New York University Leonard N. Stern School of Business

Corporate Bankruptcy & Reorganization FINC-GB.3198.01

Professor Edward Altman, Emeritus Adjunct Professor Mark Kronfeld Fall 2021 (2st Half) Tues/Thurs 10:30am-11:50am Location: **In-Person and Remote** (Details TBA)

The subject of bankruptcy and reorganization is an exciting as well as important area in the study of corporate finance, capital markets, corporate law and investor behavior. Over the last 30 years the market for non-investment grade debt has grown considerably and with that, the field of corporate bankruptcy has become increasingly prominent. This has led to the development of a number of interesting and potentially lucrative career paths within the fields of investment management and investment banking, as well as restructuring and turnaround consulting.

In fact, the issue of insolvency has become relevant outside of just the corporate arena with the bankruptcy reorganization of Detroit in 2013, as well as the Puerto Rico debt restructuring. And, since we are now in the midst of a devastating economic downturn, primarily caused by the COVID-19 pandemic, the number and importance of corporate bankruptcies has soared to record levels, especially amongst the mega- bankruptcies, involving firms with more than \$1 billion in liabilities.

Over the term of this course, we will study a number of important areas to help you get an understanding of:

- The origins, purpose and evolution of bankruptcy law
- The size, scope and growth of the non-investment grade, leveraged finance and Non-bank lending markets
- Tools that can be used to predict corporate distress
- COVID19 and the Credit Cycle
- Corporate distressed debt investing, including valuation and analysis of distressed firms
- Investment Banking and Corporate Restructuring
- Examples of historical bankruptcies
- Municipal Bankruptcy and Sovereign Defaults

The original focus of the class more than 45 years ago was on discussing and using corporate distress prediction models from an external and fixed income security perspective. These statistical-multivariate models, utilizing financial statement and market valuation variables, have become standard analytical procedures in the financial world. They are now complemented by a number of newer analytical approaches,

including option pricing, artificial intelligence, corporate governance assessments and machine learning.

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 below investment grade issuers, distressed or bankrupt firms and their outstanding securities, primarily bonds, bank loans and equities of companies that are distressed and trade either before or during bankruptcy reorganization or have emerged from Chapter 11. The market for these types of investments has grown considerably over the last twenty years and now stands at about \$3.5 trillion. The bankruptcies of corporations like Enron and WorldCom, the credit crisis in 2008/2009 and the recent cycle of extreme distress in the energy and retail industries, among others, 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.

In addition to the classroom discussion, all students are given the opportunity to join the NY Chapter of the *Turnaround Management Association, This year the entire registration cost will be subsidized by the TMA*. Membership in the TMA provides access to TMA's networking, educational resources, and certification opportunities available to its members in the field of corporate bankruptcy and restructuring.

The course includes traditional lectures, case studies, and guest speakers on various topics, such as, valuation in corporate bankruptcy reorganizations, advising a bankrupt debtor, predicting financial distress, operational and financial restructurings and "vulture" investing. Grading will be determined by a combination of your in-class participation, assignments (individual and group), and a group project that will be due at the end of the full semester. Students *may* have the opportunity to present the findings of their term projects in a special, extra session at the end of the term, as well as at the end of the half-semester. Incidentally, Stern has "hatched" at least six dozen vulture investors, traders of distressed securities and restructuring professionals over the years and this course is oftentimes the "breeding ground" for these successful "birds."

This fall, 2021 semester is being presented to Stern and NYU law students by Professor Edward Altman, who created the course and continues to be active in the relevant academic and practitioner worlds. Professor Altman is extremely pleased to again have Mark Kronfeld as his co-instructor. Mark is Managing Director and Global Head of Restructuring at *BlackRock*, the world's largest asset manager. Mark brings his extensive professional experience in distressed investing and restructuring as well as his significant teaching experience at other universities and at BlackRock where he leads internal training and education programs.

The course will be taught **in-person** and, at times remotely. Professors Altman and Kronfeld will make time to speak with any registered student on an individual basis to supplement class activities.

You can reach Professor Altman at (646) 469-7029 and/or visit his website at www.stern.nyu.edu/~ealtman or email: ealtman@stern.nyu.edu. You can reach Professor Kronfeld at (646) 352-1562 or by email: mpk211@stern.nyu.edu.

