





# The Federal Reserve Tools: Past and Present

by Ken Kapner CEO and President, GFMI



## The Federal Reserve Tools: Past and Present

Pundits all seem to agree that, later this year, the Federal Reserve will finally raise rates. Some seem to think that will occur in June while others believe it will be September. Regardless of when it happens, now would be a good time to review how the Federal Reserve actually goes about raising rates. This article reviews the Federal Reserve's role, how they control the Fed Funds rate, and the tools used to accomplish these goals; it is not designed to be an in-depth look, but more of an overview.

## **The Federal Reserve**

The Federal Reserve (or the "The Fed" as it is commonly referred to) was created by an Act of Congress with the explicit goals of "fostering maximum employment and price stability." For current policy and an economic activity summary see the press release from the March 18<sup>th</sup> FOMC meeting (<u>http://www.federalreserve.gov/newsevents/press/monetary/20150318a.htm</u>). To keep this simple, the Fed raises rates when inflation is rearing its ugly head, or lowers rates when the economy is not doing well. These goals can be in direct conflict or there may be an exogenous event that may cause inflation to go up and the economy to stall. Or, there may be a credit crisis.

The Fed imposes reserve requirements on banks, which is a tiny percentage of banks' deposits. Banks maintain these reserves over a short time period such as one or two weeks. If banks have excess reserves or require reserves, they lend/borrow to one another in the overnight Federal Funds market, simply referred to as overnight Fed Funds. The Fed influences this overnight rate in three different ways:

- 1. Reserve Requirements—By increasing/decreasing the amount required to be held, the Fed influences the level of balances held at the Fed.
- 2. The Discount Window—This facility gives banks the ability to borrow directly from the Fed at a rate known as the discount rate.
- 3. Open Market Operations—This is the primary tool that The Fed uses to influence the Fed Funds rate. When conducting open market operations, the Fed can influence the amount of reserves in the banking system permanently by buying/selling government securities outright or temporarily through repurchase agreements, commonly referred to as repos. When buying securities, it adds money to the system and, when selling securities, it drains the system. Repos add, and reverse repos drain, the system.

The reserves or liabilities were free in that, traditionally, the Fed did not pay interest on them. In turn, the Fed purchased government securities thereby creating assets and rounding off their balance sheet.

For years, the Fed was able to target an overnight Fed Funds rate and maintain it using the above methodology.



## Along comes the credit crisis . . .

At the onset of the credit crisis the Fed engineered quite a number of unique programs to get money into the hands of institutions that needed it<sup>1</sup>. They also embarked on quantitative easing, or what is now known as QE. The Fed's balance sheet went from approximately 800–900 billion in 2008 to over 4 trillion dollars (that is a lot of zeros!!) today, which is illustrated in the graph below:



To help them achieve and manage their target, currently in a range of 0.00%–0.25%, the Fed altered their policy in 2008 and started paying interest on reserves, both required and excess reserves. Therefore, when the Fed deems that rates should be higher, they will simply increase the rate they pay on reserves. The markets seem to be more focused on interest on excess reserves, or IOER.

In addition, the Fed will also use overnight reverse repos, or ON RRP, to manage their target. What is interesting here is that they have made this available to institutions outside the traditional primary government dealer community, including non-financial institutions. They have been testing this ON RRP since September 2013.

Whether the Fed raises rates this year or at some later date, one can count on them using these newer tools to manage interest rates and hence monetary policy.

## References

<sup>1</sup>For those interested in the Feds response go to: <u>http://www.federalreserve.gov/monetarypolicy/bst\_crisisresponse.htm</u>



## About the author

Ken Kapner, CEO and President, started Global Financial Markets Institute, Inc. (GFMI) a NASBA certified financial learning and consulting boutique, in 1998.

## **Professional Experience**

Since 1997, Ken has designed, developed and delivered custom instructor led training courses for a variety of clients including



Government Regulators, Asset Managers, Banks and Insurance Companies as well as a variety of support functions for these clients. Ken is well-versed in most aspects of the Capital Markets. His specific areas of expertise include derivative products, risk management, foreign exchange, fixed income, structured finance, and portfolio management.

He has been a Risk Management Advisor to a Mutual Fund's Board of Trustees and has served as an Expert Witness using knowledge of derivatives, trading and risk management

Prior, Ken spent 14 years with the HSBC (Hong Kong and Shanghai Banking Corporation) Group in their Treasury and Capital markets area where he traded a variety of instruments including interest rate derivatives, spot and forward foreign exchange, money markets, managed the balance sheet, sat on the Asset Liability Committee and was responsible for the overall Treasury activities of the bank. He spent two years in Hong Kong where he headed up HSBC's Global Treasury and Capital Markets Product training. Specifically, his responsibilities included developing new courses and delivering courses to traders, support staff and relationship managers. In New York, he established a training department for the firms' Securities Division where he was in charge of the MBA Associates Program, continuing education and Section 20 license. He currently runs his own training and consulting firm called Global Financial Markets Institute (GFMI). He has co-authored/co-edited seven books on derivatives including The Swaps Handbook and Understanding Swaps.

## Articles

March 2002 Futures Magazine, Doing Your Homework on Individual Equity Futures (co-written with Robert McDonough)

#### Books

1996 Como Entender Los Swaps, (co-author: John Marshall), published by CECSA (a Mexican publishing firm). This is a translated edition of our book Understanding Swaps, but with adaptations to fit the Mexican markets. (289 pages)



1993 he Swaps Market: 2nd edition, Kolb Publishing, 288 pages (co-author: John Marshall, copyright 1993). This book is directed to the graduate business student.

1993 Understanding Swaps, John Wiley & Sons, 270 pages (co-author John Marshall, copyright 1993). This book is directed to the practitioner market and is published as part of Wiley's Finance Series.

1993 1993-94 Supplement to the Swaps Handbook, New York Institute of Finance, a Simon & Schuster Company, 494 pages, (co-authors John Marshall and Ellen Lonergan, copyright 1993). This book is directed to a practitioner audience and is a supplement to The Swaps Handbook. My role was largely that of editor.

1991 1991-92 Supplement to The Swaps Handbook, New York Institute of Finance (Simon & Schuster Professional Information Group), 300+ pages (co-author: John Marshall copyright 1992). This book is directed to a professional practitioner audience and is an annual supplement to The Swaps Handbook.

1990 The Swaps Handbook: Swaps and Related Risk Management Instruments, New York: New York Institute of Finance, a Simon & Schuster Company, 543 pages. (co-author: John Marshall). This book is directed to derivative product professionals.

1988 Understanding Swap Finance, Cincinnati: South Western publishing Company, 155 pages. (co-author John Marshall, copyright 1990). This was the first academic text published on the swaps markets.

## Affiliations

International Association of Financial Engineers Board of Advisors - 1994 - 2010

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