**Value Investing in Credit Markets**

**Spring 2023**

**PROFESSORS**

Anjali Verghis and Denis Tolkachev

 Office Location: TBD

E-mail: amv2108@columbia.edu (Anjali) dgt2108@columbia.edu (Denis)

Office Hours: TBD

**TEACHING ASSISTANTS**

TBD

**REQUIRED COURSE MATERIAL**

A short set of required pre-class reading material and an exercise will be posted on Canvas. It is important that the students review the readings and complete the exercise before the classes begin, in order to maximize the value of this course.

While the course does not have a required textbook, we recommend four books that cover most of the materials reviewed in the class. Certain chapters from these books will be paired with the class sessions as recommended reading.

1. “Fixed Income Analysis (3rd Edition)”, Barbara Petitt, Jerald Pinto, and Wendy Pirie
2. “Fundamentals of Corporate Credit Analysis”, Blaise Ganguin and John Bilardello
3. “Distressed Debt Analysis: Strategies for Speculative Investors”, Stephen Moyer
4. “Understanding High-Yield Bonds”, Milbank

**REQUIRED PREREQUISITES AND CONNECTION TO THE CORE**

Financial Accounting and Capital Markets are required prerequisites for the course.

The learning in this course will utilize, build on and extend concepts covered in the following core courses:

|  |  |
| --- | --- |
| **Core Course** | **Connection with Core** |
| Corporate Finance | 1. Opportunity cost of capital
2. Risk
3. Firm valuation model
 |
| Global Economic Environment I | 1. Role of financial markets in the economy
 |
| Decision Models | 1. Sensitivity Analysis
2. Decision making under uncertainty and risk
3. Use of analysis in decision making
 |
| Financial Accounting | 1. The accounting model
2. Revenue and expense recognition
3. Resources and obligations-measurement and disclosure
 |

Enrolled students are expected to have a sound knowledge of these concepts and be able to apply them in the course.

**COURSE DESCRIPTION**

Corporate credit markets are a central part of U.S. capital markets, however they are generally not well understood by MBA graduates, due to a more typical classroom focus on equities. This course will enable students to develop an understanding of the corporate credit markets and build a practical skill set to evaluate and invest in individual credits using a classic Value Investing methodology.

The approach will be a pragmatic one. Throughout the course, we will focus on 4 to 5 different companies - all debt issuers of different credit risk profiles - and will utilize class lectures to discuss the factors that shape capital structure and pricing of various securities (debt or equity) issued by these companies. As part of the final project, students are expected to work in teams and analyze and generate a buy or sell recommendation on the securities issued by a U.S.-based corporate issuer. This assignment will provide students with an opportunity to solidify the learnings in a hands-on, experiential manner.

In addition to lectures and student presentations, students will also hear from representatives of private equity, credit and distressed investment management, and investment banking firms. These speaker sessions will enable students to gain access to multiple viewpoints to credit markets and various investing techniques and styles.

Given the importance of credit to companies, we believe that the skill set and knowledge obtained from this class will be valuable whether one becomes an equity (public or private) investor, a credit investor, or an investment banker.

**COURSE OBJECTIVES**

The course has two main objectives:

* Introduce students to: (i) the basic structure of existing corporate credit markets, (ii) the differences between bonds, bank loans and equity, and (iii) the nature of covenants and institutional versus market-based lending more generally.
* Develop students' abilities to identify, evaluate, and price particular credit investment opportunities, with the primary focus on non-distressed situations, although we will touch upon certain distressed topics as well.

**Course Outline**

|  |  |
| --- | --- |
| 1 | Overview of Global Credit Markets1. Size, liquidity, and players (issuers, investors, rating agencies)
2. Conceptual issues: credit vs. equity investing, asymmetric risk / reward, bond investor protections, capital structure considerations
3. Bond basics: yield, call structure, maturity, spreads
 |
| 2 | Cash Flow and Fundamental Analysis1. Pre-class assignment discussion
2. Industry and business quality from the creditor’s perspective
3. Financial analysis from the creditor’s perspective
4. Management incentives, board priorities and fiduciary duties
5. Investing based on market misperceptions of recurring, financeable cash flows
 |
| 3 | Understanding the Capital Structure1. Overview of corporate financing options: pros and cons of issuing debt vs. equity vs. using internal FCF to fund operations. Focus on cost of capital, funding, flexibility, and M&A perspectives
2. Revolver, term loan, bond, mezzanine debt, equity from the investor’s perspective - pricing vs. risk-return profile
3. Arbitraging relative value within capital structure
 |
| 4 | Structure and Covenants 1. Seniority ratings and why they matter (investor base, pricing)
2. Overview of debt covenants and discussion of what to look for
3. Understanding indentures and credit agreements
4. Negotiating / structuring ability and considerations
5. Case studies on how to invest based on the understanding of covenants and on the covenant analyses gone wrong
 |
| 5 | Private Equity and Private Debt 1. What’s an LBO?
2. LBO modeling and picking the “right” capital structure – students will learn how to build a simple LBO model as part of this exercise
3. Important considerations when investing in the debt of PE-backed companies. Covenants and credit investor’s risk perspective
4. Case studies: LBOs gone wrong and how to derive value from private debt structuring

