



Victoria Management School

MMBA556 Financial Statement Analysis

Summer Trimester 2005

COURSE OUTLINE

- Start Date:** 14 November 2005
- Format:** Two three-hour sessions each week for four weeks until 8 December 2005.
- Lecture Times:** Mondays and Thursdays, 5:40 to 8:30pm
- Location:** RWW224
- Teaching Staff:** Mr Martin Turner MBA, BCom(Hons1), LLB.
- Office: Rutherford House 723
Email: martin.turner@vuw.ac.nz
- Mobile: 021 476 200
Telephone: 463 5233 extn 8538
- Textbook:** Penman, Stephen H. Financial Statement Analysis and Security Valuation 2nd ed. New York: McGraw-Hill/Irwin, 2004.

Course Objectives

The Master of Business Administration Programme serves to produce professional managers capable of fulfilling strategic roles within corporate and government enterprises. Integral to this capability is an understanding of the relations between strategy, financial accounts and value.

This course aims to facilitate understanding of the use of financial statement information for making investment decisions and for strategy analysis.

Broadly, the course will cover:

- Deriving information about a company's financial health and performance – and the performance of its management – from financial statements (and other annual report information);
- Valuation of companies based on accounting information.

There will be an emphasis on the practical use of accounting knowledge in analysing financial statements and company valuation. The course will include the use of case studies.

Reading Before Commencement of Course

It is a requirement that, as a minimum, the Essential Reading from Penman (2004) is completed. Further, it is strongly advised that students complete as much as possible of the Recommended Reading from Penman (2004).

This reading is substantial and students are strongly advised to complete as much of this reading as possible (and to consider its contents carefully) **BEFORE** the course starts on Monday 14 November.

Essential Reading

Penman (2004): pp14-19 (Chap 1); pp. 222-235 (Chap 7); pp. 276-298 (Chap 9); pp.350-369 (Chap 11); pp.382-403 (Chap 12); pp. 527-534 (Chap 15).

Recommended Reading

Those aspects of Chapters 1, 5, 6, 7, 9, 11, 12, 13 and 15 of Penman (2004) not already covered in the Essential Reading.

It is recommended that you also use the textbook's web resources: www.mhhe.com/penman2e. In particular, it is recommended you print the Course Notes for each of Chapters 1, 5, 6, 7, 9, 11, 12, 13 and 15 from the website and use these notes as summaries for each chapter. You can add your own notes to them as you read through each chapter.

A list of other references is provided at the end of this Course Outline.

Group Assignment

Students will need to commit a significant amount of time to completing the Group Assignment. **The Group Assignment should be commenced in Week 1 of the course and be worked on consistently through the four weeks of the course.** It is the key vehicle for students to practically apply the analytical framework presented in this course.

Format of Classes

Each class will be three hours. The first week will be spent focusing on relevant concepts underlying the analytical framework being used; the second and third weeks will be a mixture of extending the analytical framework with discussion of case studies and the Group Assignment. The fourth week will be a discussion of case studies and the presentation and discussion of the Group Assignment.

An interactive, discussion format will be used throughout the course.

The course involves 24 hours of class time over 4 weeks (i.e. 6 hours/week) and thus will require a concentrated focus by students.

Key aspects of the analytical framework outlined in Penman (2004) will be presented in class, with a focus on the concepts involved. Knowledge of the various accounting relations and formulae is best gained by carefully completing the Essential and Recommended Reading before class.

For students to fully participate in the class discussions and to gain the most from this course, it will be essential to complete the relevant reading thoroughly before class.

A significant focus of class time will be devoted to the discussion of case studies. This discussion by students will be facilitated by the lecturer. A thorough reading and consideration of the case studies before class is essential.

Classes will focus on assisting students to grapple with and understand the key concepts presented in the course, enabling students to develop their own views on an appropriate analytical framework which they can take with them as their personal tool in financial statement analysis, valuation and business strategy analysis.

A key objective of this course is to demonstrate the benefits of adopting a rigorous, comprehensive and efficient method of financial statement analysis that is accounting-based and clearly distinguishes between what is known and what is speculation.

Course Assessment

Group Assignment	30%	Class Presentation on Thursday 8 December.
End of Course Test	70%	Wednesday 14 December 6.00 - 8.00pm

Group Assignment (30%)

Each group will be allocated a significant New Zealand company and asked to evaluate its performance and future prospects based on its financial statements, annual report and on each group's industry and/or economic research. Each group will be asked to make a presentation to the class and to hand in a copy of its slides and accompanying narrative for assessment.

