

ACCG350 Financial Statement Analysis

2005 Semester 1

MACQUARIE UNIVERSITY

Division of Economic and Financial Studies ACCG350 Financial Statement Analysis Unit Outline

Year and Semester: 2005, Semester 1

Unit convenor: Sue Wright Prerequisites: ACCG253 (P)

Credit points: 3

Students in this unit should read this unit outline carefully at the start of semester. It contains important information about the unit. If anything in it is unclear, please consult one of the teaching staff in the unit.

ABOUT THIS UNIT

- This unit equips students to undertake financial analysis and to read and
 interpret an annual report, in order to make investment decisions about that
 organisation. Students will develop an understanding of the theoretical and
 practical relations between financial statement items and share markets. They
 will learn to apply the five steps of analysing an organisation: business and
 strategic analysis, accounting analysis, financial analysis, forecasting and
 valuation, from lectures and a case study of an Australian company.
- The content of this unit draws on both ACCG101 Accounting 1B (particularly cash flow statements) and ACCG253 Financial Management.
- This capstone unit draws on several discipline areas that students have studied in their programs: economics, statistics, accounting, finance, marketing and business, and so it is very relevant for students undertaking accounting and/or finance degrees, and for students interested in careers in areas such as investments, portfolio management, financial and business analysis, and auditing.
- The Macquarie University Accounting and Finance Prize for ACCG350, worth \$100, will be awarded to the student with the best performance in this unit.

UNIT WEB PAGE

- The web page for this unit is at: http://online.mq.edu.au/public/ACCG350
- It contains all information provided in this unit outline, as well as copies of lecture transparencies and announcements and changes made during the semester. Please consult it regularly.

TEACHING STAFF

Name	Role in unit	Room	Phone	Email
Siang Chang	Adjunct			
	Lecturer; Tutor			
Neil Fargher	Lecturer	C5C432	9850 9281	nfargher@efs.mq.edu.au
James Hazelton	Lecturer	C5C444	9850 8486	<u>jhazelto@efs.mq.edu.au</u>
Alicia Jiang	Adjunct Tutor			
Joshua	Adjunct Tutor			
Kirkwood				
Alex Proimos	Tutor	C5C418	9850 9179	aproimos@efs.mq.edu.au
Philip	Lecturer; Tutor	C5C427	9850 7101	psinnad@efs.mq.edu.au
Sinnadurai				
Sue Wright	Unit Convenor;	C5C429	9850 8521	swright@efs.mq.edu.au
	Lecturer; Tutor			

A consultation timetable will be provided at the beginning of the semester.

CLASSES

- There are two lectures, Thursday 1-3pm in C5CT1 and Thursday 6-8pm in C5CT2. Students must attend their allocated lecture theatre each week.
- Copies of the lecture transparencies will be generally available from the website in the week prior to the lecture.
- Details of tutorial classes can be found on the unit website. Students must attend their allocated tutorial class each week.
- Tutorial classes can only be changed during the first two weeks of classes, by emailing the unit convenor with a request for a change, including two alternative times, in order of preference. Changes will be confirmed (or refused if there is insufficient space at the requested time) by return email. There will be no tutorial changes approved after the end of the second week of classes.

REQUIRED TEXTS AND/OR MATERIALS

- Lundholm and Sloane, Equity Valuation and Analysis, Irwin McGraw-Hill, 2004.
- Case Studies for ACCG350 Financial Statement Analysis
- ACCG350 Readings Book

These required texts are all available in the Co-op Bookshop.

Palepu, Healy and Bernard, <u>Business Analysis and Valuation</u>, Thomson, 2004 is recommended as a supplementary text. Copies are available in the library.

LEARNING OUTCOMES

- This unit will provide students with an understanding of the theories and practice of financial statement analysis, which will enable them to thoroughly analyse and to prepare a report on a firm's financial position and estimate its fundamental value from its annual report.
- They will develop generic skills in a range of areas, including
 - o analytical skills in information management, analysis and interpretation in a multi-disciplinary environment.
 - o communication and negotiation skills through group work and the presentation of progress reports.

