

DRAFT - COURSE INFORMATION**Financial Regulation**

Autumn 2016

Instructors: Willem Buiter and Anne Sibert

Course Number: INAFU6095_001_2015_3

24hr clock used

Meeting Times: Thursdays 9:00–10:50

Location: Room 411 International Affairs

Office Hours: Thursdays 07:00-09:00 and 11:00-13:00 and by appointment

Instructors' email: wb2302@columbia.edu, as5011@columbia.edu

Credits: 3.0

Prerequisites: Intermediate microeconomics and a tolerance for rigorous argument; calculus is useful, but not required.

Course Overview:

We consider financial market failures due to externalities, incomplete information and financial fragility and analyze how a benevolent government might use regulation to improve matters. We also consider political economy theories where self-interested groups compete to capture regulators and supervisors to extract economic rents and behavioral economic theories of how regulators and supervisors are prone to cognitive or cultural capture by the groups that they are supposed to mind. We consider problems in designing financial regulation such as the possibility of regulatory arbitrage and tradeoffs between commitment and credibility and discretion and flexibility. Finally, we consider alternatives to conventional regulation such as self-regulation and nudging. The recent financial crises illuminated an array of possible regulatory inadequacies. We analyze these failures and consider possible solutions.

Reading:

There is no textbook. Each lecture has associated readings. Readings with an asterisk are required; readings without an asterisk are optional. We will provide lecture notes for some of the lectures and these will be available on Courseworks after the lecture.

Grading:

The grades will be based on a final exam covering the entire course (50 percent), a midterm exam covering material up until that point (35 percent) and course attendance and participation (15 percent).

Schedule: (As Professor Buiter's schedule is imperfectly predictable, some of the lectures may occur in a slightly different order than what is specified here.)

Date 1. (8 September) Externalities and Imperfect Competition (Sibert)

This lecture considers two types of market failure: externalities and imperfect competition. In particular we will consider the externality that is created by the social cost of bank failures exceeding the private cost.

Reading:

*Lecture Notes

*Reread the chapter dealing with externalities and market failures in your microeconomics textbook or some other microeconomics text.

*Haldane, Andrew G., "Have We Solved 'Too Big to Fail'?" Vox, www.voxeu.org, 17 January 2013.

*Rajan, Raghuram G., "A Better Way to Reduce Financial Sector Risk," opinion pages, Financial Times, 25 Jan 2010. <http://www.ft.com/intl/cms/s/0/63a3bb52-09f1-11df-8b23-00144feabdc0.html#axzz3iEYMdoAW> (The article is available on CLIO if this link does not work.)

Stein, Jeremy C. "Regulating Large Financial Institutions," speech given at the International Monetary Fund's conference "Rethinking Macro Policy II," Washington, D.C., 17 Apr 17, 2013, <http://www.federalreserve.gov/newsevents>, click on "Testimony and Speeches" and then "Speeches".

For those who are curious, two of the original famous papers on the topic are:

Coase, Ronald, "The Problem of Social Cost," *Journal of Law and Economics* 3, 1960, 1–44. <http://www.econ.ucsb.edu/~tedb/Courses/UCSBpf/readings/coase.pdf>

Vickrey, William, "Automobile Accidents, Tort Law, Externalities, and Insurance: An Economist's Critique," *Law and Contemporary Problems* 33, 1968, 464–487. http://www.vtpi.org/vic_acc.pdf

Both of these papers are available on CLIO if the above links do not work.

Date 2. (15 September) Fractional Reserve Banking and Bank Runs (Sibert)

In 2007 Northern Rock was the first British bank in 150 years to experience a run. At one time, however, bank runs were common. In this lecture we explain how a fractional reserve banking system can ensure efficient risk sharing but its mismatch between illiquid assets and liquid liabilities can lead to bank runs. We discuss how policy makers and regulators might attempt to solve this problem.

Reading:

*Lecture Notes

*Kashyap, Anil K., "Bank Runs aren't madness: This model explained why," *Capital Ideas*, ChicagoBooth, 17 June 2014, <http://www.chicagobooth.edu/capideas/magazine/summer-2014> (Scroll down to find the article)

*Krugman, Paul, "If Banks are Outlawed, Only Outlaws will have Banks," opinion pages, *New York Times*, 10 October 2011, http://krugman.blogs.nytimes.com/2011/10/10/if-banks-are-outlawed-only-outlaws-will-have-banks/?_r=0 (This article is available on CLIO if this link does not work.)

