# Course Name: Seminar on Credit Risk Spring 2024 Department of Finance National Taiwan University

Instructor: Dr. Hsien-hsing Liao Course Number: 723M1900

Office: Room 814, Building 2, College of Management

Phone: 33661090 Email: hliao@ntu.edu.tw Class hours: Tuesday 9:10 pm – 12:10 pm Office hours: by appointment

Class Room: Management Building #2, 203

# **Course Materials:**

1. Lecture notes

2. Research papers

### **Course Objective:**

The major purpose of this course is to help students understand the research framework of credit researches and help develop research projects in related areas. The topics will cover the development of major types of credit risk models in literature and credit related researches in corporate financial management and investment tools. The course will be held as a seminar form relying heavily on discussions and student presentations. No class sitting-in (旁聽) is allowed without permission.

### Grading Policy:

1. The course grades will be based on the following elements:

Term Project\* 30%

Presentation and Participation 70%

## **Course Schedule and Contents:**

Week		Content
教師報告		
1	02/20	Course introduction
		Issue 1: How to prepare the presentation and the term project
		Issue 2: Brief introduction of credit risk modeling
2	02/27	Lectured by teacher
		Giesecke, Kay, 2004, "Credit Risk Modeling and Valuation: An Introduction",
		An abridged version of this article is published in Credit Risk: Models and
		Management, Vol. 2.
3	03/05	Lectured by teacher

<sup>\*.</sup> Term Project means a research proposal or project related to the class presented in the end of the semester. For first year graduate students, it could be a research proposal. For second year graduate students, it could be their proposal or draft of master thesis.

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	(加退選結束)	Giesecke, Kay, 2004, "Credit Risk Modeling and Valuation: An Introduction",	
		An abridged version of this article is published in Credit Risk: Models and	
		Management, Vol. 2.	
教師指定論文報告			
4	03/12	學生自選待定	
5	03/19	學生自選待定	
6	03/26	學生自選待定	
7	04/02	學生自選待定	
學生自選論文報告			
8	04/09	(期中考週)	
9	04/16	學生自選待定	
10	04/23	學生自選待定	
11	04/30	學生自選待定	
12	05/07	學生自選待定	
期末研究計畫大綱(research proposal)報告			
13	05/14	研究計畫報告	
14	05/21	研究計畫報告	
15	05/28	研究計畫報告	
16	06/04	(期末考週)	

# 教師指定報告論文:

## **Strucutral form credit model**

- 1. Merton, Robert.C, 1974, "On the pricing of corporate debt: The risk structure of interest rate", *Journal of Finance* 29, 449 470.
- 2. Duffie, Darrell & David Lando, 2001, "Term structures of credit spreads with incomplete accounting information", *Econometrica* 69, 633–664.
- 3. Yu Fan, 2005, "Accounting transparency and the term structure of credit spreads", *Journal of Financial Economics* 75, 53 84.

## **Reduced form credit model**

4. Duffie, Darrell & Kenneth J. Singleton, 1999, "Modeling term structures of defaultable bonds", *The Review of Financial Studies* 12, 687—720.

## Flow-based credit model

5. Chen, Tsung-kang, Hsien-Hsing Liao, and Chia-wu Lu, May, 2011 "A flow-based corporate credit model", *Review of Quantitative Finance and Accounting*, Volume 36, Issue 4, 517-532.

#### **Empirical researches**

- Campbell, John Y., and Glen B. Taksler, 2003, "Equity volatility and corporate bond yields."
   *Journal of Finance* 58, 2321-2349.Lu, Chia-Wu, Tsung-kang Chen, and Hsien-Hsing Liao,
   September, 2010, "Information uncertainty, information asymmetry and corporate bond yield
   spreads" *Journal of Banking and Finance*, Vol. 34, No. 9, 2265-2279.
- 7. Chen, Tsung-Kang, Hsien-Hsing Liao, Hui-Ju Kuo, and Yu-Ling Hsieh (2013). Suppliers' and Customers' Information Asymmetry and Corporate Bond Yield Spreads. *Journal of Banking and Finance*, Vol.37, No.8, Pages 3181-3191.
- 8. Chen, Tsung-kang, Hsien-Hsing Liao, and Hui-Ju Kuo, July, 2013 "Internal Liquidity Risk, Financial Bullwhip Effects, and Corporate Bond Yield Spreads: Supply Chain Perspectives", *Journal of Banking and Finance*, Vol.37, No.7, 2434-2456.
- 9. Chen, Tsung-kang\*, Hsien-hsing Liao, Wei-Lun Chen (2014, Dec). Production efficiency uncertainty and corporate credit risk: Structural form credit model perspectives. Journal of Empirical Finance, 29, 266–280.
- **10.** Chen, Tsung-kang, Yan-Shing Chen and Hsien-Hsing Liao, August, 2011, "Labor unions, bargaining power and corporate bond yield spreads: Structural credit model perspectives", *Journal of Banking and Finance*, Vol.35, No.8, 2084-2098.
- 11. Chen, Tsung-Kang, Hsien-Hsing Liao, and Cheng-Ming Chi, January, 2014 "The Economic Consequences of Regulatory Changes in Employee Stock Options on Corporate Bond Holders: SFAS No.123R and Structural Credit Model Perspectives", *Journal of Banking and Finance*, Vol.42, No.5, Pages 381-394.
- 12. Chen, Tsung-kang, Hsien-Hsing Liao, and Jing-Syuan Ye, December, 2019 "Bank Management expertise and asset securitization policies", *Journal of Banking and Finance*, Vol.109, 105667.
- 13. Billett, M., T.D. King, D. Mauer, 2004, "Bondholder wealth effects in mergers and acquisitions: New evidence from the 1980s and 1990s", *Journal of Finance* 59, 107-136.
- 14. Maxwell, W., C. Stephens, 2003, "The wealth effects of repurchases on bondholders." *Journal of Finance* 58, 895-919.
- **15.** Titman Sheridan, Stathis Tompaidis, & Sergey Tsyplakov, 2004, "Market Imperfections, Investment Flexibility, and Default Spreads", *Journal of Finance* 59, 165—205.
- **16.** Baker Malcolm, Robin Greenwood and Jeffrey Wurgler, 2003, "The maturity of debt issues and predictable variation in bond returns", *Journal of Financial Economics* 70, 261–291.