



HAMBURG SCHOOL OF BUSINESS ADMINISTRATION

**Shipping and Ship Finance  
Module Descriptions  
3<sup>rd</sup> Year of study**

Academic Year 2011/2012



HAMBURG SCHOOL OF BUSINESS ADMINISTRATION

## Module Descriptions 3<sup>rd</sup> Year of Study

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### **Core Modules**

Finance II  
Corporate Management II – Financial Controlling

### **Support Modules**

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### **Communication and Social Skills Modules**

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### **Transferable Modules**

Case Study Lifecycle of a Ship

### **Specialisation Modules**

Shipping III  
Ship Management III  
Ship Finance II  
Ship Finance III

# Finance II

## Module description

### General

Code:	FI2EN
Year of study:	2011/2012
Form of course:	Obligatory
Frequency of course offer:	Every third year of study
Prerequisites:	Successful attendance in Finance I
Name of lecturer:	Prof. Dr. Jens-Eric von Düsterlho et.al.
Language of teaching:	English
ECTS credits:	6
Workload and its composition:	62 hours contact, 118 hours independent study
Contact hours:	60 hours in academic year
Methods of examination:	Presentation (45 min. /60 points) and Oral examination (30 min. /40 points)
Emphasis of the grade for the final grade:	3,3%

### Aim of course

The participants should get a thorough understanding about how companies raise money to finance their investments. Further, the role of the financial manager in a business organization and the effects of financing decisions on the market value of a firm have to be realized.

### Contents of the module (Based on

1. Introduction
  - 1.1. Goals and Governance of the Firm (Brealey Chapter 1)
  - 1.2. Financial Markets and Institutions (Brealey Chapter 2)
2. Value
  - 2.1. Valuing Bonds (Brealey Chapter 6)
  - 2.2. Valuing Stocks (Brealey Chapter 7)
3. Financing
  - 3.1. Introduction to Corporate Financing (Brealey Chapter 14)
  - 3.2. Venture Capital, IPO's and Seasoned Offerings (Brealey Chapter 15)
4. Debt and Payout Policy
  - 4.1. Debt Policy (Brealey Chapter 16)
  - 4.2. Payout Policy (Brealey Chapter 17)
5. Risk, Return, and Capital Budgeting (Brealey Chapter 12)
  - 5.1. Measuring Market Risk
  - 5.2. Risk and Return
  - 5.3. Capital Budgeting and Project Risk
6. Financial Planning (Brealey Chapter 19)
  - 6.1. Links between Long-Term and Short-Term Financing
  - 6.2. Working Capital and Cash Conversion Cycle
  - 6.3. Short Term Financial Plan
7. Risk Management (Brealey Chapter 24)
  - 7.1. Reducing Risk with Options
  - 7.2. Futures, Forwards and Swaps

## Teaching and learning methods

Preparation based on book and handouts, Lecture with discussion, examples and case studies as well as student presentations

## Special features

### Demands on company training

Practical training in the company should provide a

- » overview and knowledge about financial markets, financing instruments used and criteria for their choice,
- » insight into the debt and payout policy,
- » insight into capital budgeting, financial planning and risk management

## Recommended literature

- » Brealey, Richard. A/Myers, Stewart C/Marcus, Alan J: Fundamentals of Corporate Finance, Sixth Edition, 2009, McGraw Hill, International Edition

Online Learning Center:

[http://highered.mcgraw-hill.com/sites/0073382302/information\\_center\\_view0/](http://highered.mcgraw-hill.com/sites/0073382302/information_center_view0/)

# Corporate Management II – Financial Controlling

## Module Description

### General

Code:	CM2EN
Year of Study:	2011/2012
Form of course:	Obligatory
Frequency of course offer:	Every year
Prerequisites:	Module Accounting, Finance I and II
Name lecturer:	Prof. Dr. Torsten Keller and others
Language of teaching:	English
ECTS-Credits:	6
Workload and its composition:	62 hours contact, 118 hours independent study
Contact hours:	62 hours in academic year
Method of examination:	Written examination (120 min., 100 points)
Emphasis of the grade for the final grade:	3,3%

### Aim of Course

On the basis of the Modules Accounting and Finance students will learn more about steering the company.