Buiter, Willem and Anne Sibert, "The Icelandic banking crisis and what to do about it: The lender of last resort theory of optimal currency areas," *CEPR Policy Insight* No. 26, Oct. 2008, <http://www.annesibert.co.uk/PolicyInsight26.pdf>

Eichenbaum, Martin, "What Shortcomings in Macroeconomic Theory and Modeling Have Been Revealed by the Financial Crisis and How Should They Be Addressed in the Future," <http://faculty.wcas.northwestern.edu/~yona/research/ECB.pdf>

Pennacchi, George, "Narrow Banking," *Annual Review of Financial Economics* 4, 2012, <https://business.illinois.edu/gpennacc/GPNarrowBankARFE.pdf>.

For those who like technical papers:

Diamond, Douglas W., "Banks and Liquidity Creation: A Simple Exposition of the Diamond-Dybvig Model," *Federal Reserve Bank of Richmond, Economic Quarterly* 93, Spring 2007, 189–200, <https://www.richmondfed.org/publications> (Click on "Research" and then on "Economic Quarterly")

Date 3. (22 September) Guest Lecture (Dr Alexander Wolfson): How do we assess the robustness and resilience of a Globally Significant Financial Institution operating in multiple jurisdictions? Country risk management, stress testing, CCAR & all that.

Dr. Alexander (Sandy) Wolfson of Citigroup, New York will give this lecture. He is a Managing Director, whose Job Function is 'Risk Management' and whose Job Title is 'Head, Global Country Risk Management'.

Dr. Wolfson got his PhD in Economics at MIT in 1999 and worked at the IMF from 1999 till 2005, when he joined Citigroup. He is one of the world's leading authorities on financial risk management

Date 4. (29 September) Adverse Selection and Moral Hazard (Sibert)

In this lecture we discuss how asymmetric information can cause adverse selection and moral hazard problems in financial and other markets and we discuss what policy makers and regulators might do about it.

Reading:

*Lecture Notes

*Besley, Timothy, "How Do Market Failures Justify Interventions in Rural Credit Markets?" *World Bank Research Observer* 9(1), 1994, 27–47, http://www.princeton.edu/rpds/papers/Besley_How_Do_Market_Failures_Justify_Interventions_in_Rural_Credit_Markets.pdf (The article is available on CLIO if this link does not work.)

*Buiter, Willem, "The Magical World of Credit Default Swaps Once Again," *Maverecon* blog, *Financial Times*, 14 June 2009, <http://blogs.ft.com/maverecon/2009/06/the-magical-world-of-credit-default-swaps-once-again/#axzz3fsoaLKVj>

*Jobst, Andreas, "What is Securitization?" *Finance & Development*, September 2008, 48–49, <http://www.imf.org/external/pubs/ft/fandd/2008/09/pdf/basics.pdf> (The article is available on CLIO if this link does not work.)

Tarulla, Daniel K., "Confronting Too Big to Fail," Speech given at the Exchequer Club, Washington, D.C., October 21, 2009, <http://www.federalreserve.gov/newsevents>, click on "Testimony and Speeches" and then "Speeches".

Date 5. (October 6) Contagion and the Lender of Last Resort (Buiter)

Reading:

*Buiter, Willem and Ebrahim Rahbari, "The ECB as Lender of Last Resort for Sovereigns in the Euro Area", *Journal of Common Market Studies*, Special Issue: The JCMS Annual Review of the European Union in 2011 50, Issue Supplement s2, 2012, 6–35, working paper version, <http://willembuiter.com/loir.pdf> (The article is available on CLIO if this link does not work.)

DeGrauwe, Paul, "The European Central Bank as Lender of Last Resort," *Vox*, www.voxeu.org, 30 Oct 2008.

Fischer, Stanley, "On the Need for an International Lender of Last Resort," *Journal of Economic Perspectives*, 13(4), 1999, 85–104, <https://www.aeaweb.org/articles.php?doi=10.1257/jep.13.4.85>. (The article is available on CLIO if this link does not work.)

