QF600: Asset Pricing

Course Outline

Course Overview

- QF 600 covers financial asset allocation and asset pricing at post-graduate-level
- Lectures will focus on theories and concepts relating to asset allocation and asset pricing
- Homework assignments will focus on numerical applications and programming
- Gradual increase in sophistication of numerical applications and programming

Lecture Topics

| | Topic | | Topic |
|---|---------------------------------|----|-------------------------------|
| 1 | Expected Utility Theory | 6 | Stochastic Discount Factor |
| 2 | Efficient Frontier | 7 | Multi-Period Asset Pricing |
| 3 | Capital Asset Pricing Model | 8 | Behavioural Finance |
| 4 | Linear Factor Models | 9 | State Prices |
| 5 | Efficient Frontier Revisited | 10 | Stock Valuation |

Reference Textbooks

- Primary reference will be lecture notes;
 homework and exam will only test on topics
 and material covered in lecture notes
- Lecture notes are mainly based on Theory of Asset Pricing (2008), by George Pennacchi
- Financial Decisions and Markets (2018), by John Campbell provides more recent and comprehensive coverage of asset pricing

Assessment Methods

| Class Participation | 10% |
|---------------------|------|
| Homework | 30% |
| Final Exam | 60% |
| Total | 100% |

Class Participation

- SMU encourages interactive learning, where students participate actively during lectures
- Feel free to interrupt me at any time with relevant questions or comments
- TA will track frequency of participation, while instructor will track quality of input
- Marked using logarithmic scale, so less marks for each additional instance of participation

Homework

- Homework assignments for topics highlighted in red, focusing on numerical applications
- You may use any programming language, although Python is recommended for students with no prior experience in other languages
- You may discuss assignments with classmates, but each student must submit individual completed assignment on eLearn

Final Exam

- Two-hour online exam on Thursday, 14 Nov
- Exam will focus on numerical applications and programming, just like homework
- Exam will be "open laptop": you will have access to all programming tools and reference materials stored on your laptop computer
- You are free to solve numerical problems in any programming language of your choice