

COURSE OUTLINE

Financial Economics ECON3006/3016/8037

Semester 2, 2009

School of Economics

College of Business and Economics

The Australian National University

Course Description

This course examines the economic principles that determine the allocation of resources through time in market economies. It uses supply and demand relationships to value capital assets (or projects more generally). There is a detailed treatment of the effects of risk and taxes on capital asset prices, and the Modigliani-Miller financial policy irrelevance theorems are examined under these circumstances. The honours/graduate lectures will extend the material covered in pass lectures, and will cover some new material.

Course Overview

Financial markets play a significant role in modern market based economies. To understand the way securities are priced we consider the institutional arrangements in securities markets, which include taxes and other government regulations, and the role played by time, uncertainty, information and inflation. Throughout the course consideration is given to the factors that distinguish finance from other consumption goods. In particular, emphasis is placed on the importance of arbitrage for asset pricing and income tax incidence.

We begin by analysing consumption and investment decisions in a certainty setting using a two-period Fisher model. The Net Present Value (NPV) rule comes from this model and is the basis for evaluating and choosing between investment opportunities. Then we introduce uncertainty to the analysis. There is an extensive literature on this subject, but we will confine ourselves to a treatment which provides sufficient understanding of the way security prices adjust in the presence of risk. Asset pricing is an important part of finance because it is the basis for determining the cost of capital investment. We examine the Capital Asset Pricing Model (CAPM) which is the most popular pricing model in applied finance.

Another important component of the course will be to consider corporate financial policy which includes the capital structure (or debt-equity) choices made by firms and their dividend policies. The Modigliani and Miller (M-M) irrelevance

theorems show how firm value is independent of its financial policy. We derive the conditions required for M-M to hold, and then relax them to examine the way optimal financial policies are determined. The impact of risk and taxes on financial policy are also examined.

Learning Outcomes

The course will provide students with a working knowledge of the classical finance model, which is the foundation for modern finance. It establishes a basis for examining the role of asymmetric information in financial markets.

Lecture Times

The course is taught at two levels - (i) the pass level, and (ii) the honours/graduate level. Students who are completing fourth year honours, graduate diploma or Master of Economics degrees, are enrolled in this unit at the honours/graduate level. Students attempting the course at the pass level can achieve an honours grade by enrolling in the unit at the honours/graduate level.

All students attend the 2 hour pass lecture and honours/graduate students also attend an additional one hour lecture each week. It will commence in the second week of the semester.

Tutorials

All students attend a one hour tutorial which commences in the second week of the semester.

Workload

In addition to the three contact hours at lectures and the tutorial students should commit approximately 6 hours each week to reading reference material and attempting tutorial problems. Given the emphasis on problem solving it is important to attempt the questions before attending tutorials.

Lecturer

Chris Jones

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Recommended Textbook

Jones, C.M., (2008), *Financial Economics*, Routledge, Oxon.

It can be ordered on line at: [http://www.taylorandfrancis.co.uk/shopping
_cart/products/product_detail.asp?sku=0415375851&pc=>](http://www.taylorandfrancis.co.uk/shopping_cart/products/product_detail.asp?sku=0415375851&pc=>)

Other Reference Books

Copeland, T.E., and Weston, J.F., *Financial Theory and Corporate Policy* (3rd Edition), Addison-Wesley Co., 1988.

Brealey, R.A., Myers, S.C., Partington, G., and Robinson D., *Principles of Corporate Finance*, Irwin McGraw Hill, Inc., 2000.

Elton, E.J., and Gruber, M.J., *Modern Portfolio Theory and Investment Analysis* (5th Edition), John Wiley and Sons, Inc., 1995.

Hirshleifer, J., *Investment, Interest, and Capital*, Prentice Hall Inc., 1970.

Altman, E.I., and Subrahmanyam, M.G., editors of *Recent Advances in Corporate Finance*, Irwin, 1985

WebCT

Tutorial questions and lecture handouts will be placed on WebCT, along with notices of in-class tests. It is worth checking this site on a regular basis.

Assessment

1. Two tutorial tests will be held during the semester, one after approximately 6 weeks and the other in the second last week of lectures. Confirmation of their timing will be provided in lectures and on WebCT. Each test will contribute 10 percent of the final mark if they improve the grade.
2. There is a three (3) hour exam at the end of semester. Honours/graduate students take a different paper to pass level students to reflect the more advanced treatment of subjects.

Reading List for Pass Lectures

1. *Intertemporal Choice Under Certainty*

- Jones - Chapter 2.

(a) Net Present Values (NPV)

- Brealey, Myers, Partington and Robinson - Chapters 2 & 3.

- Hirshleifer - Chapter 2.

- Hirshleifer, J., *Price Theory and Applications* (2nd Edition), 1980 - Chapter 14.

- Gravelle, H., and Rees, R., *Microeconomics*, 1990 - Chapter 15.

(b) Valuing Bonds and Shares

- Brealey, Myers, Partington and Robinson - Chapter 4.

- Tease, W., (1988), "The Expectations Theory of the Term Structure of Interest Rates", *The Economic Record*, pp:120-7.

(c) Investment Decisions Using NPV

- Brealey, Myers, Partington and Robinson - Chapters 5 & 6.

- Hirshleifer - Chapter 3.

2. Intertemporal Choice Under Uncertainty

- Jones - Chapter 4: pp.107-127.

(a) Risk, Return, Diversification and the Opportunity Cost of Capital - The CAPM

- Copeland and Weston - Chapters 6 & 7.

- Brealey, Myers, Partington and Robinson - Chapters 7 & 8.

- Elton and Gruber - Chapters 4, 5, 13 & 15.

(b) Capital Budgeting

- Brealey, Myers, Partington and Robinson - Chapters 9, 10, 11 & 12.

