

IMBA PROGRAM
COLLEGE OF COMMERCE
NATIONAL CHENGCHI UNIVERSITY
Analysis of Fixed Income Securities Market and Credit Ratings
Spring 2015

A. Instructor: Professor Joseph Hu

Office:

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Class Hours: Thursdays, 7:00 pm to 10:00 pm

Office Hours: By appointment, Monday to Friday, 10 am to 5 pm

B. Books

1. Textbooks:

- (MS) Marcia Stigum and Anthony Crescenzi, *Stigum's Money Market*, fourth edition, McGraw-Hill, 2007.
- (JH) Joseph Hu, *Asset Securitization: Theory and Practice*, John Wiley & Sons, Inc., 2010.

2. Recommended Book:

- Joseph Hu, *Basics of Mortgage-Backed Securities*, second edition, Frank J. Fabozzi Associates, 2001, (distributed by John Wiley & Sons, Inc.), 2001.

C. Course Objectives

This course, Analysis of Fixed Income Securities and Credit Ratings, is to provide students with fundamental understanding on the fixed-income securities in the U.S. bond market. These securities include the U.S. Treasury securities (Treasuries), government-sponsored agency securities (GSEs), corporate bonds (Corporates), state and municipal tax-exempted bonds (Munis), and asset-backed (structured finance) securities (ABS). This course also describes the concept and methodology of credit ratings of corporate bonds and asset-backed securities. In addition, it provides a description of a variety of fixed income securities market participants, including issuers, underwriters, and investors. On the part of investors, this course also presents and discusses the concept of bond math, portfolio immunization and bond indexes.

By taking this course, students will be able to gain a comprehensive understanding on the process of how an entity--be it a government agent, a corporation, or a special purpose entity (of asset securitization)--raises funds in the capital market to finance economic activities. Based on the understanding of the various debt instruments, students will be able to appreciate the many reasons why different investors, both individual and institutional, purchase different fixed income securities. This, in turn, will enable students to develop skills in the investment management of fixed income securities.

A unique feature of this course is the extensive and detailed coverage on asset securitization. Asset-backed securities are the most complicated securities among

all fixed-income securities. They also represent the largest sector of the U.S. bond market. Asset securitization is an innovative way for lenders to raise funds in the capital market. In matured capital markets, asset securitization has proven to be an efficient way of financing in that it reduces the ultimate funding cost for borrowers, improves the balance sheet management for lenders, and provides diversified investment products for investors. A final element of the discussion of asset securitization market covers the collapse of the market in 2008 and the prospects of recovery in the coming years.

D. Grading Policy

The course grade will be determined by a combination of performance in class (15%), take-home exam (35%), and investment project (50%). The class performance is measured individually by the student's performance in attending the class regularly, arriving at the class punctually, participating in class discussion actively, and paying attention to lecture closely. The class will be subdivided into groups with three to four students per group. The take-home exam and investment project are taken by group. Under no circumstances can there be discussions or consultations between groups on the exam and the project. Students who miss three 3-hour class meetings will not be given a course grade. More important, students of groups that violate the honesty policy regarding the take-home exam and the investment project will not be given a course grade. The class will be curved and when the course grade is announced, it is final.

E. Important Notes and Policies

CLASS SCHEDULE

#	Date	Content	Readings
1	Feb 26	The U.S. financial markets and flow of funds	MS, Chps. 1, 2, 3
2	Mar 5	Bond math: bond prices, yield-to-maturity, price sensitivity, total rate of return analysis	MS, Chps. 4, 5; Lecture Notes: Bond Math
3	Mar 12	Bond math (cont'd)	
4	Mar 19	Bond math (cont'd)	
5	Mar 26	Overview of fixed-income securities	MS, Chps. 8, 14, 25
6	April 2	The U.S. Treasuries, GSEs, Corporates, and Munis	MS, Chps. 8, 14, 25
7	Apr 9	Basics of asset-backed securities	JH, Chps. 1, 2, 3, 4
8	Apr 16	Residential mortgages and the U.S. residential mortgage market	JH, Chps. 5, 6
9	Apr 23	Agency-guaranteed residential mortgage backed securities	JH, Chp. 7
10	Apr 30	Agency-guaranteed residential mortgage backed securities (Cont'd) Midterm Exam – Take home exam by group	

11	May 7	Multiclass residential mortgage backed securities	JH, Chp. 8
12	May 14	Multiclass residential mortgage backed securities (Cont'd)	
13	May 21	Private-label pass-throughs and subprime mortgage-backed securities	JH, Chps. 9, 10
14	May 28	Commercial mortgage backed securities	JH, Chp. 11
15	June 4	Credit card receivable backed securities, auto loan backed securities, and CDOs	JH, Chps. 12, 13
16	June 11	Credit ratings on asset-backed securities and corporate bonds Collapse and Recovery of the Asset Backed Securities Market Final Exam—Investment project by group	JH, Chps. 13, 14
17	June 18	Management of a Fixed Income Securities Portfolio--Bond Immunization and Bond indexing	MS, Chps. 5, 10 Lecture notes
18	June 25	Review of the Fixed Income Securities Market	Lecture notes