Figure 1.11. Measures of Leverage and Investment Funds with Derivatives-Embedded Leverage

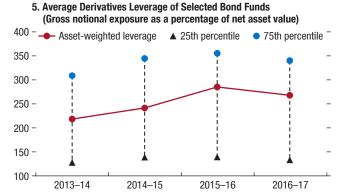
Although well below precrisis levels, synthetic CDO issuance is coming back ...

1. Synthetic CDO Issuance (Billions of US dollars) 700 -600 -500 -400 -300 -200 -100 -2005 06 07 08 09 10 11 12 13 14 15 16 17

... and net exposures in margin accounting for stock borrowing reaching record negative levels.



... with rising gross notional exposures ...



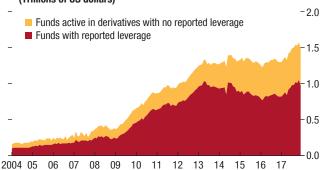
... with elevated stock borrowing by margin indicating greater leverage risk in US equity markets ...

## 2. Margin Debt from Stock Borrowing

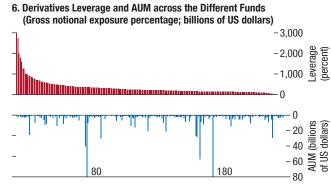


There is strong growth in the AUM of selected large regulated bond funds that use derivatives ...

## 4. Assets under Management of Selected Bond Funds (Trillions of US dollars)



... that can exceed multiples of fund net asset values.



Sources: Annual reports of selected regulated investment funds; Bloomberg Finance L.P.; Federal Reserve; Financial Industry Regulatory Authority; ICE Bank of America Merrill Lynch; and IMF staff estimates.

Note: Selected EU-domiciled investment funds report a gross notional exposure of their derivative positions in their annual report. Funds with reported leverage in derivatives positions in the sample account for over \$1 trillion of these assets, including the assets of the US-domiciled version of the same EU-domiciled funds that report leverage. Although these funds are separate investment vehicles, they share the same mandate and portfolio manager and therefore have closely matched portfolios, exhibiting a high correlation of returns. The remaining \$500 billion of assets correspond to a group of selected funds that do not report leverage in derivatives positions but are known to be active in derivatives (the funds' latest annual reports list at least 15 derivatives positions). In panels 2 and 3, margin debt data may also include nonequity securities such as bonds. In panel 6, the data are as of the latest annual reports. AUM = assets under management; CDO = collateralized debt obligation.