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 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 emergingmarket 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

During the duration of the class there will be individual assignments, a group assignment ("Final Project") or as an alternative possibly a Take-Home Assignment, and guest lecturers, as well as reading requirements from the required text in addition to individual ppt handouts and readings to support certain lectures. Participants of the course are also responsible for the required readings and assignments for each session

We are still determining if the the major written requirement will either be a Final Project and/or a Take-Home Exam. The former which will consist of in-depth report of a significant corporate bankruptcy or theme related to the topics covered in the course. Students are required to work in small groups of three to five members. Ideally, students will form their groups early in the term but *no later than* November 23. This project is due by December 14. Incompletes are possible.

III. Materials

A. <u>REQUIRED</u>:

- 1. Edward I. Altman, Edith Hotchkiss, & Wei Wang, Corporate Financial Distress, Restructuring & Bankruptcy, 4th ed., John Wiley & Sons, 2019, available in hard copy or electronic version.
- 2. PowerPoint Handouts

- B. Suggested books: If "Investing in Distressed Securities" and/or "Managing Credit Risk" is very important to you, the following books are recommended (these are **not required** for the course):
 - J. Caouette, E. Altman, P. Narayanan and R. Nimmo, Managing Credit Risk: The Great Challenge For Global Financial Markets, 2nd edition, John Wiley & Sons, 2008
 - 2. E. Altman, **Distressed Securities: Analyzing & Evaluating Market Potential & Investment Risk**, Probus, 1991, reprinted by Beard Books, 1999
 - 3. S. Moyer, Distressed Debt Analysis, J. Ross, 2005
 - 4. H. Rosenberg, **The Vulture Investors**, 1st and/or 2nd edition, John Wiley & Sons

IV. Detailed Course Outline

Session

Dates Subject and Readings

11/2 Foundations of Corporate Credit; The Corporate Bankruptcy Phenomenon (Read Chapters 1, 2 and 4; Introductory Materials (PPT))

- Overview of the Course, Final Project, and Grading
- Overview of leveraged finance and the debt markets
- Key foundation topics in corporate credit analysis
- Credit monitoring and the investment process
- Corporate financial distress and factors that cause firms to go bankrupt
- Business failures, corporate distress, restructuring and bankruptcies
- Trends in restructuring, corporate reorganization and bankruptcy
- Introduction to Final Project
- 11/4 & 11/9 The High Yield Bond Market and "COVID-19 and the Credit Cycle" (Read Chapters 2 & 8; "Current Conditions and Outlook for Credit Markets" (PPT) and New manuscript "COVID19 and the Credit Cycle: revisiting 2020 and Outlook")
 - Evolution and current status of leveraged finance markets
 - Risk and return analysis of high-Yield and Distressed Securities
 - The raw material for the distressed securities market
 - Distressed Debt Market Market Dynamics
 - Default and Recovery Rate and Mortality Rate Models and Methods
 - Estimating the probability of default
 - Are historically based models still relevant?
 - Structured Credit Products (CLOs)

- Major risks going forward Market Outlook
- COVID-19 and the Credit Cycle

Where are we in the Credit Cycle & Outlook

11/11 Restructuring and the Chapter 11 Bankruptcy Process – Part 1 (Read Chapters 3, 4, 6; "Overview of Workouts, Restructurings and Bankruptcy" (PPT))

- Recap of key underlying concepts in credit analysis
- Corporate governance in distressed firms
- Objectives of restructuring and bankruptcy processes
- Approaches to Workouts, Restructurings and Bankruptcy
- Out of court restructuring strategies, key steps and considerations
- Bankruptcy Code Basics; Overview of Chapter 7 and 11
- Chapter 11 bankruptcy process, timeline and steps; pros and cons
- The Big Picture: stakeholders, players, goals, issues and conflicts
- Case Studies

11/16 Restructuring and the Chapter 11 Bankruptcy Process – Part 2 (Read Chapters 5, 7; "Fundamentals of Chapter 11 Bankruptcy" (PPT), Bankruptcy Primer (PPT)