End of Course Test (70%)

Two hour open book test. The test will include a case study.

Course Terms of Reference

Obtaining Terms

To obtain terms to sit the End of Course Test in this course, students are required to attend classes, and fully participate in the Group Assignment.

Passing the Course

In order to pass this course, students are required to obtain at least forty percent of the End of Course Test marks available, and obtain at least fifty percent of the overall course marks available.

Victoria MBA Grading Standards

- Victoria MBA - **Excellent** Category
A (80 – 85%) to A+ (above 85%): The quality is performed to a very high level of proficiency, i.e. it is at a standard that makes it exceptional at Master's level.
- Victoria MBA - **Very Good** Category
B+ (70 – 74%) to A- (75 – 79%): The quality is performed at a high standard. Students have reached a level which clearly exceeds "competency".
- Victoria MBA - **Good** Category
B- (60 – 64%) to B (65 – 69%): The quality is clearly demonstrated without being exceptional in any way. Students can be thought of as competent in respect of this quality.
- Victoria MBA - **Satisfactory** Category
C (50 – 54%) to C+ (55 – 59%): The quality is demonstrated to a minimally acceptable level. There may be flaws but these are not serious enough to "fail" the student on this quality.
- Victoria MBA - **Unsatisfactory** Category
E (0 – 39%) to D (40 – 49%): The quality is absent or performed to a very low level, or the performance is seriously flawed in this respect.

Plagiarism

The Victoria MBA programme views plagiarism as a serious offence. Students who plagiarise put themselves at risk of expulsion from the programme.

Faculty of Commerce and Administration Offices

Railway West Wing (RWW) - FCA Student Administration Office

The Student Administration Office is located on the ground and first floors of the Railway West Wing. The ground floor counter is the first point of contact for general enquiries and FCA forms. Student Administration Advisers are available to discuss course status and give further advice about FCA qualifications.

Easterfield (EA) - FCA/Law Kelburn Office

The Kelburn Campus Office for the Faculties of Commerce & Administration and Law is situated in the Easterfield Building - it includes the ground floor reception desk (EA005) and offices 125a to 131 (Level 1). The office, will be open from 9:00 am to 12 noon during the Summer Trimester, and offers the following:

- Duty tutors for student contact and advice.
- Information concerning administrative and academic matters.
- FCA Student Administration forms (e.g. application for academic transcripts, requests for degree audit, COP requests).
- Examinations-related information during the examination period.

General University Policies and Statutes

Students should familiarise themselves with the University's policies and statutes, particularly those regarding assessment and course of study requirements, and formal academic grievance procedures.

Student Conduct and Staff Conduct

The Statute on Student Conduct together with the Policy on Staff Conduct ensure that members of the University community are able to work, learn, study and participate in the academic and social aspects of the University's life in an atmosphere of safety and respect. The Statute on Student Conduct contains information on what conduct is prohibited and what steps can be taken if there is a complaint. For queries about complaint procedures under the Statute on Student Conduct, contact the Facilitator and Disputes Advisor. This Statute is available in the Faculty Student Administration Office or on the website at: www.vuw.ac.nz/policy/StudentConduct.

The policy on Staff Conduct can be found on the VUW website at:

www.vuw.ac.nz/policy/StaffConduct.

Academic Grievances

If you have any academic problems with your course you should talk to the tutor or lecturer concerned or, if you are not satisfied with the result of that meeting, see the Head of School or the Associate Dean (Students) of your Faculty. Class representatives are available to assist you with this process. If, after trying the above channels, you are still unsatisfied, formal grievance procedures can be invoked. These are set out in the Academic Grievances Policy which is published on the VUW website: www.vuw.ac.nz/policy/AcademicGrievances.

Academic Integrity and Plagiarism

Academic integrity is about honesty – put simply it means **no cheating**. All members of the University community are responsible for upholding academic integrity, which means staff and students are expected to behave honestly, fairly and with respect for others at all times.

Plagiarism is a form of cheating which undermines academic integrity. Plagiarism is **prohibited** at Victoria.

The University defines plagiarism as follows:

Plagiarism is presenting someone else's work as if it were your own, whether you mean to or not.

Someone else's work means anything that is not your own idea, even if it is presented in your own style. It includes material from books, journals or any other printed source, the work of other students or staff, information from the Internet, software programmes and other electronic material, designs and ideas. It also includes the organization or structuring of any such material.

Plagiarism is not worth the risk.

Any enrolled student found guilty of plagiarism will be subject to disciplinary procedures under the Statute on Student Conduct (www.vuw.ac.nz/policy/studentconduct) and may be penalized severely.

