Master of Science Financial Management

Developed and awarded by University of Birmingham, UK

MODULE OUTLINES

CORPORATE FINANCIAL MANAGEMENT (20 credits)

This module aims to give students critical knowledge and understanding of finance theories and the key issues in corporate financial management.

By end of the module, students should be able to:

- Understand and apply the concept of time value of money;
- Appraise project investment proposals and critically evaluate the effects of investment decisions of firms on their market values under certainty and uncertainty;
- Understand and apply techniques of valuation of stocks, bonds and options;
- Assess the potential impacts of financing and dividend decisions of firms on their costs of capital and market values;
- Critically apply a range of asset and option pricing models and know their strengths and limitations;
- Assess efficiency of financial markets; and demonstrate critical knowledge and understanding of the key issues in the mergers and acquisitions, behavioural finance and digital finance.

FINANCIAL MODELLING TECHNIQUES (20 credits)

Students shall be taught a range of techniques for summarising data, analysing data, estimating models and testing hypotheses. This module has three sections:

The first section covers the techniques for calculating measures of central tendency and dispersion of a dataset, such as mode, median, mean, range, standard deviation, skewness and kurtosis. Statistical inference from the classical linear regression model will cover concepts of hypothesis testing and construction of confidence intervals for regression coefficients.

Further developments of the classical linear regression model will be explored in the second section including the breakdown of classical regression model's assumptions, e.g. multicollinearity, heteroscedasticity and autocorrelation and remedies for these problems.

In the final section, students will learn parametric techniques for analysing data, constructing financial models and testing the goodness of fit of models. Topics include multiple regression analysis, moving average processes, autoregressive processes, ARCH and GARCH processes and an introduction to forecasting. This module will then conclude with consideration of other topics, such as quantitative research methods, including panel data estimation technique, logit and probit models, simultaneous equations models, as well as the strengths and limitations of each technique.

By end of the module, students should be able to:

- Determine the appropriate technique(s) to use to summarise a set of data, apply the technique(s) and interpret results obtained correctly;
- Determine the appropriate probability model(s) to use to estimate the likelihood of occurrence of some events that a finance manager is interested in, apply the model(s) and interpret results obtained correctly;
- Determine the appropriate parametric technique(s) to use to test a hypothesis, construct suitable financial models, apply the technique(s) and interpret results obtained correctly;
- Determine the appropriate non-parametric technique(s) to use to test a hypothesis, apply the technique(s) and interpret results obtained correctly;
- Demonstrate critical awareness of the strengths and limitations of any technique that they use.

FINANCIAL STATEMENT ANALYSIS AND BUSINESS VALUATION (20 credits)

This module introduces fundamental analysis that is an economic framework for business analysis and business valuation based on accounting information, focusing mainly on:

i. Understanding the concepts and usage of financial information;
ii. Critical analysis of financial information with referring to the strategic position of an Enterprise, profitability drivers and the capital structure;
iii. Forecasts for financial performance and position;
iv. Application of valuation techniques for assets and securities.

By end of the module, students should be able to:

- Explain the accounting framework, the conceptual basis of financial reporting and financial statements;
- Explain how assets, liability and earnings numbers may be affected by accounting policy choice, earnings management, creative accounting and international differences in accounting practices
- Perform strategy analysis to identify the firm's profit drivers and key risks, and sources of finance by calculating suitable financial ratios using published accounting data from annual reports and financial databases;
- Apply forecasting techniques to business and understand the foundation of relative valuation methods such as accruals-based and cash flow-based models, P/E and book to market ratios, etc;
- Evaluate the capital structure and liquidity risk of a company.

ETHICS, GOVERNANCE AND REGULATION IN TREASURY (20 credits)

This module covers the role of treasury policy, framework and procedures, performance measures, reporting, operations and documentation in treasury management including:

i. Key accounting regulations which impact on treasury operations;
ii. Key drivers of the legislation and regulation of corporate governance and treasury operations, and the wider organisation;

iii. Operational risk and control, ethics and codes of practice from professional bodies such as the ACT (Association of Corporate Treasurers);
iv. Integration of IT systems into the treasury function.