- Deeper dive into Chapter 11 process
- Overview of "absolute" priority, bankruptcy valuation and distributions
- Petition, automatic stay, creation of the estate
- First day orders, cash collateral, adequate protection, DIP financing
- Examiners, trustees, professional retention, committee formation
- Claims process, bankruptcy causes of action and litigation issues
- Bankruptcy Sales
- Plan of Reorganization process and Recapitalizations
- Key protections, strategies, and takeaways different perspectives
- Case Studies

11/18 Guest Speaker - TBD

- Financial Restructuring from an Investment Banking Perspective
- Current issues, prospects and career opportunities in restructuring

11/23 Overview of Distressed Investing

(Read Chapters 14-15; "Distressed Investing – Part 1" (PPT))

- Distressed debt market and investing landscape
- Analysis, components, process, and opportunity set

- Styles, approaches and strategies of distressed investors across the distressed company life cycle (pre- and post-bankruptcy).
- Steps in Distressed Credit Research
- Distressed Recovery Paradigm; Seven-Step Approach
- Basics of Distressed Valuation
- Determining attractiveness of investment opportunities; upside/downside, IRRs and yields, convexity and asymmetry, cheap and free options, risks and rewards, probability and path analysis
- Idea generation, pattern recognition, uncertainty, and alpha generation
- Recent trends in Distressed Investing
- Importance of rank, structure, seniority, rights and remedies
- Negotiating Strategies
- Examples and case studies

11/23 Final date to Choose a Term Project or elect to do Take-Home Final

11/25 Thanksgiving Holiday

11/30 Analyzing Distressed Securities and Investment Strategies -Guest Speaker-TBA

(Read "Distressed Investing – Part 2" (PPT))

- Seven-Step Approach deeper dive
- Key considerations driving reorganizations, valuation, and recoveries
- Distressed waterfall models, going concern and liquidation models
- Determining recoveries/LGDs and other default-related considerations
- Identify hidden risks, issues, red flags and opportunities in investments that most impact LGD, recoveries, etc. and how to spot/analyze them
- Vulture or Phoenix? Activism and the Role of the Distressed Investor
- Examples and case studies

12/2 Credit Scoring Models: Predicting Financial Distress (Read Chapters 10 & 11) and Corporate Credit Scoring Models (PPT)

- Z-Score Family of Models
- KMV, Neural Networks, etc.
- For emerging markets- robust version of Z-Score Model Z"-Score GMF/Ford discussion and more current cases
- A 50-Year Retrospective on Z-Scores
- Models for SME Analytics
- 12/7 Implications & Applications of Financial Distress Prediction Models (Read Chapters 11, 12; Financial Restructuring, The GTI Case Of Managing A Financial Turnaround (PPT))
 - For investors
 - For bankers

- For managers the corporate renewal process
- For Board Members
- The GTI corporate turnaround Chapter 12
- How to avoid Chapter 22

12/9 Distressed Investor Perspective/Bankruptcy Case Study (Read Distressed Investor Perspective – Molycorp Case Study (PPT))

- Recap prior sessions; advanced distressed techniques and strategies
- Insider's view of distressed investing (i.e. strategy, career, key skills, advice, war stories, etc.)
- <u>Case study on Molycorp</u>: illustrate topics from prior sessions and cover distressed analysis, tactics and strategies, hidden pitfalls and opportunities, war stories, the value of seating location in a conference room, and whether throwing bagels is a good negotiating technique

12/14 Careers in Restructuring and Investing; Tying up Loose Ends; Q&A

- Careers in restructuring, distressed investing, and related paths
- Advice and perspectives on job market, opportunities, interviews, career paths, war stories, and skills for success
- Tying up loose ends: recap, clarifications and amplification regarding prior topics and materials
- Wrapping up: lessons learned, how does this all fit together, what do we now think, and have our view or opinions changed?
- Q&A

FINAL PROJECTS WILL BE DUE ON DECEMBER 14

<u>Grading</u>: Will be based primarily (80-90%) on the Final Project with smaller, but meaningful weights for in-class contribution and any graded individual assignments (10-20%)

Office Hours/Location:	Edward Altman Remote Office Hours: Fridays 11:30am to 1pm, by appt
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	Mark KronfeldOffice Hours: Fridays 10am to 11:30am and by appt.Will be available via zoom, phone or facetime

(sign up details TBA)

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