Lessons from the Crisis for Monetary Policy

The Fed in the 21st Century Conference

Simon Potter

January 14, 2010

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.

Many “Lessons” from the Crisis

- Asset Prices and Monetary Policy
  - Lean or clean?
    - Prior to Crisis Fed was strongly in the clean camp
- Leverage
  - More important for transmission of monetary policy than conventional models assumed
    - Main reason models failed to correctly propagate the sub-prime losses
- Great Moderation was much more risky than we understood
  - Too much time spent prior to crisis on the benefits of the Great Moderation
  - Some view this as indictment of macroeconomics in general
- Focus presentation on the power of communication of possible future actions to achieve goals
  - Fed forward guidance continued to increase during the crisis

Brief History of Fed Reserve Communication

- Prior to 1994 most communication was "ex post", that is disclosing previously taken actions
  - No post meeting statement
  - Minutes published after next FOMC meeting
  - Monetary Policy Report forecasts very short horizon
  - Main vehicles for policy guidance: testimony, speeches

- Since 1994, communication has become more explicitly forward looking
  - 1994 first post-meeting statement
  - Communication continued to evolve through October 2007
    - Intermeeting bias replaced by balance of risks in 1999

First Post-Meeting Statement February 1994

Chairman Alan Greenspan announced today that the Federal Open Market Committee decided to increase slightly the degree of pressure on reserve positions. The action is expected to be associated with a small increase in short-term money market interest rates.

The decision was taken to move toward a less accommodative stance in monetary policy in order to sustain and enhance the economic expansion.

Chairman Greenspan decided to announce this action immediately so as to avoid any misunderstanding of the Committee's purposes, given the fact that this is the first firming of reserve market conditions by the Committee since early 1989.

Communication and Policy

Expectations of future "policy/actions" are crucial part of transmission mechanism especially in a crisis

- Central Bank Forecasts
  - Summary of Economic Projections (introduced in October 2007)
    - Reduce uncertainty about future actions
  - Long run forecasts (introduced in January 2009)
    - Reduce uncertainty about goals and policymakers view of potential and NAIRU
    - Facilitate discussion of medium term strategy
- Inflation/price level objective
  - Resist deflationary/inflationary expectations
  - Lower real interest rates in liquidity trap
- Conditional Commitments
  - Lessons from Japan and US 1937 keep stimulus in place until recovery firmly takes hold
  - Target Rate low for "some time" or "extended period"
    - Similar to 2003 "considerable period"
    - Canada, Riksbank, ECB LTRO

Monetary Policy Tools in the Crisis

- Short-term interest rates
  - Fed Funds Target, Discount Rate, Interest on Excess Reserves
- Balance Sheet
  - Purchases of Government and Agency Liabilities
  - Swap lines with foreign central banks
  - Liquidity provision through discount window and auctions (PCF, PDCF, TAF, TSLF)
  - "Credit" provision to specific markets through new facilities (CPFF, TALF)
- Communication: future policy and objectives
- Fed can react quickly to developments with its tools so communication about future use of its tools can be very powerful
  - Many times a commitment to act is sufficient
    - "Discount Window is Open"

Governance Issues:
See “Fed We Trust” by David Wessell

- Board of Governors responsible for facilities (with one Reserve Bank)
- Board of Governors votes on discount rate (recommendations from Reserve Banks) and interest on excess reserves
- FOMC responsible for direct purchases and liability side of balance sheet
- FOMC agrees on directive to Desk, post meeting statement, minutes and forecasts
- In 2009 all meetings two day to allow “discussion” between Board of Governors and Reserve Bank Presidents
  - Frequent video-conference calls to keep Presidents informed

Section 13 of Federal Reserve Act: Powers of Federal Reserve Banks

- Subsection 3: In **unusual and exigent circumstances**, the Board of Governors of the Federal Reserve System, by the affirmative vote of not less than five members,* may authorize any Federal reserve bank, during such periods as the said board may determine, at rates established in accordance with the provisions of section 14, subdivision (d), of this Act, to discount for **any individual, partnership, or corporation**, notes, drafts, and bills of exchange when such notes, drafts, and bills of exchange are indorsed or otherwise **secured to the satisfaction of the Federal Reserve bank**: *Provided*, That before discounting any such note, draft, or bill of exchange for an individual, partnership, or corporation the Federal reserve bank **shall obtain evidence that such individual, partnership, or corporation is unable to secure adequate credit accommodations from other banking institutions**. All such discounts for individuals, partnerships, or corporations shall be subject to such limitations, restrictions, and regulations as the Board of Governors of the Federal Reserve System may prescribe

* Amended by the Patriot Act

FOMC Statement: August 5, 2008

The Federal Open Market Committee decided today to keep its target for the federal funds rate at 2 percent.