TEACHING AND LEARNING STRATEGY

- The material in this unit is presented in the weekly lectures, and discussed in tutorials using both tutorial questions and case studies as bases for discussion. To ensure that students are able to effectively discuss the case studies, they are required to submit answers to a one-page question sheet on each case study prior to the tutorial class.
- Stockland will be used as the continuing lecture example to which the theories and techniques presented in many of the lectures are applied.
- The major assignment for this unit requires students to also apply the theories and techniques to a current Australian company, in groups of two or three. Students will form groups in the first couple of weeks of semester, and will work on the major assignment throughout the semester in those groups, facilitating their learning in a practical way. Students need to be available at mutually convenient times to be effective group members.

RELATIONSHIP BETWEEN ASSESSMENT AND LEARNING OUTCOMES

- The learning outcomes of this unit are primarily assessed by the final examination, which will include:
 - o questions on the process of financial statement analysis as demonstrated by the student's understanding of the various stages and processes undertaken for their major assignment;
 - o questions on the case studies discussed in tutorials; and
 - o questions on other topics from the lectures.

 Additional assessment tasks are designed to ensure that the learning process occurs over the whole semester. The various components of the assessment are as follows:

Tutorial Attendance and Participation	10%
Case Study Preparation	10%
Major Assignment	20%
Final Examination	60%

In order to pass this unit, a student must pass the final examination and the unit overall.

• Final Examination:

There will be a three hour final examination, consisting of three parts: questions on the major project, questions on the case studies, and questions on other topics. Non-programmable calculators will be allowed in the examination. You will not be allowed to use translation dictionaries in the final examination for this unit. You must attend this examination, unless clearly prevented from doing so by illness or misadventure.

• Tutorial Attendance and Participation:

Tutorial attendance is essential, and attendance will be recorded weekly. The assessment component will be based on the student's attendance and contribution.

• Case Study Preparation:

- Four case studies will be investigated and discussed in tutorials throughout the semester.
- Students are required to prepare these case studies prior to the relevant weekly tutorial, and to submit answers to a one page question sheet for each case study no later than the Monday of the relevant week (i.e. prior to the tutorial) to an assignment box in ERIC. The question sheets will be available on the webpage at the beginning of the semester.
- Answers to these questions will be graded satisfactory (2.5 marks) or unsatisfactory (0 marks), and will be returned in tutorials. Late submissions will not be graded.
- Total contribution of case studies towards the final grade is 10% (4 x 2.5%). Note that one third of the final examination (20% of the final mark) will be based on selected case studies.

Major Assignment

"In groups of two or three students, evaluate and report on the most recent annual report of an Australian company (chosen from the list below), as if you were security analysts making a recommendation on whether or not your clients should invest in it."

The report is to be handed in on 6^{th} June, to an assignment box in ERIC. It is to be approximately 15 - 20 pages in length and to include the following sections:

- 1. **Business and Strategic Analysis**, including an analysis of the economy, the industry, and the company's place in the industry; the company's competitive and corporate strategy; the company's and the industry's growth potential; and the implications of all of these for its future profitability.
- 2. **Accounting Analysis**, including an analysis of the company's accounting policies that are likely to affect the interpretation of its financial reports, and a comparison to those of a competitor in the same industry;
- 3. **Financial Analysis**, including the presentation and interpretation of relevant ratios for the company and a competitor (<u>not</u> from the list of companies below), a time series analysis of these for both companies over the past three years, and an analysis of the company's overall financial position.
- 4. **Prospective Analysis**, including forecasts for all three financial statements in full for the company for one financial year, with reasons for major items, and valuation of the company using two different methods;
- 5. **Recommendation** for the clients, drawing on the whole analysis of the company.

A cover sheet is attached to this outline. The report should be word-processed and professionally presented, and secured with plastic spiral binding. All assumptions should be clearly stated and supported if possible. Students should consult with the lecturer-in-charge if further clarification is needed. Late submissions will have 10% of the mark deducted per day.

Assessment and marking of this assignment will be:

- 5% for a short presentation on section 1 of the assignment in the allocated tutorial* in week 5 (all groups members to speak).
- 5% for a short presentation on sections 2 and 3 of the assignment in the allocated tutorial* in week 9 (all group members to speak).

- 20% for questions in the final examination based on the major assignment (including for example, reasons why certain methods or data have been chosen, assumptions behind calculations).
- 10% for the final report, to be submitted in week 13, on the basis of its accuracy, comprehensiveness, cohesiveness, and overall quality.