Gropp, Reint and Philipp Hartman, "Financial Contagion: Myth or Reality," *Research Bulletin*, European Central Bank, Nov. 2004, 2–5. Online as www.ecb.europa.eu. Click on Research & Publications and then on Research Bulletin, listed under Economic Research.

Buiter, Willem H. (2014, 2015, 2016), "The Simple Analytics of Helicopter Money; Why It Works - Always", *Economics: The Open-Access Open-Assessment E-Journal*. Reasonable readers will ignore the maths.

Brunnermeier, Markus K. and Lasse Heje Pedersen (2008), "Market Liquidity and Funding Liquidity", *The Review of Financial Studies*, December 2008. Reasonable readers will ignore the maths and go for the intuition/message.

Date 6. (13 October) Bubbles (Sibert)

Is the United States stock market in a bubble? In this lecture we explain how self-fulfilling expectations can lead to bubbles and other non-fundamental equilibria and we discuss the possible policy responses.

Reading:

*Lecture Notes

*Mishkin, Frederic S., "How Should We Respond to Asset Price Bubbles?" Speech given at the the Wharton Financial Institutions Center and Oliver Wymans Institute's Annual Financial Risk Roundtable, Philadelphia, 15 May 2008, <http://www.federalreserve.gov/newsevents>, click on "Testimony and Speeches" and then "Speeches".

*Trichet, Jean-Claude, "Asset Price Bubbles and Monetary Policy," speech given at the Monetary Authority of Singapore, Singapore, 8 Jun 2005, <https://www.ecb.europa.eu>, click on "Media" and then "Speeches".

DeGrauwe, Paul, "Central Banks should Prick Asset Bubbles," opinion pages, *Financial Times*, 1 Nov 2007, <http://www.ft.com/intl/cms/s/0/479f24ba-8892-11dc-84c9-0000779fd2ac.html#axzz3iFCHxRt0> (The article is available on CLIO if this link does not work.)

Garber, Peter M, "Famous First Bubbles," *Journal of Economic Perspectives* 4(2), 1990, 35–54, <https://www.aeaweb.org/articles.php?doi=10.1257/jep.4.2.35> (The article is available on CLIO if this link does not work.)

Wilkes, Giles, "Beijing Will Slip if it Strains to Catch a Bubble," opinion pages, *Financial Times*, 15 July 2015. (The article is available on CLIO)

Date 7. (20 October) MIDTERM EXAM

Date 8. (27 October) Political Economy and Behavioral Economics Theories of Regulation (Buiter) In this lecture we consider political economy theories of regulatory capture such as the "Chicago School" and "Virginia School" approaches. We examine some historical and current examples. We also examine behavioral and economic views of cognitive or cultural regulatory capture. We consider how this capture can be reduced.

Reading:

*Buiter, Willem, "Lessons from the North Atlantic Financial Crisis," paper prepared for The Role of Money Markets, conference organized by the Columbia Business School and Federal Reserve Bank of New York, 29-30 May 2008, <http://newyorkfed.org/research/conference/2008/rmm/buiter.pdf>, pp. 23–38, but especially 35–38. (Hereafter referred to as "Lessons")

*Huntington, Samuel P., "The Marasmus of the ICC: The Commission, the Railroads and the Public Interest," *Yale Law Journal* 61, 1952, 467–509. (This article is available on CLIO.)

*Johnson, Simon, "The Federal Reserve's Escape from New York," *Project Syndicate*, 24 Nov 2014, <https://www.project-syndicate.org> (You need to register with Project Syndicate.)

*Kwak, James, "Cultural Capture and the Financial Crisis," in David Carpenter and David Moss, eds., *Regulatory Capture: Special Interest and How to Limit It*, New York, Cambridge University Press, 2012, <http://www.tobinproject.org>, click on "Research & Publications". (We advise downloading this as soon as possible as this link may expire.)

For those who are curious, some of the original articles are the following. They are technical to varying degrees. They are all available on CLIO if the links do not work.

Posner, Richard, "Theories of Economic Regulation," *Bell Journal of Economics and Management Science* 5, 1974, 335–358, also available as NBER Working Paper no. 41, May 1974, <http://www.nber.org/papers/w0041>.

Stigler, George, "The Theory of Economic Regulation," *Bell Journal of Economics and Management Science* 3, 1971, 3–21, <http://www.ppge.ufrgs.br/giacomo/arquivos/regulacao2/stigler-1971.pdf>.

