

**MACQUARIE UNIVERSITY**

**Division of Economic and Financial Studies**



UNIT OUTLINE  
2003 Second Semester

ECON 828  
INTERNATIONAL INVESTMENT AND RISK

Dr. Ronald D. Ripple  
Lecturer-in-charge  
[rripple@efs.mq.edu.au](mailto:rripple@efs.mq.edu.au)

# ECON828

## International Investment and Risk

### Course Overview

The focus of ECON828 is to provide the student with a thorough introduction to the theory, analytical tools, and methodologies applicable to investment in a global/international context. This includes developing a full understanding of risk and risk aversion, international bonds and equities, the implications of foreign exchange risk on such investments, how one might hedge the risks faced in the international investment environment., the benefits of international diversification, how to estimate the international cost of capital, how to evaluate foreign direct investment opportunities, and the influence of taxes on international investment.

The course will begin with an introduction to risk and risk aversion. The measurement of risk is a key element of investment decision making. The fact that most investors are assumed to be risk averse means that we need to understand how we may participate in risky investments in a manner that tends to reduce the risk we face for a given return to be gained. Portfolio diversification is the means by which we reduce the risk faced for a given rate of return. We will develop the fundamentals of portfolio formation and then extend these into the international market environment.

We will introduce a range of asset classes for investment in the international marketplace and how to value them. We will then examine how we may hedge our portfolios in the international market using currency swaps, forwards, and futures, as well as employing index futures and options.

The estimation of the cost of capital in the international environment and capital budgeting techniques will be developed to facilitate an understanding of the analysis conducted to evaluate foreign direct investment opportunities. Finally, we will examine the implications of taxation in the international investment environment.

### Teaching Program

| <b>Lecturer</b>      | <b>Class Location</b> | <b>Class Time</b>    | <b>Contact</b>  | <b>Consultation Times</b>                      |
|----------------------|-----------------------|----------------------|---|--|
| Dr. Ronald D. Ripple | E7B 100               | Thursday:<br>6pm-9pm | Office: C5C 364<br>Phone: 9850 7063<br>Email:<br>ripple@efs.mq.edu.au | Tuesday:<br>10am-noon<br>Wednesday:<br>2pm-4pm |

The class sessions will be conducted primarily as lectures, with practical examples and problems introduced occasionally where appropriate.

There is no one text for this class, but we will draw fairly heavily from:

Bodie, Z., Kane, A., and Marcus, A. (2002), *Investments*, 5<sup>th</sup> edition, McGraw-Hill, Boston, Massachusetts.

A copy of *Investments* is on reserve in the Macquarie University library.

A list of topics is presented below. Also attached below is a list of readings by topic that are recommended reading prior to attending the associated lecture. We will cover roughly a topic a week.

Some of these readings are text chapters and others are journal articles. The journal articles will be made available on the Web CT page for this class, and/or in ERIC.

Other reference texts addressing the topics covered may be found in the library, both on reserve and in the stacks. A few such references are:

Solnik, B. (2000), *International Investments*, 4<sup>th</sup> edition, Addison Wesley Longman, Reading, Massachusetts.

Moosa, I.A. (1999), *International Finance: An Analytical Approach*, Irwin/McGraw-Hill, Roseville, New South Wales.

Shapiro, A.C. (2002), *Multinational Financial Management*, 7<sup>th</sup> edition, John Wiley & Sons, Boston, Massachusetts.

Fabozzi, F. (1997), *The Handbook of Fixed Income Securities*, 5<sup>th</sup> edition, Irwin, Chicago, Illinois.

Fabozzi, F. (2001), *Bond Portfolio Management*, 2<sup>nd</sup> edition, Frank J. Fabozzi Associates, New Hope, Pennsylvania.

Juttner, J.D. (1998), *International Finance and Global Investments*, 4<sup>th</sup> edition, Addison Wesley Longman, Melbourne, Victoria.

