NYUTSTERN Monetary Policy, Banks and Central Banks ECON-GB.2333.20 Prof. Kim Schoenholtz

> Syllabus Spring 2013

Financial systems and central banks are often in the news as countries cope with economic problems and crises. This course is an MBA elective that examines financial systems (institutions, instruments, markets, practices, and public authorities) from the perspectives of both financial and economic stability. Several broad questions will be addressed in the course:

- How is a financial system organized? What purposes does it serve? How and why may it be vulnerable?
- Why and how do countries regulate the financial sector?
- What do central banks do? How do they do it? What are their key challenges?
- How is monetary policy transmitted to the economy?

The course will involve a combination of lecture, discussion and case analysis.

Course Schedule. ECON-B30.2333.20 will meet on Mondays and Wednesdays between 10:30am and 11:50am in KMC 3-60.

Required textbook. Stephen G. Cecchetti and Kermit L. Schoenholtz, *Money, Banking and Financial Markets*, McGraw-Hill Irwin, 2010 (ISBN: 978-0073375908).

The materials in this book, combined with current events, will form the core of what is covered in class meetings. Your participation in class and on the Discussion Board is strongly encouraged.

Other Course Materials. Course announcements and readings not found in the textbook will be posted on Blackboard. Powerpoint slides for the lectures will be posted on Blackboard and distributed in class. Students should keep informed about central bank policy developments around the world by becoming regular readers of the *Financial Times, The Wall Street Journal*, or *The Economist*. Here is a <u>link</u> for an academic subscription to *The Economist* (my faculty id is 6014).

Course Requirements and Grades. Students will submit a group "virtual presentation" (see description below) that will account for 25% of the course grade. An in-class midterm exam will account for 30% of the course grade, and the final exam for the remaining 45%. Attendance and class participation (including the Discussion Board) also will influence the course grade in the case of (good or bad) outliers.

There will be no make-up for the midterm, which is *required* of all students. If a student obtains *prior* approval from the professor to be excused from the midterm due to a serious illness or the equivalent, the weight on the final examination will be increased

accordingly. Please take careful note of the midterm and final exam dates and plan accordingly. Consistent with Stern policies, no more than 35% of the students should expect to receive a course grade of A or A-.

Practice Problem Sets. The problem sets should *not* be submitted for grading. However, experience indicates that completing the practice problems (shortly after each class section is complete) will provide good preparation for the exams.

Group Virtual Presentation. Students should form groups of four persons and inform the professor by email of the group membership *before* class on February 11. The Blackboard course roster should help you contact potential group members in the weeks before the course begins.

Each group will portray and interpret the *distinguishing* characteristics of a specific country's financial system. The goal is to develop a 20-minute "virtual presentation" including Powerpoint slides and a concise five-page guide to the slides. Groups also may recommend an outside reading (of up to 10 pages) to accompany their presentation.

By February 19, each group should propose a country for their project. The country choices are limited, and no more than two groups will be allowed to focus on any single country. First-proposer groups will have their first choice. The following countries make up the potential universe: Brazil, China, India, Mexico, Russia, and South Africa. In exceptional cases involving groups with native speakers, other countries may be considered.

Project work should begin only after the country selection has been approved. Once a topic has been approved, group membership is not subject to change

To make the project feasible, the key is to focus on what is *most special* about the financial system, rather than what is common to financial systems generally. Each group should plan to meet with the professor in February (or early March) to discuss the presentation and narrow its focus. A draft outline submitted one day in advance of the meeting is necessary to facilitate these discussions.

When completed, each group presentation (Powerpoint, write-up, and recommended reading link) will be posted as a thread on the Blackboard Discussion Board, inviting response and critical evaluation from the entire class. Students may be asked to rank the presentations on a variety of dimensions, including effort, organization, knowledge and analysis, creativity, and effective communication of a well-defined subject. All students in a group will receive the same grade for the project.

