

BAYLOR UNIVERSITY
HANKAMER SCHOOL OF BUSINESS
DEPARTMENT OF FINANCE, INSURANCE & REAL ESTATE

Finance 4335: Business Risk Management, Spring 2023
Tuesday and Thursday, 11 a.m. - 12:15 p.m. in Foster 228

Instructor: Dr. James R. Garven
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Professor of Finance and Insurance
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Course website: fin4335.garven.com
Campus office: Foster 320.39

Office Hours: 3:30-4:30 TR, or
[by appointment](#)
Phone/SMS: (254) 307-1317

1. Required Texts and Materials

- [Integrated Risk Management: Techniques and Strategies for Managing Corporate Risk](#), Neil A. Doherty, McGraw-Hill Professional Publishing, 2000. Although this book is not available from Baylor Bookstore, it may be purchased from [Amazon](#) and various other online booksellers. Assigned chapters are also [available in PDF format](#) from the course website.
- [Readings](#) (assigned from sources other than the textbook) distributed from [the course website](#).

- *Wall Street Journal* (*WSJ*). If you haven't already signed up for your free *WSJ* student membership, then do so by going to <https://wsj.com/ActivateBaylor>. Once you have created your *WSJ* account, you can log in [via the web](#) or if you prefer, either the [iOS](#) or [Android](#) app.

2. Prerequisites

- The only course prerequisite for Finance 4335 is Finance 3310. However, since Finance 4335 is a fairly quantitative course, you should also be “up to speed” in mathematics and statistics. The mathematics and statistics topics used in Finance 4335 are listed in the blog posting entitled “[Calculus and Probability & Statistics recommendations](#)” where links to Khan Academy tutorials for each of these topics are provided.
- [Section 1](#) of Professor Martin Osborne’s [math tutorial](#) is also a highly recommended resource for topics in mathematics which are applicable for Finance 4335.

3. Course Description

- This course offers an integrated approach to risk management by combining concepts, tools, and techniques from finance and related disciplines such as economics and the decision sciences.
- Attention is focused on the identification, evaluation, pricing, and management of risk from corporate and personal perspectives.
- Topics covered include how to characterize and measure risk attitudes, compare and price risk, and evaluate the effects that risk has on incentives, welfare, corporate value,

etc.

4. Learning Objectives

After completing this course, students should understand:

- The various measures of risk;
- How to calculate risk measures for individual risk exposures and portfolios of risk exposures;
- The steps of the risk management process; i.e.,
 - Identify risks;
 - Measure risks;
 - Evaluate different methods for managing risk; and
 - Implement an appropriate risk management strategy.
- Methods which individuals and businesses can use to allocate and manage risk;
- Factors that limit the extent to which risk can be diversified or traded from one counterparty to another;
- Various types of insurance and derivative contracts and their use in risk management;
- Basic financial valuation models and how risk is incorporated into these models; and
- How risk management affects personal and social welfare, and corporate value.

5. Grade Determination

The final course numeric grade is based upon the following equation:

$$\text{Final Course Numeric Grade} = .10(\text{Attendance and Participation}) + .10(\text{Quizzes}) + .20(\text{Problem Sets}) + \text{Max} \{ .20(\text{Midterm Exam 1}) + .20(\text{Midterm Exam 2}) + .20(\text{Final Exam}), .20(\text{Midterm Exam 1}) + .40(\text{Final Exam}), .20(\text{Midterm Exam 2}) + .40(\text{Final Exam}) \}$$

Since the final exam is comprehensive, this grading scheme allows students to redeem themselves on the final should they perform poorly on either of the midterms.

There will be two midterm exams. The date for the first midterm exam is February 21, and the date for the second midterm exam is April 4. The dates for the two midterm exams are subject to change at the discretion of the instructor. The date and time for the Finance 4335 final exam are set according to [the official university calendar](#).

Final Course Letter Grade. The final course letter grade will be based upon the following schedule of final course numeric grades:

A	93 – 100%	C	73 – 77%
A-	90 – 93%	C-	70 – 73%
B+	87 – 90%	D+	67 – 70%
B	83 – 87%	D	63 – 67%
B-	80 – 83%	D-	60 – 63%
C+	77 – 80%	F	<60%

6. Contact Information

My phone number (which also supports text messaging) is (254) 307-1317. I can also be reached by email at James_Garven@baylor.edu.

7. Attendance and Participation

I expect students to attend class regularly, punctually, and meaningfully take part in class discussions and Q&A. In order to earn academic credit in Finance 4335, students are required (as per the [Hankamer Attendance Policy](#)), to attend at least 75 percent of all scheduled class meetings. If you cannot attend a scheduled class meeting for health/safety reasons, then take the following steps:

- Complete the [excused health/safety absence request form](#) for the scheduled class meeting (or meetings) you will miss.
- Email appropriate documentation (e.g., such as a copy of a signed medical excuse provided by a licensed medical professional) to fin4335@gmail.com.

