COURSE GUIDE

Academic Year: 2021 -2022

Corporate Finance
with Data Visualisation

Financial Analyst and Advisor for Businesses

Name of course:	**Corporate Finance**
Code:	MIBU-7CORPFIN-21
Course of study:	IIBS – Finance Track
Year of study:	4rd year, Semester 7
Number of blocks:	Course offered in blocks A & C, resits in B & D
ECTS credits:	5
Coordinator /Lectures:	Drs.Samuel Ackah: samuel.ackah@hu.nl
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Corporate Partners:	ABN AMRO Bank, Rabobank, KPMG

Contents:

Bringing value to Businesses through Finance

1. Module Description

The aim of this subject is to master the most important principles of corporate finance, as well as developing a practical insight into sound financial management tools.

It gives an overview of financial analysis and the financial environment, cost of capital, capital structure decisions, sources of long and short term cash management, stock and bond valuation models and company valuation techniques. It will address the changes in landscape of financial industry covering investment appraisals and valuation of business techniques. Apply theories to practical corporate assignment performing various analysis by delivering comprehensive corporate finance report.

2. Programme Learning Outcomes (PLO's) Competencies

This course contributes to the development of the following competences

WT1 (3)	**Use the process of thoughtful evaluation to deliberately formulate a reasonable conclusion.** • Provide financial and finance advice to business management which matches business strategies • Ability to understand finance process/value chain • You will have the ability to describe and understand the consequences of the various risks inherent to international business. • You have the ability to apply finance theories to practical real-life companies
LW9 (3)	**Respond appropriately to an unfamiliar, or unexpectedly changing, business environment.** • You are aware of recent international developments in specific regions • You will have to ability to handle financial decisions in existing businesses • Response to and provide finance advice to management regarding changing business environment
TWM18 (3)	**Evaluate financial performance of the organisation from different stakeholders' perspectives.** • Investment appraisals: Have the ability to analysis various projects investment appraisals • Performance Analysis: You will be able to perform financial analysis • Financial scenarios: Various financial scenarios calculation, valuing of money • Financial Planning: Able to build financial planning and forecasting • Mergers and Acquisitions: Perform business valuation techniques – real life companies • Data Visualization: Visualise financial data base on financial performance
TWM19 (3)	**Recommend financing possibilities in a dynamic international environment.** • Debt Financing: Provide debt financing advices to management • Raising Equity: Able to advise and assist on raising equity for small or large firm • Capital Structure: You will have the ability to give analysis firm's capital structure with optimisation

3. Module Learning Objectives

At the end of this course you should be able to

- Calculate and evaluate various projects investment appraisals techniques
- Compute and utilize liquidity, solvency, profitability, and market based financial ratios
- Calculate arithmetic return, expected return ,net present value, future value, annuities,
- Describe the consequences of the market, inflation and interest rate
- Describe what are government and corporate bonds and perform bonds valuation
- Calculate and perform stock valuation using the Dividend Growth method
- Define what is meant by a cash and stock dividend
- Calculate and assess the mixture of long term debt and equity financing
- Calculate and utilize the "Capital Asset Pricing Model" in company and project appraisals
- Calculate and apply company valuation techniques such as book value, stock market pricing, dividend growth method, Discounted Cash Flow method, valuation multiples
- Understand and calculate pricing for mergers and acquisitions
- Apply and evaluate sources of long term and short term financing
- Discuss current events of international financial importance
- Able to visualize finance data with a dashboard

4. Study Burden

Total Workload: **5 ec's 140 Hours**

Break down:

• Class Contact Hours (1,5 hrs x 2, 3hrs per week)	21 hours
• Readings (3 hours per chapter (10 chapters)	30 hours
• Problem Solving/homework (2 hours per week)	14 hours
• Group(per 2 students) Assignments	40 hours
• Reading the Newspaper weekly daily	5 hours
• Excel practice – Self Study	10 hours
• Exam Preparation:(1 exam)	20 hours

5. Pre-requisites

A basic knowledge of financial accounting, cost accounting is advised. In addition, keeping informed on current financial events, by reading financial publications, such as the Wall Street Journal, Financial Times, Reuters, Yahoo finance, The Financial Dagblad, or the Economist,, and listening to financial reports on Bloomberg TV CNN, BBC Business Briefings or CNBC will definitely help in making the concepts of the course become more understandable by tying them into real world events.

6. Exemption Possibilities

There are no exemption possibilities without permission of the Exam Board and approval of lecturer.

