**ADMS 4536 M**

**Security Valuation**

**Winter 2020**

Instructor: Charles A. Dreezer, BCom, CFA

Class Hours: Thursday 7:00-10:00 pm. First class: Thursday Jan. 9th

Location: HNE 035

Course website: moodle.yorku.ca [If you are registered, you will be able to log in to all your Moodle courses from this general website using Passport York].

**Learning Outcomes**

Students will learn to:

1. Create basic corporate financial models using Excel™ and present results in PowerPoint.™
2. Understand the principles and practical application of the most commonly-used valuation models: discounted dividend, free cash flow and market-based relative value models (commonly called market multiples).
3. Apply basic industry and corporate financial statement analysis to equity valuation.
4. Apply the valuation models to a comprehensive valuation of the traded common shares of a Canadian or U.S. company, using the company's public disclosures.
5. Present an oral investment presentation for the company in #4.
6. Write a professional business valuation report.

**Lectures**

You will work in class on financial modelling and valuation of several public companies, which will be announced in lecture. We will not spend much time lecturing in class. Rather, most of your time will be spent actually analysing and valuing real firms. It is therefore important that you:

* Do the assigned readings in advance of lecture so that you are up to speed on all of the underlying theoretical concepts.
* Watch the relevant short online lectures in advance of coming to class (available on the course moodle site).
* Do any assigned homework.

Coming prepared to class is essential because you learn this subject by doing. Some students decide not to come prepared and/or to spend their time in lecture doing things other than the assigned work. They mistakenly believe that because the material is made available to them, it would be just as easy to practice on their own time. This couldn’t be more WRONG. Many questions will be raised as you do your work and the most efficient way to deal with them is to ask me as they arise.

You must attend lecture. You cannot make it up easily by reading or watching the video lectures, or even getting notes from fellow students.

You must come equipped for class: laptop with Microsoft Windows, ™ Excel, ™ and PowerPoint™ installed and a financial calculator. You should think of the classes as hands-on learning to do the three written assignments that make up a majority of the marks.

You may bring a mac if that is all you have but please be aware that Office™ for Windows™ is much more efficient. I will not be able to help you with Mac™ shortcuts and the macros you will need are not able to be installed on a Mac without a virtual machine.

**Financial Modelling**

We are going to teach you basic financial modelling in an organised, step by step process. Financial modelling is an essential skill for anyone who wants to work in any analytical job in the investment industry, in lending, in preparing business plans and in all areas of treasury management and corporate finance.

**Required Textbooks**

The three required textbooks for this course are:

1. *Equity Asset Valuation* by Pinto et. al.
2. *Investment Banking: Valuation, Leveraged Buyouts, and Mergers & Acquisitions (2nd edition)* by Rosenbaum & Pearl.
3. *Investment Banking Workbook*, which is meant to accompany the 2nd edition of the preceding book.

**Full details below:**

Jerald Pinto, Elaine Henry, Thomas Robinson and John Stowe, *Equity Asset Valuation 3rd ed.,* 2014. Wiley is the publisher, but copyright holder is the CFA Institute. Shrink-wrapped single package: ISBN 978-1-119-10426-1.

Joshua Pearl and Joshua Rosenbaum, *Investment Banking: Valuation, Leveraged Buyouts, and Mergers and Acquisitions, 2013 (Second Edition).* Published by Wiley. ISBN 978-1-118-65621-1.

This is the valuation bible for investment banking and private equity.

Joshua Pearl and Joshua Rosenbaum, *Investment Banking: Workbook, 2013 (to complement Investment Banking 2e).* Published by Wiley. ISBN 978-1-118-71570-3.

**Grading**

Evaluation: A1 Key Industry factors, company analysis, comps 20%

A2 Three Statement Operating Model 20

Oral Presentation 15

Participation (incl. homework as assigned) 10

A3 Valuation Report (take home exam) 35

100%

**Prerequisite**

ADMS 4501. We check the pre-requisite and if you don’t have it, the registrar’s office will remove you from the course. We accept successful completion of CFA Level 1 exam as a substitute, but you must provide evidence of this or any other substitute to the course director along with a completed Prerequisite Waiver form.

**Using the Textbook and Workbook**

You must read the textbook chapters as assigned. The core texts are very concise, and illustrate the valuation principles and practice with specific examples. We will spend most of the class time working on examples, so it is imperative that you come prepared to class ready to work.

### Submitting Assignments

Submit your assignments through the moodle website or via email as instructed. Specific instructions regarding format and file type will be provided in the assignment instructions.

**The file name must be:**

**lastname [all lastnames if a group] Assignment # or identifier ADMS 4536 A**

**e.g. Rusetski Wong A2 ADMS 4536M**

**ALWAYS INCLUDE YOUR FIRST AND LAST NAMES, STUDENT NUMBER, EMAIL ADDRESS(ES), THE ASSIGNMENT NUMBER and A DESCRIPTIVE TITLE ON THE FIRST PAGE OF THE ASSIGNMENT. Failure to do so will cost you ten or more percentage points depending on how difficult you’ve made it for me.**

If the assignment requires submission of one or more spreadsheets, upload the Excel spreadsheets with the same file naming convention.