## Course Topic Calendar

| Topic No. | Topic  |
|-----------|--|
| 1         | Introduction/Risk and Risk Aversion                |
| 2         | Capital Allocation and Optimal Portfolios          |
| 3         | International CAPM and Multifactor Models          |
| 4         | Global Bonds, Markets, and Bond Valuation          |
| 5         | Term Structure of Global Interest Rates            |
| 6         | International Portfolio Investment                 |
| 7         | Hedging Using Currency Swaps, Forward, and Futures |
| 8         | Hedging Using Stock Index Futures and Options      |

|    |  |
|----|--|
| 9  | International Cost of Capital                    |
| 10 | International Capital Budgeting and Real Options |
| 11 | Foreign Direct Investment                        |
| 12 | International Taxation and Investments           |

## Important dates for the semester

**There will be NO CLASS during Week 5, 28 August.** I have to be out of the country for a conference. To make up for the lost class, we will extend the class time Weeks 2, 3, 4, 6, 7, and 8 by half an hour. **Therefore, for those six weeks we will meet from 6pm-9:30pm.**

**Mid-semester break is over the period of 27 September – 12 October.**

**The examination will be held in Week 13, in our usual classroom, 6 November.**

## Course Assessment

Assessment will be based on a semester assignment and an examination, with the following weights:

|             |     |
|-------------|-----|
| Assignment  | 20% |
| Examination | 80% |

**The Assignment is to be submitted by 6pm Friday 26 September.** The assignment is to be submitted to the ECON828 box in ERIC (C5C 244). It must be submitted using the official cover sheet, with the plagiarism declaration signed. You should keep a dated, witnessed copy of your assignment in the case of any mishandling. This is YOUR responsibility.

**The Examination will be held during Week 13.** It will consist of both multiple choice and long-answer questions and will be set over a two-hour duration.

In addition to the assignment and the exam there will occasionally be problems assigned, which you are required to solve and submit. You will be required to submit these solutions at the start of a class lecture period, as the solutions will be gone over at the end of the lecture. These problem solutions will not be marked, but they will be reviewed for effort. Moreover, students may be called upon at random to discuss the solutions, so coming prepared will be beneficial.

## Assignment

The semester assignment is a 2500 word essay. The details of the essay topic are covered under separate cover.

## Readings

### Topic 1 Risk and Risk Aversion

Bodie/Kane/Marcus, Chap. 6, pp. 154-182.

Krause, A., (2002) "Coherent risk measurement: an introduction," *Balance Sheet*, Vol. 10, Iss. 4, pp. 13-17.

Krause, A., (2003), "Exploring the limitations of Value at Risk: how good is it in practice?," *The Journal of Risk Finance*, Winter 2003, pp. 19-28.

### Topic 2 Capital Allocation and Optimal Portfolios

Bodie/Kane/Marcus, Chaps. 7-8, pp. 183-256.

Markowitz, H.M., (1991), "Foundations of portfolio theory," *The Journal of Finance*, Vol. 46, Iss. 2, June, pp. 469-477.

### Topic 3 International CAPM and Multifactor Models

Bodie/Kane/Marcus, Chaps. 9-10, pp. 258-319.

Solnik, Chap. 5, pp. 162-171.

Moosa, Chap. 19, pp. 558-560.

Black, F. (1993), "Beta and return," *The Journal of Portfolio Management*, Fall, pp. 8-18.

Cochrane, J.H. (1999), "New facts in finance," *Economic Perspectives*, FRBC, Q3, pp. 36-58.

Cochrane, J.H. (1999), "Portfolio advice in a multifactor world," *Economic Perspectives*, FRBC, Q3, pp. 59-78.

### Topic 4 Global Bonds, Markets, and Bond Valuation

Bodie/Kane/Marcus, Chaps. 14 & 16, pp. 414-451 & 482-529.

Fabozzi (2001), Chap. 19, pp. 645-666.

Erb, C., C. Harvey, and T. Viskanta (2000), "Understanding emerging markets bonds," *Emerging Markets Quarterly*, Spring, pp. 1-17.

### Topic 5 Term Structure of Global Interest Rates

Bodie/Kane/Marcus, Chap. 15, pp. 452-481.

King, R. and A. Kurmann (2002), "Expectations and the term structure of interest rates, *Economic Quarterly*, FRBR, Fall, pp. 49-95.

