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Investor flows and fragility in corporate bond funds[☆]

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ABSTRACT

This paper explores flow patterns in corporate bond mutual funds. We show that corporate bond funds exhibit a concave flow-to-performance relationship: their outflows are sensitive to bad performance more than their inflows are sensitive to good performance. Moreover, corporate bond funds tend to have greater sensitivity of outflows to bad performance when they have more illiquid assets and when the overall market illiquidity is high. These results point to the possibility of fragility in the fast-growing corporate bond market. The illiquidity of corporate bonds may generate a first-mover advantage among investors in corporate bond funds, amplifying their response to bad performance.

1. Introduction

The landscape of the financial industry is constantly changing, as new financial innovation and regulation shift activities across different financial institutions and vehicles. One of the dominant trends of recent years is the growth of assets under management by fixed income mutual funds, i.e., mutual funds investing in corporate or government bonds. Data reported by Feroli, Kashyap, Schoenholtz, and Shin (2014) show that from January 2008 to April 2013, fixed income funds have attracted multiple times more inflows compared to equity, money market, allocation, and other funds combined. Data reported by the

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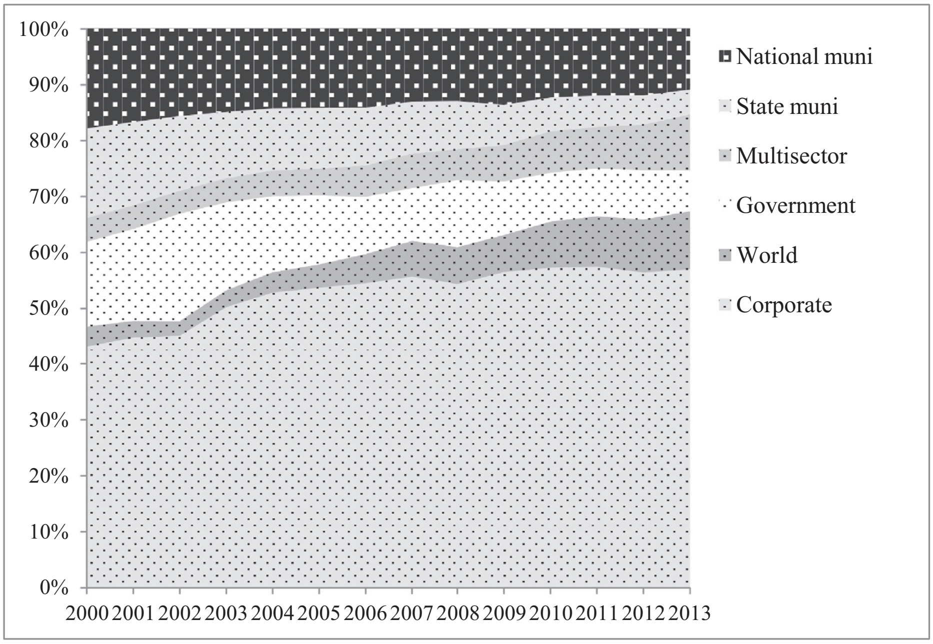

Fig. 1. Distribution of bond fund assets across investment objectives. This figure plots the share in net fund assets for fixed income mutual funds grouped by their investment objectives over the period 2000 to 2013. The source of data is the 2014 Investment Company Institute Fact Book.

Investment Company Institute (ICI 2014) show bond fund assets roughly doubling over this period.[1]

Observing this trend, several commentators have argued that bond funds pose a new threat to financial stability. What will happen when the current trend of loose monetary policy changes or upon increasing concerns of corporate defaults? Will large flows out of bond funds and subsequent sales of assets by these funds destabilize debt markets with potential adverse consequences for the real economy? Feroli, Kashyap, Schoenholtz, and Shin (2014) use evidence from the dynamics of bond funds to show that flows into and out of funds seem to aggravate and be aggravated by changes in bond prices. They conclude that this suggests the potential for instability to come out of this industry.

To get a better understanding of the potential threats to stability posed by bond mutual funds, we need more research on the flows into and out of these funds. By now, there is a large literature on flows in equity mutual funds, as reviewed recently by Christoffersen, Musto, and Wermers (2014). However, as they note, there is little research on flows in bond mutual funds. In this paper, we try to fill the gap. We focus on actively managed corporate bond funds in the period between January 1992 and December 2014. This is because, as we show in Fig. 1, the growth in assets held by these funds has been large relative to other bond funds, and because these funds present a particularly strong concern for stability due to the illiquidity of their assets (corporate bonds).

Fig. 2 shows the total net assets (TNA) and dollar flows of actively managed corporate bond funds in our sample. The total net assets in this segment have been trending up in our sample period, particularly since the onset of the recent financial crisis. As of 2008, there was $649 billion under management. From 2008 to 2014, this figure has almost tripled to more than $1.8 trillion. During the same period, outstanding US corporate bonds have gone up by 44% from $5.42 trillion to $7.83 trillion, according to Securities Industry and Financial Markets Association (SIFMA). Thus, corporate bond mutual fund size has grown significantly as a proportion of outstanding US corporate debt. Such a steady increase in corporate bond fund assets, however, masks increasingly volatile fund flows. For instance, corporate bond funds attracted net inflows of approximately $190 billion in 2009 but experienced net redemptions of nearly $60 billion from existing funds in 2013.

A pervasive result in the empirical literature on equity mutual funds is that the flow-to-performance relation tends to have a convex shape, that is, inflows to equity funds tend to be very sensitive to good past performance, but outflows are overall not that sensitive to bad past performance. Papers documenting this pattern, discussing its origins and consequences include: Ippolito (1992), Brown, Harlow, and Starks (1996), Chevalier and Ellison (1997), Sirri and Tufano (1998), Lynch and Musto (2003), Huang, Wei, and Yan (2007), among others. Considering the context of fragility, a convex flow-to-performance curve suggests that fragility is not a pressing concern. If investors do not rush to take their money out of funds following negative developments, then one should not worry about outflows depressing prices and leading to negative consequences for the real economy.

Our evidence, however, shows that corporate bond funds exhibit quite a different pattern from equity funds when it comes to the sensitivity of flow-to-performance. While we confirm a convex shape for equity funds' flow-to-performance over the period of our study, we show

[1] See Section 2.1 for details on the developments in the bond fund industry.