



## INSTEP-WFU Cambridge

### THE THEORY OF FINANCE

Pre-requisites: *Microeconomics; Probability and Statistics*

This course is taught through the medium of interactive group supervisions. The content is designed to provide students with a broad introduction to investment and financial decision-making from a borrower's and investor's viewpoint. It will therefore cover selected aspects of corporate finance and investment management. Content will incorporate technical elements (including the time value of money, modern portfolio theory and capital assets pricing model (CAPM)) as well as important behavioural facets of financial markets.

#### **Aim:**

Whilst the primary aim of the course is to introduce students to theoretical financial concepts, students will also learn the limitations of certain models and the importance of qualitative, as well as quantitative analysis. The format will be very interactive and therefore reliant upon students' self-motivation and preparation. Guidance on readings will be provided throughout and students encouraged to actively try to apply concepts to enhance their understanding and enjoyment. Aside from assignments, students will participate in a stock picking competition as a vehicle through which to further their enjoyment and understanding.

#### **Syllabus:**

##### **Weeks 1-5: Borrowers & Issuers:**

***Introduction to external finance liabilities: the issuer's viewpoint.***

##### *Week 1:*

- Introduction to course and basic concepts. Where are we going? What do we mean by finance? What do we mean by risk? How do I value a project?
- How do I finance a project? What is debt; what is equity?

##### *Weeks 2 & 3:*

- Valuing debt: how do we price corporate vs sovereign bonds?
- Valuing equity: reading accounts; Capital Asset Pricing Model; Tobin's q; does sector matter?

##### *Weeks 4&5:*

- Does it matter how we finance the firm?
- What is corporate governance?
- Why do we have acquisitions and mergers?

### **Weeks 5-10:**

#### ***Broadening the asset scope & changing the lens: finance from the investor's viewpoint***

##### *Weeks 5&6:*

- Exchange; & Commodity markets; the importance of cash management & leverage (Metallgesellschaft case study)

##### *Weeks 7&8:*

- Performance & risk: Portfolio theory; market risk & uncertainty; credit risk; value at risk; scenario analysis; generating alpha; Sharpe ratios, climate change.
- Investment approaches: 'People' vs machines (Time horizons; behavioural finance & Systems trading).

##### *Weeks 9&10:*

- Diagnosing historical crises: 1992; 1997; 2008+
- Understanding the importance of Leverage; Liquidity; default; contagion

##### *Week 11:*

- Course recap: where have we been?
- How did our stock picks do and why?

### **Reading List:**

Allington, Nigel F. B., McCombie, John S. L., Pike, M., 2012, Lessons not learned: from the collapse of Long-Term Capital Management to the subprime crisis, *Journal of Post Keynesian Economics*/Summer 2012, Vol. 34, No. 4 555

Brealey, R. A., Myers, S. C. & F. Allen, 2014, *Principles of Corporate Finance*, New York: McGraw Hill.

Digenan, J., Felson, D., Kelly, R., & Wiemert, A., 2004, Metallgesellschaft AG: A Case Study, available at [http://www.prmia.org/sites/default/files/references/MG\\_IIT.pdf](http://www.prmia.org/sites/default/files/references/MG_IIT.pdf)

Lowenstein, R., 2000, *When genius failed: the rise and fall of Long Term Capital Management*, Fourth Estate, 2000.

Rodgers, K., 2016, *Why Aren't They Shouting? A Banker's Tale of Change, Computers and Perpetual Crisis*, Penguin Books, London

### **Assessment:**

Two 2,500 word assignments

Class discussion and participation