Lessons from the Crisis and Post-Crisis Experience

Brian Sack
The D. E. Shaw Group
May 2016

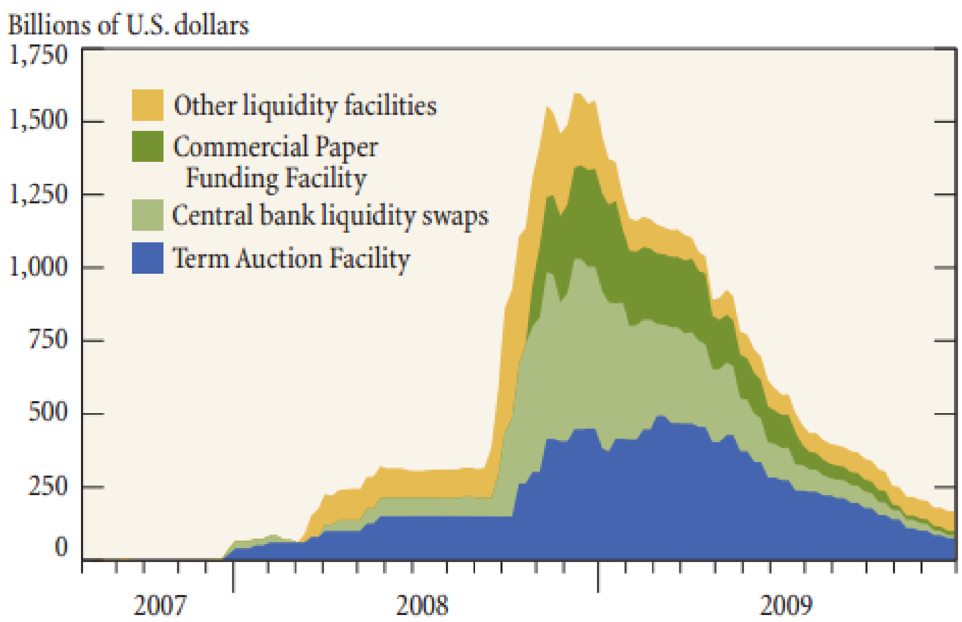
Observations from the Crisis and Post-Crisis Period

1. **The Fed needs to have an effective set of standing tools for providing liquidity.**
   - The Fed showed remarkable innovation during the crisis
   - But that success came mostly from introducing new facilities rather than from standing facilities
   - And the Fed faced several constraints that might have slowed its response
   - Framework should be able to more effectively provide liquidity to the banking sector through standing facilities
   - Also important to consider whether facilities should include a wider set of counterparties

Liquidity Provision During the Financial Crisis

Chart 2

Evolution of Federal Reserve Liquidity Facilities



Source: Fleming and Klagge (2011), "Income Effects of Federal Reserve Liquidity Facilities," *Current Issues*, Volume 17-1, Federal Reserve Bank of New York.

Observations from the Crisis and Post-Crisis Period

2. The Fed needs to have the capacity to do large-scale asset purchases.

- Asset purchase programs can be an effective policy instrument
- Central banks need to retain the option to do asset purchases because of the lower bound on short-term interest rates
- Operational capacity to do LSAPs should be maintained
- Framework should allow a smooth transition to an expanded balance sheet