Economic activity expanded in the second quarter, partly reflecting growth in consumer spending and exports. However, labor markets have softened further and financial markets remain under considerable stress. Tight credit conditions, the ongoing housing contraction, and elevated energy prices are likely to weigh on economic growth over the next few quarters. Over time, the substantial easing of monetary policy, combined with ongoing measures to foster market liquidity, should help to promote moderate economic growth.

Inflation has been high, spurred by the earlier increases in the prices of energy and some other commodities, and some indicators of inflation expectations have been elevated. The Committee expects inflation to moderate later this year and next year, but the inflation outlook remains highly uncertain.

Although downside risks to growth remain, the upside risks to inflation are also of significant concern to the Committee. The Committee will continue to monitor economic and financial developments and will act as needed to promote sustainable economic growth and price stability.

Voting for the FOMC monetary policy action were: Ben S. Bernanke, Chairman; Timothy F. Geithner, Vice Chairman…...
Voting against was Richard W. Fisher, who preferred an increase in the target for the federal funds rate at this meeting.

FOMC Statement: December 16, 2008

The Federal Open Market Committee decided today to establish a target range for the federal funds rate of 0 to 1/4 percent.

Since the Committee's last meeting, labor market conditions have deteriorated, and the available data indicate that consumer spending, business investment, and industrial production have declined. Financial markets remain quite strained and credit conditions tight. Overall, the outlook for economic activity has weakened further.

Meanwhile, inflationary pressures have diminished appreciably. In light of the declines in the prices of energy and other commodities and the weaker prospects for economic activity, the Committee expects inflation to moderate further in coming quarters.

The Federal Reserve will employ all available tools to promote the resumption of sustainable economic growth and to preserve price stability. In particular, the Committee anticipates that weak economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time.

The focus of the Committee's policy going forward will be to support the functioning of financial markets and stimulate the economy through open market operations and other measures that sustain the size of the Federal Reserve's balance sheet at a high level. As previously announced, over the next few quarters the Federal Reserve will purchase large quantities of agency debt and mortgage-backed securities to provide support to the mortgage and housing markets, and it stands ready to expand its purchases of agency debt and mortgage-backed securities as conditions warrant. The Committee is also evaluating the potential benefits of purchasing longer-term Treasury securities. Early next year, the Federal Reserve will also implement the Term Asset-Backed Securities Loan Facility to facilitate the extension of credit to households and small businesses. The Federal Reserve will continue to consider ways of using its balance sheet to further support credit markets and economic activity.

Downside Risks to the Outlook Continue to Increase

- In January 2009, depth and duration of the recession were very uncertain
  - Stress test based on a more adverse recession in terms of depth and duration than the consensus forecast in late January and early February

- There were also worries about deflation

Moreover, the Committee sees some risk that inflation could persist for a time below rates that best foster economic growth and price stability in the longer term. (January 2009 FOMC statement)

FOMC Statement: March 18, 2009

Information received since the Federal Open Market Committee met in January indicates that the economy continues to contract. Job losses, declining equity and housing wealth, and tight credit conditions have weighed on consumer sentiment and spending. Weaker sales prospects and difficulties in obtaining credit have led businesses to cut back on inventories and fixed investment. U.S. exports have slumped as a number of major trading partners have also fallen into recession. Although the near-term economic outlook is weak, the Committee anticipates that policy actions to stabilize financial markets and institutions, together with fiscal and monetary stimulus, will contribute to a gradual resumption of sustainable economic growth.

In light of increasing economic slack here and abroad, the Committee expects that inflation will remain subdued. Moreover, the Committee sees some risk that inflation could persist for a time below rates that best foster economic growth and price stability in the longer term.

In these circumstances, the Federal Reserve will employ all available tools to promote economic recovery and to preserve price stability. The Committee will maintain the target range for the federal funds rate at 0 to 1/4 percent and anticipates that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for an extended period. To provide greater support to mortgage lending and housing markets, the Committee decided today to increase the size of the Federal Reserve's balance sheet further by purchasing up to an additional $750 billion of agency mortgage-backed securities, bringing its total purchases of these securities to up to $1.25 trillion this year, and to increase its purchases of agency debt this year by up to $100 billion to a total of up to $200 billion. Moreover, to help improve conditions in private credit markets, the Committee decided to purchase up to $300 billion of longer-term Treasury securities over the next six months. The Federal Reserve has launched the Term Asset-Backed Securities Loan Facility to facilitate the extension of credit to households and small businesses and anticipates that the range of eligible collateral for this facility is likely to be expanded to include other financial assets. The Committee will continue to carefully monitor the size and composition of the Federal Reserve's balance sheet in light of evolving financial and economic developments.