3. Corporate Finance

- Jones - Chapter 7.

(a) How Firms Finance Investment

- Brealey, Myers, Partington and Robinson - Chapters 13, 14 & 15.

(b) Capital Structure Choice and the Cost of Capital

- Brealey, Myers, Partington and Robinson - Chapters 17, 18 & 19.

- Copeland and Weston - Chapters 13 & 14.

- Auerbach, A.J., "Taxation, Corporate Financial Policy and the Cost of Capital", *Journal of Economic Literature* 21, September 1983, pp. 905-940.

- Miller, M.H., "Debt and Taxes", *Journal of Finance* 32, May 1977, pp. 261-275.

- DeAngelo, H., and Masulis, R.W., "Optimal Capital Structure Under Corporate and Personal Taxation", *Journal of Financial Economics* 8, March 1980, pp. 3-29.

- Miller, M.H., (1988), "Modigliani-Miller Propositions After Thirty Years", *The Journal of Economic Perspectives* 2, No.4 (Fall 1988), pp. 99-120. (There are other articles in this journal which you can read on this topic.)

- Harris M., and Raviv A., (1991), "The Theory of Capital Structure," *Journal of Finance*, 46 (March), pp. 297-355.

(c) Dividend Policy and the Cost of Capital

- Brealey, Myers, Partington and Robinson - Chapter 16.

- Copeland and Weston - Chapters 15 & 16.

- DeAngelo, H., and Masulis, R.W., "Leverage and Dividend Irrelevancy Under Corporate and Personal Taxation", *Journal of Financial Economics* 8, March 1980, pp. 3-29.

4. Option Pricing

- Jones - Chapter 6.

(a) Option Pricing Theory

- Brealey, Myers, Partington and Robinson - Chapter 20.

- Copeland and Weston - Chapter 8.

(b) Applications and Evidence

- Brealey, Myers, Partington and Robinson - Chapter 21.

- Copeland and Weston - Chapter 8.

Additional references to reading material, if required, will be handed out in class.

Reading List for Honours/Graduate Lectures

Part I - The Economics of Insurance

(a) Common Information

- Jones - Chapter 5.

- Laffont, Jean-Jacques, (1989), *The Economics of Uncertainty and Information*, MIT Press, Chapter 8: pp. 121-134.

- Malinvaud, E., (1972), "The Allocation of Individual Risks in Large Markets", *Journal of Economic Theory* 5, pp. 312-328.

(b) Asymmetric Information

- Jones - Chapter 5.

- Pauly, M.V., (1974), "Overinsurance and Public Provision of Insurance: The Roles of Moral Hazard and Adverse Selection", *Quarterly Journal of Economics* 88, pp. 44-54.

- Rothschild, M., and Stiglitz, J., (1976), "Equilibrium in Competitive Insurance Markets", *Quarterly Journal of Economics* 90, pp. 629-650.

- Shavell, S., (1979), "On Moral Hazard and Insurance", *Quarterly Journal of Economics* 93, pp. 541-562.

(c) The Role of Government Policy in Insurance Markets

- Arrow, K., (1963), "Uncertainty and the welfare Economics of Medical Care", *American Economic Review* 53, pp. 941-969.

- Arrow, K., and Lind, R., (1970), "Uncertainty and the Evaluation of Public Projects", *American Economic Review* 60, pp. 364-378.

- Dixit, A., (1987), "Trade and Insurance with Moral Hazard", *Journal of International Economics* 23, pp. 201-220.

- Dixit, A., (1989), "Trade and Insurance with Adverse Selection", *Review of Economic Studies* 56, pp. 235-248.
- Spence, M., (1973), "Job Market Signaling", *Quarterly Journal of Economics* 87, pp. 355-374.

Part II - Firm Financial Policies in General Equilibrium

- Aivazian, V.A., and Callen, J.L., (1987), "Miller's Irrelevance Mechanism: A Note", *Journal of Finance* 42 (March 1987), pp.169-180.
- Auerbach, A.J., (1983), "Taxation, Corporate Financial Policy and the Cost of Capital", *Journal of Economic Literature* 21, pp. 905-940.
- DeAngelo, H., and Masulis, R.W., (1980), "Optimal Capital Structure Under Corporate and Personal Taxation", *Journal of Financial Economics* 8, pp. 3-29.
- DeAngelo, H., and Masulis, R.W., (1980), "Leverage and Dividend Irrelevancy Under Corporate and Personal Taxation", *Journal of Finance*, May 1980.
- Gravelle, H., and Rees, R., *Microeconomics*, 1990.
- Hamada, R.S., and Scholes, M.S., (1985), "Taxes and Corporate Financial Management" in *Recent Advances in Corporate Finance* edited by Altman, E.I., and Subrahmanyam, M.G., Irwin, Part III, Chapter 8.
- Haugen, R.A., and Senbet, L.W., (1978), "The Insignificance of Bankruptcy Costs to the Theory of Optimal Capital Structure", *Journal of Finance* 23, pp. 383-393.
- Miller, M.H., (1977) "Debt and Taxes", *Journal of Finance* 32, pp. 261-275.
- Miller, M.H., (1988) "The Modigliani-Miller Propositions After Thirty Years", *The Journal of Economic Perspectives* 2, No. 4, pp. 99-120.
- Poterba, J.M., and Summers, L.H., (1985), "The Economic Effects of Dividend Taxation" in *Recent Advances in Corporate Finance* edited by Altman, E.I., and Subrahmanyam, M.G., Irwin, Part III, Chapter 9.
- Ross, S.A., (1988) "Comment on the Modigliani-Miller Propositions", *The Journal of Economic Perspectives* 2, No. 4, pp. 149-158.