Consequences of being found guilty of plagiarism can include:

- an oral or written warning
- suspension from class or university
- cancellation of your mark for an assessment or a fail grade for the course.

Find out more about plagiarism and how to avoid it, on the University's website at: www.vuw.ac.nz/home/studying/plagiarism.html.

Students with Disabilities

The University has a policy of reasonable accommodation of the needs of students with disabilities. The policy aims to give students with disabilities an equal opportunity with all other students to demonstrate their abilities. If you have a disability, impairment or chronic medical condition (temporary, permanent or recurring) that may impact on your ability to participate, learn and/or achieve in lectures and tutorials or in meeting the course requirements, then please contact the Course Coordinator as early in the course as possible. Alternatively you may wish to approach a Student Adviser from Disability Support Services to confidentially discuss your individual needs and the options and support that are available. Disability Support Services are located on Level 1, Robert Stout Building, or phoning 463-6070, email: disability@vuw.ac.nz. The name of your School's Disability Liaison Person can be obtained from the Administrative Assistant or the School Prospectus.

Student Support

Staff at Victoria want students' learning experiences at the University to be positive. If your academic progress is causing you concern, please contact the relevant Course Co-ordinator, or Associate Dean who will either help you directly or put you in contact with someone who can.

The Student Services Group is also available to provide a variety of support and services. Find out more at www.vuw.ac.nz/st_services/ or email student-services@vuw.ac.nz.

VUWSA employs two Education Coordinators who deal with academic problems and provide support, advice and advocacy services, as well as organising class representatives and faculty delegates. The Education Office is located on the ground floor, Student Union Building, phone 463 6983 or 463 6984, email education@vuwsa.org.nz.

Maori and Pacific Mentoring Programme (Manaaki Pihipihinga)

This is a free programme of mentoring for Maori and Pacific students doing first year courses within the Faculty of Commerce and Administration. Weekly one hour mentoring sessions: drafting and editing assignments/discussing any questions that you might have from tutorials or lectures and going over every aspect of essay writing, either in small group sessions or on a one-to-one basis.

This includes:

- A computer suite hooked up to cyber commons for students to use to produce their assignments.
- Regular skill-based workshops with a learning adviser from Student Learning Support Services.
- Networking with other Maori and Pacific support groups throughout the university.

For more information please contact:

Melissa Dunlop, Programme Coordinator

Ph: 463 6015 or Email: Maori-Pacific-Mentoring@vuw.ac.nz

Summary of the Course

Week 1: Introduction: Valuation Technologies, Forecasting Template and Fundamental Analysis

We will cover briefly various **valuation technologies** that can be adopted – some involving forecasting and some not. These valuation technologies convert our understanding of the business of a firm into a valuation. We will see that financial statements contain information of varying quality and that sometimes the accounting can be suspect. However, financial statements provide hard information that largely excludes speculation – and they are audited for most companies. So financial statements provide a good starting point when valuing firms, i.e. Value = Anchor + Extra Value (where the anchor is a particular measure from the financial statements such as the book value of shareholders' equity or earnings).

This course will provide a **forecasting template** that is based on the various concepts and accounting relations that will be the focus of this course.

This forecasting template will be provided in the first class and it is then analysed and unpicked as we proceed through the course. In the final week, students will present to the class their own analyses of a major New Zealand corporation in the Group Assignment based on a critical application of the analytical framework studied in this course.

In the analytical framework provided by Penman (2004), forecasting as the basis for valuation or business strategy analysis can be set out in 7 steps:

1. Forecast Sales
2. Forecast Asset Turnover and Calculate Net Operating Assets
3. Revise Sales Forecasts
4. Forecast Core Sales Profit Margins
5. Forecast Other Operating Income
6. Forecast Unusual Operating Income
7. Calculate Residual Operating Income (ReOI) and Abnormal Operating Income Growth (AOIG).

Each of these steps is described in greater detail in Penman (2004, pp. 527-30).

These steps can be built into a spreadsheet program and form the basis for a forecast template that you can take with you into your professional life (and for your personal investing).

You can also use this forecast template to better assess the quality of the financial statement analysis, valuations and business strategy analysis of others.

In the rest of Week 1, we will examine the **5 stages of fundamental analysis**. We will focus on the importance of **knowing the business**, as it is the “real” economic or business factors that drive the drivers of residual operating income (ReOI) and thus of value.

Reference will also be made to a **summary of formulas** that show the various accounting relations that can assist in financial statement analysis.