By end of the module, students should be able to:

- Critically explain ethics and corporate governance theories and their application;
- Critically explain the principles, importance and detailed application of treasury policy, procedures and reporting in order to support their development and implementation in practice;
- Apply corporate governance and regulatory controls and policies to manage treasury and show how they enable treasury to be carried out in an efficient and ethical manner;
- Review and critically assess the fundamental principles of financial reporting and taxation relating to treasury in order to support the preparation and analysis of financial reports, tax analysis and financial and business analysis;
- Critically assess and recommend appropriate IT solutions for different treasury requirements and describe the project management steps required for their successful implementation and security controls.

INTERNATIONAL TREASURY MANAGEMENT (20 credits)

This module equips students with the knowledge and skills for managing cash, liquidity and treasury departments in local and multinational organisations and to also gain critical knowledge of the structure and operations of financial markets and institutions globally.

By end of the module, students should be able to:

- Critically determine how a treasury department should be organised locally and/or internationally in order to achieve its key performance indicators efficiently, the environment in which treasury professionals work and the processes and controls needed to enable a treasury department run effectively;
- Critically determine alternative funding solutions that a firm can use locally and/or internationally, including financial technologies, crowd funding and cryptocurrency markets, and know the strengths and limitations of each solution;
- Evaluate various strategies that can be used to manage relationships with banks, other creditors and shareholders globally;
- Assess equity and debt issuance and documentation procedures and records;
- Critically review the types of treasury technology that are available locally and internationally and how technology can be used effectively when carrying out treasury activities;
- Select the most appropriate management solutions, including payments systems, in order to safeguard the organisation's cash and optimise its net interest expense or income, while maintaining the organisation's operational flexibility and its reputation locally and internationally.

RISK ANALYSIS AND MANAGEMENT (20 credits)

This module explores the nature of business risks and covers the fundamentals of corporate governance, external reporting and risk management framework; Interest rate risk; risk identification and risk measurement and management; liquidity risk and credit, commodity and pension risk as well as hedge funds and structured products.

By end of the module, students should be able to:

- Explain the fundamental importance to an organisation of identifying and measuring the risks that it faces and the benefits of establishing a robust process for managing the risks;
- Assess the role and responsibilities of the treasury in managing the key risks which an organisation faces in order to protect against potential losses;
- Critically apply a wide range of techniques to measure, report and manage treasury risks to protect an organisation against losses and support the organisation, and its stakeholders, with relevant risk related information;
- Critically assess the strengths and weaknesses of a wide range of techniques that are used for managing business risks.

DISSERTATION (60 credits)

The Dissertation is students' opportunity to specialise in researching a particular area of Financial Management. The topic will be of students' choice and students are recommended to link their topic to possible opportunities that may relate to the next steps of their future career.

First Stage

This stage focuses on research design and research methods in Finance, guiding students to pursue academic readings, conduct literature reviews, develop research ideas, highlight related ethical issues and understand broad suits of methodologies available for data analysis. There shall be practical guidance on data collection via available data sources and data analysis using Stata statistical software.

Students are required to submit and present a thorough Research Proposal (1,000 words) for University's evaluation and approval prior to the Second Stage.

Second Stage

Students shall work with their assigned dissertation supervisor through scheduled meetings to develop their approved Research Proposal into a 16,000 to 20,000 words dissertation for final submission and assessment. During these meetings, students will receive feedback on how to improve their work and as well as to orally present their work.

By end of the module, students should be able to:

- Assess and critically review the literature relevant to an area of academic research;
- Evaluate and demonstrate familiarity with previous and current theoretical and applied research across a range of core finance-related subjects such as corporate finance,

investment, asset pricing, banking and financial markets;

- Design a convincing motivation for a programme of research on their topic of interest, leading to the development of a research idea with clear testable hypothesis;
- Apply competence and skills in using a range of financial databases, as well as for collecting primary data, when necessary;
- Critically apply knowledge of broad suits of methodologies available for data analysis;
- Effectively communicate research finding through their dissertation.