LIST OF AUSTRALIAN COMPANIES TO USE FOR MAJOR ASSIGNMENT

Aristocrat (www.aristrocrat.com.au) (www.austereo.com.au) Austereo (blackmores.com.au) Blackmores (www.boral.com.au) Boral (www.brambles.com) Brambles (www.burnsphilp.com.au) Burns Philp (www.caltex.com.au) Caltex (www.davidjones.com.au) David Jones (www.harveynorman.com.au) Harvey Norman

Seven Network (www.seven.com.au)

The University Examination Period in first semester 2005 is from 15 June to 29 June inclusive.

Students are expected to present themselves for examination at the time and place designated in the University Examination Timetable. The timetable will be available in draft form approximately eight weeks before the commencement of the examinations and in final form approximately four weeks before the commencement of the examinations, at http://www.timetables.mg.edu.au/exam

The only exception to not sitting an examination at the designated time is because of documented illness or unavoidable disruption. In these circumstances a student may wish to consider applying for Special Consideration. Information about unavoidable disruption and the special consideration process is available at http://www.reg.mq.edu.au/Forms/APSCon.pdf

If a Supplementary Examination is granted as a result of the Special Consideration process the examination will be scheduled as soon as possible after the conclusion of the official examination period.

Students are advised that it is Macquarie University policy not to set early examinations for individuals or groups of students. All students are expected to ensure that they are available until the end of the teaching semester, that is the final day of the official examination period.

^{*} The allocated tutorial of all or the majority of group members.

PLAGIARISM

The University defines plagiarism in its rules: "Plagiarism involves using the work of another person and presenting it as one's own." Plagiarism is a serious breach of the University's rules and carries significant penalties. Students must read the University's practices and procedures on plagiarism. These can be found in the *Handbook of Undergraduate Studies* or on the web at: http://www.student.mq.edu.au/plagiarism/

The policies and procedures explain what plagiarism is, how to avoid it, the procedures that will be taken in cases of suspected plagiarism, and the penalties if a student is found guilty. Penalties may include a deduction of marks, failure in the unit, and/or referral to the University Discipline Committee.

University Policy on Grading

Academic Senate has a set of guidelines on the distribution of grades across the range from fail to high distinction. The final result will include one of these grades plus a standardised numerical grade (SNG).

It is unlikely that the raw mark for a unit (i.e., the total of the marks for each assessment item) will be the same as the SNG. Under the Senate guidelines, results may be scaled to ensure that there is a degree of comparability across the university, so that units with the same past performances of their students should achieve similar results.

The policy does not require that a minimum number of students are to be failed in any unit. In fact it does something like the opposite, in requiring examiners to explain their actions if more than 20% of students fail in a unit.

The process of scaling does not change the order of marks among students. A student who receives a higher raw mark than another will also receive a higher final scaled mark.

For an explanation of the policy see

http://www.mq.edu.au/senate/MQUonly/Issues/Guidelines2003.doc or http://www.mq.edu.au/senate/MQUonly/Issues/detailedguidelines.doc.

STUDENT SUPPORT SERVICES

Macquarie University provides a range of Academic Student Support Services. Details of these services can accessed at http://www.student.mq.edu.au.

The Division of Economic and Financial Studies operates the Economic Resources and Information Centre (ERIC), which provides useful resources for students, as well as an assignment collection facility.

TUTORIAL QUESTIONS

WEEK 2

- 1. Read Brown (1970). Take one of the results listed on pages 281 282, and
 - (i) restate it in your own words,
 - (ii) describe how Brown came to this conclusion, from the research described in the paper, and
 - (iii) describe how this information (the result) can be useful to an investor.

(Questions from Palepu, Healy and Bernard, <u>Business Analysis and Valuation</u>, Third Edition, Thompson, 2004)

- 2. Coca-Cola and Pepsi are both very profitable soft drinks. Inputs for these products include sugar, bottles/cans, and soft drink syrup. Coca-Cola and Pepsi produce the syrup themselves and purchase the other inputs. They then enter into exclusive contracts with independent bottlers to produce their products. Use the five forces framework and your knowledge of the soft drink industry to explain how Coca-Cola and Pepsi are able to retain most of the profits in this industry.
- 3. There are very few companies that are able to be both cost leaders and differentiators. Why? Can you think of a company that has been successful at both?

WEEK 3

- 1. Read Penman (1996).
 - (i) What is the contribution of this paper? Why was this at odds with the then-prevailing view about P/E and P/BV?
 - (ii) What concepts are Penman's explorations of P/E and P/BV based on?
 - (iii) Why is the result surprising? Would you expect it to still hold today?
- 2. Calculate the P/E ratio and P/BV ratio for the company you have chosen for your major assignment. Classify it into one of the following categories, and describe the market's view of the company's future prospects:
 - (a) a high PE and a low market-to-book ratio
 - (b) a high PE and a high market-to-book ratio
 - (c) a low PE and a low market-to-book ratio
 - (d) a low PE and a high market-to-book ratio

(Question from Palepu, Healy and Bernard, <u>Business Analysis and Valuation</u>, Third Edition, Thompson, 2004)

3. The Boston Tea Company plans to acquire Hi Flavor Soda Co. for \$60 per share, a 50 per cent premium over current market price. John E. Gray, the CFO of Boston Tea, argues that this valuation can easily be justified, using a price-earnings analysis. "Boston Tea has a price-earnings ratio of 15, and we expect that we will be able to generate long-term earnings for Hi Flavor Soda of \$5 per share. This implies that Hi Flavor is worth \$75 to us, well below our \$60 offer price". Do you agree with this analysis? What are Grey's key assumptions?

(Question from Stickney and Brown, <u>Financial Reporting and Statement Analysis</u>, Dryden, Fourth Edition, 1999)

- 4. Selected data for Wal-Mart Stores for Year 7 appear in Table A.
- (a) Compute the theoretical and actual PE ratios for Wal-Mart at the end of Year 7. Assume that the risk-free interest rate is 6 per cent and that the market equity premium over the risk-free interest rate is 7 percentage points.
- (b) Compute the growth rate in earnings implied by the actual PE ratio, assuming that the cost of equity capital is correct.
- (c) Compute the cost of equity capital implied by the actual PE ratio, assuming that the historical growth rate in earnings is correct and sustainable.
- (d) Compute the theoretical and actual P-BV ratios at the end of Year 7. Assume that Wal-Mart will maintain a dividend payout rate of 21 percent, and that the rate of return on shareholders' equity will be as follows:

Year 8: 20.5% Year 9: 19.7% Year 10: 18.9% Year 11: 18.3% Year 12: 17.3% Year 13: 16.3% Year 14: 15.3% Year 15: 14.3% Year 16: 13.3%

Year 17: 12.3%

The rate of return on shareholders' equity will equal the cost of equity capital after Year 17.

(e) Given your analyses above, discuss whether you think that Wal-Mart is undervalued, overvalued or fairly valued by the market.

Table A	
Selected Date for Wal-Mart Stores	
Net Income for Year 7 (in millions)	\$3 056
Earnings Per Share for Year 7	\$1.33
Dividends/Net Income for Year 7	21%
Historical Annual Growth Rate in Earnings	6.6%
Shareholders' Equity at Beginning of Year 7 (in millions)	\$14 756
Shareholders' Equity at End of Year 7 (in millions)	\$17 143
Market Equity Beta	0.83
Market Price per Share at End of Year 7	\$23.50
Number of Shares Outstanding at End of Year 7 (in millions)	2, 298

WEEK 4

- 1. To what extent may the decision by Australian authorities to move to International Financial Reporting Standards (IFRS) in January 2005 have been politically motivated?
- 2. "It is more appropriate to rely on consolidated, rather than parent entity figures for financial statement analysis and corporate valuation". Discuss
- 3. A disclosure published by the directors of Scitech Ltd on 17 July, 1995 has been reproduced in Appendix A. Evaluate this disclosure in terms of the "rules of engagement" proposed by Fuller and Jensen (2002).
- 4. Pleasure Pty Ltd is a small company that is about to float on ASX. It operates solely in the leisure industry, managing a chain of gambling casinos in NSW and Victoria. Pleasure Pty Ltd disclosed in the float prospectus that it has experienced significant positive growth in the last two years, and that it anticipates this will continue indefinitely after the float. However, the amount of capital raised via the initial public offering (IPO) will be within the bottom quartile of Australian floats during the past twelve months.

Imagine you are a potential investor in the IPO. Do you anticipate that the forecasts of earnings in the prospectus are more likely to be managed upward or downwards? Explain your answer.

