FEBRUARY 2013

Introduction to Finance 2

Both terms of RC finance share one goal: to provide you with a strong foundation in the principles of finance and an opportunity to apply these principles to practical and managerial decisions.

The financial landscape is rapidly evolving, in the wake of the global financial crisis. Many of the themes of FIN2 have special relevance today: the pros and cons of debt financing, the use of derivatives to reduce, increase, or share risk; the bankruptcy process; the costs of financial distress as firms restructure; and the role of private equity. Examining these issues will provide you with a holistic view of finance, capital markets, and the financial system.

Many FIN2 cases focus on financing decisions, risk management, or mergers and acquisitions from the perspective of corporate managers, founders, CEOs, or CFOs. Some take the point of view of investors, including private equity investors and other providers of capital. And several cases add a focus on the key institutions in finance, examining the role of capital markets, banks, analysts, credit ratings and other financial intermediaries. A deep understanding of the concepts of FIN2 is useful beyond corporate finance, in general management, corporate strategy, management consulting, entrepreneurship, as well as investment banking and investment management.

Course Themes

The first-year finance sequence is divided into two parts: Identifying and measuring value in FIN1, and structuring the claims on value in FIN2. Roughly speaking, FIN1 helps you choose among projects, while FIN2 helps you choose among deal structures. The objective of FIN2 is to understand how entrepreneurs, managers, and firms can create or destroy value with financial policy.

Successful financial policy means dividing up firm value and control in a way that allows entrepreneurs and firms to fund their operations, to create appropriate incentives, and to manage risk. There are two key themes that run through the course.

The Law of One Price. In a perfect market, two securities, portfolios, assets or projects that produce the same dollar payoffs in all future situations must have the same price. For example, two bonds that generate exactly the same payoffs at every future moment in time should sell today at exactly the same price. If they don't sell for the same price, an investor may be able to enjoy an arbitrage opportunity, and make a profit by exploiting the difference in prices.

"You better cut the pizza in four pieces because I'm not hungry enough to eat six." If you understand the old Yogi Berra joke, then you are on your way to understanding the law of one price. This simple and fundamental principle of finance and helps us to value debt, equity, options, and companies. It also helps rule out some misconceptions about why debt might be better than equity or why a new financial instrument might lead to better returns or a lower cost of capital. This sort of financial engineering – if it only serves to carve up the pie in a different way – cannot create value in a perfect market.

Incentives. So, how can you change value with financial policy, if it simply divides the pie? In a static situation – when the pizza is already cooked – the law of one price says you can't. But, the division of value tomorrow and the division of control today create the incentive to influence the current operations of the firm and thereby change value. There are other ways that the law of one price can fail. We call these market imperfections – the tax code is another important one – and incentives are likely to be the most enduring across borders and time.

A key organizing idea in FIN2 is to develop an understanding of the incentives created by capital structure, risk management, and mergers and acquisitions and consider the impact of these incentives on value. Two applications of incentives are in understanding financial institutions and corporate governance.

Institutions. The global financial crisis is a reminder of the growing importance of financial institutions and regulations. During FIN2, we will examine many of these, including the bankruptcy process, ratings agencies, derivatives markets, and investment and commercial banking, with an eye toward the incentives that they create for firms and other market participants.

Corporate Governance. Many of the financial decisions we consider below are subject to standards of corporate governance, which regulate the actions of the board of directors and senior managers. Corporate governance is a central topic in Leadership and Corporate Accountability (LCA), but it is also an important topic in FIN2. Throughout the course we will consider whether, in their financial decision-making, managers have fulfilled their duties to the corporation and their fiduciary responsibilities to shareholders.

Course Structure

FIN2 focuses on four important managerial decisions, with a module devoted to each.

Module 1. Financing and Financial Policy: How should a firm finance its activities? Throughout the course, we will study firms wrestling with decisions about how to finance their activities. Financing involves choosing the right capital structure – the mixture of equity, debt and other securities. We will consider how firms choose to finance ongoing operations, new projects, mergers and acquisitions and how firms return capital to their investors.

Module 2. Valuation: How can we value firms with complex financial structures? In FIN1 you learned to use the net present value rule to determine whether an investment was likely to increase shareholder value. In FIN2, you will learn to value projects and firms with complex capital structures—merger targets, subsidiaries about to be divested, LBO candidates, firms on the brink of bankruptcy. You will learn two techniques for taking into account the tax benefits of debt in valuing firms: the adjusted present value (APV) method and the weighted average cost of capital (WACC) method.

Module 3. Options and Risk Management: How can a firm use options and other derivatives securities to create incentives, raise capital, and manage risk? Many contracts – like restricted stock, employee options, convertible securites, merger agreements – involve contingencies that are designed to share risk and create incentives. These contingencies create options that represent a transfer of value from buyer to seller or firm to employee. You will learn about how the Black-Scholes model and binomial models of option pricing can be used to estimate value. We will apply these tools in three contexts: employee incentive programs, convertible financing, and risk management.