Commitment to Act

- Minutes of October 2008 FOMC meeting

Members anticipated that economic data over the upcoming intermeeting period would show significant weakness in economic activity, and some suggested that additional policy easing could well be appropriate at future meetings. In any event, the Committee agreed that it would take whatever steps were necessary to support the recovery of the economy.

  - Extended Period for exceptionally low rates
  - Large Scale Asset Purchases expanded in scale and to Treasuries
  - TALF etc

- Contingent Commitment by March 2009 was very large

FEDERAL RESERVE COMMITMENTS

(Billions of USD)

Program	Maximum	Actual as 04/09
Outright Purchases	**1750**	**538**
Agency MBS	1250	404
Agency debt	200	67
Treasury debt	300	66
Support for Specific Institutions	**466**	**116**
Maiden Lane 1 (Bear Stearns)	29	29
Maiden Lane 2 (AIG RMBS)	23	18
Maiden Lane 3 (AIG CDOs)	30	24
Citigroup backstop	236	0
Bank of America backstop	88	0
AIG loans	60	45
TALF	**1000**	**6**
Central Bank Liquidity Swaps	**852**	**250**
Lending to Depository Institutions	**1625**	**449**
TAF	600	404
PCF	1025	45
Lending to Primary Dealers	**400**	**39**
PDCF	150	1
TSLF	200	38
TOP	50	0
Lending to Other Institutions	**1523**	**182**
CPFF	833	178
AMLF	150	4
MMIFF	540	0
TOTAL	**7616**	**1580**

Decline in Downside Risks to the Outlook

- May 2009 SCAP successful
  - Banks available to access private capital markets
- Funding Conditions improve for financial intermediaries
- Stock Market moves significantly above its March lows

