

FNCE 238/738: Funding Investments

Prof. D. Musto

Course Schedule

This course covers the techniques by which firms go to the market for funds, and the economic issues that arise. As the primary source of funds is debt issuance, the course focuses primarily on the different forms of corporate debt. We analyze the bank-run risk presented by short-term debt, and the mechanisms that have evolved to defend against it. The key issues that arise with longer-term debt are why and how debt contracts constrain issuers, and the legal and strategic environment of distressed or bankrupt borrowers. We cover financing through securitization, starting with the economics of consumer credit, and we address the role of investment intermediaries such as mutual funds. We also consider how issuers bring equity to the market, both at the IPO and later on.

The course is in lecture format, with a 10-15 page note for each class (other than the class with the cases, for which there will be no note). All notes and other course material will be posted on the webCafé site. There is no textbook, but there is a bulkpack. You are advised to read the notes before class, and you are responsible for their content on the tests. The bulkpack readings are for background; you are responsible for their content only to the extent that we discuss it in class. You are generally responsible for the material we discuss in class, whether or not it appears in the notes or other readings.

The assignments to be handed in, on the indicated dates, are

- 7 homeworks
- 3 case write-ups

There are two tests, on October 25 and December 1. They will be in-class. To the first test you will be allowed to bring one 8.5 x 11 sheet with anything you want on either side, and also a calculator; to the second test you can bring two sheets and a calculator. The only allowable excuses from a test are 1) a note from a doctor stating that you are unable to take the test, or 2) a family emergency that the Dean's Office regards as a valid excuse (as opposed to, for example, a note stating that you went to the clinic, which would not be an allowable excuse, or an interview, which is also not an allowable excuse). In the event of a valid excuse, there will be a makeup.

Homeworks are to be done individually, while the cases are to be done in groups of 3 to 6.

For the final grade, the coursework will be weighted as follows

- 70% on the two tests (35% each)
- 20% on the best 6 of the 7 homeworks
- 10% on the cases

Class participation can help at the margin.

September 8 Bank Runs

Diamond and Dybvig, Bank Runs, Deposit Insurance and Liquidity (Journal of Political Economy, June 1983, p. 401-419). This is the classic and fundamental paper on bank runs. The math may be hard to follow; in class we will follow this [simpler numerical version](#).

Diamond/Dybvig Model
Suspension of Convertibility
Lender of Last Resort
Deposit Insurance
Recent policies

September 13 Liquidity and Market Making

Bagehot, The Only Game in Town, Financial Analysts Journal, Mar/Apr 1971, p12-22. This paper (which is actually by Jack Treynor; Bagehot was a 19th-century financial writer) began the literature on transactions costs, and said most of what had to be said with no math. We will formalize and extend his argument with a little math.

What do we mean by liquidity?
Market structures
Market and Limit orders
Bid/Ask spreads
Trading strategies
Payment for Order Flow

September 15 Bond Basics

Garbade, Pricing of Bonds. The quantification of bond values is different in some key ways from what we're used to in the stock market. This paper gets you up to speed on those differences.

Fabozzi, Corporate Debt Instruments. This is a primer on the basics of corporate bonds.

Treasury Bonds and Bills
Price Quotation
Yield to Maturity
Treasury Auctions
Basic Arbitrage Relationships

September 20 Short-term debt: Repurchase agreements

[Instruments of the Money Market, FRB of Richmond](#), chapters 6, 9, and 12. This collection of writings about the money market is now 17 years old, but is still a good resource.

[Keane, Repo Rate Patterns for New Treasury Notes](#). We'll discuss the role of repos in short selling. This paper explains and analyzes one of the popular motives for shorting Treasuries, and its effect on repo rates.

Market-Making HW due

Structure of Repos
Pricing and Scarcity

Margins
[Run on the Repo Market](#)
Shadow Banking System

September 22 Short-term debt: [Commercial Paper](#)

Treasury HW due

Pricing
Bank-run risk
Backup lines & Early exit
Recent policies

September 27 Cases: *Long-Term Capital Management* and *Blackrock Money Market Management*

September 29 Option Basics

Repo HW due

Put/Call Parity
One-period binomial pricing
Multiperiod binomial pricing

October 4 Corporate Securities as Options

Equity as a call on firm value
Debt as risk-free debt minus put on firm value
Credit default swaps
JR debt as one call minus another
Convertible as straight debt plus call
Incentive to ramp up risk
Debt Overhang

October 6 Bond Contracting

Smith and Warner, On Financial Contracting: An Analysis of Bond Covenants. *Journal of Financial Economics*, June 1979, p. 117-161. This is an old, long and very academic paper, but is the canonical reference as regards the philosophy and variety of bond covenants.

Option HW due

Role of bond covenants
Some popular covenants
Creditors' rights upon default and the role of the trustee
Voting to amend the indenture
Why bank debt is senior

October 11 *Fall Break – NO CLASS*

October 13 Corporate Bankruptcy

[Here](#) is a brief chronology of bankruptcy law.

