Outright purchases improved liquidity of MBS during the first reinvestment program (October 2011–November 2012), had no effect during QE3 (December 2012–October 2014), and was recently decreasing market liquidity (November 2014–March 2015).

Sources: Federal Reserve Bank of New York; FINRA Trade Reporting and Compliance Engine; and IMF staff estimates.

Note: The figure shows the estimated improvement in liquidity (reduction in round-trip costs) in MBS securities per billion dollars of securities purchased by the Federal Reserve. The effect is normalized by the average imputed round-trip cost in the sample. Solid columns mean statistical significance at least at the 10 percent level. See Annex 2.2 for details. Fed = Federal Reserve; MBS = mortgage-backed security; QE = quantitative easing.