Fed's Holdings of Treasury Securities

Chart 13

Composition of SOMA Domestic Securities Holdings

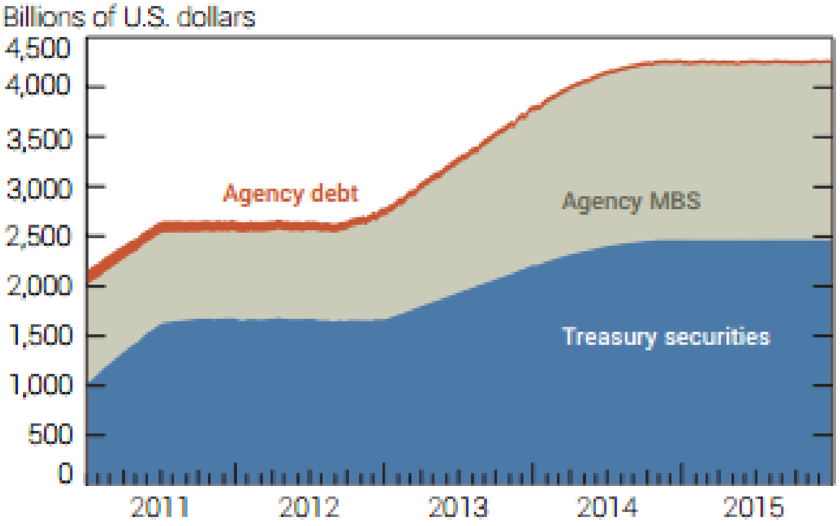
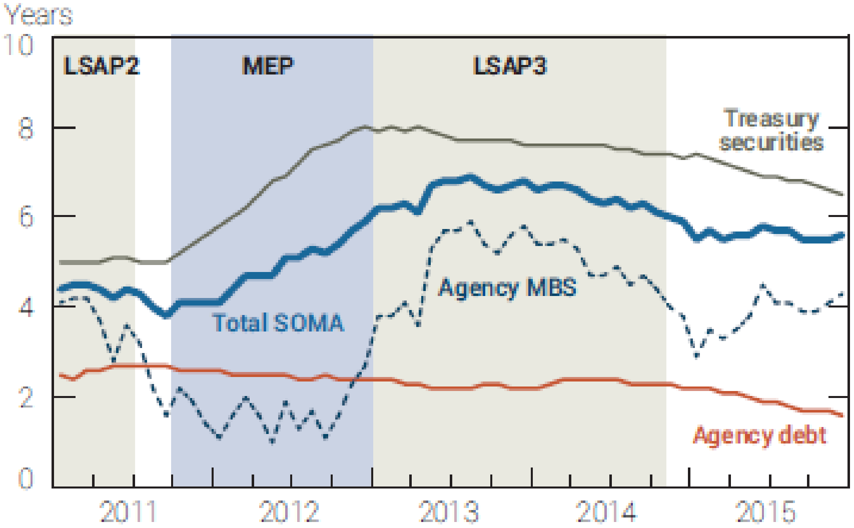


Chart 17

Average Duration of SOMA Domestic Securities Holdings



Source: *Domestic Open Market Operations During 2015*, Federal Reserve Bank of New York.

Observations from the Crisis and Post-Crisis Period

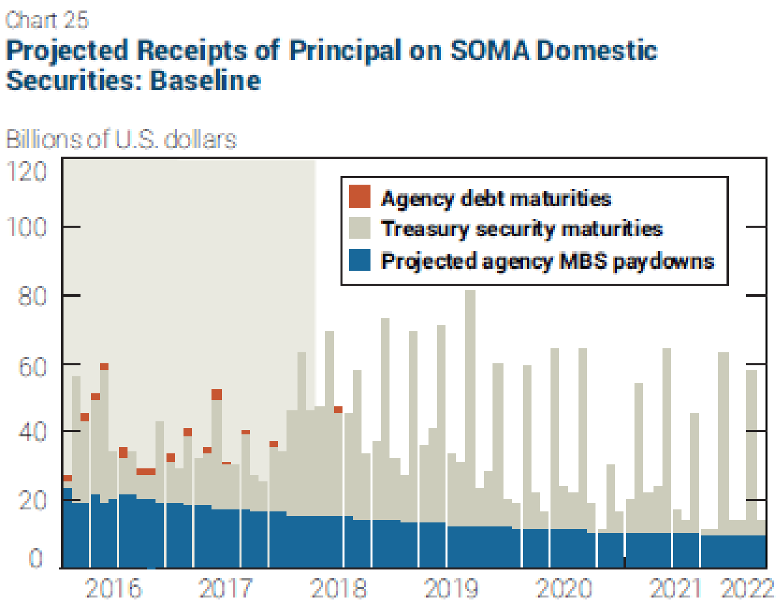
3. **The Fed should consider a larger balance sheet in steady state, with the policy rate managed in a floor system.**
   - Key aspect of framework debate will be whether to operate in floor or corridor system
   - Possible to have large steady-state balance sheet and rely on IOER and RRP to control the policy rate
   - There are some advantages to maintaining large balance sheet (more liquidity in the financial system)