Speaker: TBD |
| 5 | Valuation and Sourcing Ideas1. Credit valuation techniques: absolute vs. relative value; spreads, yields
2. Impact of the industry, business quality, structure, covenants, and ratings on securities pricing and valuation
3. Macro considerations for valuation: Central Banks
4. Credit securities trading, liquidity and secondary market trading, and impact of passive funds investing on valuation
5. Sourcing: searches (relative value trades, curve trades, investment horizon), sellside ideas (when / how to use), reverse inquiry
 |
| 7 | Overview of Distressed Debt Investing1. Causes of financial distress
2. Key players and incentives: investors, owners, advisors, bankruptcy courts
3. Investing in distressed vs. performing credits: liquidity, returns, unique risks
4. Distressed exchanges, Ad hoc groups and steering committees
5. Chapter 11 overview
6. Recovery analysis
7. Distressed investing case studies
 |
| 8 | Credit Indices and Credit Derivatives1. CDS vs. CDX / ETFs: Pricing, liquidity, and use cases in the investment portfolio
2. Corporate credit indices and benchmarks (custom benchmarks, rationale, techniques for managing against a benchmark vs. absolute return)
3. Speaker: TBD
 |
| 9 | Other Topics in Credit Investing1. Overview of asset allocation considerations
2. Shorting debt and equity of levered companies and other cross-asset class ideas
3. Investing in quasi-sovereign (e.g., Saudi Aramco) and municipal bonds
4. Credit securities portfolio construction and management (thematic trades: curve, quality, sector)
5. Communicating ideas (best practices, audience, etc.)
 |
| 10 | Careers in Corporate Credit1. Advisory roles: investment bankers (industry bankers, capital markets, syndicate) and lawyers (securities and bankruptcy law)
2. Underwriters and market makers: new issue process, research / desk credit analysts, and sell-side traders
3. Commercial lenders: credit and risk officers
4. Buy-side roles: analysts, portfolio managers, and traders

Speakers: TBD / Panel  |
| 11 / 12 | 1. Student Team Final Project Presentations
 |

**METHOD OF EVALUATION**

Final grades will be based on the breakdown below:

|  |  |
| --- | --- |
| Pre-class assignments | 5% |
| Participation | 15% |
| Quizzes (best 5 out of 6)  | 50% |
| Team Final Project | 30% |

The pre-class assignment must be submitted via Canvas by 5pm on the day before the first class. There will be no credit given for the late submissions. This assignment will be detailed on Canvas.

Attendance and the quality of your class participation will form the basis for your class **participation grade**. Investing has few absolute answers. There is a lot of ambiguity, and debate is very useful in clarifying thinking about what matters. It is therefore expected that students are eager to think independently, ask questions, and debate ideas. This is a highly interactive class and your participation is critical to your success and the success of the course. You should not take the course unless you recognize the need for participation. There will be substantial cold calling. A weekly self-evaluation of your class participation will be required.

**Quizzes** will be unannounced and will include 10 short answer/multiple choice questions based on the materials discussed in the class up to the day of the quiz. Each quiz will be a closed book/closed notes Type C assignment (see the chart below), to be completed by each student individually. There will be 6 quizzes in total and we will count the 5 best scores towards your final grade. The purpose of these quizzes is to increase your understanding of the material, provide feedback, and help you prepare for the final project.

**Final Team Project**

For the final project, students will be split into teams of 3-4 and asked to evaluate the securities in the capital structure of a corporate issuer (to be assigned in class) and provide buy or sell recommendation with the specific price targets. You will then present your analysis to the class and the guest credit investors. The final product should not be longer than 5-7 pages/slides. You should use the following questions to frame your analysis:

* Does this company have a conservative or an aggressive capital structure, given the quality of the industry, business, and the company’s credit profile? How would you modify the capital structure (if at all) to optimize the company’s cost of capital?
* What key risks do the company’s structure and covenants pose for the credit investors? What are the carve outs for the key covenants? Why were these carve outs likely negotiated?
* Are the company’s securities priced fairly? What probability of default / recovery rates do the security prices imply for this business?
* Which security/investment offers the best risk-reward in the capital structure?
* Would you be a buyer or a seller of each of the part of the company’s capital structure (e.g., loans, bonds, equity)?
* Outline bull/bear case scenarios for these securities.
* How would you evaluate the attractiveness of these investments relative to the High Yield index?
* Would you LBO this business? What would be the optimal capital structure and associated equity returns if you did LBO it?

Note that Team Final Project is Type A described in the chart below.

In order to avoid ambiguity that may lead to unintentional violations of the Honor Code, the description types for assignments have been standardized. They are specified in the table below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Type*** | ***Designation*** | ***Discussion of concepts***  | ***Preparation of submission***  | ***Grade*** |
| A | group / group  | Permitted with designated group\*  | By the group | Same grade for each member of the group  |
| B | group / individual  | Permitted | Individually(No sharing of any portion of the submission) | Individual |
| C | individual / individual  | None of any kind  | Individually | Individual |
| D | (An optional category to be defined in detail by the individual faculty member)  |

The designated group can be either an assigned study group or a self-selected one.

**CLASSROOM NORMS AND EXPECTATIONS**

In class, please demonstrate consideration for your classmates (and your instructors and guest speakers) by leaving laptops and cell phones in bags, posting nameplates, and being on time at the beginning of the class and at break. To ensure that we get to know you quickly, please sit in the same place in each class.

Cases, readings and related materials will be made available via a casebook; we will post original documents.

We will provide hard copies of slide presentations; these will also be posted on angel after class.

Use canvas for the final project. The final project is due by 5pm on the day before the final class.