Weiss, The Bankruptcy Code and Violations of Absolute Priority. This paper documents frequent violations of absolute priority in 1980s bankruptcies, and speculates as to their cause

[Werner, Bharath & Panchapegesan, The Changing Nature of Chapter 11.](#) This documents the decline in violations since the 1980s, and also speculates as to the cause.

[Chapter 7 Liquidation](#)

- Stay of creditor claims
- Reversal of Preferences and Avoidance of Conveyances
- Absolute Priority
- Involuntary filings

[Chapter 11 Reorganization](#)

- DIP financing
 - Super priority

[Critical Vendors](#)

[Voting Rules](#)

- Exclusivity Period
 - Gerrymandering classes
 - Violations of Absolute Priority
 - Cram-downs

[Section 363 Auctions](#)

[Section 365: Rejecting, Assuming, and Reassigning Leases](#)

[Section 1113: Abrogation of Labor Contracts](#)

Creditors get at least what they would have in Chapter 7

October 18 Financial Distress and Restructuring

[Roe, The Voting Prohibition in Bond Workouts.](#) In *Corporate Bankruptcy: Economic and Legal Perspectives*, Cambridge Press, 1996, pp. 415-433. This is the key paper on how the law boxes firms into making exchange offers that face a potentially crippling free-rider problem.

[Fridson, "Coercive" Exchange Offers.](#) This is Marty Fridson's take on the tactical role and social value of exchange offers that address the free-rider problem by weakening covenants.

[Roe & Skeel, Assessing the Chrysler Bankruptcy.](#) This discusses the precedent set by the treatment of secured creditors in the Chrysler case.

- Buoying-up problem
- Minimum participation
- Exit consent / Coercive structures
- Prepackaged bankruptcy
- New use of Section 363

October 20 **Guest Speaker: Adam Cohen**

October 25 FIRST TEST

October 27 Consumer Credit

Musto, What Happens when Information Leaves a Market? Evidence from Post-Bankruptcy Consumers (*Journal of Business*, October 2004, p. 725-748). Yes, this is my own paper, which I have included to demonstrate the role of credit bureaus, credit scores and relevant laws in consumers' access to credit.

Secured borrowing – houses and cars
Unsecured borrowing – credit cards and student loans
Credit bureaus and scores

Chapter 7

Keep exempt assets, lose others, debt discharged
Attractive to lend post-bankruptcy

On your file for 10 years; other derogatories stay for 7

Chapter 13

Pay out of future income
Keep secured assets if you keep paying
Creditors get at least what they would have in Chapter 7
1st –mortgage cram-down policy debate

Means-testing under BAPCA

Recent and proposed policies and legislation

November 1 Mortgage-backed securities

Fabozzi, Modigliani, Jones and Ferri, The Mortgage Market and Mortgage-Backed Securities Market

Basic mortgage math
Pooling and tranching
Prepayment
PACs, Floaters, Inverse Floaters

November 3 Asset-Backed Securities

Fabozzi, Modigliani, Jones and Ferri, Asset-Backed Securities Markets

Credit Enhancements
Servicing arrangements
Soft Bullet Structure
Ratings

November 8 Subprime Mortgage Case

Hand in Case Writeups

November 10 Mutual Funds and other Investment Pools

MBS homework due

Open-End funds
Closed-End funds
ETFs/ETNs

November 15 Underwriting

Smith, Raising Capital: Theory and Evidence, in Chew, *The New Corporate Finance: Where Theory Meets Practice*, 1993, McGraw-Hill. This paper summarizes what the academic literature has found about how a firm's stock price reacts to different financing decisions it can make.

Ellis, Michaely and O'Hara, When the Underwriter is the Market Maker: An Examination of Trading in the IPO Aftermarket. *Journal of Finance*, June 2000, pp. 1039-74, and Aggarwal, Stabilization Activities by Underwriters after Initial Public Offerings. *Journal of Finance*, June 2000, pp. 1075-1103. These two papers are about the crucial role that after-issuance price support plays in the marketing of IPOs, and in particular in the practice of overselling offerings in the first place.

Rights offerings
Underwritten seasoned offerings
Initial Public Offerings
Overallotment / Green Shoe

November 17 Shareholder Votes and Corporate Control

One Share / One Vote
Free rider problem with takeovers
Supermajority rules

November 22 Project Finance

Myers & Majluf, Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics* 13, pp. 187-221.

Pooling / Separating Equilibria
Underinvestment problem caused by asymmetric information about existing projects
Project Finance Structures
Example of Wind Farms

November 24 *Day Before Thanksgiving – Review Day*

Equity HW due

November 29 **CLASS SPEAKER TBA**

December 1 SECOND TEST

December 6 TBA

Last HW due

December 8 Wrap-up