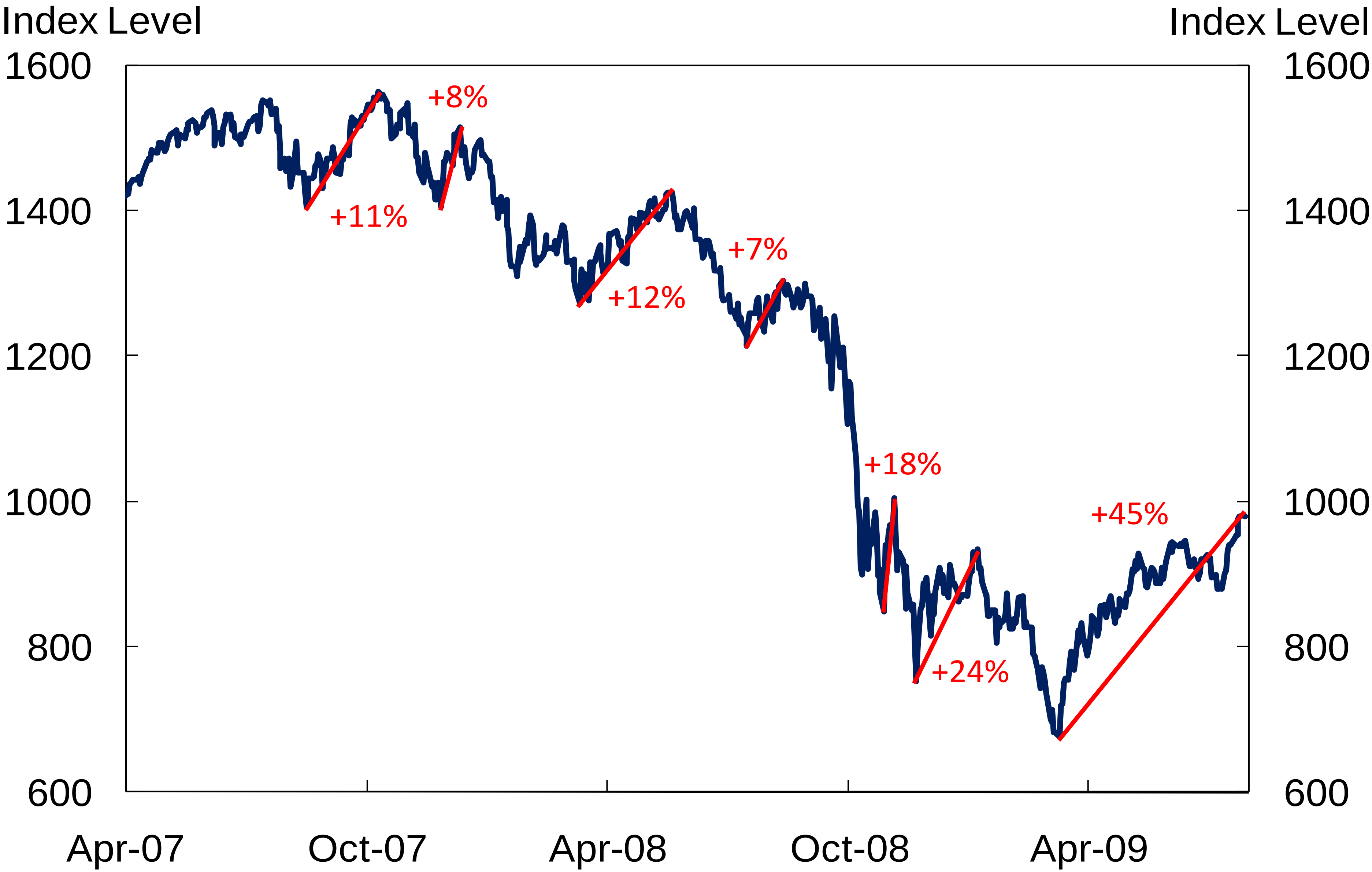
Banking Sector Credit Risk

Source: New York Fed calculations

Cost of Funds in the Interbank Market

Source: New York Fed calculations

S&P 500 Rallies Since July 2007



Source: Datastream

FOMC Statement: August 12, 2009

Information received since the Federal Open Market Committee met in June suggests that economic activity is leveling out. Conditions in financial markets have improved further in recent weeks. Household spending has continued to show signs of stabilizing but remains constrained by ongoing job losses, sluggish income growth, lower housing wealth, and tight credit. Businesses are still cutting back on fixed investment and staffing but are making progress in bringing inventory stocks into better alignment with sales. Although economic activity is likely to remain weak for a time, the Committee continues to anticipate that policy actions to stabilize financial markets and institutions, fiscal and monetary stimulus, and market forces will contribute to a gradual resumption of sustainable economic growth in a context of price stability.

The prices of energy and other commodities have risen of late. However, substantial resource slack is likely to dampen cost pressures, and the Committee expects that inflation will remain subdued for some time.

In these circumstances, the Federal Reserve will employ <u>all available</u> tools to promote economic recovery and to preserve price stability. The Committee will maintain the target range for the federal funds rate at 0 to 1/4 percent and continues to anticipate that economic conditions are likely to warrant exceptionally low levels of the federal funds rate <u>for an extended period</u>. As previously announced, to provide support to mortgage lending and housing markets and to improve overall conditions in private credit markets, the Federal Reserve will purchase a total of up to $1.25 trillion of agency mortgage-backed securities and up to $200 billion of agency debt by the end of the year. In addition, the Federal Reserve is in the process of buying $300 billion of Treasury securities. To promote a smooth transition in markets as these purchases of Treasury securities are completed, the Committee has decided to gradually slow the pace of these transactions and anticipates that the full amount will be purchased by the end of October. The Committee will continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets. The Federal Reserve is monitoring the size and composition of its balance sheet and will make adjustments to its credit and liquidity programs as warranted.

FOMC Statement: December 16, 2009

Information received since the Federal Open Market Committee met in November suggests that economic activity has continued to pick up and that the deterioration in the labor market is abating. The housing sector has shown some signs of improvement over recent months. Household spending appears to be expanding at a moderate rate, though it remains constrained by a weak labor market, modest income growth, lower housing wealth, and tight credit. Businesses are still cutting back on fixed investment, though at a slower pace, and remain reluctant to add to payrolls; they continue to make progress in bringing inventory stocks into better alignment with sales. Financial market conditions have become more supportive of economic growth. Although economic activity is likely to remain weak for a time, the Committee anticipates that policy actions to stabilize financial markets and institutions, fiscal and monetary stimulus, and market forces will contribute to a strengthening of economic growth and a gradual return to higher levels of resource utilization in a context of price stability.

With substantial resource slack likely to continue to dampen cost pressures and with longer-term inflation expectations stable, the Committee expects that inflation will remain subdued for some time.

The Committee will maintain the target range for the federal funds rate at 0 to 1/4 percent and continues to anticipate that economic conditions, <u>including low rates of resource utilization, subdued inflation trends, and stable inflation expectations</u>, are likely to warrant exceptionally low levels of the federal funds rate for an extended period. To provide support to mortgage lending and housing markets and to improve overall conditions in private credit markets, the Federal Reserve is in the process of purchasing $1.25 trillion of agency mortgage-backed securities and about $175 billion of agency debt. In order to promote a smooth transition in markets, the Committee is gradually slowing the pace of these purchases, and it anticipates that these transactions will be executed by the end of the first quarter of 2010. The Committee will continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets.