MFE 409 LECTURE 1A OVERVIEW

Valentin Haddad

Spring 2019

UCLA Anderson

Who Am I?

About me:

- 2008 M.Sc. Applied Mathematics and Economics Ecole Polytechnique
- ▶ 2012 Ph.D. Economics and Finance University of Chicago
- 2012 -2016: Assistant Professor Princeton University
- 2007, 2008: Credit Suisse FI research, Counterparty Risk

Research

- Equilibrium models of financial intermediation
- Risk management and asset prices: banks, insurance companies, buyouts
- Monetary policy and financial markets
- Behavioral economics

■ Teaching

Derivatives (MFin), Money and Banking, Asset Pricing

CONTACTS

- Me:
 - ► Email: valentin.haddad@anderson.ucla.edu
 - Office hours: drop by or make an appointment
 - ▶ Office: C419
- TA:
 - Paul Huebner, paul.huebner.phd@anderson.ucla.edu
 - ► TA sessions: Monday 10:00am 11:00am, location D310
 - ▶ Office hours: Friday 10:15am 11:15am, location C310

Course Requirements

Lectures

- ► Tuesday 8:30-11:20 (#1), 1:00-3:50 (#2): please show up for your cohort time
- ► B301
- Bring a name tag

■ Textbook (not mandatory): John C. Hull, "Risk Management and Financial Institutions" Wiley

■ Other readings: class website + case package

Course Requirements

- Homework (20%):
 - ► Each week
 - Handed out on Tuesday due following Monday at midnight
 - 2 free passes in case of personal issue (turn in Wednesday) then 0
 - Prepare in groups, but write individually
 - Exception: case studies to be written in group and no free pass
- Exams:
 - ► Midterm (25%): Week 5 during class time, 2h
 - ► Final (45%): June 11, 11:30pm 2:30pm, B301 (#1) C315 (#2)
- Participation (10%)

OUTLINE

• RISK MANAGEMENT OVERVIEW

2 TAKEAWAYS

WHAT IS THIS CLASS ABOUT?

Financial Risk Management

■ What are the risks taken by engaging in financial activities?

■ How to measure these risks?

■ How to *limit* these risks?

WHY SHOULD YOU CARE?

■ Explosion in the importance of risk management since the 2008 financial crisis → jobs!

■ Be cognizant of risk in any finance position

■ No choice: regulation

■ Avoid going bankrupt

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 - If you need capital for something profitable, somebody will lend it to you
 - Related to no arbitrage

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 - If you need capital for something profitable, somebody will lend it to you
 - ► Related to no arbitrage
- In real life: going bust is messy!
- Regulators: prevent from taking risk

RISK MANAGEMENT

■ Best risk management policy?

RISK MANAGEMENT

- Best risk management policy?
 - Do nothing!

■ Risk is often necessary to make profits

■ Risk management is about trading off these profits with risk

ROLE OF REGULATION

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- Reason for regulation: externalities
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 - ► How to take as much risk as possible while respecting the constraint?
 - Regulatory arbitrage

Role of Regulation

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 - ► Institutions would *privately* choose to take more risk than *socially* efficient

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 - ▶ How to take as much risk as possible while respecting the constraint?
 - Regulatory arbitrage

- You work for the private institutions
 - You can also be ethical

OUTLINE

RISK MANAGEMENT OVERVIEW

TAKEAWAYS

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Risk is an inherent part of the business of finance

Important to be aware of it and control it

Regulators further impose limits

Next: How to measure market risk?

credit risk
figuration risk
operational risk

THREE OBJECTIVES FOR THE CLASS

My goal is to get you ready for interviews and jobs in risk management

Learn tools to measure and manage risk

 Get comfortable with the language to communicate about risk management

Learn to think critically about risk management methods

How Will We Achieve This?

Show you the techniques

■ Work out some examples together in class

■ More challenging problems in the homework

■ Communicate, communicate!

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- What is your background?
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