

ECON 423: Topics in Financial Economics
Fall 2022
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Banking, the Real Economy and Financial Crises:

Outline:

This course considers how the banking industry works, the benefits it provides the real economy, the way it interacts with the real economy, and possible problems and economic inefficiencies that can result in financial crises. To understand the causes of financial and banking crises, you will require a battery of skills that we will introduce in this course. This will provide you with insights into the working of traditional commercial banking, the relatively recent role of investment banking and financial trading, and the constructive role of careful government prudential supervision.

We are in the midst of a very serious economic and financial crisis that has been caused by government regulatory, fiscal and monetary policies reacting to the pandemic and the current energy crisis. I will provide current reading during the term to illustrate ideas developed in the course.

Note: This course is an introductory course on banking and crises. The literature in this area is huge, some of it is accessible; and some of it is mathematically sophisticated, graduate material. I have included some reading that is beyond what I will cover in class, but it delves deeper into key topics.

I have tried to give you a useful, current survey without covering all aspects of the field. The literature is evolving with a number of controversial, unresolved issues. I will try to give you a flavour of that material.

Prerequisites:

We will assume knowledge of investment theory at the Econ 322 level.

Weekly Exercises:

There will be weekly practice exercises that will be discussed in tutorials.

Examinations:

Midterm (in class)	50%
Final	50%

Text: Greenbaum, Thakor and Boot, (eds.), *Contemporary Financial Intermediation* (4th Edition) Academic Press, 2019.

Apart from the text, class reading will be made available as pdf files during the term.

Advanced References (Graduate Material) (A):

Berger, Molyneux, and Wilson,(eds.) *The Oxford Handbook of Banking*, (Second Edition), OUP, 2015.

Freixas and Rochet, *Microeconomics of Banking*. MIT Press (Second Edition) 2008.

Altman, Hotchkiss and Wang, *Corporate Financial Distress, Restructuring and Bankruptcy*. (Fourth edition), Wiley, 2019.

Van Hoose, *The Industrial Organisation of Banking*. (Second Edition) Springer, 2017.

Milne, *Finance Theory and Asset Pricing*. (Second Edition), OUP 2003.

Federal Deposit Insurance Corporation (FDIC), 2017. *Crisis and Response: An FDIC History, 2008–2013*. Washington, DC: FDIC

Gjerstad and Smith, *Rethinking Housing Bubbles: The Role of Household and Bank Balance Sheets in Modeling Economic Cycles*, Cambridge University Press, 2014.

Topics:

1. **Introduction to the US and Canadian Banking Systems:**
Greenbaum, Thakor and Boot Chapter 2.

2. **Basic banking theory and empirical Evidence:**
Greenbaum, Thakor and Boot: Chapters 1, 3, 4.

3. **Interest Rate risk:**
Greenbaum, Thakor and Boot: Chapter 5.

4. **Liquidity Risk:**
Greenbaum, Thakor and Boot: Chapter 6.
(A)Pedersen, *Efficiently Inefficient: How Smart Money Invests & Market Prices are Determined*, Princeton University Press, 2015. (A fascinating discussion of real-world security trading and the role of liquidity. Vacation reading.)

5. **An Introduction to Lending, Credit Modelling by Banks and Rating Agencies:**
 - (a) **Basics:**
Greenbaum, Thakor and Boot: Chapter 7.
(A)Chapters 1- 4 Altman, Hotchkiss and Wang, *Corporate Financial Distress, Restructuring and Bankruptcy*. (Fourth edition), Wiley, 2019.

 - (b) **Further Issues in Bank Lending:**
Greenbaum, Thakor and Boot: Chapter 8

 - (c) **Classic Credit Analysis: Cash Flows and Holding to Maturity:**
Crean, (2012) Notes to Lectures 3, 6, 7.
This traditional analysis is crucial for understanding bank lending to major corporations. Statistical Models provide a useful first pass, but traditional analysis is necessary to understand the sources of credit risks arising from the firm, industry and corporate financial structure.
Chapter 5 Altman, Hotchkiss and Wang, *Corporate Financial Distress, Restructuring and Bankruptcy*. (Fourth edition), Wiley, 2019.