In the first class, a New Zealand corporation will be allocated to each group for the Group Assignment.

Week 2: Reformulating the Financial Statements and Residual Earnings/Abnormal Earnings Growth

In Week 2 we look at all the stocks and flows for a firm – operating and financing activities. We then look at **reformulating the financial statements** – reformulating the balance sheet and income statement into operating and financing activities. This helps prepare the financial statements for use in forecasting by applying the seven steps in the forecasting template.

The Statement of Financial Position, or balance sheet, lists a firm's assets and liabilities, usually classified into current and long-term categories. This format is most useful for credit analysis. However, for valuing equity, it is more useful to reformulate or restate the balance sheet into operating and financial assets and operating and financial liabilities. We are usually provided with enough information in a firm's financial statements to do this, although it is often difficult to know how much of cash balances are needed to support the operations of the firm and how much could be better classified as a financial asset. We note that in reformulating the balance sheet, this helps us to identify net operating assets (NOA) and net financial obligations (NFO) or net financial assets (NFA).

The Statement of Financial Performance, or income statement, summarises the increase or decrease in shareholder wealth during a period, as measured by accrual accounting. We can reformulate the income statement to include all income (including any "dirty surplus", being items included in the Statement of Movements in Equity) to determine a firm's comprehensive income and we can separate operating revenue (OR), operating expenses (OE) and operating income (OI) from net financial income (NFI) or net financial expenses (NFE). We note that it is necessary to allocate taxation expense to operating and financial activities when reformulating the income statement.

Given debt markets are largely efficient, it is the operating activities that add value not the financing activities. Restating the financial statements into operating and financing activities helps us to focus on the operating activities of a business in a comprehensive and efficient manner.

We will also look at the concepts of **residual earnings** and **abnormal earnings growth**. We will see these concepts as an extension of the idea that financial statements provide a good starting point when valuing firms, i.e. $\text{Value} = \text{Anchor} + \text{Extra Value}$ (where the anchor is a particular measure from the financial statements). We will examine the concept of residual earnings as being the residual or excess earnings after deducting the required return on the book value of shareholders' equity. We will also examine the concept of abnormal earnings growth and see that it equates to the change in residual earnings.

The concepts of residual earnings and abnormal earnings growth will be central to our understanding of the forecasting template and valuation technology examined in this course.

We will discuss case studies on **Dell** and **IBM**.

Week 3: Analysis of Profitability and Growth and Forecasting

This week we will investigate what drives profitability and growth. Restating the financial statements helps us to better analyse the current drivers of profitability and growth, which will then provide the basis for forecasting these drivers. We will see that a sound knowledge of the business is needed to forecast the drivers of profitability and growth. We will also see that it is important to clearly separate what is known in the financial statements from what is speculation about the future.

We will see that the primary drivers of profitability and growth are return on net operating assets (RNOA) and the growth in net operating assets (NOA) that can be put in place to earn that return. We will see that two drivers of RNOA are operating profit margins (PMs) – the profitability of each dollar of sales – and the asset turnovers (ATOs) – the sales revenue generated per dollar of net operating assets. This is the Du Pont model – profit margins are a profitability measure and asset turnovers are an efficiency measure.

At the conclusion of the first class in Week 3 we should have completed the outline of the analytical framework provided in Penman (2004).

We will discuss case studies on Borders Group and Procter & Gamble.

Week 4: Case Studies and Group Assignments

The fourth week of the course will involve discussion of a case study on **Quaker Oats** and presentation of the Group Assignments.

Lecture Schedule - MMBA 556 – Summer Trimester 2005

Week	Date	Topic	Basic Reading*
			Penman (2004)
1	Mon 14 Nov	Analytical Tools (1): Valuation Technologies Forecasting Template Fundamental Analysis Know the Business Group Assignment: - Ryman Healthcare - Fisher & Paykel Healthcare Discussion: Benefits of Different Valuation Technologies	Chap 1, 15 pp. 14-19; pp. 527-534
	Thurs 17 Nov	Analytical Tools (2): Fundamental Analysis Analysing Information: - Operating and Financing Activities - Reformulating Financial Statements	Chap 9 Chap 7, 13 pp. 222-235 pp. 276-298
2	Mon 21 Nov	Analytical Tools (3): Analysing Information: - Reformulating Financial Statements Case Study: Dell	M12.1 (p. 419)
	Thurs 24 Nov	Analytical Tools (4): - Residual Earnings and Abnormal Earnings Growth Case Study: IBM	Chap 5, 6, 13 M12.2 (p. 424)
3	Mon 28 Nov	Analytical Tools (5) - Analysis of Profitability & Growth Case Study: VF Corporation	Chap: 11, 12 pp. 350-369 pp. 382-403 M11.2 (p.337)
	Thurs 1 Dec	Forecasting Case Studies: Borders Group Procter & Gamble	M15.3 (p.548) M15.4 (p.550)
4	Mon 5 Dec	Case Study: Quaker Oats	M15.5 (p.552)
	Thurs 8 Dec	Group Assignment presentation (Ryman Healthcare) Group Assignment presentation (F&P Healthcare) Exam Revision	
	Wed 14 Dec	End of Course Test (6-8pm)	

