

**New York University
Leonard N. Stern School of Business
Executive MBA Program**

**Corporate Bankruptcy, Credit Risk
& Distressed Securities
B40.3398**

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This is an expanded and more in-depth offering compared to our Stern “classic” bankruptcy course which itself evolved in an interesting way over the thirty plus years that I have taught it. The original focus was on discussing and using corporate distress prediction models from an external fixed income security perspective. These statistical-multivariate models, utilizing financial statement and market valuation variables, have become standard analytical procedures in the financial world, especially as financial institutions prepare for Basel II. They are now complemented by a number of newer analytical approaches, including option pricing and artificial intelligence models.

While the financial distress prediction aspect is still an important part of this course, perhaps the more important perspective is now the valuation and analysis of distressed firms and their outstanding securities, primarily bonds and bank loans. Discussion and analysis of the high yield, junk bond market complements the distressed securities materials. Reorganization in bankruptcy cases explore this unique period in a company’s “life.” The materials in this course are no longer “niche” subject areas as bankruptcy plays an increasingly “popular” role in our economy. Indeed, approximately 100 U.S. companies filed for bankruptcy in the three-year period 2001-2003 and have reorganized under Chapter 11 with at least \$1 billion in liabilities.

The pedagogy of the course includes traditional lectures, case studies, guest speakers in bankruptcy law, “vulture” investing, and operational and financial restructuring. A choice of either a take-home project (usually a complex case study), or a term paper related to the theme of the course is the major grade requirement. Students have the opportunity to present the findings of their term projects at the end of the term. Incidentally, Stern has “hatched” at least four-dozen vulture investors, analysts and traders of distressed securities over the years and this course is oftentimes the “breeding ground” for these successful “birds.”

I. General Course Description & Objectives

An in-depth study of practical and theoretical financial aspects and implications of corporate bankruptcy, credit analysis, and leveraged and distressed restructurings and other techniques for corporate renewal. Among the topics discussed are the bankruptcy-reorganization process; techniques and procedures to value firms in distress and/or reorganization; global implications of credit risk, predicting impending problems of various types of companies including manufacturing firms, retailers and commercial banks; the effect of bankruptcy on total share valuation; investment strategies relevant to distressed companies' securities; financial restructuring; high yield "junk" bonds; the emerging-market corporate debt market; and the implications of bankruptcy analysis to financial lending institutions and non-financial corporate management personnel. References will be made to recent corporate failures and cases as well as to empirical and theoretical scholarly and professional studies.

II. Course Requirements & Instructions

The pedagogy of the course includes seminar-type discussion of issues and latest research in the field, analysis of case studies, guest speakers, and student presentations of their case-research reports. The major written requirement will be an in-depth report of a significant corporate bankruptcy or a paper related to the theme of the course. Students must work in small groups of two or four members. See partial list of bankrupt firms and paper themes attached. A take-home final exam is possible as an alternative to the paper. Participants of the course are also responsible for the required readings of each session's discussion and the case studies **(worked on by groups of two-three students)**.

III. Required Materials:

- A. Edward I. Altman & Edith Hotchkiss, **Corporate Financial Distress & Bankruptcy**, 3rd ed., John Wiley & Sons, 2005.
- B. J. Caouette, E. Altman & P. Narayanan, **Managing Credit Risk: The Next Great Financial Challenge**, John Wiley & Sons, 1998 [MCR].
- C. Packet of Handouts and Exhibits (download from Blackboard)
- D. **Suggested** books (If “Investing in Distressed Securities” and/or “Managing Credit Risk” is very important to you)
 - a. E. Altman, **Distressed Securities: Analyzing & Evaluating Market Potential & Investment Risk**, Probus, 1991, reprinted by Beard Books, 1999.
 - b. H. Rosenberg: **The Vulture Investors**, John Wiley & Sons, 2000.
 - c. S. Moyer, **Distressed Debt Analysis**, J. Ross, 2005.