- (d) **Basic Corporate Credit models:**
 (A) Chatterjee, “Modelling credit risk”, Bank of England, 2015.
<https://www.bankofengland.co.uk/-/media/boe/files/ccbs/resources/modelling-credit-risk.pdf?la=en&hash=53B7332226FB2FB1B280B3D643DBB8AFF1FA5F32>
- (e) **Limitations of Corporate Credit Models: Recovery Rates:**
 Chapter 16 Altman, Hotchkiss and Wang, *Corporate Financial Distress, Restructuring and Bankruptcy*. (Fourth edition), Wiley, 2019.
6. **Securitization:**
 Greenbaum, Thakor and Boot Chapter 11.
 (A) Casu and Sarkysan, “Securitization”, Chapter 15 in Berger, Molyneux, and Wilson, (eds.) *The Oxford Handbook of Banking*, (Second Edition), OUP, 2015.
7. **Funding Banks:**
- (a) **Bank Funding, Bank Runs and Lender of Last Resort:**
 Greenbaum, Thakor and Boot Chapter 12.
 (A) Freixas and Parigi “Lender of Last Resort and Bank Closure Policy: A Post Crisis Perspective” Ch.20 in Berger, Molyneux and Wilson (eds.) 2015
- (b) **Bank Capital Structure:**
 Greenbaum, Thakor and Boot: Chapter 13.
 Miller, Merton H. (1995), “Does the M&M Proposition Apply to Banks?”
Journal of Banking and Finance, 19, 483-489.
 (A) Anat R. Admati / Peter M. DeMarzo / Martin F. Hellwig / Paul Pfleiderer
 “Fallacies, Irrelevant Facts, and Myths in the Discussion of Capital Regulation: Why Bank Equity is Not Socially Expensive” WP. 2013.
http://homepage.coll.mpg.de/pdf_dat/2013_23online.pdf
8. **Some Examples of Previous Banking Crises:**
- (a) **Historical Examples:**
 Greenbaum, Thakor and Boot: Chapter 12
 Milne (overheads 2019)
 (A) Crean-Milne manuscript (2022)
 (A) Reinhart and Rogoff, *This Time Is Different: Eight Centuries of Financial Folly*, Princeton Univ. Press, 2009. (A lengthy discussion of many financial crises over the centuries.)

(b) **The Great Depression:**

Chapter 2 & 4 Gjerstad and Smith, *Rethinking Housing Bubbles*, (Chapter 2 is an interesting survey of experiments inducing asset bubbles. Chapter 4 is an excellent analysis of the role of the 1920's real estate bubble and its collapse, leading into the Great Depression.)

9. **Real Sector Risks Creating Financial Risks:**

Milne (overheads for the Crean-Milne model)

(A)Crean-Milne manuscript (2022)

Gjerstad and Smith, *Rethinking Housing Bubbles*, Ch.6-8. (This analysis complements Crean-Milne, but concentrates on real estate as the principal driver of major crises in Western economies.)

10. **The 2007-2010 Financial Crisis and its Aftermath:**

(a) **The Basics of the 2007-10 Crisis:**

Greenbaum, Thakor and Boot: Chapter 14

FDIC (2018) Chapter 1.

Mian and Sufi, *House of Debt*, University of Chicago Press. 2014 Chs. 1, 2, 3 & 8. (A readable summary of recent empirical research on regional US Real Estate markets.)

Gjerstad and Smith, *Rethinking Housing Bubbles*, Ch.3. (An excellent account of the real estate bubble and crash and its impact on household and bank balance sheets.)

(A)Mather and Sanchez, "The Unequal Recovery: Measuring Financial Distress by ZIP Code" 2019.

<https://www.stlouisfed.org/publications/regional-economist/first-quarter-2019/unequal-recovery-measuring-financial-distress>

11. **The Covid Health, Economic and Financial Crisis:**

Longworth-Milne Overheads

Longworth and Milne *Preparing for Pandemics: Lessons from the Global Financial Crisis and Covid-19* World Scientific Publishing 2022.

12. **Financial regulation before and after the Crisis:**

(a) **Regulation:**

Greenbaum, Thakor and Boot: Chapters 15.

(A)Chapter 4. Federal Deposit Insurance Corporation (FDIC), 2017. *Crisis and Response: An FDIC History, 2008–2013*. Washington, DC: FDIC

- (b) **Stress Tests:**
 - Dent and Westwood, “Stress testing of banks: an introduction” Bank of England Quarterly Bulletin 2016 Q3.
 - Borio, Drehmann, Tsatsaronis, “Stress-testing macro stress testing: Does it live up to expectations?” Journal of Financial Stability 2014.
 - Dowd, *Math Gone Mad: Regulatory Risk Modelling by the Federal Reserve*, Cato Institute, 2014.)
 - Dowd, “No Stress II: The Flaws in the Bank of England’s Stress Testing Programme” Adam Smith Inst. 2015.
 - (c) **Bank Resolutions and Receiverships:**
 - (A) Chapter 6. Federal Deposit Insurance Corporation (FDIC), 2017. *Crisis and Response: An FDIC History, 2008–2013*. Washington, DC: FDIC
13. **Failures of Risk Management Models and Systemic Risks:**
- (a) **Lessons from the Crisis and Regulatory Responses:**
 - Milne “Anatomy of the Credit Crisis: The Role of Faulty Risk Management Systems,” C.D. Howe Institute Commentary, No. 269, July 2008.
 - Milne, “The Complexities of Financial Risk Management and Systemic Risks”, *Bank of Canada Review*, Summer, 2009.
 - Dowd, *Math Gone Mad: Regulatory Risk Modelling by the Federal Reserve*, Cato Institute, 2014.
 - (b) **Have the Regulators Solved all the Problems?**
 - <https://knowledge.wharton.upenn.edu/article/ten-years-great-recession-global-financial-system-safer/>
 - IMF Financial Stability Report October 2019.
 - <https://www.imf.org/en/Publications/GFSR/Issues/2019/10/01/global-financial-stability-report-october-2019>
14. **To Big to Fail Subsidies:**
- Hoenig, “TBTF Subsidy for Large Banks--Literature Review” June 2013.
 - Noss and Sowerbutts, “The Implicit Subsidy of Banks”, Financial Stability Paper No. 15 – May 2012