WEEK 8

- 1. What are the pressures on management to show enhanced financial performance?
- 2. Provide an example of a presentational distortion from a recent Australian annual report. (Pick an annual report with which you are familiar such as your

- assignment company. To help identify distortions enter the underlying numbers into Excel and graph the data yourself.)
- 3. What does the use of presentational distortions imply about management beliefs in shareholders' abilities to read annual reports?
- 4. Consider the six points highlighted by the G100 guidelines (Tom Roberts, Charter, June 1999, page 39). Analyze the management review of operations from a recent Australian annual report with respect to the criteria that the review is "balanced and objective, dealing even-handedly with both positive and negative aspects of financial condition". Bring a copy of the review of operations you are assessing and your analysis to the tutorial.

WEEK 12

- 1. Discuss four practical valuation issues encountered in practice.
- 2. You are an Analyst for a project that has the following cashflow (in millions):

t = 0	t = 1 yr	t = 2 yr	t =3 yr	t =4 yr
-100	20	30	50	70

Given a WACC of 10%, the NPV at t = 0 is \$28.35m, and t = 1 is \$141.19m. Your CEO was surprised that NPV has increased almost five times in one year, and cast doubt on your analysis.

- a) How do you explain the large increase in the NPV to the CEO, and what adjustment is necessary so that the two NPV is measuring the same thing?
- b) Discuss the practical issues of trying to explain to a CEO unfamiliar with accounting or finance.

WEEK 13

- 1. What is 'indexing'? How does it differ from 'active' investing?
- 2. What are the advantages and disadvantages of indexing?
- 3. Indexing is more developed in the US than Australia, and more popular with institutional than individual investors. Why might this be the case?
- 4. What is ethical investing?

- 5. Imagine that you are the investment analyst for an ethical investment fund. What issues might you face that are different from a traditional financial analyst?
- 6. Why might ethical investments financially outperform 'traditional' investments? Why might they underperform?
- 7. Why do Haigh and Hazelton (2004) criticize ethical investment? Why do they believe ethical fund managers should lobby governments?

LECTURE AND TUTORIAL SCHEDULE

WEEK	DATE	<u>TOPIC</u>	READING	TUTORIAL ASSIGNMENT
1	28/2	Introduction Strategic and Industry Analysis	Text Chapters 1, 2, 3 Brown (1970)	No tutorials in first week
2	7/3	Interpreting Market Ratios	Text Chapter 11 Penman (1996)	Tutorial questions week 2
3	14/3	Accounting Issues	Text Chapter 4 (4.1 – 4.3) Haswell and McKinnon (2003); Fuller and Jensen (2002); Healy and Palepu (2001)	Tutorial questions week 3
4	21/3	Accounting Analysis	Text Chapter 4 (4.4 – 4.6)	Tutorial questions week 4
5	28/3	Interpreting Accounting Ratios	Text Chapter 5	First presentation of major assignment
6	4/4	Interpreting Accounting Ratios cont. Analysing the Cash Flow Statement	Text Chapter 6	Case Study: "Bigger Isn't Always Better"

7	11/4	Cross-Sectional and Time-Series Analyses	Foster Chapters 6, 7 Beattie and Jones (1999) Roberts (1999) ARA Criteria Booklet	Case Study: "Playing the Numbers Game"		
8	2/5	Forecasting	Text Chapters 7, 8	Tutorial questions week 8		
9	9/5	Valuation using Dividends and Cash Flows	Text Chapters 6, 10	Second presentation of major assignment		
10	16/5	Valuation using Earnings Valuation using Balance Sheets	Text Chapter 10	Case Study: "The Body Shop International"		
11	23/5	Valuation in Practice		Case Study: "Rocky Mountain Advanced Genome"		
12	30/5	Index and Ethical Investing	Haigh & Hazelton (2004) Hancock (1999) Vanguard (2001)	Tutorial questions week 12		
13	6/6	Other Issues Revision <i>Major Assignment Due</i>	Chapter 12	Tutorial questions week 13		

ACCG350 FINANCIAL STATEMENT ANALYSIS

MAJOR ASSIGNMENT

Name	 	
Signature		
Name		
Signature		
Name		

Signature			
COMPANY			

- By signing your name in the space provided, you are verifying that

 1. each group member has contributed equally to the writing of this, and

 2. your contribution to this assignment is free of cheating and plagiarism, as set out in the unit outline.