**More detailed instructions for each assignment will be provided separately**. *Please note that assignments submitted after the deadline will lose five percentage points, and if they are very late, penalties will be higher and compound daily!*

**A1 Comparable Company Analysis (group of two or three)**

**The company for all three Assignments in the course (“TargetCo”) will be announced in class.**

You will do four things in this assignment:

* **Competitive environs:** Define the industry TargetCo is in and tell us concisely what are the most important competitive factors or issues in this industry that are relevant to determining the value of the shares;
* **Spread comparables:** Identify the appropriate peers, spread historical data for TargetCo and peers, and calculate appropriate performance and valuation metrics and multiples;
* **Relative performance analysis:** Explain concisely whether TargetCo is over- or underperforming relative to its peer group and discuss possible reasons for this, including identification of key competitive factors or issues in the company;
* **Argue whether your TargetCo is over- or -undervalued:** Use prior analysis to justify a target range of multiples. Then use forward metrics to estimate current stock price.

**A2 Three Statement Operating Model (group of two)**

You will produce a complete operating model of TargetCo with balance sheet, income statement and statement of cash flows, a forecast of at least the next five years’ results, supporting schedules as demonstrated in lecture and perform scenario analysis on the forecasts.

**Oral Presentation (Solo, Week 11/12 random start order)**

You will give a stock pitch, presenting either a strong buy or strong sell recommendation on TargetCo using your work so far in the course. Since Assignment 3 is due two or three weeks after the oral presentation, you will have done enough work by the time of the oral presentation to be able to provide some values and a recommendation, even if you have not finished everything. We will be marking the presentation quality and reasonableness of your work as well as the quality of your analysis but the focus will be on presentation skills.

You are required to attend the entire class in which your presentation occurs, but you do not attend the other class(es). You will present within a fixed time limit of five to six minutes. We will plan to have time to debrief after everyone has finished presenting, and we will email you written comments with your marks.

**A3 Valuation Report (Solo, this is like a take home exam)**

1. This assignment replaces the final exam and will be treated like a take-home exam.
2. You will do it as a solo assignment. No consultation allowed. We expect you will use material from Assignments 1 and 2 but you may change anything you did in them as well when doing Assignment 3.
3. The assignment will be a comprehensive valuation report of TargetCo, using several valuation techniques, and making a strong buy or strong sell recommendation.
4. Your final written report does not have to match the recommendation and the detailed prices you presented orally; you may change any of it based on your subsequent work or even what you heard during the oral presentations.

**Consultations with the Course Instructor**

Email [cdreezer@yorku.ca](mailto:cdreezer@yorku.ca) to schedule a time to meet. Meetings will take place at York in Chris Robinson’s office in the Atkinson building on evenings or weekends. All email communication must follow these guidelines to ensure prompt and accurate responses:

* Responses will be provided to emails for which the email subject heading begins with “ADMS 4536”
* Clearly identify who you are.
* Prior to sending an email, please review the course outline and assignment instructions carefully. Questions with answers that are contained in the materials like this posted on the website are not likely to receive a response.
* I will try to respond within three days, but cannot guarantee it. Usually, I can respond within a day.
* For reasons of privacy and confidentiality, please email from your @yorku.ca account.

