

# **Money & Banking (220:301:06)**

Spring 2014

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Office Hours: 3:15-4:00 Tuesdays and Thursdays

Class meets Mondays/Wednesdays 4:30pm to 5:50pm  
Room 213 Murray Hall, CAC

**Prerequisites: Eco 102 & 103 (This is a lower level elective)**

## **Money & Banking**

December 23, 1913 Woodrow Wilson signed into law the Federal Reserve Act. We are now celebrating the Fed's Centennial year. As such it is appropriate that we spend some time in class studying the history of the Fed.

The world of Money & Banking has changed significantly in recent years. Concepts such as "Too Big to Fail", and the "Volcker-Rule" have been incorporated into recent legislation (Dodd-Frank).

The Fed has reached the co-called "Zero-Bound", that is the traditional policy rate is effectively at zero. Has the Fed run out of ammo in combating the persistently high unemployment rate? What are the unconventional tools used by the Fed, and are they working? How will the Fed unwind these unconventional policies?

Welcome to Money & Banking.

These topics and more will be discussed in class.

## **Final Exam**

To avoid any confusion it is policy to display the date and time of the final exam on the front page of the syllabus.

***Date: Friday, May 9, 2014, 4:00pm***

## **Grading Policy**

First Exam	40%
Final Exam	50%
Assignments	10%

Make-Up Exams will only be given under extraordinary circumstances. Students should check with me before missing an exam to see whether their particular circumstances meet my very limited definition of extraordinary.

## **Learning Outcomes**

Students who satisfactorily complete Money & Banking will understand the role of money and banks in the broader economy. Specifically, students should garner an understanding of the unique role of banks in the financial system. Students will learn how banks and other financial institutions make money, and allocate credit. Students will also have an appreciation for the money markets and bond market.

Students will also learn the relevance of the Federal Reserve and related central banking topics, including the causes, policy responses, and lessons associated with the current financial market crisis.

## **Attendance Policy**

Students are expected to attend every class. While I understand that such is not always possible, students should be aware that I will not provide individual review sessions. I will take attendance.. Moreover, *students should understand that it is impossible to pass this course without regular attendance.*

*Students are expected to attend all classes; if you expect to miss one or two classes, please use the University absence reporting website: <http://sims.rutgers.edu/ssra> to indicate the date and reason for your absence. An e-mail is automatically sent to me.*

## **Other**

The University has established rather severe penalties for cheating. For example, "Copying from or giving others assistance on an hourly or final examination..." is a Level Three violation. A Level Three violation carries with it "Suspension from the University for one or more terms."

## **Textbook**

Much has changed in the world of Money & Banking over the past few years. As a consequence most textbooks are out of date. I teach largely from Powerpoint presentations, which I make available to students. I don't teach directly from a textbook. That said, I do recommend that students have access to a standard text. Any of the major texts will do, try to buy a used, or old edition, I am trying to save you money. In past semesters I have assigned the following:

**M&B**, Dean Croushore, South-Western Cengage Learning, 2nd edition. (1st edition will suffice)

## Homework Assignments

There will be a number of homework assignments. These assignments are designed to get your "hands dirty" with economic and financial market data. You will be required to download data from Federal Reserve and other websites, manipulate the data in an Excel spreadsheet, compile graphs using these data, and reflect upon the underlying story captured in these graphs.

Students should be aware that I am not looking for perfection; each assignment should take only about 1/2 hour. Your mission is an attempt at some basic level of economic research. My thinking is that you will understand the concepts better by actually playing with the data.

Students should use the "*Assignments*" function on *Sakai* to turn in assignments. Full credit will be given to all "good-faith" attempts at completing assignments. ***Thus, make sure you turn in all assignments on time.*** This is an easy way of securing the full 10% contribution to your final grade.

## Class Notes

I will use Power-Point presentations in class. I will make these available to you in advance (via Sakai). I recommend that you use printouts of these presentations to take class notes. Some students have found it useful to compile these presentations in a binder.