7. Didactic Forms

This course will utilize:
- Lectures, class participation, class presentations, videos, cases, and calculation tutorials;
- Business and financial news including other articles and practical cases will be use or incorporated during lectures and tutorials
- Corporate case studies could be applied;
- Canvas offers students with course detailed information including extra course materials;
- **MyFinanceLab** (Digital learning Environment) offered by the publisher (Pearson) is part of this course which improves student learning abilities by mastering concepts and exercises. Instructions to register **MyFinanceLab** is on SharePoint. In additional lectures will assist students enroll in Digital Learning Environment. www.pearsonmylabandmastering.com.

Note: In your book is a registration code to allow you access to the student training site.

The Student Experience MyFinanceLab

- Agree or strongly agree that their understanding of the course material increased as a result of using MyFinanceLab.
- Agree or strongly agree that the use of MyFinanceLab positively affected their exam scores.
- Agree or strongly agree that MyFinanceLab provided additional resources that helped them learn more than they would have from more traditional pencil-and-paper homework.

8. Assessment

TESTS AND ASSESSMENTS
- There will be one written exam at the end of the block A or C.
- **Group Assignment is 70%,** of the grade, **3** or **4 students per group**
- **Mergers & Acquisition stimulation** is 30% of the grade.

The final grade in Osiris will represent a weighted average of both assessments.

Type of Assessment	Weight	Min. Mark
Group Assignment Report Assignment Report 3 or 4 Student per Group Use of Real- life firms	70%	5.5
Mergers & Acquisition Stimulation Presentations Use of Real- life firms	30%	5.5
Final Grade in Osiris (one position)	100%	5.5

9. Course Material and Literature

BOOK (Required)					
Title:	Fundamentals of Corporate Finance with MyFinanceLab, Global Edition, 4/E				
Author(s):	Jonathan Berk, Peter DeMarzo and Jarrad Harfod				
ISBN:	**9781292215198**	Edition:	4th	Publisher:	Pearson

Topics covered in lectures, guest lecture presentations, and any outside activities may be used in assessments

10. Evaluation

Evaluation by students of this course will be done at the end of the block via

1.1 Introduction
Finance is life. Every chapter we study in class has a real world counterpart. Once you see and understand that, the excitement and necessity of Finance will follow. We shall try this block to make Finance become more meaningful and applicable to you. We will use several different methods to do this.

First: The Book
We'll use the book to learn the tools necessary to analyse and explore financial propositions

Second: Cases – Note is subject to change
Case studies are important because they give the tools learned a context. They tie in all the concepts and show how they are relevant in actual business practice. By now you have all been exposed to with case method learning. We will use various cases to utilize the concepts studied in this book.

Third: Current Business News
We want you to apply the material to current events. You will be asked throughout this course to talk about news items that directly relate to what we will be studying that week

Finally: Decision Making
During this course we don't want you to lose sight of the fact that this is a management course as well. We want to stress that no matter what is your career goal; a financial manager, or a marketing manager, or a logistics manage, you are primarily a decision maker. Therefore, what you write or say or do should be analytical, pragmatic, and explicit; with possible pitfalls described, what if's examined and limitations discussed.

Prepare for Classes: Pre-lecture/Tutorials
What should I study before attending corporate finance classes?

Pre-lecture/Tutorials
- Listen to or read any current business news (this will be discuss in class)
- Students are required to read the assigned chapters of their text book
- Practice End Chapter Problem questions focus on self-study questions
- Use **MyFinanceLab** learning aid to enhance their learning

Post-lecture/Tutorials
Continue with
- Strongly recommends that students practice continue the End of Chapter questions
- Revision their notes and prepare for next Pre-lecture/Tutorial sections

Note: Below examples:

- Week 1: The following chapters 1, 2, 3 and 4 are assigned revision chapters to week 1. It is required that students revise (read) those chapters and practices questions before attending lessons.

- Week 2: Students are required to read chapter 5 and 6, prepare Self-Study questions using **MyFinanceLab.**

This course will utilize lectures, class participation, class presentations, video cases, and calculation tutorials..
Note: In your book is a registration code to allow you more access to the **MyFinanceLab** (Digital learning Environment) student training site.