All presentations (including supplementary materials) are due on Monday, April 8. Thereafter, if there is time and interest, one or more groups may be asked if they wish – on a voluntary basis – to make their presentation on video or in class.

Honor Code. Naturally, the Stern <u>Code of Conduct</u> applies. Please aim at the highest standard of professional behavior. Lateness, cellphone use, private conversations, browsing the internet, checking your email, and any other behavior that disrupts the class will be considered inappropriate. Repeated violations of this standard will affect your grade.

Office Hours and Staff. I usually will be available on Mondays after class for one hour in my office (KMC 7-89). My email address is <u>kermit.schoenholtz@stern.nyu.edu</u>. Teaching fellow Saahil Peerbhoy's email address is sap434@stern.nyu.edu. Please email either or both of us with questions or suggestions.

Proposed Course Schedule Note: Readings are to be completed *before* the first class of the week.

February 4, 6

Core Principles, Money and the Financial System Term Structure and Information Content of Interest Rates

Questions:

Why is financial development related to economic development? How and why are financial institutions evolving?

Readings: Chapters 2, 3 and 7 (pages 164-176 only) FOMC Statement from January 30 (<u>FRB Website</u>) Practice Problem Set #1

February 11, 13

Economics of Financial Intermediation

Questions: How do financial institutions earn profit? What accounts for shifts between bank finance and other types of finance? Are banks special? What makes financial institutions and markets vulnerable?

Readings: Chapters 11 and 12 Skim ECB President Draghi's February 7 Introductory Statement (<u>ECB website</u>) Practice Problem Set #2

February 18 (no class) Presidents' Day Holiday

February 20, 25

Financial Industry Structure and Regulation (I)

Questions: Why are there so many banks in the United States? What is the lender of last resort? Do we need the government safety net? What is its impact? How is regulation structured in different countries?

Readings: Chapters 13 and 14 Practice Problem Set #3

December 30, 2012

February 27, March 4

Regulation (II)

Questions:

What is systemic risk and how can regulators address it? What are the differences between micro-prudential and macro-prudential regulation? How will recent financial crises affect regulation going forward?

Readings: Hanson, Kashyap and Stein, "<u>A Macroprudential Approach to Regulation</u>" (pages 3-20 and "A Financial Reform Report Card" on pages 23-25) Admati, "<u>What Jamie Dimon Won't Tell You...</u>" Acharya et al. "<u>A Bird's Eye View of the Dodd-Frank Wall Street Reform and Consumer</u> <u>Protection Act</u>"

March 6, 11

Case Study: The Crisis of 2007-09 and the Central Bank as Lender of Last Resort

What caused the crisis? Why was it so broad, deep and prolonged?

What role did the lender of last resort play?

Bear, Lehman and AIG

How to distinguish between illiquidity and insolvency? How will Fed behavior change as a result of the crisis and the Dodd-Frank reform?

Reading: Bernanke, <u>Statement before the Financial Crisis Inquiry Commission</u>. Skim ECB President Draghi's March 7 Introductory Statement (<u>ECB website</u>)

March 13

Midterm Exam (in class -- 90 minutes – until noon)

March 18 (no class), 20 (no class) Spring Break

March 25, 27

Central Banks in the World Today

Questions: What do central banks do? Do we need them? How do monetary and fiscal policy differ? How are the Fed and the ECB similar? How are they different?

Readings: Chapters 15 and 16 March 20 FOMC Statement and Summary of Economic Projections (FRB website) Practice Problem Set #4 (Chapters 15 and 16 only)

<u>April 1</u>

The Central Bank Balance Sheet and the Money-Supply Process

Questions: How does an open-market operation work? How does a foreign exchange intervention work? Can the central bank control the quantity of money in the economy?