Tullock, Gordon, "The Welfare Costs of Tariffs, Monopoly and Theft," *Western Economic Journal* 1967, 5, 224–232, <http://cameroneconomics.com/tullock%201967.pdf>

Peltzman, Sam, "Toward a More General Theory of Regulation," *Journal of Law and Economics* 19, 1976, 211–248, (optional), <http://www.nber.org/papers/w0133>, comment by Gary Becker: <http://www.law.uchicago.edu/files/files/becker.pdf>

Date 9. (3 November) Some Regulatory Issues (Buiter)

In this lecture we consider various issues in financial regulation. Should it be centralized or decentralized? Should regulation target behavior, institutions or markets? Should it be principles-based or rules based? What is the tradeoff between rules and discretion? How can we prevent a race to the bottom? What are the role of transparency, incentives and accountability?

Reading:

*Becker, Gary, "Why I Favor Rules Over Discretion" and Posner, Richard, "Rules versus Discretion in Financial and Other Regulation," the Becker-Posner Blog, 3 Feb 2013, <http://www.becker-posner-blog.com>

*Bernanke, Ben S., "Central Bank Independence, Transparency and Accountability," speech at the Institute for Monetary and Economic Studies International Conference, Bank of Japan, Tokyo, Japan, 25 May 2010, <http://www.federalreserve.gov/newsevents>, click on "Testimony and Speeches" and then "Speeches".

*Kwak, James, "Regulatory Capital Arbitrage for Beginners," *The Baseline Scenario*, 30 May 2009, <http://baselinescenario.com/2009/05/30/regulatory-capital-arbitrage-for-beginners>

Fleischer, Victor, "Regulatory Arbitrage," unpublished paper, University of Colorado, 2010. <http://www.law.umn.edu/uploads/3d/sF/3dsFF3ucy5Dc04r-tWv-Xw/Fleischer-RegulatoryArbitrage-03-08-10.pdf>

Date 10. (10 November) Self-Regulation and Nudging (Buiter)

What are the costs and benefits of self-regulation of the financial sector? How has it worked in practice in the past? Can we use behavioral economics to design better regulation?

Reading:

*Rajan, Raghuram, "The Trouble with Libertarian Paternalism," *Project Syndicate*, 12 Apr 2012, <https://www.project-syndicate.org> (You need to register with Project Syndicate.)

*Sunstein, Cass R., "Nudging: A Very Short Guide," unpublished paper, 2014, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2499658.

Bossone, Biagio and Larry Promisel, "The Role of Self-Regulation in Developing Economies," *Financial Sector*, World Bank Group, n.d., <http://www1.worldbank.org/finance/html/self-regulation-in-developing-.html>.

Federal Reserve Bank of Boston, "Panic of 1907," <https://www.bostonfed.org/about/pubs/panicof1.pdf>.

Omarova, Saule T., "Wall Street as a Community of Fate: Toward Financial Industry Self Regulation," *University of Pennsylvania Law Review* 159, 2011, 411–492.

Date 11. (17 November) Compensation, Gender Bias and Cognitive Errors (Sibert)

Why did the bankers behave so badly? We consider compensation structures, the gender bias in the financial services industry and systematic cognitive errors as possible explanations. We consider what can be done to improve matters.

Reading:

*Buiter, Willem, "Lessons," pp. 13–14.

*Sibert, Anne, "Sexism and the City: Irrational Behaviour, Cognitive Errors and Gender in the Financial Crisis, *Open Economies Review* 21, 2010, 163–166, working paper version, <http://www.bbk.ac.uk/ems/faculty/sibert/sibert-downloads/Sexismandthecity.pdf> (This article is available on CLIO if the link does not work.)

No author, "Bad Bonus Rules are Worse than Bad Bonuses," *The Economist*, 5 Jan 2011, http://www.economist.com/blogs/freeexchange/2011/01/financial_sector_compensation (This article is available on CLIO if the link does not work.)

No author, "Sexism and the City," *Financial Times*, opinion page, 16 Jan 2015, <http://www.ft.com/intl/cms/s/0/5482ac56-9d7a-11e4-8946-00144feabdc0.html#axzz3YvGxPySv> (This article is available on CLIO if the link does not work.)