11. Weekly Chapters Overview

Weekly	What will you Learn?	Chapters	Chapter content
Week 1	Corporate Finance Introduction	1	Course Introduction, Corporate Finance and the Financial Manager
		2	Introductions to Financial Statement Analysis: Self-Study *Data Visualisation: A Guide to Effective Data Presentation*
Week 2	Understanding of Time Value of Money	3	Time Value of Money: Introduction, *Data Visualisation*
		4	Time Value of Money: Valuing Cash Flow Streams *Data Visualisation*
Week 3	Valuation of Bonds Stock Valuation	6	Valuation of Bonds
		7	Stock Valuation
Week 4	Raising Equity & Debt Financing Investment Appraisal	14 & 15	Raising Equity Capital & Debt Financing
		8	Investment Decisions Rules
Week 5	Business Valuation Techniques (M&A's)	12	*"M&A" Mergers and Acquisitions*
		10	*Business Valuation Techniques*
Week 6	Cost of Capital & Capital Structure	13 & 16	Cost of Capital & Capital Structure
		Revision	Revision and Q&A's Assignments
Week 7	Company Visit & Revision		Revision and Q&A's Assignments
			"M&A" Mergers and Acquisitions Stimulations 24 hours

WEEKLY ACTIVITIES

Note: Students are required to read weekly chapters and practices most exercises before attend lectures and tutorials

Week 1   **Introduction to Corporate Finance & Working with Financial Statements**

Class Preparation: **Chapter 1**: Corporate Finance and the Financial Manager.
Chapter 2: Financial Statement analysis (**Self-Study & Revision**)

Class Activity: The goal of this first week is to understand what is a company and how does it work,
Including key functions of Finance Manager.
We will end by reviewing financial statements and learn how to interpret their information.
Chapter 2 introduces key financial statements; Coverage of financial ratios has been centralized to prepare
students to analyse financial statements holistically

Importance: Examine and understanding of corporate finance, financial manager main activities and decision making
process, financial statements analysis for management performance review.

	Chapters	Self-study	Tutorials
Problems:	Chapter 1:	8, 9, 13, 14,	16, 17, 19, 21, 22, 23, 24
	Chapter 2	Self - Study	Self - Study
	Data Visualisation: A Guide to Effective Data Presentation		

Week 2   **Time Value of Money (TVM) Introduction and Valuing Cash Flow Streams**

Chapter 3 introduces the Valuation Principle and time value of money techniques for single-period investments.
Chapter 4 presents the mechanics of discounting; New examples with non-annual interest rates provide
time value of money applications in a personal loan context

Class Preparation: **Chapter 3**: Time Value of Money: Introduction
Chapter 4: Time Value of Money: Valuing Cash Flow Streams

Importance: Understanding the basics helps us to begin to understand what a company does with its money. Even the
basics are important in helping us decide whether or not to invest in a certain firm

	Chapters	Self-study	Tutorials
Problems:	Chapter 3:	2,4,9,10,13, 13,19,22	15, 18, 20, 25, 29
	Chapter 4	Critical questions 1-6, Problems: 1, 2, 9	11, 12, 15, 18, 21
	Data Visualisation		

Week 3   **Bonds and Stock Valuation**

Class Preparation: **Chapter 6:** Bonds Valuations
Chapter 7: Stock Valuations

Class Activity: We will discuss loan interest rate calculations, and will begin our discussion of bonds and other long term
borrowing techniques. What are stock, stock valuation techniques, how stocks are issued and refunding
operations? We will learn how to read the New York Stock Exchange Quotations.

Importance: How do we calculate interest? What rates do we use? Why is a Euro today better than a Euro in one year's
time? If interest rates are rising it important to see that firms are managing their borrowing costs. Are they? Can
we predict the future? How can we borrow? Introduces stocks and presents the dividend discount model as an
application of the time value of money

Discussion of the various financial markets: money market, capital markets, primary and secondary markets, and interest rate risk, the yield curve, expectation theory and bond valuation techniques. We will look at bond yields on the Bloomberg and see how bonds are quoted in the Financial Times. We will talk about international bonds

Practice Problems: Chapter 5 and 6

	Chapters	Self-study	Tutorials
Problems:	Chapter 6:	Critical questions:1 - 4, 6 Problem question 1, 2, 4a	10, 15, 16 plus hand in exercises
	Chapter 7:	1, 3, 5, 6, 7, 8	11, 12, 13, 17, 22, 26

Week 4:   **Raising Equity Capital and Debt Financing, Investment Decisions Rules**

Class Preparation: **Chapter 8:** Investment Decisions Rules
     Chapter 14: Raising Equity Capital
     Chapter 15: Debt Financing including warrants and convertibles

Class Activity: Using investment techniques for decisions. Which new invest project is good or bad? Should your firm investment in project? Should the investment be accepted or reject and why? Should a company borrow? How much? 100%? 50%? How much is too much Does borrowing increase risk? Is there an optimal level? How to raise Equity Capital, we will discuss this both theoretically as well as practically.

