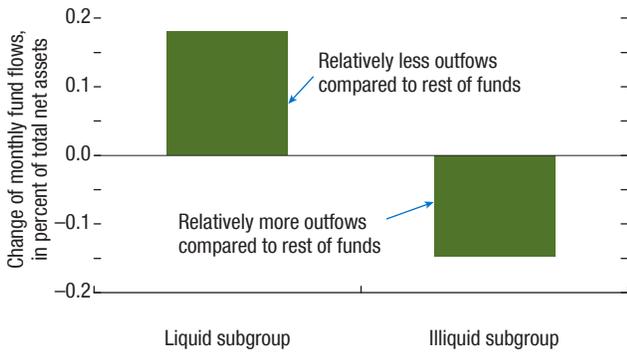


Figure 3.10. Liquidity Risk and Fund Structures

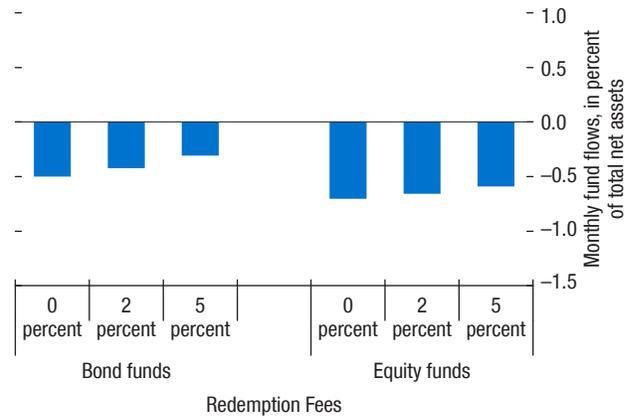
Among equity funds, fund flows of funds investing in liquid stocks are less sensitive to performance.

1. Relative Sensitivity of Equity Fund Flows to Performance
(Response of flows into liquid and illiquid funds to a one standard deviation decline in benchmark returns, difference with respect to rest of funds)



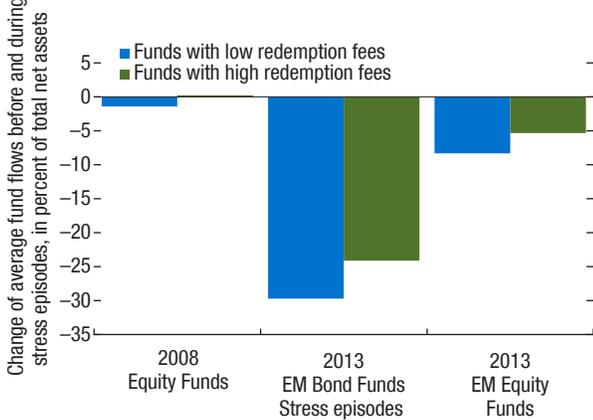
Redemption fees are effective in mitigating outflows.

2. Fund Flows by Redemption Fees
(The effect of a one standard deviation decline of returns)



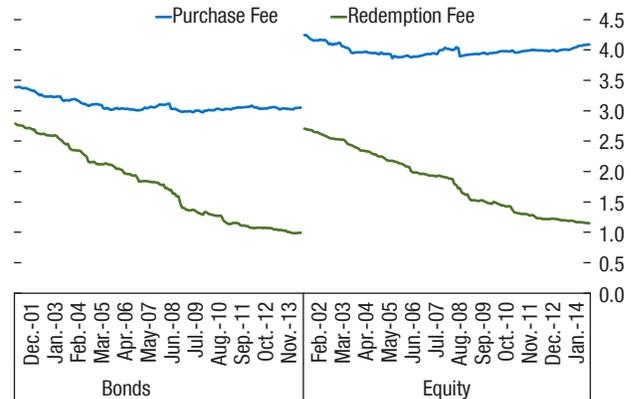
Redemption fees have helped mitigate redemptions during stress episodes, especially for emerging market funds.

3. Redemptions during Stress Times, by Redemption Fee Levels



However, mutual fund fees, especially redemption fees, have declined over the past 15 years, due to competitive pressures in the industry.

4. Trend of Mutual Fund Fees
(Simple average, in percent)



Sources: Calculated based on data from the survivor-bias-free US mutual fund database ©2014 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business; and IMF staff estimates.

Note: EM = emerging markets; ETF = exchange-traded fund. Fees are maximum reported fees in the prospectus. Redemption fees include narrowly defined redemption fees and contingent deferred sales charges. Estimates in panels 1 and 2 are based on a regression of net inflows on VIX, benchmark performance (lagged), excess performance over benchmark (lagged), age, size, and the reported fund characteristics (added one at a time) interacted with excess performance over benchmark (lagged). The estimation uses share-class-level data covering 1998–2014. Panel 3 computes the difference between average flows before the crisis period and average flows during the reported stress periods (September to December 2008 for the global financial crisis, and May to September 2013 for the tapering episode). Fund flows are standardized by the beginning-of-period total net assets. Funds are classified as having low redemption fees if redemption fees are equal to zero. Funds are classified as having high redemption fees if redemption fees are greater than or equal to 0.03 percent in 2008 and 0.01 percent in 2013. For more details on estimations and data, see Annex 3.2.