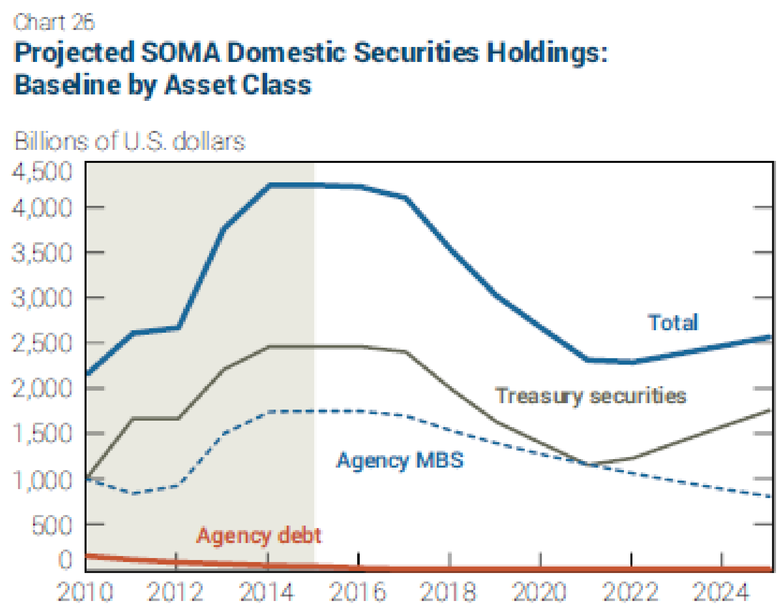
Observations from the Crisis and Post-Crisis Period

4. **The composition of the Fed's steady state portfolio of Treasuries should be optimized.**

   - Before the crisis, the Fed's balance sheet holdings were governed by Treasury issuance patterns
   - Fed should optimize the composition of its Treasury holdings for policy-oriented objectives
   - Argument for holding bills: provides flexibility to drain quickly if needed

Anticipated Adjustments to Fed's Treasury Holdings





Source: *Domestic Open Market Operations During 2015*, Federal Reserve Bank of New York.

Observations from the Crisis and Post-Crisis Period

5. **The Fed can effectively control the policy rate even with a large balance sheet.**

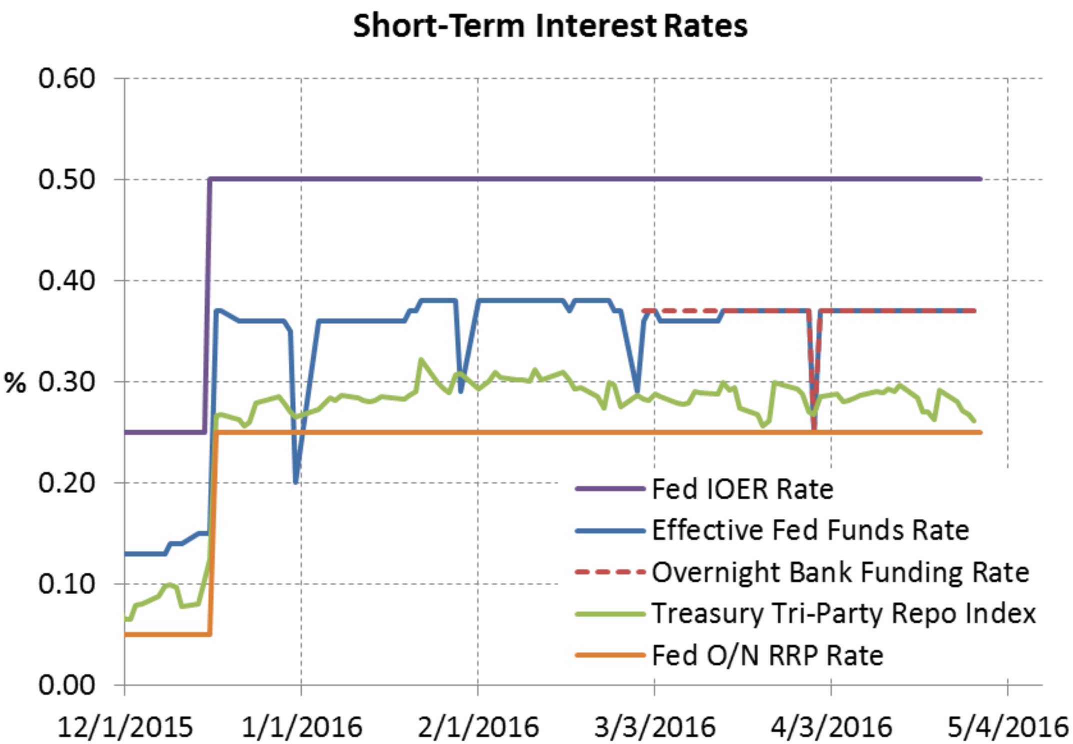
   – Control of short-term interest rates is most important aspect of framework; Fed needs to have an effective floor

