

Equilibrium Models of Money and Financial Intermediation

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Draft Syllabus

This syllabus indicates the topics intended to be covered in the course. This plan may change due to time constraints or to accommodate particular interests of participants. There is a huge literature on the subject of financial intermediation. Rather than attempting survey it, I will examine closely the logic and structure of some of the principal theories. The topics that I intend to cover are listed below, together with some readings that will be covered directly. The selection of readings is not intended to be representative, and it emphasizes recent contributions rather than classical ones (or even modern classics). The bibliographies of these articles, however, collectively provide more adequate sample of the scientific literature. The list of topics and readings is preceded by a list of four books, two of which provide factual background and two of which are widely read expositions of recent theoretical models.

Some Factual Background

Sprague, O. M. W., *History of Crises Under the National Banking System*. U.S. Government Printing Office, 1910 (reprint ed., Augustus M. Kelley, 1968).

Demirgüç-Kunt, Asli, and Ross Levine, eds., *Financial Structure and Economic Growth: A Cross-Country Comparison of Banks, Markets, and Development*. MIT Press, 2001.

Recent Graduate-Level Lectures/Textbooks

Dewatripont, Matthias, and Jean Tirole, *The Prudential Regulation of Banks*. MIT Press, 1994.

Freixas, Xavier, and Jean-Charles Rochet, *Microeconomics of Banking*. MIT Press, 1997.

Course Topics and Readings

1. Efficient sharing of risk regarding timing of consumption opportunities: “Maturity transformation” and bank “runs.”
 - Diamond, Douglas, and Philip Dybvig, “Bank runs, deposit insurance, and liquidity,” *JPE*, 1983, <http://www.minneapolisfed.org/research/qr/qr2412.html>
 - Wallace, Neil, “Another attempt to explain an illiquid banking system: The Diamond and Dybvig model with sequential service taken seriously,” Minneapolis Fed *Quarterly Review*, 1988, <http://www.minneapolisfed.org/research/qr/qr1241.html>
 - Green, Edward, and Ping Lin, “Implementing efficient allocations in a model of financial intermediation,” mimeo, 2001
 - Peck, James, and Karl Shell “Equilibrium Bank runs,” mimeo, 2001, <http://www.arts.cornell.edu/econ/cae/bankrun1.pdf>
2. Efficiency of a “simple debt” contract to finance investment where enforcement of repayment is costly.
 - Townsend, Robert, “Optimal Contracts and competitive markets with costly state verification,” *JET* 1979, (21:417–25)
 - Krasa, Stefan, and Anne Villamil, “Optimal contracts when enforcement is a decision variable,” *Econometrica* 2000, (68:119–34)
3. Combining testing and self selection to choose investment candidates: Sub-optimality of non-intermediated market equilibrium, and implications for bank regulation.
 - Chiang, Yeong-Yuh, and Edward Green, “Financial-intermediation regime and efficiency in a Boyd-Prescott economy,” *Carnegie Rochester Conference Series on Public Policy*, 2001 (54:117–29)
4. Demandable debt as an efficient incentive arrangement for intermediaries that take private actions.

- Hellwig, Martin, “Financial intermediation with risk aversion,” *REStud* 2000, (67:719–42)
5. Efficient risk-sharing arrangements with aggregate uncertainty and private information about endowments or productive effort.
- Green, Edward, and Soo-Nam Oh, “Can a ‘credit crunch’ be efficient?” *Minneapolis Fed Quarterly Review* 1991, <http://www.minneapolisfed.org/research/qr/qr1541.html>
 - Bolton, Patrick, and Robert Rosenthal, “Political intervention in debt markets: moratoria and bailouts,” mimeo, 2001
6. General equilibrium in environments with a role for intermediation
- Hellwig, Martin, “Liquidity provision, banking, and the allocation of interest-rate risk,” *European Economic Review* 1994, (38:1363–89)
 - Allen, Franklin, and Douglas Gale, “Banking and Markets”, 2001, <http://www.econ.nyu.edu/user/galed/banks-ma.pdf>
7. Inside money
- Sargent, Thomas, and Neil Wallace, “The Real Bills Doctrine versus the Quantity Theory: A Reconsideration,” *JPE*, 1982 (90:1212–36)
 - Green, Edward, “Money and debt in the structure of payments, Bank of Japan *Monetary and Economic Studies*, 1997, <http://www.minneapolisfed.org/research/qr/qr2322.html>