**Topic 6 International Portfolio Investment**

Solnik, Chap. 4, pp. 107-153.

Bodie/Kane/Marcus, Chap. 25, pp. 848-872.

Elton, E.J., M.J. Gruber, S.J. Brown, and W.N. Goetzmann (2003), *Modern Portfolio Theory and Investment Analysis*, 6<sup>th</sup> edition, John Wiley & Sons, Inc., New York, New York, Chap. 12, pp. 262-289.

Sill, K. (2001), "The gains from international risk-sharing," *Business Review*, Q3, pp. 23-32.

Lewis, K.K. (1999), "Trying to explain home bias in equities and consumption," *Journal of Economics Literature*, June, pp. 571-608.

Strong, N. and X. Xu (2003), "Understanding the equity home bias: evidence from survey data," *The Review of Economics and Statistics*, May, Vol. 85, No. 2, pp. 307-312.

**Topic 7 Hedging Using Currency Swaps, Forwards, and Futures**

Pitts, M. (1997), "Hedging with Futures and Options," in Fabozzi (1997), pp. 1221-1251.

Brown, K.C. and D.J. Smith (1992), "Currency Swaps: Quotation Conventions, Market Structures, and Credit Risk," in *Cross Currency Swaps*, edited by C.R. Beidleman, Business One Irwin, Chap. 3, pp. 63-90.

Hull, J. (2000), *Options, Futures, and Other Derivatives*, 4<sup>th</sup> edition, Prentice-Hall, Inc., Upper Saddle River, New Jersey.

**Topic 8 Hedging Using Stock Index Futures and Options**

Hull, J. (2000), *Options, Futures, and Other Derivatives*, 4<sup>th</sup> edition, Prentice-Hall, Inc., Upper Saddle River, New Jersey.

Juttner, D.J. and K. Hawtrey (1997), *Financial Markets, Money, and Risk*, Longman, Melbourne, Victoria, Chaps. 28 and 29.

## **Topic 9 International Cost of Capital**

Moosa, I.A. (2002), *Foreign Direct Investment: Theory, Evidence, and Practice*, Palgrave, New York, New York, Chap. 7, pp. 188-220.

Shapiro, Chap. 14, pp. 474-509.

Fama, E.F. and K.R. French (2002), "The equity premium," *Journal of Finance*, vol. 57, no. 2, April, pp. 637-659.

Mehra, R. and E. Prescott (1985), "The equity premium: a puzzle," *Journal of Monetary Economics*, March, pp.145-161.

Siegel, J (1999), "The shrinking equity risk premium," *Journal of Portfolio Management*, Fall, pp. 10-17.

Godfrey, S. and R. Espinosa (1996), "A practical approach to calculating costs of equity for investments in emerging markets," *Journal of Applied Corporate Finance*, Fall, pp. 80-89.

Schramm, R. and H. Wang (1999), "Measuring the cost of capital in an international CAPM framework," *Journal of Applied Corporate Finance*, Fall, pp. 63-72.

O'Brien, T. (1999), "The global CAPM and the firm's cost of capital in different countries," *Journal of Applied Corporate Finance*, Fall, pp. 73-79.

## **Topic 10 International Capital Budgeting and Real Options**

Shapiro, Chap. 17, pp. 565-608.

Moosa, Chap. 20, pp. 576-584.

Kester, W.C. and T.A. Luehrmann (1995), "Capital budgeting, investment, and cross-border valuations," in *Case Problems in International Finance*, McGraw-Hill, New York, New York, pp. 47-73.

Lessard, D.R. (1985), "Evaluating international projects: an adjusted present value approach," in D.R. Lessard, *International Financial Management: Theory and Application*, 2<sup>nd</sup> edition, UMI, Ann Arbor, Michigan, Chap. 34, pp. 570-584.

Luehrmann, T.A. (1997), "Using APV: a better tool for valuing operations," *Harvard Business Review*, May-June, pp. 145-154.

Luehrmann, T.A. (1997), "What's it worth? A general manager's guide to valuation," *Harvard Business Review*, May-June, pp.132-142.