   – Fed has demonstrated impressive control of short-term interest rates

   – Allows it to make decisions about balance sheet without compromising control of monetary policy

   – IOER alone does not provide a hard floor, but the combination of IOER and RRP seems to be working well

Behavior of Short-term Interest Rates Since Lift-off



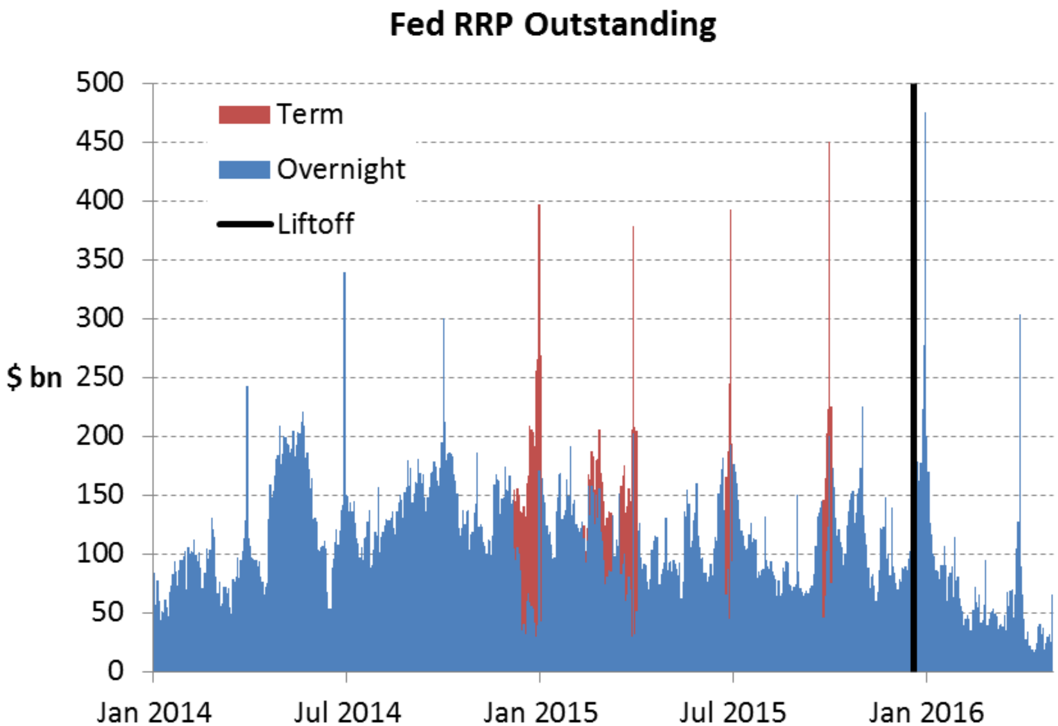
Source: Bloomberg, BNY Mellon.

Median Expectations from FRBNY Primary Dealer Survey, 12/7/2015

	Immediately After Liftoff	1 Year After Liftoff
Fed IOER Rate	0.50%	1.25%
Effective Fed Funds Rate	0.34%	1.11%
Treasury Tri-Party O/N Repo Rate	0.30%	1.06%
Fed O/N RRP Rate	0.25%	1.00%

Source: Federal Reserve Bank of New York.

Activity at the Fed's RRP Facility



Source: Federal Reserve Bank of New York.

Median Expectations from FRBNY Primary Dealer Survey, 12/7/2015

	Immediately After Liftoff	1 Year After Liftoff
O/N RRP Demand	\$300 bn	\$350 bn
O/N RRP Cap	\$600 bn	\$450 bn

Source: Federal Reserve Bank of New York.

