### New York University Leonard N. Stern School of Business

Corporate Bankruptcy & Reorganization FINC-GB.3198.20

Profs. Edward Altman/Stuart Kovensky Spring 2014 (1<sup>st</sup> Half) Tue/Thurs 10:30-11:50 a.m. Location: KMC, Room 3-50

This is a unique course in business administration curricula and has 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 prepared for **Basel II and Basel III**. 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 the course, perhaps the more important perspective is now the valuation and analysis of high yield and distressed firms and their outstanding securities, primarily bonds and bank loans. The market for these two types of investments has grown considerably over the last twenty years and now stands at over \$2.5 trillion. In addition, the bankruptcies of corporations like Enron and Worldcom, as well as the credit crisis in 2008/2009 are evidence that given the size and inherent risk in this market, familiarity with bankruptcy and reorganization is essential to truly understanding corporate finance and the capital markets. Indeed, this course can now be followed by a companion course on "Distressed Securities, FINC-GB.3176" as well as a Case and Prospectus Analysis course on "Case Studies in Bankruptcy & Reorganization, FINC-GB.3199."

This course will be jointly taught with Professor **Stuart Kovensky**, a seasoned Distressed Debt Portfolio Manager at Onex Credit, joining Professor Altman and presenting materials from a practitioner viewpoint. Discussion and analysis of the high-yield, junk bond and sovereign debt market complement the distressed securities materials. Reorganization in bankruptcy cases explore this unique period in a company's "life." As a complement to the investment aspects of the course, we also pursue the financial and operating restructuring of ailing firms. All full-time students are given the opportunity to join the NY Chapter of the *Turnaround Management Association* at a highly discounted price.

The pedagogy of the course includes traditional lectures, case studies, guest speakers on various topics, such as, corporate restructuring and "vulture" investing and a choice of either a take-home project (usually a complex case study), or a term paper related to the theme of the course. The latter project is discussed early in the course but is not due until the full semester is over. Students have the opportunity to present the findings of their term projects in a special, extra session at the end of the term. Incidentally, Stern has "hatched" at least five- dozen vulture investors and traders of distressed securities over the years and this course is oftentimes the "breeding ground" for these successful "birds."

Call Prof. Altman at (212) 998-0709 or Prof. Kovensky at (914) 450-0581 or email: <a href="mailto:ealtman@stern.nyu.edu">ealtman@stern.nyu.edu</a>, <a href="mailto:skovensky@gmail.com">skovensky@gmail.com</a>.

### **Course Outline**

### 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. 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, commercial banks, municipalities and sovereign nations; 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 and sovereign 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 are required to work in small groups of two to 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. You must work with one other student on the Take-Home Final. 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. Additional Practitioner Presentations

There will be several practitioner presentations on class-related subjects. These presentations will be held during our day session course and also during Altman's evening section on Thursday, 6:00-9:00 pm in KMEC 3-120, this term jointly taught with the Honorable Judge James Peck. You are invited to attend or you can view these sessions on the class videos (schedule will be distributed in class). One session of special note is on February 27, 2014 from 6:00-9:00 pm when two icons in the bankruptcy field will "hold court." They are the Honorable James Peck (The "Lehman Judge") and Harvey Miller of Weil, Gotshal & Manges LLP (The Dean of all Bankruptcy lawyers).

### **Required Materials:**

- A. Edward I. Altman and Edith Hotchkiss, **Corporate Financial Distress & Bankruptcy**, 3<sup>rd</sup> ed., John Wiley & Sons, 2006.
- B. Packet of PowerPoint Handouts and Exhibits (Download from "Blackboard").
- C. Suggested books If "Investing in Distressed Securities" and/or "Managing Credit Risk" is very important to you, the following books are recommended:
  - a. J. Caouette, E. Altman, P. Narayanan and R. Nimmo, **Managing Credit Risk: The Great Challenge For Global Financial Markets**, 2<sup>nd</sup> edition, John Wiley & Sons, 2008
  - b. E. Altman, **Distressed Securities: Analyzing & Evaluating Market Potential & Investment Risk**, Probus, 1991, reprinted by Beard Books, 1999
  - c. S. Moyer, Distressed Debt Analysis, J. Ross, 2005
  - d. H. Rosenberg, **The Vulture Investors**, 1<sup>st</sup> or 2<sup>nd</sup> edition, John Wiley & Sons

### IV. Detailed Course Outline

### Session

### **Dates Subject and Readings**

- 2/4 The Corporate Bankruptcy Phenomenon (E. Altman & S. Kovensky)
  - Introduction to corporate financial distress
    - Factors that cause firms to enter distress
  - Business failures and bankruptcies chapter 1
  - Defaults and bankruptcies in 1971-2012
  - The credit crisis of 2007-9 (corporate); 2010-2012 (euro-sovereign)
  - Major players in the reorganization process
  - The chapter 11 process chapters 2, 4
  - Trends in bankruptcy reorganization
  - Valuation theory in a distressed reorganization: review basic concepts chapter 5
  - Review term project or take-home final option
  - Guest speaker Teresa Kohl, President, Turnaround Management Association, NY Chapter

### 2/6 Corporate Restructurings - Leveraged and Deleveraged (S. Kovensky)

- Why do companies become leveraged financial and operational
- Steps in the restructuring process
- Transactional leverage vs creeping leverage
- Remain calm/all is well
- Houston, we have a problem
- When to reorganize vs liquidate

# 2/11 The Bankrutpcy Code and the Real World Implications of Bankruptcy (S. Kovensky)

- History and evolution of the Bankruptcy Code
- Key milestones in a reorganization
- Who wins and loses in a reorganization

# 2/13, The High Yield Bond Market – Chapter 7 and 2013 Salomon Center Report

- 18 **(E. Altman)** 
  - Evolution and current status of the market (review introductory [9/6] materials)
  - Risk and return analysis
  - The raw material for the distressed securities market
  - Traditional default and mortality rate methods
  - Estimating the probability of default
  - Are historically based models still relevant?

