Implementing Monetary Policy
The Federal Reserve in the 21st Century

Chris Burke
Vice President, Markets Group
Director, Domestic Money Markets and Reserves Management

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Disclaimer

The views in this presentation are those of the speaker and do not necessarily reflect the views of the Federal Reserve Bank of New York or the Federal Reserve System.
Contents

• Monetary Policy Institutional Framework
• Traditional Operating Objective, Transmission Mechanism, and Operations
• The Current Environment and Approach to Implementing Monetary Policy
Framework for the Conduct of Monetary Policy

• Federal Open Market Committee (FOMC)
  – Board of Governors plus 5 Reserve Bank Presidents
  – Directs Open Market Operations to achieve economic goals
  – Delegates FRBNY to execute OMOs
  – Issues a “Directive” to FRBNY after each meeting setting the operating objective for OMOs

• Board of Governors
  – Responsible for Discount Window programs
  – Approves requests for changes in the discount rate from Boards of Directors of the District Banks
  – Sets Reserve Requirements
  – Authorizes lending under “unusual and exigent circumstances”
Sample Traditional FOMC Policy Directive
August 2008

Excerpt from the Domestic Policy Directive to the FRBNY Domestic Trading Desk:

To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 2 percent.

Reserves

Balances held by commercial banks at Federal Reserve Banks

Federal Funds Market

interbank market for borrowing/lending reserves

Federal Funds Rate

overnight rate has been the FOMC’s operating objective for open market operations for most of the past 35 years
Traditional Monetary Transmission Mechanism

• Changes in banks’ short term borrowing and lending rates feed through to longer term interest rates generally
  – Longer term rates are also affected by expectations for future short-term rates
  – Spreads between private sector long-term rates and risk-free Treasury rates are also affected by assessments of risk and liquidity

• Longer term interest rates affect business and consumer spending and savings decisions

• Changes in short term interest rates may affect spending through other channels, e.g. through their impact on exchange rates
Treasury Yields and the Overnight Federal Funds Rate
January 11, 2010
The Demand for and Supply of Reserve Balances

A. Demand: \[ \text{Supply} \]

B. Demand: \[ \text{Supply} \]

C. Demand: \[ \text{Supply} \]

Federal Funds rate

- Too high
- Too low
- $target$
- Too high
- Too low
- $target$
- Too high
- Too low
- $target$
# Federal Reserve Balance Sheet

## August 2007

(billions of dollars)

### Assets

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (billions of dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treasury Securities</td>
<td>791</td>
</tr>
<tr>
<td>RPs</td>
<td>19</td>
</tr>
<tr>
<td>Discount Window Loans</td>
<td>0</td>
</tr>
<tr>
<td>Other Assets</td>
<td>59</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>869</strong></td>
</tr>
</tbody>
</table>

### Liabilities

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (billions of dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank reserves</td>
<td>15</td>
</tr>
<tr>
<td>Federal Reserve notes</td>
<td>777</td>
</tr>
<tr>
<td>Treasury deposits</td>
<td>5</td>
</tr>
<tr>
<td>Other liabilities and capital</td>
<td>72</td>
</tr>
<tr>
<td><strong>Total liabilities and capital</strong></td>
<td><strong>869</strong></td>
</tr>
</tbody>
</table>

Source: Board of Governors h.4.1
Daily Operating Procedures (Traditional)

Estimate Supply of Reserves

Based on estimates and known values of other balance sheet factors

Estimate Demand for Reserves

Established by reserve requirements, place in reserve maintenance period, and Fedwire payment flows (special days)

Execute Open Market Operations

Adjusting for current market conditions, add to or drain reserve supply, to keep it in line with demand

Operations arranged each morning

Auctions over proprietary electronic platform with primary dealers
A Morning on the Desk

7:00 am  Receive estimates of reserve supply for that day, and each remaining day in the maintenance period

8:00-9:00 am  Discuss Fed Funds and other money market conditions with participants, and refine estimates of reserve demand accordingly

9:10 am  Review conditions in reserve markets and discuss plans with staff at Board of Governors

9:30 am  Announce any operation to dealers & public

By 9:40 am  Dealers submit propositions

By 9:41 am  Select propositions and return results to dealers
Observations about the Traditional Approach

• Fed operated almost exclusively in the market for Treasury securities

• Maximum reliance on market mechanisms for determining interest rates in all financial market segments
The Current Environment
(since December 2008)

• Federal Reserve can now pay interest on reserves
• Policymakers reduced the target federal funds rate to its “effective lower bound” funds rate (0 to 25 basis points)
  – Weak economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time
• Expand balance sheet by extending credit through lending facilities and asset purchases
  – Focus of policy going forward will be to support the functioning of financial markets and stimulate the economy through measures that sustain the size of the Federal Reserve’s balance sheet at a high level
Federal Reserve Liquidity Operations, Facilities, and Special Arrangements

Traditional Facilities
OMOs – Open market operations: repos against govt. securities and outright holdings of Treasury debt
PCF – Primary Credit Facility; traditional discount window
SL – overnight securities lending facility; bonds for bonds

New Arrangements (month of their initial announcement)
modified PCF – term lending and narrower spread (August 2007)
TAF – Term Auction Facility (December 2007)
Swaps Lines – Reciprocal currency arrangements with foreign CBs (December 2007)
Single-tranche Agency MBS repos (March 2008)
TSLF – Term Securities Lending Facility; bonds for bonds (March 2008)
PDCF - Primary Dealer Credit Facility (March 2008)
Maiden Lane LLC lending (March 2008)
AIG Lending (September 2008)
AMLF – ABCP MMMF Liquidity Facility (September 2008)
CPFF- Commercial Paper Funding Facility (October 2008)
MMIFF – Money Market Investor Funding Facility (October 2008)
Outright purchases of Agency and Agency MBS debt (November 2008)
TALF - Term Asset-Backed Securities Loan Facility (March 2009)
Outright purchases of longer term Treasury securities (March 2009)
Characteristics and Objectives of New Liquidity Facilities and Operations

• Have broadened the eligible set of borrowers and/or expanded the types of collateral accepted against extensions of Federal Reserve credit

• Credit is being directed directly to financial particular markets under severe stress

• Asset purchases have been designed to directly influence key longer term interest rates that affect spending
Implications for Operations and the Balance Sheet

• As the Federal Reserve has expanded its lending and purchases of assets, bank reserves have also grown.

• But as long as interest rates are near zero, no need to worry about the impact of a high level of reserves on interest rates.
# Federal Reserve Balance Sheet

**January 2010**

(billions of dollars)

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treasury Securities</td>
<td>Bank reserves</td>
</tr>
<tr>
<td>777</td>
<td>1,025</td>
</tr>
<tr>
<td>Agency and Agency MBS</td>
<td>Federal Reserve notes</td>
</tr>
<tr>
<td>1,069</td>
<td>885</td>
</tr>
<tr>
<td>Discount and Other Loans</td>
<td>Treasury deposits</td>
</tr>
<tr>
<td>271</td>
<td>172</td>
</tr>
<tr>
<td>Other Assets</td>
<td>Other liabilities and capital</td>
</tr>
<tr>
<td>112</td>
<td>157</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Assets</th>
<th>Total liabilities and capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,239</td>
<td>2,239</td>
</tr>
</tbody>
</table>

Source: Board of Governors h.4.1
Upcoming Issues

How and when will the size of the balance sheet return to “normal?”

How would we target a positive federal funds rate if reserves were still high?
Questions?