The first part of the course contains operational methods of controlling. In particular we will make clear the interrelations between the numbers coming from financial accounting, managerial accounting and finance.

In addition the module Corporate Management II specialises on the strategic alignment of the controlling department. The Balanced Scorecard as an instrument for the realisation of strategic goals is in the focus of this course.

Students learn about the importance of a multidimensional alignment of the organisational goal system and its additional requirements for the Controlling department to accompany this process with the according supply of information.

Furthermore, the possibilities of application and limits of the Balanced Scorecard Concept shall be identified within the companies where the students complete their on the job training.

## Contents of the Module

1. Introduction
  - 1.1. Definition
  - 1.2. Objectives
  - 1.3. Tasks
  - 1.4. Organization
    - 1.4.1. Structure
    - 1.4.2. Information and Communication
    - 1.4.3. Planning and Monitoring
2. Key Figures and Performance Measurement Systems
  - 2.1. Traditional Figures
  - 2.2. Value based Figures
3. Operational Controlling Methods
  - 3.1. Contribution Margin Accounting
    - 3.1.1. Breakeven-Analysis
    - 3.1.2. Controlling with Target Contribution Margins
  - 3.2. Budgeting und Beyond Budgeting
  - 3.3. Controlling Overhead Costs
    - 3.3.1. Overhead-Value-Analysis
    - 3.3.2. Zero-Based-Budgeting
    - 3.3.3. Activity Based Costing
  - 3.4. Projectcontrolling
4. Strategic Controlling Methods
  - 4.1. Benchmarking
  - 4.2. Target Costing
  - 4.3. Balanced Scorecard
    - 4.3.1. Quantification of the Corporate Strategy
    - 4.3.2. Realisation of the Corporate Strategy

## Teaching and learning methods

Lectures, tutorials, self-study

## Special Features

### Demands on company training

Company training shall serve as a deepening and an amendment to the theoretical studies. It shall train a well-grounded approach to microeconomic questions in the company by giving the students the opportunity to get a closer look especially to the following aspects:

- » The integration of controlling in the organization.
- » The decision making on the basis of numbers.
- » The planning and controlling of time and money in projects.
- » The opportunity to learn about the practical implementation of the balanced scorecard within the organization. Special focus shall be interferences between the different scorecards.
- » If the Balanced Scorecard System is not implemented in business, alternative approaches for the realisation of strategic corporate goals on operational level shall be identified. A critical discussion between students and persons responsible within the organisation about chances and limits of the Balanced Scorecard Concept is recommended.

## Recommended Literature

- » Bragg, S.M.: Controller's Guide to Planning and Controlling Operations, Wiley
- » Horvath, P.: Controlling, 11. Aufl., München 2008
- » Kaplan, R.S.; Norton, D.P.: Balanced Scorecard. Translating Strategy into Action, 1996
- » Weber, J.; Schäffer, U.: Einführung in das Controlling, 13. Aufl., 2011

- » Weber, J.; Schäffer, U.: Introduction to Controlling, 2008
- » Zimmerman, J.: Accounting for Decision Making and Control, Richard D. Irwin, Inc

# Case Study: Lifecycle of a Ship

## Module description

### General

Code:	CSSSEN
Year of study:	2011/2012
Form of course:	Obligatory
Frequency of course offer:	In every third year
Prerequisites:	Shipping I, Shipping II, Ship Management I, Ship Management II, Ship Finance I
Name of lecturer:	Prof. Dr. Orestis Schinas
Language of teaching:	English
ECTS credits:	7
Workload and its composition:	50 hours contact, 100 hours independent study
Contact hours:	50 hours in academic year
Methods of examination:	Presentation
Emphasis of the grade for the final grade:	3,8 %

