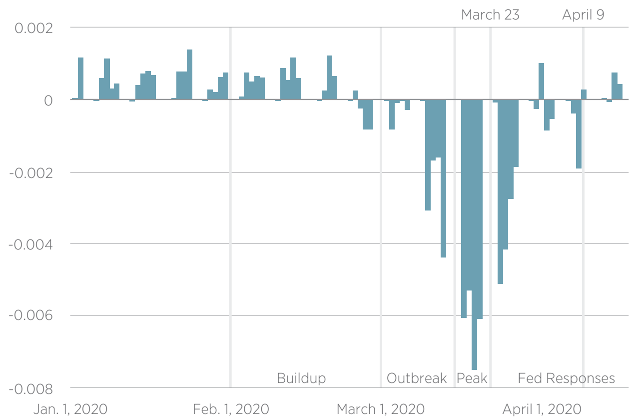


Note: This figure plots the quarterly time-series of an estimate of the importance of corporate bond funds and ETFs. The numerator is the aggregate dollar value of net assets of bond funds and ETFs, which is calculated by aggregating over individual funds' net assets. The denominator is the aggregate dollar value of nonfinancial corporate bonds outstanding. Time period is 2010Q1 to 2019Q4. Data source: Morningstar for net assets and Flow of Funds (Federal Reserve Board Financial Accounts, Z.1) for bonds outstanding.

The authors address this gap by analyzing recent events around the COVID-19 crisis, which provide an opportunity to inspect the resilience of these important non-bank financial intermediaries in a major stress event and the unprecedented policy actions that followed it. The COVID-19 crisis unfolded quickly around the world in early 2020. Initial declaration of a public health emergency was made January 31, with reports of confirmed infections intensifying in March. On March 13, a national emergency at the federal level in the United States was declared. Financial markets tumbled as these events took place, with corporate bond markets in particular experiencing severe stress amid major liquidity problems.

The Federal Reserve responded aggressively with a March 23 announcement of the Primary Market Corporate Credit Facility (PMCCF) and Secondary Market Corporate Credit Facility (SMCCF), which were designed to purchase $300 billion of investment-grade corporate bonds. On April 9, the Fed announced the expansion of these programs to a total of $850 billion and an extension of coverage to some high-yield bonds. These facilities were unprecedented in the history of the Fed. As such, their announcements had a major impact on corporate-bond markets. Spreads for both investment-grade and high-yield rated corporate bonds, which almost tripled relative to their pre-pandemic level by March 23, reversed after the two policy announcements.

Figure 2 • Fund Fragility in the COVID-19 Crisis: Evolution of Flows over the Crisis, Daily Aggregate Net Fund Flows



Note: This figure plots the daily time-series of aggregate net flows of corporate bond funds as a percentage of their aggregate net assets. The numerator is the aggregate dollar growth of new assets of bond funds, which is calculated by aggregating over individual funds' growth of new assets. The denominator is the aggregate dollar value of their net assets at the beginning of each day, which is calculated by aggregating over individual funds' net assets. The Federal Reserve responded aggressively with the announcement on March 23 of the Primary Market Corporate Credit Facility and Secondary Market Corporate Credit Facility, which were designed to purchase $300bn of investment-grade corporate bonds; on April 9, the Fed announced the expansion of these programs to a total of $850bn and an extension of coverage to some high-yield bonds. Time period is January 2020 to April 2020. Data Source: Morningstar.

This recent episode allowed the authors to empirically investigate two important and related questions: How fragile were these corporate bond funds and how effective were the Fed's actions in contributing to a resolution? Using daily data on flows into and out of mutual funds in corporate bond markets during the crisis allowed the authors to shed light on the determinants of flows across different funds, and thus to better understand the sources of fragility and what actions mitigated that instability. In summary, they highlight three main sources of fragility: asset illiquidity, vulnerability to fire-sales, and sector exposure.

The authors then show that the Fed bond purchase program helped to mitigate fragility by providing a liquidity backstop for their bond holdings. In turn, the Fed bond purchase program had spillover effects, stimulating primary market bond issuance by firms whose outstanding bonds were held by the impacted funds, and stabilizing peer funds whose bond holdings overlapped with those of the impacted funds. This analysis uncovers a novel transmission channel of unconventional monetary policy via non-bank financial institutions, which carries important policy lessons for how the Fed bond purchases transmit to the real economy.

The authors caution that massive Fed intervention in the market will likely not become the norm and, likewise, some of the structural fragilities in the way investment funds operate in illiquid markets must be addressed more directly.