

NEW YORK UNIVERSITY STERN SCHOOL OF BUSINESS
Debt Instruments and Markets (GB.3333.01)
Fall 2016, MW 1:30-2:50pm, KMEC 3-60

Instructor: Bruce Tuckman

Office: KMC 9-92

Office Hours: Wednesdays 3-5:45pm and by appointment

Email: btuckman@stern.nyu.edu

Teaching Assistant: Maxwell Lee, ml4905@stern.nyu.edu

Course Description

This course has three parts. The first and shortest part of the course introduces fixed income markets and market participants in the United States, Europe, and Japan, with an emphasis on recent developments. The second and longest part of the course covers the theory and practice of pricing and hedging in fixed income markets. The third part of the course does a deep dive into selected securities and markets.

While every effort has been made to limit the mathematical complexity of the course, students should be aware that fixed income is inherently a quantitatively demanding subject.

Text and Materials

Bruce Tuckman and Angel Serrat, *Fixed Income Securities: Tool's for Today's Markets*, Third Edition, John Wiley & Sons, 2012.

Lecture slides and problems/sample exam questions with answers will be distributed at the start of the semester.

Exams and Grading

There will be a midterm and a final. Each exam will be multiple choice and closed book, although a calculator is expected. Smart phones will NOT be permitted. Each exam will focus on half the course, but knowledge of material from the first half may be required for the final.

The course grade will be determined by the average of the two exam grades.

Course Outline

(Chapter numbers refer to Tuckman and Serrat.)

Overview of Global Fixed Income Markets (Overview Chapter^{*})

Prices, Discount Factors, and Arbitrage (Chapter 1)

Spot, Forward, and Par Rates (Chapter 2)

Returns, Spreads, and Yields (Chapter 3, pp. 99-105, 110-112, 113-116;
Chapter 8, pp. 245-248)

One-Factor Risk Metrics and Hedges (Chapter 4)

Multi-Factor Risk Metrics and Hedges (Chapter 5)

Empirical Approaches to Risk Metrics and Hedging (Chapter 6)

Repurchase Agreements and Financing (Chapter 12)

Additional reading: "The Deal of the Century," by Tom Junod, Esquire,
September 11, 2009.

<http://www.esquire.com/features/barclays-deal-of-the-century-1009>

Forwards and Futures: Preliminaries (Chapter 13, pp. 351-357)

Note and Bond Futures (Chapter 14, pp. 373-383, 386-390; Chapter 13, pp.
359-363)

Short-Term Rates and Their Derivatives (Chapter 15, pp. 401-411, 417-422,
424-432; Chapter 13, p. 371)

Swaps (Chapter 16, pp. 435-450)

Corporate Bonds and Credit Default Swaps (Chapter 19)

Mortgages and Mortgage-Backed Securities (Chapter 20, pp. 563-580, 584-
589)

Exam Dates

Students are expected to arrange their schedules to be present for
both the midterm and final exams.

Midterm: Wednesday 2 November, in class

Final: Wednesday 21 December, 1:30-3pm, in class.

^{*} Please note that the overview chapter in the book is stale relative to what will be presented in class.