## Macro-Review

### Lesson 1--What Is a Bank?

Chapter 2--M&B

**Banking Basics**, Federal Reserve Bank of Boston

<http://www.bostonfed.org/education/pubs/bankingbasics.htm>

*Extra Credit Assignment:* Fun With T-Accounts

### Lesson 2--What Is Money?

Chapter 3--M&B

**History of Colonial Money**, Federal Reserve Bank of Boston

<http://www.bostonfed.org/education/pubs/historyo.pdf>

### Lesson 3--How Banks Work

Chapter 8--M&B

## Lesson 4--Instruments of the Money Markets

Special Report: Instruments of the Money Market, Tim Cook and Robert Laroche, Federal Reserve Bank of Richmond (Chapter 1)

[http://www.richmondfed.org/publications/research/special\\_reports/instruments\\_of\\_the\\_money\\_market/index.cfm](http://www.richmondfed.org/publications/research/special_reports/instruments_of_the_money_market/index.cfm)

Who's Borrowing in the Fed Funds Market? Gara Afonso, Alex Entz, and Eric LeSueur, Liberty Street Blog, FRBNY (December 9, 2013)

<http://libertystreeteconomics.newyorkfed.org/2013/12/whos-borrowing-in-the-fed-funds-market.html>

Who's Lending in the Fed Funds Market? Gara Afonso, Alex Entz, and Eric LeSueur, Liberty Street Blog, FRBNY (December 2, 2013)

<http://libertystreeteconomics.newyorkfed.org/2013/12/whos-lending-in-the-fed-funds-market.html>

### ***The Fragility of an MMF-Intermediated Financial System***

Marco Cipriani, Antoine Martin, and Bruno Maria Parigi, Liberty Street Blog, FRBNY (December 22, 2013)

<http://libertystreeteconomics.newyorkfed.org/2013/12/the-fragility-of-an-mmf-intermediated-financial-system.html>

### **Libor: The Basics, The British Bankers Association**

<http://www.bbalibor.com/bbalibor-explained/the-basics>

Why Are Bill Yields Negative? CNBC Interview with Raymond Stone (December 21, 2011), <http://video.cnbc.com/gallery/?video=3000063716>

**Assignment 1:** Graph the following (1995 to present monthly, all on same graph)

- (1) Federal Funds rate
- (2) 1-month Eurodollar
- (3) 1-month Commercial Paper (Nonfinancial)
- (4) 1-month CD (secondary market)
- (5) Bank Prime Loan
- (6) 3-month Treasury Bill (secondary Market)

These data can be found here:

<http://www.federalreserve.gov/releases/h15/data.htm>

## Lesson 5-Bank Regulation and Supervision

The Dodd-Frank Act: a cheat sheet

<http://www.mofo.com/files/Uploads/Images/SummaryDoddFrankAct.pdf>

## Q&A: The Volcker Rule

<http://online.wsj.com/article/SB10001424052702303822204577464661833507038.html>

## Too Big to Fail

[http://www.minneapolisfed.org/publications\\_papers/studies/tbtf/index.cfm](http://www.minneapolisfed.org/publications_papers/studies/tbtf/index.cfm)

## What are CAMELS and who should know?

[http://www.minneapolisfed.org/publications\\_papers/pub\\_display.cfm?id=2518](http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=2518)

## FRBPF Chapter 5

[http://www.federalreserve.gov/pf/pdf/pf\\_5.pdf](http://www.federalreserve.gov/pf/pdf/pf_5.pdf)

## Lesson 6--Fed History (Early Days)

### Centennial Timeline

<http://www.federalreserveeducation.org/about-the-fed/history/>

### Events, People, and Purpose

<http://www.federalreservehistory.org/>

### Video of Centennial Commemoration

<https://www.youtube.com/watch?v=BYAI9cLggPU>

### Panic of 1907

Federal Reserve Bank of Boston

<http://www.bos.frb.org/about/pubs/panicof1.pdf>

### Historical Beginnings... The Federal Reserve System (Chapter 3)

Federal Reserve Bank of Boston

<http://www.bos.frb.org/about/pubs/begin.pdf>

A Century of U.S. Central Banking: Goals, Frameworks, Accountability, Ben Bernanke, July 10, 2013.

