# Duke University Department of Economics Economics 378 FINANCIAL RISK MANAGEMENT

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Office Hours: Tues n Thurs 1 -3 pm and by appointment.

Course Description: This course is an introduction to both the techniques and the issues of financial risk management. Every firm faces financial risks, but they are most pronounced for firms in the financial services industry. Therefore, we will focus our analysis on banks and other financial intermediaries. As we shall see during the course, risk management of individual firms has significant consequences for other firms in the same industry as well as for the broader economy. Therefore, regulation is a key driving factor in risk management and the design of risk management policy will be one of the main topics we consider. Of course, the tools of risk management will figure prominently as well. This course will rely heavily on the ideas and techniques you learned in statistics and econometrics courses.

## **Texts and Software:**

Course info site: https://sakai.duke.edu

I am going to require you to read the *Wall Street Journal*, so that we can discuss articles that come up in the paper. You may obtain a 15-week subscription (in digital or digital plus print) for a very low price using this link: <a href="http://r.wsj.net/j3mrZ">http://r.wsj.net/j3mrZ</a>

Most of the readings for the course will be posted on the Sakai site, but you will be asked to read almost all of *Plight of the Fortune Tellers* by Ricardo Rebonato. Please obtain this book as soon as possible.

Also, many of our cases will be covered in *Global Derivatives Debacles*, From Theory to Malpractice by Jacques Laurent. You may wish to get a copy of

this book ( $2^{nd}$  edition is the latest).

If you want a risk management book for your own reference, then I would recommend *Risk Management and Financial Institutions* (latest edition), by John Hull. We'll use a few ideas and some readings from this book in the course.

## **Requirements:**

This course is intended to function a lot like a seminar—readings will be assigned and I'll expect you to come prepared to discuss what you've read. Participation will count for a large part of your final grade—at least half.

In addition, I will aim to have at least one (short) written assignment due each week. They may be very brief written responses to a reading assignment, or more technical assignments in which you must explain or use some risk-management tool.

Finally, there will also be a final exercise of some kind, probably a short-tomedium paper, in which each person in the class will be assigned a discussant who will comment on the paper.

## **Absences, Late Papers, Statute of Limitations**

If you miss class without an excused absence, I will count it against you—a little at first, then rising exponentially. In addition to anything the University says is an excused absence, I also excuse **off-campus** job interviews **if you give me advanced notice.** If you are called at the last minute and are rushing out the door, simply send me a quick email and you're covered.

I will also try to cut you slack for on-campus interviewing, but if my course time becomes your default interview time, I will penalize you as if the absences are not excused.

All written assignments—problem sets as well as papers—will be considered due at the beginning of class on the day they are to be handed in. Please hand in hard copies of problem sets and use the digital dropbox in Sakai to send me electronic versions of your papers. Any computational assignments need to be handed in, in hard copy form. I will not accept late papers. Extensions will be granted only in cases of illness or certifiable family emergency. Be sure to submit

the electronic forms or bring your documentation with you.

## **Course Overview**

This course addresses five broad questions associated with financial risk management:

- How do human beings define, perceive, and deal with risk, and what does this imply for financial risk management?
- Why should financial institutions manage risk, and why should their risk management be regulated?
- What are the main financial risks and the tools used to manage them?
- How have financial risk management and its regulation evolved?
- What are some of the most important financial risk management case studies from history, and what do they teach us?

## **Rough Outline of the Course**

In the first part of the course, we'll review some basic ideas about finance and focus on the first two questions listed above. This should take less than one third of the course.

For the remainder of the semester, we'll mostly address the last three questions listed above. These three questions are strongly intertwined, so every session will probably have a slightly different emphasis on these three questions, depending on what the reading assignment for that class period is.

# **Schedule of Readings**

I will try to post a reading schedule in a separate document on the course Sakai site. I will try to post readings for the next 1-2 weeks, so that you can get a bit ahead if you wish.

## **Duke University's Academic Honor Code**

## The Duke Community Standard and Definitions

#### I. The Duke Community Standard

Duke University is a community of scholars and learners, committed to the principles of honesty, trustworthiness, fairness, and respect for others. Students share with faculty and staff the responsibility for promoting a climate of integrity. As citizens of this community, students are expected to adhere to these fundamental values at all times, in both their academic and non-academic endeavors.

