

COURSE OUTLINE AND READING LIST

Chris Sims

104 Fisher Hall

sims@princeton.edu

Course Web Page: <http://sims.princeton.edu/yftp/Bubbles2007>

PREAMBLE

In this half-course we study financial market bubbles and crashes. We will consider some specific historical examples and look for regularities in them, as Kindleberger does in the book mentioned below. We will also study some simple mathematical models of asset market behavior. Even well-functioning asset markets can be expected to show occasional large and surprising changes in prices and to create distress among some market participants when these things occur. The mathematical models help in thinking about how one detects malfunctioning, as opposed to justifiably volatile, asset markets. They also help in thinking about what policy might do to avoid malfunctions and investors might do to avoid being stung by manias and panics.

BOOKS

You will be expected to read most of Charles P. Kindleberger's *Manias, Panics and Crashes*. The fifth edition (CK5), written jointly with Robert Aliber and published by Wiley in 2005, has different numbering of chapters from the third edition (CK3), published in 1996. The fifth edition is more up to date and text-book-like, but has lost some of the charm of Kindleberger's meandering discussions and it is in some respects less clear on analytical points than the third. The fifth is available new in paperback and the third was available in paperback. (I haven't made a detailed comparison with the fourth.) Assignments will have page or chapter references in both.

Parts of Robert Shiller's *Irrational Exuberance* (second edition) (RS) (Princeton University Press 2005) will also be assigned. This is also available in paperback.

The Econometrics of Financial Markets by Campbell, Lo and Mackinlay (CLM) is an excellent survey of empirical financial models and results, though it is now somewhat dated as a finance text. We will be using introductory material from various chapters, which sets out models and theoretical results at a level and with a pattern of emphasis that matches what we need in the course.

Speculative Bubbles, Speculative Attacks, and Policy Switching by Flood and Garber (FG) collects papers by these two authors on the subject matter of this course. All of the chapters of the book have appeared elsewhere, usually as journal articles, so they are accessible on the internet, and the book should be on reserve. The book has

some papers that extend theories beyond what we will do in class and a number that analyze particular countries and periods.

The Great Crash, 1929 by John Kenneth Galbraith (JKG) (Houghton Mifflin 1961) is a detailed discussion of the 1929 stock market crash that preceded the Great Depression of the 30's.

The only book that you are strongly advised to buy is Kindleberger's.

1. INTRODUCTION

1.1. Anatomy of Bubbles and Crises. Lecture 1

Kindleberger provides general discussion of how manias start and are amplified, with some historical references. Shiller focuses on the start and amplification of the late 1990's US stock market boom. Galbraith addresses the same aspects of the stock market boom that preceded the 1929 crash. The readings in this section should be completed the first week, but are not needed to understand the first week's lectures.

CK3, Chapters 21-3, or CK5, Chapters 2-3

RS, Chapters 1-4 and 6

JKG, Chapters 1-2

1.2. Simple Asset Price Models: Why Prices Don't Change Smoothly. Lecture 1-2

These readings should be completed early the first week, as they may help with understanding the second lecture.

CLM, sections 1.4-1.5, p.9-25

CLM, section 9.1.1, p.341-44

2. WHAT IS A BUBBLE?

2.1. Tulipmania. Lecture 3-4

FG, Chapters 3 and 2, in that order. Chapter 3 originally from *Journal of Political Economy*, June 1989. Chapter 2 from *Journal of Economic Perspectives*, spring 1990.

CK3, Chapter 7 or CK5, Chapter 6

2.2. Fundamentals and Rational Bubbles. Lecture 3-4

CLM, section 7.1.1-2, p.253-260

Grossman and Shiller (1981)

RS, Chapter 7

3. LENDING, LEVERAGE, INSURANCE, AND BETTING

3.1. Does Credit Play a Role in Every Bubble and Crisis? Lecture 4-5

CK3, Chapters 4,6 and 8 or CK5, Chapters 4,5 and 7

3.2. The Economic Functions of Lending. Lecture 4-6

3.2.1. Intertemporal trade, no uncertainty.

Notes to be handed out

- 3.2.2. *Risk-sharing: CAPM.*
CLM, sections 5.1-5.2, p.181-184
- 3.2.3. *Risk-sharing: Stochastic discount factor, completeness of markets.*
CLM, section 8.1, p.293-5
- 3.2.4. *Asset trading when there are differences of opinion.*
Notes to be handed out

4. IRRATIONALITY AND CRIMINALITY

- 4.1. **Criminality.** Lecture 7
CK3, Chapter 5, or CK5, Chapter 9
“Open Secrets”, by Malcolm Gladwell, from *The New Yorker*, January 8, 2007, available at http://www.gladwell.com/2007/2007_01_08_a_secrets.html.
Optional: *The Smartest Guys in the Room*, by Bethany McLean
Optional: *Power Failure*, by Mimi Swartz
- 4.2. **Irrationality.** Lecture 8-9
Case and Shiller (1989)
Smith, Suchanek, and Williams (1988)
Goeree, Palfrey, Rogers, and McKelvey (2006)

5. BANKRUPTCY

- 5.1. **Moral Hazard: Explaining the Standard Loan Contract.** Lecture 10
TBA
- 5.2. **Banking and Bank Runs.** Lecture 10
sections TBA of *Financial History of the United States* by Davis Dewey
possibly additional reading on a theoretical model

6. LENDER OF LAST RESORT AND OTHER POLICIES TO FORESTALL OR END CRISES

Lecture 11-12

- CK3, Chapters 10-12, or CK5, Chapters 11-13
Friedman and Schwartz, *A Monetary History of the United States*, Chapter 7, p. 299-419 (this was also published as a separate book, *The Great Contraction*)
The Savings and Loan Crisis and Its Relationship to Banking, http://www.fdic.gov/bank/historical/history/167_188.pdf
Kashyap (2002)

REFERENCES

- CASE, K. E., AND R. J. SHILLER (1989): "The Behavior of Home Buyers in Boom and Post-Boom Markets," Working Paper Series 2748, NBER.
- GOEREE, J. K., T. R. PALFREY, B. W. ROGERS, AND R. D. MCKELVEY (2006): "Self-correcting Information Cascades," Discussion paper, Princeton University.
- GROSSMAN, S. J., AND R. J. SHILLER (1981): "The Determinants of the Variability of Stock Market Prices," *American Economic Review*, 71(2), 222–227, Proceedings issue.
- KASHYAP, A. K. (2002): "Sorting Out Japan's Financial Crisis," Working Paper 9384, National Bureau of Economic Research.
- SMITH, V. L., G. L. SUCHANEK, AND A. W. WILLIAMS (1988): "Bubbles, Crashes and Endogenous Expectations in Experimental Spot Asset Markets," *Econometrica*, 56(5), 1119–1151.