Importance: Using investment techniques such as NPV & XNPV, IRR & MIRR, Measuring Sensitivity with IRR,
     Payback Rule, Profitability Index, and etc. for evaluating project and making decisions.

Raising Equity capital and Debt financing topics helps us understand that too much borrowing can cause financial distress. However, not borrowing is also very rarely the optimal policy. We will discuss why that is true.

	Chapters	Self-study	Tutorials
Problems:	Chapter 8:	1 - 7	11, 12, 14,15, 16,17, 20, 22, 24, 26, 28,35
	Chapter 14:	1, 2, 7, 8	10, 11, 12, 13, 22
	Chapter 15:	1 - 3	1 – 3 , 12, 13

Week 5:   **Mergers and Acquisitions – Business Valuation Techniques**

Class Preparation: **Chapter 22:** Mergers and Acquisitions
     Chapter 10: M&A - Business Evaluation Techniques

Class Activity: Discussion of forms of mergers, the valuation of a merger, the impact on the Balance Sheet and Income Statement, the effects on shareholders, and the impact of divestiture. Mergers & Acquisitions, Case Studies, Valuation Principles and Techniques

Importance: Chapters 22 & 10 are important and its content is always in the news. A merger or acquisition is an investment made under uncertainty, and the basic principles of valuation apply. We need to know if the merger is a strategic fit.

	Self-study	Tutorials
Chapter 22:	1, 6 – 7 , 9	1, 5, 8 ,9
Chapter 10:	1 – 4, 15, 17 -20, 22	5, 6, 7, 9, 16
Tutorials	Using valuation techniques selected by the lecturer such as: • Calculate and utilize the "Capital Asset Pricing Model" in company and project appraisals • Calculate and apply company valuation techniques such as book value, stock market pricing, dividend growth method, Discounted Cash Flow method, valuation multiples Select Relevant Tutorial Questions, Tutor Assist students on their report	

Week 6:   **Capital Structure, Cost of Capital and Financial Modeling**

Class Preparation: **Chapter 13:** Cost of Capital
                                 Chapter 16: Capital Structure

Class Activity: Calculates and uses the firm's overall costs of capital with the WACC method
Analyzes the tax benefits of leverage, including the debt tax shield; Discusses distress costs and the Trade-off Theory**.**

Importance: As manager, your able to handle WACC and understand the appropriation of debt to equity weights for Capital Structure.

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	Chapters	**Self-study**	**Tutorials**
Problems:	Chapter 13	1, 2, 3, 5, 7	8, 9, 10, 11, 13, 16, 19, 23
	Chapter 16	1, 2, 3, 6, 7,	9, 10, 16, 17, 20

Week 7:   **Revision, & "M&A" Mergers and Acquisitions Stimulations 24 hour?**

12. Company Investment Plan Report

Group Assignment 70% – Case Study, 3 or 4 students per group

Your analytical skills is required, if you do not have one, develop it.

You are financial analyst for a well-known investment corporation. You have been working now with the organization for 24 months. Your Manager has put you on the management trainee fast track on investment. Your manager therefore would like you to recommend to her/him your most promising company to invest in or use your investment report to advice investors. Your manager asks you to do a thorough comprehensive analysis.

For your calculations use excel, graphs/chart, you can copy your some calculations in your word document report. You are required to develop and use your analytical skills, quantitatively calculate financial data and provide full analysis of the results. Provide the underlying explanations of your results. Qualitative explanations without elaborations is often meaningless. Specify where you get your information, include list of sources and use APA standards for referencing.

Your investment Report should consist the following:

1. **Company Profile - Background:**
   Select a stock listed company and provide the following information:

   - Brief Historical background – professional company profile
   - Company structure – business units or subsidiaries
   - What are core business/ products or services and segmentation
   - Global presence - geographical reach or footprint and number of employees,
   - Recent financial highlights
   - Does the company has future plans (short/medium/long term
   - Provide 5 years share price overview and elaborate on most important fluctuations

2. **Macro Environment Analysis**
   A macro environment is the condition that exists in the economy as a whole, rather than in a particular sector or region. In general, the macro environment includes trends in below listed economic factors.
   Given the market your company operate in describe;

   - What are the important macro-economic development?
   - Research and analysis the relevant macro-economic factors impact on your firm and its stock such as; business cycle, GDP development (growth, recessions), interest rate, currency fluctuations, inflation, employment and future outlook.