# The Sovereign Debt Market - Predicting Sovereign Debt Defaults Introducing the Distress Debt Market - Chapters 8, 9

- Size and scope
- Investment strategies and players
- Performance and correlation measures
- Outlook

Introducing the **Duplan Case** – (Blackboard)

The Duplan Case should be worked out carefully; it will be discussed and collected on March 4<sup>th</sup>. You <u>must</u> work in teams of two or three students (three is suggested).

# 2/20 Investing in Distressed Securities/Distressed Debt Market Size, Scope and Outlook (S. Kovensky)

- Historical returns
- The bankruptcy process and investing
- Techniques/opportunities to invest
- Debt vs equity, or both
- Growth in number and size of restructurings

### 2/25 Analyzing Distressed Securities/Credit Investment Strategies (S. Kovensky)

- Financial and operational analysis required
- Why is a company stressed or distressed?
- Who are the creditors/stakeholders/key players?
- Can/should it reorganize?
- What is it worth?
- How should it be capitalized?
- How will the new value compensate existing creditors?
- What are the downside risks?
- Are there opportunities for upside?

# 2/27 Case Studies in Reorganization with a focus on their impact on the company, its creditors and owners (S. Kovensky)

- How to create value in bankruptcy Chemtura case study
- A case study in creditor conflict Dynegy

### 3/4 The Duplan Case will be discussed and collected (E. Altman)

### 3/6 Credit Scoring Models: Predicting Financial Distress – Chapters 11, 12 (E. Altman)

- Z-Score, Z"-Score and Z-Metrics analysis chapter 11, Z-Metrics White Paper (Blackboard)
- KMV, Neural Networks, etc. Chapter 11
- For emerging markets-expanded version of Z"-Score Chapter 12
- Enron/WorldCom and GM/Ford discussion

# 3/11 Implication & Applications of Financial Distress Prediction Models – Chapters 13, 14 (E. Altman)

- For investors Chapter 13
- For bankers Chapter 13
- For managers the corporate renewal process chapter 14
- The GTI corporate turnaround Chapter 14
- How to avoid Chapter 22

### 3/13 **Z-Score in Practice (Kodak Case)**

## Recent Issues/trends in the Market for Municipal Bonds (S. Kovensky)

- The size and scope of the municipal bond market
- Differences between the municipal and corporate bond market
- Reorganization in the municipal bond market
- Key cases and issues they raise

- Take-home final due (for those not doing the term project). You should work with one other student on the Take-Home. You can submit by email to S. Kovensky <a href="mailto:skovensky@gmail.com">skovensky@gmail.com</a>.
- Term project due with class presentations of finished project or work-inprogress (date subject to availability).

**Grading:** Will be based primarily on the term project/take-home exam but important

weights for case and in-class contribution.

Office Hours/Location: Thursday: 2:00 - 4:00 p.m.

& by appointment, KMC bldg, Rm. 9-61

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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 (PBGC)

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

Crisis in Japanese banking

Critical events analysis and bond price reaction

Debtor-in-possession (DIP) financing Distressed Firm Control Strategy

**Distressed Ratio** 

**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)

Financial reporting consolidation (captives) & Z-Scores

Fraudulent conveyance

**Government Intervention & Creditor Rights** 

Greece and the Euro-Peripherals Hedge Funds as Corporate Lenders Highly leverage transactions (HLT) Indirect and Direct Bankruptcy Costs

Investing in bankrupt equities Japanese Rating Agencies LBO Bankruptcies 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

Roll-Up Strategy from Bankruptcies

Sovereign Risk Models Subprime Mortgage Crises Systemic Risk Analysis

Telecommunications industry prediction model The Corporate Bankruptcy restructuring industry The new BIS regulation on credit assets (Basel 11)

**Z-Scores and investing** 

### **Sample Companies**

Adelphia

Allegheny International/Sunbeam Allied & Federated Department Stores

American Airlines/US Air

Arch Wireless

Bethlehem Steel/International Steel Group

Borders Boston Chicken

**Braniff International (Chapter 33)** 

Buffets

**Charter Communications** 

Chrysler CIT Financial Collins & Aikman

**Continental Airlines (Chapter 22)** 

Dana Corporation
Delphi Corporation
Delta Airlines/Northwest

Dow Corning Dura Corp.

Eagle Picher Industries Enron Corporation Euro Tunnel (1 and 2)

Exide

Federated Dept. Stores 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 Lehman Brothers

LTV (Chapters 11 and 22)

Mirant Energy
Montgomery Ward
Movie Gallery
Northwest Airlines/Delta

Olympic & York
Northwest Airlines
Pacific G&E
Parmalat
Polaroid
Quebecor World
R.H. Macy & Company

Spectrasite Swissair

**Tower Automotive** 

Residential Capital

Trump Hotels & Casinos (Chapter 44!)

United Airlines US Airways Winn-Dixie Stores WorldCom