#### The Pledge

Students affirm their commitment to uphold the values of the Duke University community by signing a pledge that states:

- 1. I will not lie, cheat, or steal in my academic endeavors, nor will I accept the actions of those who do.
- 2. I will conduct myself responsibly and honorably in all my activities as a Duke student.

#### The Reaffirmation

Upon completion of each academic assignment, students will be expected to reaffirm the above commitment by signing this statement: "I have adhered to the Duke Community Standard in completing this assignment." [Student Signature]

#### II. Definitions

<u>Lying</u> is the expression of a material untruth made with the intent to mislead another or with reckless disregard for the truth of the matter asserted. The material untruth may be uttered or presented, verbally, electronically, or in writing, to another member of the University community (student, faculty or staff). An untruth is material when it relates to or affects in a significant way activities of legitimate concern to the University community.

<u>Cheating</u> is the act of wrongfully using or attempting to use unauthorized materials, information, study aids, or the ideas or work of another in order to gain an unfair advantage. It includes, but is not limited to:

- plagiarism;
- giving unauthorized aid to another student or receiving unauthorized aid from another person on tests, quizzes, assignments or examinations;
- using or consulting unauthorized materials or using unauthorized equipment or devices on tests, quizzes, assignments or examinations;
- using any material portion of a paper or project to fulfill the requirements of more than one course unless the student has received prior permission to do so;
- intentionally commencing work or failing to terminate work on any examination, test, quiz or assignment according to the time constraints imposed; or
- failing to adhere to an instructor's specific directions with respect to the terms of academic integrity or academic honesty.
  - "Plagiarism" occurs when a student, with intent to deceive or with reckless disregard for proper scholarly procedures, presents any information, ideas or phrasing of another as if they were his or her own and does not give appropriate credit to the original source. Proper scholarly procedures require that all quoted material be identified by quotation marks or indentation on the page, and the source of information and ideas, if from another, must be identified and be attributed to that source. Students are responsible for learning proper scholarly procedure.

The term "assignment" includes any work, required or volunteered, and submitted to a faculty member for review and/or academic credit.

All academic work undertaken by a student must be completed independently unless the faculty member or other responsible authority expressly authorizes collaboration with another.

<u>Stealing</u> is the intentional taking or appropriating of the academic work product of another without consent or permission and with the intent to keep or use the academic work product without the owner's or the rightful possessor's permission.

Responsible and Honorable Conduct means adhering to state and federal laws, residential and academic regulations, and the policies of Duke University as explicated in the <u>Bulletin of Information and Regulations of Duke University</u>.

**III. Students' Obligation to Report Potential Cases of Academic Dishonesty.** Under the Duke Community Standard, students affirm their commitment not to lie, cheat, or steal in academic endeavors, *nor accept the actions of those who do*.

Therefore, upon learning of or witnessing a potential case of academic dishonesty, students are required to provide immediately:

- a signed written statement of the observed behavior to the appropriate faculty member and/or to the Associate Dean for Judicial Affairs (Dean K.C. Wallace, Box 90946, 668-3853); and
- the name or description of the person(s) alleged to have committed the violation.

Students who knowingly do not fulfill this obligation are themselves subject to sanctions.

To this standard, I add the following comments.

Any kind of academic dishonesty is a Code violation, including witnessing a Code violation and not reporting it. The most serious type of academic dishonesty is handing in someone else's work and claiming that it is your own. This includes, in the context of essay writing, plagiarism. It also includes collaborating, even with a student who is not in this course or section, on any graded work that is supposed to be done independently. All quizzes and exams are to be done independently, as well as all paper writing. I may allow collaboration on other exercises, and if so, I will explicitly state the type and extent that I will allow. If I do not specify, you are to assume that you must work independently.

Yet another type of academic dishonesty is using work that is not original-that is, recycling your own or other students' work from other courses or sections of this course to be handed in to meet the requirements of this course, or using one piece of work to satisfy the requirements in two different courses simultaneously. In the latter case, I may allow this **if** you clear this with me ahead of time.

I believe that you are honest. Nevertheless, if I see evidence of any academic dishonesty, I will confront it according to the procedures described in the Bulletin of Duke University.