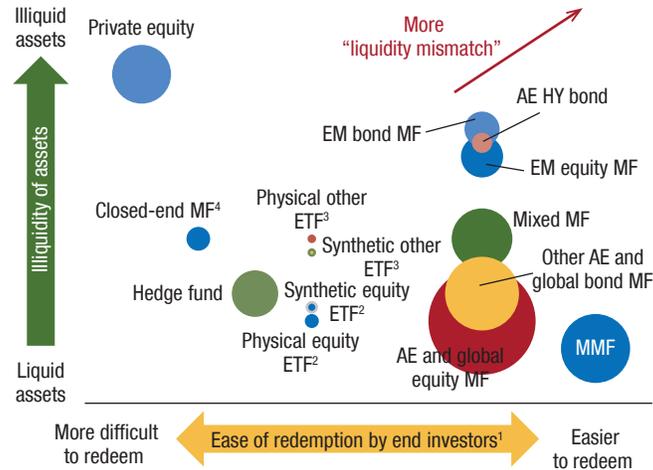


### Figure 3.5. Liquidity Mismatches

(Size of bubbles represents relative global assets under management as of end-2013)

The mismatch between the redemption risk to funds and market liquidity of funds' assets is most notable among bond mutual funds—especially corporate and emerging market debt funds, though these are relatively smaller segments.



Sources: BarclayHedge; Deutsche Bank; ETFGI; European Fund and Asset Management Association; Lipper; Preqin; and IMF staff estimates.

Note: The liquidity ranking of assets is based on IMF staff's judgment. AE = advanced economy; EM = emerging market; ETF = exchange-traded fund; HY = high yield; MF = mutual fund; MMF = money market fund.

<sup>1</sup>For ETFs, the ease-of-redemption measure ranks lower than that for open-end MFs (all MFs in the figure excluding closed-end MFs) because end investors do not directly redeem shares from funds (see Annex 3.1 and Box 3.2).

<sup>2</sup>Generally, equity derivatives markets are less liquid than cash equity markets.

<sup>3</sup>For bonds, especially corporate bonds, derivatives markets can offer better market liquidity than the cash bond market. For some firms, the notional principal for their credit default swaps is larger than their outstanding debt.

<sup>4</sup>Closed-end mutual funds tend to invest in relatively less liquid assets than open-end mutual funds (Chordia 1996; Deli and Varma 2002). Some funds may repurchase shares.