8. Other Course Policies

8.1 Grade Appeals

If you feel that a graded quiz, problem set, or exam has not been fairly evaluated, then you may submit a grade appeal. In order to be considered, your appeal must be submitted no later than one week after the date of the exam or due date for the quiz or problem set. Any appeals submitted beyond this deadline will not be considered.

If you decide to submit an appeal, email it to fin4335@gmail.com with subject header: “Grade Appeal for Finance 4335”. Identify the question(s)/problem(s) you are appealing, along with a written explanation *why* you think the question(s)/problem(s) merit(s) re-grading. Keep in mind that re-grading implies three potential outcomes: a higher grade, the same grade, or a lower grade.

The appeal procedure described above constitutes the “Conference with Faculty Member” requirement set forth in [Baylor’s Academic Appeals Policy and Procedure document](#).

8.2. Late Work

Students are required to turn in paper copies of completed [problem sets](#) at the beginning of class on the date at which each assignment is due. Furthermore, no make-ups are allowed for any missed quizzes (note: these rules do not apply in cases involving medical or family emergencies).

8.3. Electronics Policies

The following electronics policies will be strictly enforced: 1) laptops and tablets may not be used in class without the instructor's permission, and 2) calling or texting during class meetings is prohibited.

9. Course Blog

A course blog has been established for Finance 4335. This provides a convenient and timely means for distributing important announcements outside of class. The address for the course blog is <http://risk.garven.com>, and it is linked from the 'Course Blog' button on the home page of the course website.

All students enrolled in Finance 4335 are *required* to [subscribe to the course blog via email](#). Instructions for doing so are provided at <https://wp.me/p7ESgv-2RY>.

10. Course Schedule

This course provides a primer on basic economic, statistical and financial principles and applies these principles to the study of risk management decision-making by individuals and firms. The textbook material is supplemented throughout the course by various outside readings, all of which are available from the [readings section of the course website](#). Although the course schedule is subject to change, the [lecture notes page](#) on the course website effectively serves as a course calendar, since it lists by the date the sequencing of course material for the entire semester.

11. Academic Honesty and Integrity

Plagiarism, or any form of cheating, involves a breach of student-teacher trust. This means that work on quizzes, problem sets, and exams submitted under your name is expected to be your own, neither composed by anyone else as a whole or in part, nor handed over to another person for complete or partial revision. Instances of plagiarism, or any other act of academic dishonesty, will be reported to the Honor Council and may result in failure of the course or expulsion from the University.

[Baylor's honor code](#) and the [Finance 4335 honor code](#) are important resources for understanding various types of academic dishonesty, and I expect my students to be intimately familiar with both of these documents. The standards set forth in both of these honor codes will be applied to all of your work in Finance 4335.

12. Baylor University Title IX

Baylor University does not discriminate on the basis of sex or gender in any of its education or employment programs and activities, and it does not tolerate discrimination or harassment on the basis of sex or gender. If you or someone you know would like help related to an experience involving sexual or gender-based harassment, sexual assault, sexual exploitation, stalking, intimate partner violence, or retaliation for reporting one of these type of prohibited conduct, please contact the Title IX Office at (254)710-8454 or report online at www.baylor.edu/titleix.

The Title IX office understands the sensitive nature of these situations and can provide

information about available on- and off-campus resources, such as counseling and psychological services, medical treatment, academic support, university housing, and other forms of assistance that may be available. Staff members at the office can also explain your rights and procedural options if you contact the Title IX Office. You will not be required to share your experience. **If you or someone you know feels unsafe or may be in imminent danger, please call the Baylor Police Department (254-710-2222) or Waco Police Department (9-1-1) immediately.** For more information on the Title IX Office, the *Sexual and Gender-Based Harassment and Interpersonal Violence policy*, reporting, and resources available, please visit www.baylor.edu/titleix.



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*Business Risk
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(FIN 4335)

Dr. James R. Garven

Risk Management
Word Cloud

Financial Risk: Risk
vs. Uncertainty

Financial Risk: Market
Volatility (VIX)

Business Risk Management

Finance 4335, Spring 2023

Dr. James R. Garven

Department of Finance, Insurance and Real Estate
Hankamer School of Business
Baylor University

January 17, 2023



Risk Management Word Cloud

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Risk versus Uncertainty

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- Frank Knight (1921) defines risk as a quantity susceptible of measurement, and uncertainty as a form of risk that cannot be quantified.
- “Uncertainty must be taken in a sense radically distinct from the familiar notion of Risk, from which it has never been properly separated ... A measurable uncertainty, or ‘risk’ proper ... is so far different from an unmeasurable one that it is not in effect an uncertainty at all.”
- Today, “[Knightian uncertainty](#)” is commonly referred to as “ambiguity”.
- In this course, we focus primarily on *risk* as defined by Professor Knight.