Luehrmann, T.A. (1998), "Investment opportunities as real options: getting started with the numbers," *Harvard Business Review*, July-August, pp. 51-67.

Trigeorgis, L., (1996), *Real Options: Managerial Flexibility and Strategy in Resource Allocation*, MIT Press, Cambridge, Massachusetts, especially Chap. 4, pp. 121-150.

## **Topic 11 Foreign Direct Investment**

Moosa, I.A. (2002), *Foreign Direct Investment: Theory, Evidence, and Practice*, Palgrave, New York, New York, Chap. 2, pp. 23-67.

McCulloch, R. (1993), "New perspectives on foreign direct investment," in K.A. Froot, *Foreign Direct Investment*, The University of Chicago Press, Chicago, Illinois, Chap. 2, pp. 37-56.

Dunning, J.H. (1988), "The eclectic paradigm of international production: a restatement and possible extensions," *Journal of International Business Studies*, Spring, pp. 1-31.

Froot, K.A. and J.C. Stein (1991), "Exchange rates and foreign direct investment: an imperfect capital markets approach," *Quarterly Journal of Economics*, vol. 106, pp. 1191-1217.

Pan, Y. (2003), "The inflow of foreign direct investment to China: the impact of country-specific factors," *Journal of Business Research*, vol. 56, pp. 829-833.

Phelps, N.A. and J. Alden (1999), *Foreign Direct Investment and the Global Economy*, The Stationary Office, London.

## **Topic 12 International Taxation and Investments**

Moosa, I.A. (2002), *Foreign Direct Investment: Theory, Evidence, and Practice*, Palgrave, New York, New York, Chap. 6, pp. 161-187.

Devereux, M. (2002), "The impact of corporate taxation on the location of capital: a review," forthcoming in *Swedish Economic Policy Review*, available online at <http://www2.warwick.ac.uk/fac/soc/economics/staff/faculty/devereux/wp/>

Juttner, J.D. and N. Carlsen (1998), "Taxing international capital income: interest withholding tax," *Journal of Australian Taxation*, Nov./Dec., pp. 219-231.



STUDENT SURNAME: \_\_\_\_\_

**ECON828 SEMESTER ASSIGNMENT COVER SHEET**

(to be attached to the front of your semester assignment)

FULL STUDENT NAME: \_\_\_\_\_

STUDENT NO.: \_\_\_\_\_

ASSESSMENT:                      GOOD                      FAIR                      POOR

Presentation \_\_\_\_\_

Length \_\_\_\_\_

Analysis \_\_\_\_\_

Expression \_\_\_\_\_

Layout \_\_\_\_\_

|                 |                       |       |
|-----------------|-----------------------|-------|
| Marks deducted: | Lateness              | _____ |
|                 | Poor presentation     | _____ |
|                 | No acknowledgments    | _____ |
|                 | Length                | _____ |
|                 | Poor grammar          | _____ |
|                 | No data attached      | _____ |
|                 | No estimates attached | _____ |

FINAL MARK (out of 100) \_\_\_\_\_

Marker's comment:

## PLAGIARISM DECLARATION

Plagiarism involves the use of the work of another person and presenting it as one's own. Any of the following acts constitutes plagiarism unless the source of each quotation or piece of borrowed work is clearly acknowledged:

- copying out part(s) of any document or audiovisual material (including computer-based material);
- using or extracting another person's concepts, experimental results, or conclusions;
- summarising another person's work;
- in an assignment where there was collaborative preparatory work, submitting substantially the same final version of any material as another student

Encouraging or assisting another person to commit plagiarism is a form of improper collusion and may attract the same penalties.

### STATEMENT TO BE SIGNED BY STUDENT:

- 1. I have read the description of plagiarism above.**
- 2. In my assignment I have carefully acknowledged the source of any material which is not my own work.**
- 3. I am aware that plagiarism can attract severe academic penalties.**

---

(Name)

---

(Student I.D.)

---

(Signature)

**THIS PAGE MUST BE COMPLETED  
AND ATTACHED TO THE ASSIGNMENT**