

## FNCE 238/738: Capital Markets

### Prof. D. Musto

### Course Schedule

This course covers the techniques by which firms go to the capital markets, 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

- 6 homeworks; the top 5 of the 6 will count toward your grade
- 3 case write-ups

**There are six quizzes, every other Wednesday starting September 21.** So the quiz dates are 9/21, 10/5, 10/19, 11/2, 11/16 and 11/30. They will be in-class, taking approximately the first 30 minutes. I will count the top 5 of your 6 scores. There will be no makeups. There will be no tests other than these six quizzes, and there will be no final exam.

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 top 5 of the 6 tests
- 15% on the top 5 of the 6 homeworks
- 15% on the cases

Class participation can help at the margin.

September 7 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 12 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 14 The Bond Market

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, Bills and Auctions  
Price Quotation, Yield to Maturity  
Basic Arbitrage Relationships  
144A market

September 19 The Repo Market

[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.

**HOMEWORK 1 DUE**

How Repos work  
Repo pricing: GC and Specials  
Margins  
Tri-Party Repo

[Run on the Repo Market](#)

Shadow Banking System

September 21 The [Commercial Paper Market](#)

*HOMWORK 2 DUE*

*FIRST QUIZ*

Pricing

Bank-run risk

Backup lines & Early exit

Recent policies

September 26 Option Basics

Put/Call Parity

One-period binomial pricing

Multiperiod binomial pricing

September 28 Cases: *Long-Term Capital Management* and *Blackrock Money Market Management*

*HAND IN CASE WRITEUPS*

October 3 Financing Choices and NPV

Corporate securities as options on firm value

Skewed incentives of levered firms

Risk over value

Turning down +NPV

Role of bank monitoring

October 5 Bond Contracting

*HOMWORK 3 DUE*

*SECOND QUIZ*

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.

Role of bond covenants

Popular covenants and their purpose

Creditors' rights upon default and the role of the trustee

Voting to amend the indenture

October 10 *Fall Break – NO CLASS*

October 12 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 17     **Guest Speaker**

October 19     Financial Distress and Restructuring

*HOMWORK 4 DUE*

*THIRD QUIZ*

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
- Bankruptcy Auctions (Section 363)

October 24     Swap Market  
What is LIBOR?

Credit Default Swaps  
Interest-Rate Swaps  
Currency Swaps  
Market making and clearing

October 26 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  
1<sup>st</sup> –mortgage cram-down policy debate

[Means-testing under BAPCA](#)

Recent and proposed policies and legislation

October 31 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 2 Asset-Backed Securities

**HOMEWORK 5 DUE**

**FOURTH QUIZ**

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

Credit Enhancements  
Servicing arrangements  
Soft Bullet Structure  
Ratings

November 7 Mutual Funds and other Investment Pools

Open-End funds  
Closed-End funds  
ETFs/ETNs

November 9 Subprime Mortgage Case

*HAND IN CASE WRITEUPS*

November 14 Underwriting

*HOMEWORK 6 DUE*

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 16 Shareholder Votes and Corporate Control

*FIFTH QUIZ*

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

November 21 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.

Underinvestment problem caused by asymmetric information about existing projects  
Project Finance Structures

November 23 *Day Before Thanksgiving – No Class*

November 28 Airgas Case

*HAND IN CASE WRITEUPS*

November 30 Topic TBA  
*SIXTH QUIZ*

December 5 **Guest Speaker**

December 7 Wrap-up