IV. Detailed Course Outline

Session

Dates Subject and Readings

2/7 **The Corporate Bankruptcy Phenomenon**

- Introduction to corporate financial distress
- Current trends in business failures and bankruptcies
- Business failures and bankruptcies – Chapter 1
- Macroeconomic influences on business failures
- Major players in the reorganization process – Chapter 13
- Valuation theory in a distressed reorganization - review basic concepts

- **Discussion of term projects**

The Bankruptcy-Reorganization Process – Legal & Economic Issues

- The turnaround management industry – **guest speaker (representative of the TMA) best paper award competitions** – Chapter 13
- The chapter 11 process – **Chapters 2, 3**
- Emerging (emerged) trends – Chapter 10

- 2/14 **Managing Credit Risk: A Global Challenge – Chapters in [MCR]**
- Topic overview – key risk management area - **Chapters 1-9** [MCR]
 - Importance in low and high credit risk regions of the world
 - BIS regulatory issues – changes are imminent (Basel II)
 - Default and recovery rates (PD and LGD) – **Chapter 15, Chapters 15, 16** [MCR]
 - Securitized credit instruments – **Chapter 22** [MCR]
 - Traditional and new portfolio management techniques – **Chapter 17** [MCR]
 - The credit default swap market – **Chapters 20, 21** [MCR]
 - **Introducing the Duplan Case**

The Duplan Case should be worked out carefully; it will be discussed and collected on February 28. You must work in teams of two or three students.

- 2/21,28 **Risk and Return Analysis of the Corporate High-Yield Bond Market – Chapter 7**
- Evolution and current status of the high yield and distressed debt markets
 - Today's credit market condition
 - Risk and return analysis
 - Traditional default and mortality rate methods
 - Analyzing fallen angels
 - HY bonds as raw material for the distressed debt market
 - Growth and importance of the leveraged loan market
 - The collateralized debt markets

The Distressed Debt Market – Chapter 8, 9

- Size, performance and outlook
- Strategies and correlations

- 2/28 **Discussion of the Duplan Case**
(Case should be handed in; you must work with one or two other students)

- 3/7 **Guest Speaker on Distressed Investing: Allan Brown, Portfolio Manager, Concordia Capital – Chapter 9**
- Are they really vultures?
 - Different investment strategies and valuation techniques
 - Selected case studies
 - Some recent prominent situations

3/14 **Semester Break**

- 3/21 **Guest Speaker on International Distressed Investing: Geoffrey Gold, Partner, Strategic Value Partners**
- Distressed investing outside the U.S.
 - Comparing domestic with European opportunities

- Risk and return aspects of international investing
- 3/21 **Distressed Control Investing in Europe - Guest Speaker: Michael Block, Apollo Investors, LP**
- Specific reference to control investing in Germany
 - Case studies
- 3/28 **Credit Scoring Models: Predicting Financial Distress**
- Z-Score and Z''-Score analysis (available on *Bloomberg*)
 - ZETA, KMV, Neural Networks, etc.– **Chapters 11, 12 and Chapters 10, 11 [MCR]**
 - For emerging and non-U.S. markets - expanded version of Z''-Score
 - Bond rating equivalents and PD estimation
 - GM/Ford and US Auto Industry
- 4/4 **Implications & Applications of Financial Distress Prediction Models**
- For investors – **Chapter 13**
 - For bankers – **Chapter 13**
 - Enron/WorldCom discussion
 - Using distress prediction models as a turnaround technique – **Chapter 14**
- 4/11 **Corporate Highly Leveraged Restructurings**
- Asset and liability restructuring
 - Leveraged management buyouts (MBOs)
 - Linking financial theory with practice
 - Lessons from the 1980's and 1990's? Deja-vu in 2007/2008?
- 4/11 **Adding or losing value through leveraged restructurings**
- Debt for equity swaps (Leveraged Recapitalizations)
 - Leveraged buyouts
 - Post restructuring asset sales
- 4/18 **Interco Case – Leveraged Restructuring**
- Hostile takeover defense – Poison Pill?
 - Role playing by student groups
- 4/18 **Financial Restructuring Techniques and Experience – Guest Speaker: Steve Zelin, Senior Managing Director, The Blackstone Group**
- Distressed financial restructurings
 - Financial institution approach
 - Enron/Xerox
 - Current issues and career opportunities
- 4/25 **Turnaround Manager – Role and Techniques – Chapter 12**
Guest Speaker from Prominent Turnaround Management Firm