Observations from the Crisis and Post-Crisis Period

6. **RRPs should be a regular part of the Fed’s policy framework.**
   - Hard to understand the desire to phase out RRPs as quickly as possible
   - Concerns about the Fed’s footprint in markets were not fully explained
   - Best framework for ensuring effective control of short rates probably involves combination of RRP and IOER
   - Current configuration of administered rates has some shortcomings

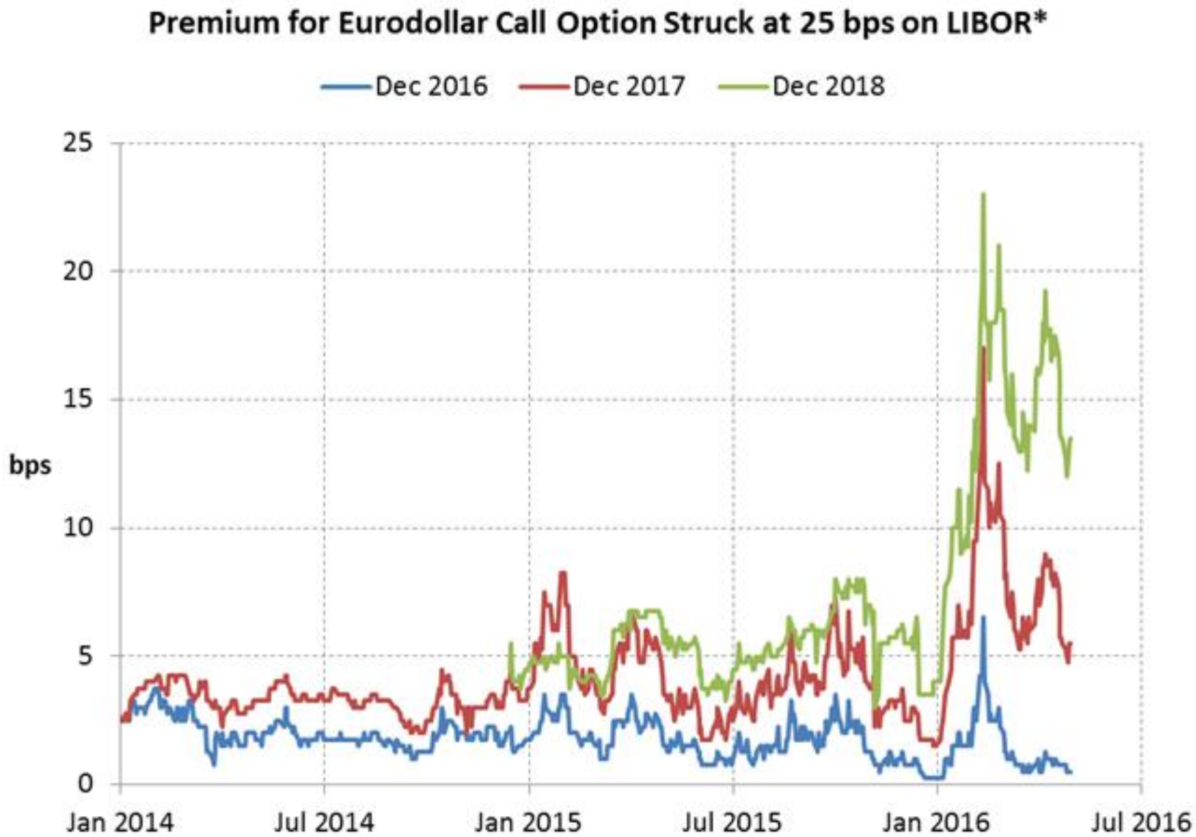
Observations from the Crisis and Post-Crisis Period

7. **The Fed should consider an alternative target variable.**
   - The federal funds market currently has a limited amount of activity
   - If want an unsecured rate, the OBFR likely dominates the federal funds rate
   - Fed could also consider a secured rate or its administered rates as the target
   - Fed likely has concern about a broader configuration of money market rates beyond its single target variable

Observations from the Crisis and Post-Crisis Period

8. **The Fed should clarify if negative rates are part of the policy toolkit.**
   - Prospect of negative interest rates is already affecting market prices
   - Fed could communicate whether negative rates are part of the toolkit and indicate the threshold to which they would be willing to adjust rates
   - Knowing the Fed’s views on negative rates would help markets more efficiently price policy prospects

Market Pricing of Negative Rate Outcomes



* Based on options on eurodollar futures contracts. Source: Bloomberg.