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| **Course Schedule** | |
| **Week 1**  **Jan 9** | Bring your laptop to every class. Bring your financial calculator. Bring the Pinto and Rosenbaum & Pearl (“R&P”) textbooks and the R&P workbook.  Short lecture about these two topics (20 minutes).   * Introduction to the course * Introduction to valuation principles / process   You will work in groups of two or three to answer three questions:   1. What does TargetCo do? (20 minutes) 2. What is the value of a TargetCo share, using a dividend valuation model? (30 minutes)   Introduction to using Excel in this course. (20 minutes)  **Read in Pinto:**   1. Chapter 1 for general understanding., Ch 5 for dividend valuation   **Read in R&P:**   1. Foreword (p. xvii), and; 2. Introduction (p. 1-5 up until “Part Two: Leveraged Buyouts) |
| **2**  **Jan 16** | Understanding the Business, Historical Analysis and Practice with Excel   * Review of Excel tools / skills (15 minutes) * Review of FSA for Valuation Slides (15 minutes) * How do you determine the comparable companies? (15 minutes)   Work in your groups on the following tasks:   * Program in Excel a full set of standardized financial statements. (30 minutes) * Use these standardized statements to compute year over year growth rates and common sized financials for TargetCo based on the historical data. (30 minutes) * Comment on the company’s financial performance using the above analysis. (30 minutes plus discussion)   If we have time:   * Sources of information (15 minutes)   **Read in Pinto:**   1. Chapter 3 for an overview of industry analysis as applied to valuation. Keep in mind when reading section 4 that the standard classification systems are rarely focused enough to rely on for selecting a peer group. They do, however, make for a good starting point. 2. Lecture notes on financial statement analysis and understanding the business that I will provide on Moodle. 3. As a reference, see list of library resources I will post on the website.   **Prepare for Next Lecture:**   1. Comp set for TargetCo. Be ready to justify your answers. |
| **3**  **Jan 23** | Market-based Valuation: Multiples Part I   * What is the basis for these relative valuation models? * Overview of the comps process (Lecture Slides) * R&P Slides - Equity Value vs. Enterprise Value (treasury stock method) and normalization (slide 26). * Overview of the R&P comps workbook. * Review Guidance on finding nonrecurring items.   Work in your groups to do:   1. What adjustments will you make to Metro Inc’s income statements? Make the adjustments on your spreadsheets. (60 minutes) 2. What are the comparable companies? Defend your choices. (20 minutes) 3. Fill out the R&P Comps page for Metro. (60 minutes)   **Read in R&P:**   * Chapter 1   **Practice problems in R&P:**  Chapter 1, questions 1-3, 5-25, 27, 35-39, 41-44. |
| **4**  **Jan 30** | Market-based Valuation: Multiples Part II   * Take up normalizations/adjustments from prior week. * What are the most important competitive issues for Metro that are value relevant 100 words or less. Where do you find this information? The challenge is to identify and explain only the important issues. Don’t waste time on a laundry list of everything that Porter or some other reading contains. Use them to understand what matters most and focus on that. * What else would you add to comps template? * Walk through filling out comps template for Metro. * Identify other comps. * Identify most relevant multiples. * How to calculate a price given a multiple. * Copying and pasting into word. * Review sample comps analyses. |
| **5**  **Feb 6** | Rate of Return and Dividend Valuation   * Lecture Slides Rate of Return Concepts (30 min) * Run through WACC template for Metro (10 min) See Beta Model. * Work in your groups to update Loblaw (30 min) * Work as a class to update Metro in column D (15 min)   Work in your group:   * Work on Assignment 1 in your groups   **Read in Pinto:**   1. Chapter 2 (skip sections 2.6, 3.2, 3.2.1, 3.2.2, 3.2.3, 4.2.3) 2. Chapter 5 for dividend valuation (exclude section 4.5).   **Practice Problems in Pinto:**  Chapter 2, questions 1, 2, 4, 6, 13-19  Chapter 5: Questions 1, 2, 4, 5, 6, 8, 9, 10, 22-27. |
| **6**  **Feb 13** | Building a Three Statement Operating Model Part I   * What is a financial model? Why do you need to know how to create one? (15 minutes)   Work together in your groups to start building a three statement operating model, starting with last year’s TargetCo history. Produce the latest twelve months (LTM) income statement.  **Read in Pinto:** Chapter 4. It explains the basis underlying financial statement modelling and how to forecast the most important values. How to create the three statement operating model in Excel will be taught in class; the book does not go into the programming details.  ***Assignment 1 due 5 pm Feb 13 electronic submission.*** |
| 7  **Feb 27** | ***Reading week Feb 15 - 21, University Open, No classes***  Building a Three Statement Operating Model Part II  Continuing working on the three-statement operating model for TargetCo. Base your forecasts on your analysis of the industry and the business, from earlier weeks in the course.  READ CHAPTER 4 in PINTO AGAIN |
| **8**  **Mar 5** | Building a Three Statement Operating Model Part III  By the end of this class your group should have completed a three statement operating model of TargetCo with defensible forecasts of the next 5 years.  **Read in Pinto:** Chapter 6, practice problems as assigned.  ***Last day to drop the course without receiving a grade – Nov 8.*** |
| **9**  **Mar 12** | Free Cash Flow Valuation Part I   * Define FCFE and FCFF (15 minutes)   Work in your groups:   * Forecast FCFF and FCFE for TargetCo   **Read in R&P:** Chapter 3, practice problems as assigned.  ***Assignment 2 due by 5 pm Mar. 12 electronic submission*** |
| **10**  **Mar 19** | Free Cash Flow Valuation Part II   * Highlight some issues in valuing FCF, especially terminal value (20 minutes) * DCF Scenarios, the market scenario and the waterfall/bridge chart * Football field charts * Oral Presentations (finding a company, doing the analysis, presenting your findings, links to hedge fund manager presentations)   Work in your groups to determine TargetCo’s value using FCFE and FCFF (2 hours) |
| **11**  **Mar 26** | Presentations  Presentation slides are due by 5 pm Tuesday Mar 24. Penalty for late submission. |
| **12**  **Apr 2** | Presentations  Presentation slides are due by 5pm on Tuesday Mar 31. Penalty for late submission.  ***Assignment 3 will be due on April 25th by midnight.*** |