International Investment Analysis

Stern School of Business, NYU

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Goals:
This course delivers the theoretical framework, the quantitative tools and the practical issues that are critical for international investment management. The class starts with the investor's problem: how can investors get more total return? The class proposes three potential solutions (all in the international and global investment context): strategic asset allocation (beta decision), active portfolio management (alpha decision) and the beta/alpha investment framework. The ending goal of the class is to deliver a consistent framework and practical tools to deliver total return to investors in the international context. We build a solid foundation in portfolio management theory first. Then we focus on the applications of portfolio theory to practical issues such as strategic asset allocation, asset liability management, macro investment, currency hedging, risk management and security selection.

Brightspace
We will make use of NYU Brightspace for lecture notes, resource materials and communication. Look for the class "International Investment Analysis" at your front page.

Textbook
I haven't found one good textbook for the class, but the following three books are good references.

1. *Modern Portfolio Theory and Investment Analysis,* by Edwin J. Elton, Martin J. Gruber, Stephen J. Brown, William N. Goetzmann
2. *Strategic Asset Allocation,* by John Y. Campbell, Luis M. Viceira
3. *Active Portfolio Management: A Quantitative Approach for Producing Superior Returns and Selecting Superior Returns and Controlling Risk,* by Richard C. Grinold, Ronald N. Kahn

Prerequisites
Some familiarity of portfolio theory and statistics.

Portfolio Management Simulation
I will give out practice exercises along the classes. For the portfolio management simulation, each student will need to participate in a group project by constructing a *strategic* portfolio for an institutional client with certain investment profile. We will evaluate and discuss the merit of varies different types of portfolio construction.

Grading

Portfolio Management Simulation*30% + Class Participation*20% + Final Examination*50%

Overview:

1. ***Motivation***
- Why Invest?
- Investment objectives
    - Defined benefit pension plan
    - Defined contribution plan and individual
    - Endowment/foundation
- Pension finance
- Current issues of institutional retirement plans
- Multi-faceted objectives

2. ***Strategic Asset Allocation (Beta decision)***
- Strategic asset allocation
- Portfolio theory and efficient frontier analysis
- Long-term return forecasting
- Long term risk/correlation forecasting
- International diversification theory and its applications
- Asset liability framework

3. ***Active Management (Alpha decision)***
- Active management theory
- Theory of short term return/risk forecasting
- Global macro investment theory and its applications
    - Global tactical asset allocation strategy
    - Active currency strategy
- Micro investment theory and its applications:
    - Global quantitative equity strategy
    - Fundamental stock picking strategy: international applications
- Stock selection risk management

4. ***Solving for total return (Alpha/Beta framework)***
- Alpha/Beta framework
    - Yale endowment case study
    - Bridgewater all weather portfolio case study
- Solving total return problem using Alpha and Beta: case studies
- Hedge fund industry
    - How do we analyze hedge fund using alpha/beta framework?
    - The future of hedge fund industry

Instructor:
Jeff Shen, PhD, Managing Director, is Co-CIO of Active Equity and Co-Head of Systematic Active Equity (SAE) at BlackRock. He is responsible for Asia Pacific and Emerging Market Active Equity Strategies. He is BlackRock's Head of Emerging Market and a member of the Global Operating Committee.

Dr. Shen's service with BlackRock dates back to 2004, including his years with Barclays Global Investors (BGI), which merged with BlackRock in 2009. At BGI, he was the Head of Investment for Asia Pacific and Emerging Market active equities. Prior to joining BGI, he began his career in 1997 with JP Morgan where he held numerous positions in global macro investment and asset allocation research in both New York and London.

Dr. Shen earned a BA degree in Economics from Hobart College, a MA degree in Economics from University of Massachusetts at Amherst, and a PhD degree in Finance from New York University.

Dr. Shen is an adjunct professor at NYU teaching a MBA class on international investment. He also serves on the advisory board of Clausen Center at UC Berkeley.

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