Financial Risk: Market Volatility (VIX)

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- A particularly useful measure of future short-term market volatility is VIX; VIX is the ticker symbol for the Chicago Board Options Exchange (CBOE) Volatility Index.
 - VIX is intended to measure the “implied” volatility of a “synthetic” at-the-money option on the S&P 500 index, with 30 days to expiration.
 - Thus, VIX represents a short-term (30-day) forecast (market consensus) of future stock market (S&P 500) volatility.
 - VIX is commonly referred to as a “fear” gauge, in that it proxies for investor risk aversion.
 - Higher (lower) VIX → higher (lower) risk aversion → higher (lower) cost of risk!



VIX Time Series, 1/2/1990 - 12/30/2022 (n=8,215)

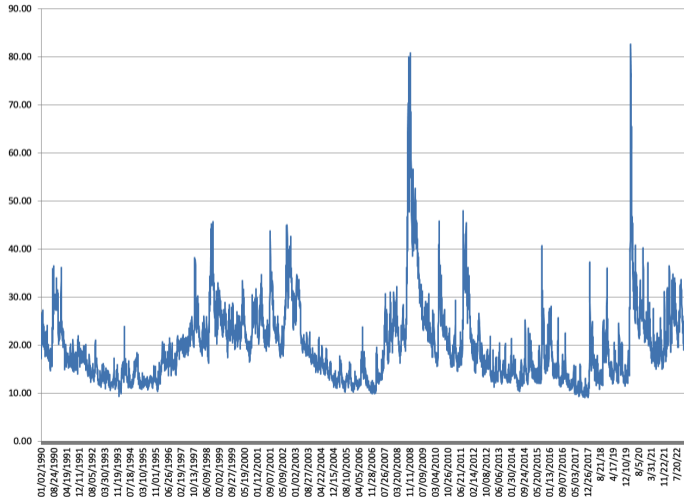
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VIX Descriptive Statistics, 1/2/1990 - 12/30/2022 (n=8,215)

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No. of Observations	8,315	Date
Mean	19.66	
Standard Deviation	7.99	
Skewness	2.12	
Kurtosis	11.09	
Minimum	9.14	11/3/17
First Decile	12.05	
First Quartile	13.88	
Median	17.82	
Third Quartile	23.17	
Ninth Decile	29.04	
Maximum	82.69	3/16/20



VIX Histogram, 1/2/1990 - 12/30/2022 (n=8,215)

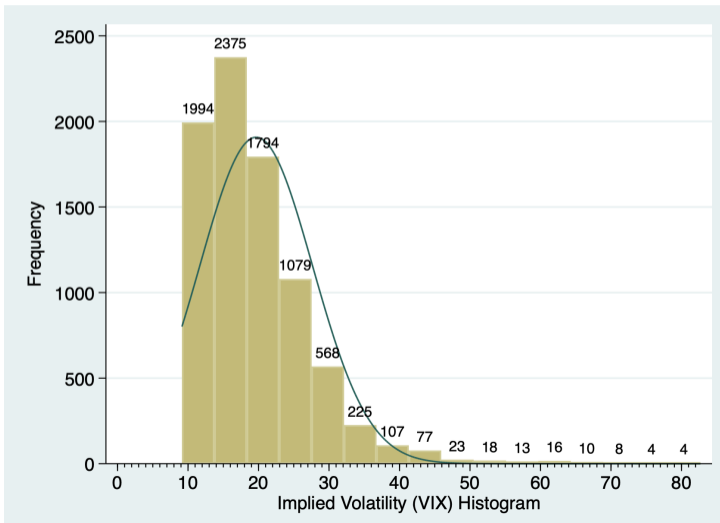
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SP500/VIX Daily Returns, 1/2/1990 - 12/30/2022 (n=8,215)

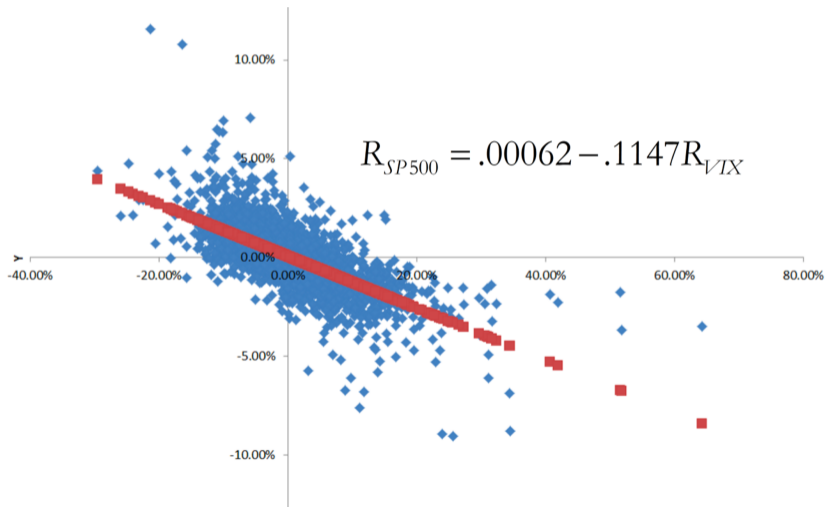
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See “On the relationship between the S&P 500 and the CBOE Volatility Index (VIX).”