3. **Sector Analysis**
   Provide section analysis as part of your investment report.

   - Analysis the sector which the company operates in
   - Provide detailed information of main players and the competitors landscape.
   - By comparison, benchmark your company to the main players using relevant ratios and figures

4. **Company Financial Analysis**
   Provide 5 years Financial Analysis/Fundamental Analysis. For your calculations use excel, graphs, and charts including trends analysis. Be analytical and creative!

   - Compute 5 years financial statement ratios, 2 - 3 each of below ratios:
     - Profitability Ratios, Liquidity Ratios,

- Interest Coverage Ratios,
- Leverage Ratios, Operation Returns Ratios
- Analysis the cash flows
  - o Analysis with full explanations of fluctuations (ups, down changes,) within ratios.
  - o Provide the underlying reasons why the changes occurs.
  - o Make sure your discussion includes an industry comparison ratios.

5. Capital Structure /Risk Analysis
  - o Structure of the debt/equity, borrowing instruments
  - o Detailed risk analysis – Changes in Credit ratings?
    - How risky is your firm?
    - Who are its rating agencies?
    - Has the rating changes in the last 3 or 2 years, if yes, why?

6. Dividend Discounted Model - DDM and Security Pricing
The Gordon growth model is also known as Dividend discount model that is used to evaluate the intrinsic value of a stock exclusive by discounting the future dividend payments by the Company.
Security's Pricing: Also, the dividend growth rate can be used in a security's pricing.
It is an essential variable in the Dividend Discount Model (DDM).

Use Dividend Discount Model to;
  - o Determine the theoretical stock price of your firm
    - Determining dividend growth rate
    - Show how you arrived at your inputs in your model including finding risk free rate.
  - o Show how Earnings Per Share (EPS) has evolved over last 5 years

If the model didn't work out, use logical assumptions to adjust figures. You can use other ways to value your shares looking at P/E multiples or other valuation methods.

7. Conclusion and Investment Advice
  - o Provide analytical brief professional summary base your above analysis
  - o Give investment advice to potential investors whether they should buy, hold or sell your company stock.

Investment Plan Report Submissions:

1. Submission of company name via excel in tutorial class.
- All students must choose a different company.

2. Assignment Deadline:
- Date and time will be given to students during lectures/tutorials sections)

3. No of Report Pages –document size
- 25 pages of word document excluding appendixes
- Excel sheet contains above calculations

4. Visualisation/Dashboard/Infographics
- Create visualise your report using relevant company data.
- Creatives and professional valuations report are rewarded.

5. Submission of Report: Very important.
- **Forma**t: Word format, include any excel sheet used for your calculations.

  1. **Via Email,** Send to your reports in digital word document including the excel sheet used for the calculation to our HU email to Samuel Ackah   samuel.ackah@hu.nl; or your corporate finance lecturer.

  2. **Via Microsoft Teams:** Assignments

  3. **Additional important Note:**
     - Late submission papers will not be graded
     - Lectures will not grade your report without your excel sheet attached.

13. Mergers and Acquisition Stimulation of Businesses

Group Assignment - Presentation 30%

Background information

The stimulation valuation business game aims to give Finance Specialisation Mergers and Acquisitions (M&A's) knowledge and skills. Valuation techniques are required which then are applied throughout the valuation of the firms. The business stimulation game set Buyers and Sellers against each other. Each Buyer group (Acquirers) have evaluate Seller's firm and Sellers (Targets) are required to evaluation their own firms to enable them to know what exact price and value of their firms.

In 24 hours, students are challenged to identify their groups Buyers (Acquirers)/Sellers (Target) including their respective firms. Both Buyers and Target groups are required to use valuation techniques to compute numbers of each Target firm, initiate buying negotiations, reached final tag price and present the final valuation information both finance (values) and non-financial information to their tutors. Tutors will act as juries on a panel.

Students will use Real life companies for the M&A Valuation

Using Valuation techniques preparing M&A appraisal.
  • **Asset Value (20%):** Book Value, Price/Book
  • **Market Ratios (30%):** Price/Earnings, EV/EBITDA & Various valuation multiples
  • **Discounted Cash Flow (30%):** Using WACC /Terminal value
  • **Non-Financial information (crucial) (20%):** Choice of value drivers, Management issues – what will happen to them (staying or leaving) etc.