### Aim of course

- » Applying techniques and knowledge acquired in other modules
- » Understanding through simulation the financial performance of a vessel
- » Understanding through simulation the financial impact of a decision
- » Drafting the financial plan of the vessel as an asset
- » Delivering proxy business documents and communication material
- » Presentation and development of Investment cases to investors, banks and other stakeholders

### Contents of the module

1. Review of techniques and topics interesting for the business game (lecture)
2. Instructions for the game (Basic Structure)  
Forming teams of 4 to 5 students who are investing and competing with each other for best performance measured in RoI / IRR for ship investments.
3. Outline of the business game  
Game is played through 5 stages. First stage initial business planning and investment. Thereafter 4 stages with exit scenario in stage 5. At the end of stage one, three and five the students present the results of their investment decisions to the investor panel and defend and explain their decision making. Throughout the stages various events occur:
  - a) Market changes (Charter and 2<sup>nd</sup> hand values)
  - b) Interest rates and exchange rates
  - c) Delays for New Buildings
  - d) Technical breakdowns
  - e) Charterer defaultsFinancing covenants may be triggered. Depending of strategy of teams (employment, swaps, insurance) the events are more or less harmful to the business plan. The development is modelled starting with actual market developments using projecting methods to create realistic scenarios of future developments.
4. The game is highly competitive! Cooperation or cooperative behaviour is excluded!

5. Beside the investor panel various specialists join the sessions to discuss events and their handling in real life and in practical terms (chartering, insurance, bank).

#### Teaching and learning methods

Lecture, team assignments, presentations, business game (large scale simulation)

#### Special features

#### Demands on company training

Students shall be given as far as possible the opportunity by the employer to:

1. Have access to market data
2. Discuss the cases with experienced personnel
3. Access similar cases and relevant documentation

#### Recommended literature

Not applicable!

All books and sources used for specialization courses (Shipping, Ship Finance, Ship Management) are expected to offer some basis for the development of the plans, as well as current market data.

# Shipping III

## Module description

### General

Code:	SH3EN
Year of study:	2011/2012
Form of course:	Obligatory
Frequency of course offer:	In every third year
Prerequisites:	None
Name of lecturer:	Prof. Dr. Schinas
Language of teaching:	English
ECTS credits:	5
Workload and its composition:	50 hours contact, 100 hours independent study
Contact hours:	50 hours in academic year
Methods of examination:	Written examination (120 min., 100 points)
Emphasis of the grade for the final grade:	2,7 %

### Aim of course

Understanding of:

- » International and Domestic Shipping Law
- » Carriage of Goods by Sea
- » Charterparties and their implications
- » Seaworthiness and Limitation of Liability
- » Marine Insurance and Protection Schemes

### Contents of the module

1. English Law and its International application in Commercial Maritime Affairs
  - 1.1. Legal Disputes involving Ships
    - 1.1.1. Arbitration
    - 1.1.2. Jurisdiction of Courts
    - 1.1.3. Arrest of Ships
  - 1.2. The Ship
    - 1.2.1. Ownership
    - 1.2.2. Registration
    - 1.2.3. Seaworthiness
  - 1.3. Master & Crew
  - 1.4. Mortgages & Liens
2. Carriage of Goods by Sea (Legal Analysis)
  - 2.1. Charterparties (C/P) under Contract Law
  - 2.2. Analysis of Voyage C/P
  - 2.3. Demurrage – Despatch
  - 2.4. Analysis of Time C/P
  - 2.5. Contracts of Affreightment (CoA)
  - 2.6. Other specialised C/P
  - 2.7. The Bill of Lading
  - 2.8. The Voyage
  - 2.9. General Average (York – Antwerp Rules and Practice)
  - 2.10. Claims and Cases
3. Analysis of Carrier's Duties & Immunities