Module 4. Mergers and Acquisitions: How can firms create value through mergers, acquisitions and divestitures? Managers today have the opportunity to create value by redeploying corporate assets through large-scale transactions including mergers, acquisitions, sale of the entire company, divestiture of subsidiaries, and other forms of corporate restructuring. The terms and negotiations of these transactions have major consequences for shareholder value and risk, management incentives, and of course financing and capital structure, so they make an ideal review of both FIN1 and FIN2.

Tips for Preparation and Participation in Finance 2

This is an introductory course. The goal is to give you a solid foundation in financial analysis. Entire careers are spent on the bankruptcy code, the valuation of esoteric derivatives, or the legal aspects of mergers and acquisitions. We will often make simplifying assumptions in class to get to the first order issues that will serve you well as a general manager. There are some right and wrong answers in finance, but financial analysis requires at least as much judgment as technique. You may make different assumptions and judgments in your analysis. Those that have the potential to change our decision making are worth debating in class.

Thorough preparation is key to participation. Be sure to take a risk by getting into the discussion early: when we are beginning new discussion areas with the next item on the agenda; when we are starting a quantitative analysis; or with questions just afterwards. Thoughtful conceptual questions for your classmates are just as useful as cogent answers. It is harder to have an impact and engage the rest of the class by getting the last word in.

Making simple and reasonable assumptions is an important part of financial analysis. But, if you plan a career as a financial specialist, you will want to practice by preparing analyses that go beyond the level of detail in class, staying abreast of current events and making connections to the course, completing optional readings, examining primary documents like annual reports and prospectuses, and explaining the key principles of finance to your peers in a simple way that resonates.

Resources for You

In addition to preparing the study questions and discussing the issues with your study group, there are a variety of ways for you to reinforce the basic concepts of the course.

- **Pre-class tutorials.** The pre-class tutorials are designed to illustrate some of the basic concepts and tools of the course in a series of spreadsheet calculations. In many cases, these mechanical calculations complete with hints will be a good place to start.
- **Reading.** The Berk and DeMarzo readings parallel most of the concepts in the course, providing a conceptual framework for the assignment questions and case decisions. These supplementary readings are labeled as optional, background, or required, indicating their importance for the case discussion.
- **Review sessions.** Our new teaching fellow, Leslie Jeng, is an excellent instructor. She will lead reviews of the core concepts in our case discussions, using a series of simple calculations.
- **Post-class reflection.** We will post a takeaways slide on the learning hub that highlights the key concepts and terms from each case and a what's next slide that describes where we are in the course.

Course Administration

Feedback for You

Grades in FIN2 will depend on class participation (50%) and a final exam (50%).

You will also be expected to complete three one hour, on-line exercises that are scheduled at the end of each module. The exercises will be open for approximately one week to accommodate your busy schedules. Each consists of a set of multiple-choice questions. The primary purpose of these exercises is to give you a stream of regular feedback on your progress. These exercises are not graded, but you are expected to complete them as part of your class participation and ongoing preparation for the course. We will also provide preliminary feedback on your class participation on March 18, during spring break.

The exam is conducted in class and scheduled for the morning of Friday, May 21. You will be asked to apply judgment and principles, as well as the tools and techniques of financial analysis. We conduct the exam in class, because some students ask clarifying questions during the exam and others need help printing their spreadsheet analysis to pdf files at the end of the exam.

Feedback for Us

We invite your comments and input. In particular, if you find errors, omissions or confusing statements in the assignment questions, case studies, readings, pre-class tutorials, or any other course materials, please contact the course administrator, Adam Scarano (ascarano@hbs.edu), who will coordinate revisions. If you have comments and suggestions about the overall course design or other matters, speak with your Ed Rep or your instructor, or feel free to contact the course head, Malcolm Baker (mbaker@hbs.edu).

Course Syllabus

Module	Date	Topic	Case
Financing and Financial Policy	February 11	Introduction to Financial Policy	Williams
	February 12	Credit Markets	Tombstones
	February 19	Issuing Securities	Morningstar
	February 20	Misconceptions about Debt and Value	Modigliani and Miller
	February 25	The Tax Benefits of Debt	Swedish Match
	February 26	Costs of Financial Distress	UAL
	March 12	Capital Structure	Stone Container (A)
	March 13	Resetting Capital Structure	Stone Container (B)
Valuation	March 25	Weighted Average Cost of Capital	Marriott
	March 26	Applying WACC, Part I	Nova Chemical
	March 27	Applying WACC, Part II	Radio One
	April 2	Adjusted Present Value, Part I	Carter's
	April 3	Adjusted Present Value, Part II	Carter's
	April 8	Deal Structure, Part I	Burger King (A)
	April 9	Deal Structure, Part II	Burger King (B)
Options and Risk Management	April 16	Introduction to Options	Intel
	April 17	Option Valuation	Intel
	April 22	Convertible Securities	Saks
	April 24	Risk Management, Part I	Maxum
	April 29	Risk Management, Part II	Ashanti (A)
	April 30	Liquidity Risk	Ashanti (B)
Mergers and Acquisitions	May 8	Introduction to Mergers and Acquisitions	Pepsi-Quaker
	May 9	Growth By Acquisition	Slater and Gordon
	May 13	Integrative Review Case, Part I	MCI
	May 15	Integrative Review Case, Part II	MCI
Review	May 16	Course Wrap	