5/2 **Take-home Final due (for those not doing the term paper) and Student Presentation of Term Reports: All Reports due**

- Maximum 10-minute presentation research

Grading: Will be based primarily on the term project/take-home exam with smaller weights for cases and in-class contribution. Term project discussed in class in handout packet.

Office Hours/Location: Wednesday: 2:00-3:00 & 4:30-6:00 pm
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POSSIBLE BANKRUPTCY PAPER TOPICS

Sample Themes

Abuses of the Bankruptcy Code
Accountants' roles in bankruptcies
Airline deregulation & bankruptcies
Airline industry prediction model
Argentina bank crisis
Asset management companies (AMCs)
Auto Supply & Automotive Industry
Bankruptcy in the telecommunication industry
Bankruptcy as a business strategy
Bankruptcy and pension plans (PBG)
Bankruptcy and reorganization in the airline industry
Bankruptcy expert systems
Bankruptcy in Central and Eastern Europe
Busted convertibles
Chapter 22s, 33s
China's bankruptcy Laws & NPLs
Claims purchases as a takeover technique
Climate change and the Insurance Industry
Computer and Electronic Industry
Corporate abuses and bankruptcy
Corporate fraud and indirect bankruptcy costs
Crisis in Japanese banking
Critical events analysis and bond price reaction
Debtor-in-possession (DIP) financing
Distressed Firm Control Strategy
Emerging market corporate debt models
Emerging Equity Investing
Equity Performance in Reorganization
Equity performance after bankruptcy emergence
European Distressed Debt Market
Fallen angels (e.g., GM & Ford)
FASB 107 Disclosures
Financial reporting consolidation (captives) & Z-Scores
Fraudulent conveyance
Hedge Funds as Corporate Lenders
Highly leverage transactions (HLT)
Investing in bankrupt equities
Japanese Rating Agencies
Macro-default models
Macro-influences on defaults
Municipal defaults
New Bankruptcy Act of 2005
Option pricing default models
Power companies and public utilities
Pre-packaged bankruptcies
Rating Agencies
Rating downgrade triggers
Re-estimating Z-Score Model
Retail industry prediction model
Roll-Up Strategy from Bankruptcies
Telecommunications industry prediction model
The Corporate Bankruptcy Restructuring Industry
The new BIS regulation on credit assets (Basel II)
Z-Scores and investing

Sample Companies

Adelphia
Allegheny International/Sunbeam
Allied & Federated Department Stores
Arch Wireless
Armstrong World
Bethlehem Steel/International Steel Group
Boston Chicken
Braniff International (Chapter 33)
Caldor
Canary Wharf
Charter Communications
Collins & Aikman
Continental Airlines (Chapter 22)
Dana Corporation
Delphi Corporation
Delta/Northwest Airlines
Dow Corning
Dura Corp.
Eagle Picher Industries
Enron Corporation
Euro Tunnel (1 and 2)
General Motors/Ford(?)
Gillette Holdings
Global Crossing
Globalstar
Grand Union (Chapter 33)
Greyhound
Hillsborough (Jim Walter)
ICO Global Communications
Iridium
Johns Manville
Kaiser Aluminum
Kmart/Sears
Loewen
Loral Space & Communication
LTV (1 and 2)
Mirant Energy
Montgomery Ward
Olympic & York
Pacific G&E
Parmalat
Polaroid
R. H. Macy & Company
Spectrasite
Southland
Swissair
Tower Automotive
Trump Hotels & Casinos
United Airlines
USAirways (Chapter 33?)
Winn-Dixie Stores
WorldCom
Xerox Corporation Restructuring