Winter, Eyal, "Why team bonuses are more effective," *Washington Post*, 24 Feb 2015, <http://www.washingtonpost.com/blogs/on-leadership/wp/2015/02/24/why-team-bonuses-are-more-effective> (This article is available on CLIO if the link does not work.)

Date 12. (1 December) Systemic Risk and Bank Resolution Regimes (Sibert)

This first part of this lecture considers the nature of systemic risk, how to measure it and what to do about it. The second part considers the resolution of financial institutions. How does a supervisor tell when a bank is failing? At what point should it be taken over? Who should be bailed out and who should pay for it? What are the problems associated with multinational firms?

Reading:

*Lo, Andrew, "The Feasibility of Systemic Risk Measurements: Written Testimony for the House Financial Services Committee on Systemic Risk Regulation," Oct. 2009, <http://www.argentumlux.org/congressional-testimony-50.html>

*Rajan, Raghuram, "Why Did Economists Not Foresee the Crisis?" *Project Syndicate*, 7 Feb 2011, <https://www.project-syndicate.org> (You need to register with Project Syndicate.)

*Tarullo, Daniel K., "Toward Building a More Effective Resolution Regime: Progress and Challenges," speech at the Federal Reserve Board and Federal Reserve Bank of Richmond Conference, "Planning for the Orderly Resolution of a Global Systemically Important Bank", Washington, D.C., 18 Oct 2013, <http://www.federalreserve.gov/newsevents>, click on "Testimony and Speeches" and then "Speeches".

Duffie, Darrell, "The Failure Mechanics of Dealer Banks," *Journal of Economic Perspectives* 24(1), 2010, 51–72, working paper version, <http://web.stanford.edu/~duffie/dealers.pdf> (This paper is available on CLIO if the link does not work.)

Tirole, Jean, "Illiquidity and All of its Friends," *Journal of Economic Literature* 49, 2011, 287–325, working paper version, <http://www.bis.org/publ/work303.pdf>.

Date 13. (8 December) Post-Crisis Regulatory Innovation (Buiter)

In this lecture we discuss some issues in post crisis regulation. These include the Financial Stability Board and Basel 3, the Dodd-Frank Act and the Volcker rule, from Value at Risk to CoVaR, macroprudential policy and the regulation of non-bank financial institutions.

Reading:

*Buiter, Willem, "Lessons," pp. 57–82.

*Hanson, Samuel G., Anil K. Kashyap, and Jeremy C. Stein, "A Macroprudential Approach to Financial Regulation," *Journal of Economic Perspectives*, 25(1), 2011, 3–28, <http://scholar.harvard.edu/files/stein/files/a-macropurdenital-final.pdf>.

Kashyap, Anil K., Raghuram G. Rajan and Jeremy C. Stein, "Rethinking Capital Regulation," 2008 Economic Symposium, Maintaining Stability in a Changing Financial System, Federal Reserve Bank of Kansas City, 2008, <https://ideas.repec.org/a/fip/fedkpr/00014.html>

Rajan, Raghuram G., "Has Financial Development Made the World Safer," Federal Reserve Bank of Kansas City, Jackson Hole Economic Policy Symposium, 2005, pp. 313–369, <http://kansascityfed.org/publications/research/escp/escp-2005.cfm>, scroll down to find the paper. The two discussants' remarks and the general discussion is interesting, too.

Elliott, Douglas J, Emre Balta, Vishal Abhinand, Olivia Korostelina and Mehreen Siddique, "Interaction, Coherence, and Overall Calibration of Post Crisis Basel Reforms", Oliver Wyman, August 9, 2016

Date 14. FINAL EXAM

If you are interested in further readings, here are some good places to find them:

Willem Buiter, "Maverecon," now mothballed, (<http://blogs.ft.com/maverecon>)

John Cochrane, "The Grumpy Economist," (<http://johnhcochrane.blogspot.com>)

Paul Krugman, "Conscience of a Liberal" (<http://krugman.blogs.nytimes.com>), available on CLIO if you do not have a subscription to the New York Times.

Greg Mankiw's Blog (<http://gregmankiw.blogspot.com>)

Project Syndicate (<https://www.project-syndicate.org/login>, you need to register)

Vox (<http://www.voxeu.org>)

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http://sipa.columbia.edu/resources_services/student_affairs/academic_policies/code_of_conduct.html

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