<http://www.federalreserve.gov/newsevents/speech/bernanke20130710a.htm>

Decision of the Reserve Bank Organization Committee, April 2, 1914

<http://fraser.stlouisfed.org/docs/historical/Misc/ReserveBankDecision1914.pdf>

## Lesson 7--Fed History (Depression/Modern Fed)

Then and Now: Fed Policy Actions During the Great Depression and Great Recession, David Lopez, Federal Reserve Bank of St Louis, November 2011

<http://liber8.stlouisfed.org/newsletter/2011/Lib1111ClassrmEdition.pdf>

## Closed for the Holiday (The Bank Holiday of 1933)

Federal Reserve Bank of Boston

<http://www.bos.frb.org/about/pubs/closed.pdf>

## Romer Roundtable: An Imperfect Parallel, Raymond Stone, The Economist, (June 19, 2009)

[http://www.economist.com/blogs/freeexchange/2009/06/romer\\_roundtable\\_an\\_imperfect](http://www.economist.com/blogs/freeexchange/2009/06/romer_roundtable_an_imperfect)

## Treasury-Federal Reserve Accord 1951

[http://www.richmondfed.org/publications/research/special\\_reports/treasury\\_fed\\_accord/background/](http://www.richmondfed.org/publications/research/special_reports/treasury_fed_accord/background/)

## The Great Inflation (Late 1960s/1970s)

Federal Reserve Bank of San Francisco

<http://www.frbsf.org/econsrch/wklyltr/2000/el2000-21.html>

## Monetary Policy in the Late 1970s/Early 1980s

Federal Reserve Bank of San Francisco

<http://www.frbsf.org/education/activities/drecon/2003/0301.html>

## U.S. Monetary Policy & Financial Markets, Targeting Money and Nonborrowed Reserves 1979-1982, Ann-Marie Meulendyke, FRBNY 1998, Chapter 2, p48-56

<http://www.ny.frb.org/education/addpub/monpol/chapter2.pdf>

## **Lesson 8-- Money Supply and the Economy/Quantity Theory**

Chapter 18--M&B Section on Money-Growth Rules (p392-394)

Milton and Money Stock Control, William Poole (FRBSL July 30, 2007)

[http://fraser.stlouisfed.org/docs/historical/frbsl\\_history/presidents/poole/20070731.pdf](http://fraser.stlouisfed.org/docs/historical/frbsl_history/presidents/poole/20070731.pdf)

## **Lesson 9 Understating Interest Rates**

Chapters 4 & 5--M&B

*Assignment 2:* Bond Math Worksheet

## **Lesson 10 Interest Rate Determination/Real Interest Rates**

Chapter 6--M&B

## **Lesson 11 The Risk and Term Structure of Interest Rates**

## Chapter 6--M&B

The Yield Curve as a Leading Indicator, Arturo Estrella (FRBNY October 2005)  
[http://www.newyorkfed.org/research/capital\\_markets/ycfaq.html](http://www.newyorkfed.org/research/capital_markets/ycfaq.html) - Main

**Assignment 3:** Graph the following (1980 to present monthly)

- (1) Yield Curve Slope--10-yr constant maturity Treasury minus effective Fed Funds rate
- (2) Compare Yield Curve Slope series with 12-month % chg in Industrial Production

These data can be found on the St Louis Fed's FRED Database:

<http://research.stlouisfed.org/fred2/>

***First Exam--Date to be announced***

## **Lesson 12--The Federal Reserve Structure, Transparency and Independence**

### Chapter 15--M&B

## **Lesson 13--The Money Supply Process**

### Chapter 16--M&B

**Assignment 4:** Graph the following: (Monthly 1978 to present)

M1 & M2 Money Supply Multipliers (Money Supply/Monetary Base)

Total Reserves: <http://www.federalreserve.gov/releases/h3/hist/h3hist1.txt>

Money Supply: <http://www.federalreserve.gov/releases/h6/hist/h6hist1.txt>

## **Lesson 14 -- Monetary Policy--Traditional Tools of the Fed**

### M&B chapter 17

A Day in the Life of the FOMC

<http://www.philadelphiafed.org/education/teachers/resources/day-in-life-of-fomc/>

## **Lesson 15--Credit Crisis: What Went Wrong?**

Six Fingers of Blame in the Mortgage Mess, Alan Blinder, Op-Ed NYT Sept 30, 2007

[http://www.nytimes.com/2007/09/30/business/30view.html?\\_r=1&scp=7&sq=Alan%20Blinder&st=cse](http://www.nytimes.com/2007/09/30/business/30view.html?_r=1&scp=7&sq=Alan%20Blinder&st=cse)

## **Lesson 16--Crisis Related Fed Liquidity Provisions**

Discount Window Policies

<http://www.frbdiscountwindow.org/index.cfm>

Why Do Banks Feel Discount Window Stigma? Olivier Armantie, Liberty Street Blog, FRBNY, January 15, 2014 <http://libertystreeteconomics.newyorkfed.org/2014/01/why-do-banks-feel-discount-window-stigma.html>

The History of a Powerful Paragraph

[http://www.minneapolisfed.org/publications\\_papers/pub\\_display.cfm?id=3485](http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=3485)

Federal Reserve Liquidity Provision During the Financial Crisis of 2007-2009, Michael Fleming, FRBNY Staff Reports # 563, July 2012.