* Essential Reading is in bold type. This should be thoroughly read and understood **BEFORE** classes start on Monday 14 November.

GROUP ASSIGNMENT 1

RYMAN HEALTHCARE

Evaluate the performance and future prospects of Ryman Healthcare Limited, based on its financial statements, annual reports and investment statement (which are attached) and on your group's industry and/or economic research.

You are to critically apply the analytical framework studied in this course.

Ryman Healthcare was trading at \$4.80 on 28 September 2005.

Your group currently holds 50,000 shares in Ryman Healthcare, which represents a significant proportion of your group's total net worth. What should you do with these shares? Should you **SELL** these shares; **BUY** more shares in Ryman Healthcare and add to your holding; or should you simply **HOLD** the shares you currently have?

Each group is to give a presentation to the class and to hand in a copy of its slides and accompanying narrative for assessment.

Presentations should be no longer than about 1–1½ hours. This should include some time set aside to interact with, and answer questions, from the audience.

There is to be **NO** discussion outside of class on the Group Assignment with members of other groups. Confidentiality **MUST** be strictly maintained within each group. However, discussion in class on the Group Assignments should be robust and open.

Various judgements and speculation about the future will be needed. Thus there is not necessarily any one correct answer – simply answers that may be more convincing (i.e. better researched and analysed) than others.

This Group Assignment will comprise 30% of the total assessment for MMBA 556 Financial Statement Analysis.

GROUP ASSIGNMENT 2

FISHER & PAYKEL HEALTHCARE

Evaluate the performance and future prospects of Fisher & Paykel Healthcare Limited. Refer to the company's website www.fphcare.com/investor. This site contains information on Fisher & Paykel Healthcare, including the company's Annual Reports 2002-2005, Information Memorandum dated 13 September 2001 and an Investors Fact Sheet. Besides an analysis of this information, your group can also draw on its own industry and/or economic research.

You are to critically apply the analytical framework studied in this course.

Fisher & Paykel Healthcare was trading at \$3.76 on 28 September 2005.

Your group currently holds 60,000 shares in Fisher & Paykel Healthcare, which represents a significant proportion of your group's total net worth. What should you do with these shares? Should you SELL these shares; BUY more shares in Fisher & Paykel Healthcare and add to your holding; or should you simply HOLD the shares you currently have?

Each group is to give a presentation to the class and to hand in a copy of its slides and accompanying narrative for assessment.

Presentations should be no longer than about 1–1½ hours. This should include some time set aside to interact with, and answer questions, from the audience.

There is to be **NO** discussion outside of class on the Group Assignment with members of other groups. Confidentiality **MUST** be strictly maintained within each group. However, discussion in class on the Group Assignments should be robust and open.

Various judgements and speculation about the future will be needed. Thus there is not necessarily any one correct answer – simply answers that may be more convincing (i.e. better researched and analysed) than others.

This Group Assignment will comprise 30% of the total assessment for MMBA 556 Financial Statement Analysis.

REFERENCES

- **Introductory on Financial Statement Analysis:**
 - ✓ Copeland, Koller, Murrin, “Valuation: Measuring and Managing the Value of Companies”, Wiley, 2000, 3rd Edition.
- **Other Books on Financial Statement Analysis:**
 - ✓ Stickney, Brown and Walhen, “Financial Reporting and Statement Analysis: A Strategic Perspective”, Dryden Press, 5th Edition, 2003.
 - ✓ White, Sondhi & Fried, “The Analysis and Use of Financial Statements”, Wiley, 3rd Edition, 2002.
 - ✓ Palepu, Bernard & Healy, “Business Analysis and Valuation: Using Financial Statements: Text and Cases”, I T P (International Thompson Publications), 3rd Edition, 2003.
- **Corporate Finance:**
 - ✓ Brealey, “Principles of Corporate Finance”, McGraw-Hill, 6th Edition, 1999