Financial Markets 金融市场, Spring 2019

Course Overview
This course provides an in-depth exploration of key financial markets through an empirically driven approach — using financial data to test and understand financial models.

- The ultimate goal of the course is to help students develop a love and appreciation for Finance. What is its essence? How does Finance contribute to the larger society?

- We will cover equity, fixed-income, currency and derivatives. For each of the financial markets, our focus is on the key risk factors in the respective markets and their relation to the broader macro-economic environment. Our approach is to integrate economic insights, empirical data, and statistical (and econometric) tools. Our goal is to help students develop and strengthen their economic intuition and quantitative capability.

- Additional attention will be given to institutional details of financial markets. For example, who are the major players in the market? What is the impact of government policy and regulations? What are the liquidity conditions? A clear awareness of such issues helps students break the boundary of textbooks and models, and get in touch with the real world.

In the end of this class, you are expected to be solidly grounded in the understanding of the key financial markets, well equipped with the empirical skills and tools necessary for quantitative analyses, and ready to extend the knowledge to other financial markets.

Course Materials

- **Required:** Slides and lecture notes in pdf format will be posted online.

- **Optional:** Bodie, Kane and Marcus, Investments, 11th edition or older, McGraw Hill.

Grading:

- **In Class:** 20% Class Attendance, 20% Class Participation, and 20% In-Class Tests.

- **Outside of Class:** 20% Group Project and 20% Individual Project.
Course Schedule *(tentative and subject to change)*

- **Day 1:** 股票市场
  
  09:00 - 10:00 Class 1: Modern finance and its impact in the real world  
  10:15 - 11:15 Class 2: Estimation using financial data  
  11:30 - 12:30 Class 3: Alpha, Beta, and the CAPM  
  13:30 - 14:30 Class 4: Quant investing and multifactor models  
  14:45 - 15:45 Class 5: Quant investing and other cross-sectional patterns  
  16:00 - 17:00 Class 6: Review and quiz

- **Day 2:** 股票，期权，汇率
  
  09:00 - 10:00 Class 1: Predicting stock market returns  
  10:15 - 11:15 Class 2: Time-varying volatility  
  11:30 - 12:30 Class 3: Black-Scholes implied volatility  
  13:30 - 14:30 Class 4: Market crashes  
  14:45 - 15:45 Class 5: Currency carry trade  
  16:00 - 17:00 Class 6: Review and quiz

- **Day 3:** 债券市场
  
  09:00 - 10:00 Class 1: Yield and duration  
  10:15 - 11:15 Class 2: Factors influencing the yield curve  
  11:30 - 12:30 Class 3: Modeling the yield curve  
  13:30 - 14:30 Class 4: Interest rate swaps  
  14:45 - 15:45 Class 5: Corporate bonds and credit risk  
  16:00 - 17:00 Class 6: Review and quiz

- **Day 4:** 资产管理，风险管理，中国金融市场
  
  09:00 - 10:00 Class 1: Portfolio Management  
  10:15 - 11:15 Class 2: Risk Management  
  11:30 - 12:30 Class 3: Chinese Stock Market  
  13:30 - 14:30 Class 4: Chinese Bond Market  
  14:45 - 15:45 Class 5: Financial Institutions in China  
  16:00 - 17:00 Class 6: Review and quiz