[http://www.newyorkfed.org/research/staff\\_reports/sr563.html](http://www.newyorkfed.org/research/staff_reports/sr563.html)

Interest on Reserves and Monetary Policy, Marvin Goodfriend, FRBNY Economic Policy Review 2002 <http://www.newyorkfed.org/research/epr/02v08n1/0205good.pdf>

## **Lesson 17--Unconventional Policies--The Great Experiment**

Federal Reserve Communications, Ben Bernanke (Nov 14, 2007)

<http://www.federalreserve.gov/newsevents/speech/bernanke20071114a.htm>

Communication in Monetary Policy, Janet Yellen (April 4, 2013)

<http://www.federalreserve.gov/newsevents/speech/yellen20130404a.htm>

Monetary Policy: Many Targets, Many Instruments. Where Do We Stand? Janet Yellen, April 16, 2013

<http://www.federalreserve.gov/newsevents/speech/yellen20130416a.htm>

Thoughts on Unconventional Monetary Policy, Jerome H. Powell, June 27, 2013

<http://www.federalreserve.gov/newsevents/speech/powell20130627a.htm>

The Federal Reserve's Asset Purchase Program, Janet Yellen, January 8, 2011

<http://www.federalreserve.gov/newsevents/speech/yellen20110108a.pdf>

Fed's Twist May Prompt Bigger Turn, Matt Phillips, WSJ, September 30, 2011

<http://online.wsj.com/article/SB10001424052970203405504576601313434984974.html>

Operation Twist Versus Quantitative Easing, Bloomberg TV interview with Raymond Stone (October 3, 2011), <http://www.bloomberg.com/video/76434666/>



## **Lesson 18-- The Transmission of Monetary Policy**

The Monetary Transmission Mechanism: Some Questions and Further Answers, Kenneth Kuttner and Patricia Mosser, FRBNY Economic Policy Review, May 2002

<http://www.newyorkfed.org/research/epr/02v08n1/0205kutt.pdf>

The Financial Accelerator and the Credit Channel, Ben Bernanke, *At the The Credit Channel of Monetary Policy in the Twenty-first Century Conference, Federal Reserve Bank of Atlanta, Atlanta, Georgia*, June 15, 2007

<http://www.federalreserve.gov/newsevents/speech/bernanke20070615a.htm>

Evidence of the Portfolio Balance Channel of Quantitative Easing, Daniel Thornton, FRBSTL Working Paper, June 2012

<http://research.stlouisfed.org/wp/more/2012-015>

The Federal Reserve and Monetary Policy,

Jonathan McCarthy, FRBNY September 22, 2011

<http://www.newyorkfed.org/education/pdf/McCarthy.pdf>

## **Lesson 19 --The Unwinding of Unconventional Fed Policies--Interest on Reserves and Other Exit Strategy Tools**

Exit Strategy Principles, Minutes of the Federal Open Market Committee, June 21-22, 2011 (Page 3)

<http://www.federalreserve.gov/monetarypolicy/files/fomcminutes20110622.pdf>

Interest on Reserves and Monetary Policy, Marvin Goodfriend, FRBNY Economic Policy Review 2002 <http://www.newyorkfed.org/research/epr/02v08n1/0205good.pdf>

Recent Developments in Monetary Policy Implementation, Simon Potter EVP FRBNY, December 2, 2013 <http://www.newyorkfed.org/newsevents/speeches/2013/pot131202.html>

**Federal Reserve's Exit Strategy**, Ben Bernanke (March 25, 2010)

<http://www.federalreserve.gov/newsevents/testimony/bernanke20100325a.htm>

## **Lesson 20 --The Taylor Rule**

Donald Kohn: John Taylor rules

<http://www.bis.org/review/r071019f.pdf>

**Assignment 5:** Graph the following (Quarterly 1992 to present)

Effective Funds Rate and Taylor Rule estimate of Funds Rate--Data to be provided

**Final Exam: May 9 @ 4:00pm**