Readings: Chapter 17 Practice Problem Set #4 (Chapter 17)

<u>April 3, 8</u>

Monetary Policy: Stabilizing the Domestic Economy

Questions:

What are the goals of monetary policy? Why do central banks usually choose to control interest rates? How do price, inflation and nominal GDP targeting differ? How do they work?

Readings: Chapter 18 Skim ECB President Draghi's April 4 Introductory Statement (ECB website) Practice Problem Set #5 (Chapter 18 only)

April 10

Money Growth, Money Demand and Monetary Policy

Questions:

When inflation is high, why is it usually higher than money growth? What are the arguments for and against targeting a monetary aggregate? What is the ECB's reference value for money growth? Does it make sense?

Readings: Chapter 20

<u>April 15, 17</u>

Exchange Rate Policy and the Central Bank The Trilemma of Open-Economy Monetary Policy Practice Problem Set #5 (Chapters 19 and 20)

Questions:

How are exchange rates and interest rates linked? Why do some countries choose to fix their exchange rates? How should we understand China's exchange rate regime? Can a country have a fixed exchange rate and a discretionary monetary policy?

Readings: Chapter 19 plus Appendix to Chapter 10

April 22, 24

Output, Inflation and Monetary Policy

Questions: What is the monetary policy reaction curve? How do monetary policy changes affect the economy? What is the short-run aggregate supply curve and why is it upward-sloping?

Readings: Chapter 21 Practice Problem Set #6 (Chapter 21 only)

April 29. May 1

Output, Inflation and Monetary Policy (continued) Monetary Policy Transmission Mechanism

Questions:

How does stabilization policy work? What is the role of policy rules? Why might there be a tradeoff between the volatilities of output and inflation? Can monetary policy be effective at a zero short-term interest rate? What are "quantitative easing" and "credit easing?" How is monetary policy transmitted when the financial system is impaired?

Readings: Chapter 22, Chapter 23 (pages 609-617) Recommended reading: <u>Bernanke</u> on Monetary Policy Since the Onset of the Crisis Practice Problem Set #6 (Chapter 22) Practice Problem Set #7

<u>May 6. 8</u>

European Monetary Union: Crisis of the Euro Area

Questions:

What are sources of the crisis? What challenges does it pose? What policies are available to address it? What have policymakers done? Whither the euro area?

Readings: Lane, <u>"The European Sovereign Debt Crisis"</u> Makin, "<u>The folly of currency pegs</u>" May 1 FOMC Statement (<u>FRB website</u>) Skim ECB President's May 2 Introductory Statement (ECB website)

<u>May 13</u>

Review

<u>May 15</u>

Final Exam (11:15am-1:15pm) KMC 3-60

December 30, 2012

Practice Problem Sets

Note: Except where specifically noted, all problems are from the third edition of the textbook. Problem sets should NOT be submitted.

#1.	Chapter 2: Problems 4, 17, 19 Chapter 3: Problems 3, 11, 19, 20
#2.	Chapter 11: Problems 1, 10, 17 Chapter 12: Problems 11, 12, 18
#3.	Chapter 13: Problems 7, 12, 15 Chapter 14: Problems 6, 8, 10, 18, 20 Explain: Why did the Fed bail out the creditors of Bear and AIG but not Lehman? If the Dodd-Frank rules had been in place, how would the policy response have changed? With what broader consequences?
#4.	Chapter 15: Problems 2, 7, 14, 15 Chapter 16: Problems 2, 8, 11 Chapter 17: Problems 2, 7, 9, 11, 12, 16
#5.	Chapter 18: Problems 2, 11, 12 Chapter 19: Problems 7, 14, 15, 16 Chapter 20: Problems 1, 2, 10 Explain: Which unconventional monetary policy is best suited to repairing a dysfunctional MBS market? Why?
#6.	Chapter 21: Problems: 4, 10, 13, 18, 19 Chapter 22: Problems 3, 8, 11, 12, 13, 16, 17
#7.	Chapter 23: Problems 5, 6, 10, 11, 19