- 3.1. Hague Rules
- 3.2. Hague-Visby Rules
- 3.3. Hamburg Rules
- 3.4. Rotterdam Rules
- 3.5. Comparative Analysis (liability focused)
4. Limitation of Liability
  - 4.1. Limitation Conventions
  - 4.2. Claims and Related Issues
5. The Marine Insurance Market
  - 5.1. History, Structure and Rational
  - 5.2. Principles of Marine Insurance
6. Marine Insurance Contract
  - 6.1. Risks & Policies
  - 6.2. Obligations of the Parties
  - 6.3. Losses & Claims
  - 6.4. Salvage (LOF)
7. Other forms of Protection
  - 7.1. P&I Clubs
    - 7.1.1. Structure and Services
    - 7.1.2. Legal Background & Practice
  - 7.2. Environmental Protection and Collective Fund Coverage
    - 7.2.1. Risks and Perils
    - 7.2.2. Specialised funds and Practices
8. Case Studies
  - 8.1. Maritime Fraud Case I (focused on Ship)
  - 8.2. Maritime Fraud Case II (focused on Cargo)
  - 8.3. Marine Insurance Case
  - 8.4. General Average
  - 8.5. Salvage Agreement

#### Teaching and learning methods

Lecture, discussions, expert presentations and individual assignments

#### Special features

##### Demands on company training

As this is a dual programme and topics related to the theory and modelling are presented in class, students shall be given the opportunity by the employer to:

- » Get a detailed picture on the operations of the legal department (in-house or of an affiliated entity) dealing either with carriage of goods or management of ships or claims and surveys or finance or underwriting and insurance.
- » Discuss with executives and personnel (preferably not only in-house but also of affiliated entities) of the legal department on jurisdiction, arbitration and court procedures, as well as on the cost implied by any of those decisions
- » Familiarize themselves with related documentation
- » Access cases and files, selected by legal executives, for training purposes.

#### Recommended literature

- » Chorley & Giles' Shipping Law, Gaskell, Debatista, Swatton
- » Scrutton on Charterparties, ISBN-13: 978-0421525801
- » Gorton I, Ihre R, Sandevan A, Hillenius P 2004 Shipbroking and Chartering Practice 6th Edition Lloyd's of London Press Ltd ISBN: 184 3
- » Marine Insurance, Ivamy
- » Hudson N., G., 1984, 'Marine Claims Handbook', 4th Edition, Lloyd's of London Press,, ISBN 0 907432 91 3

- » Anderson, P. 1998 ISM Code – A practical guide to the Legal and Insurance Implications LLP Ltd ISBN: 1 85978 621 9
- » Hodges S., Hill C. 2003 Principles of Maritime Law Lloyd's of London Press Ltd ISBN: 184 311 3228
- » Lord, R., Salzedo, S. 1996 Guide to the Arbitration Act 1996 Cavendish Publishing Limited ISBN: 1 85941 310 2
- » Reynolds, M. P. 1993 Arbitration Lloyd's of London Press Ltd

# Ship Management III

## Module description

### General

Code:	SM3EN
Year of study:	2011/2012
Form of course:	Obligatory
Frequency of course offer:	In every third year
Prerequisites:	None
Name of lecturer:	Prof. Dr. Orestis Schinas
Language of teaching:	English
ECTS credits:	3
Workload and its composition:	26 hours contact, 64 hours independent study
Contact hours:	26 hours in academic year
Methods of examination:	Written examination (120 min., 100 points)
Emphasis of the grade for the final grade:	1,6 %

### Aim of course

- » Chartering Practice
- » Comparative Analysis of Charterparties
- » Voyage Calculations – Demurrage / Dispatch Issues

### Contents of the module

1. Understanding the basics of Charterparties
  - 1.1. Fundamentals of Contract
  - 1.2. Fundamentals of Law of Transport of Goods by Sea
2. Voyage C/P Comparative Analysis
  - 2.1. Analysis of Voyage C/P –on the basis of Gencon
  - 2.2. Financial Impact and Calculations
    - 2.2.1. Voyage Estimation
    - 2.2.2. Demurrage and Dispatch
3. Time C/P
  - 3.1. Analysis of Clauses – on the basis of NYPE
  - 3.2. Comparative Analysis of C/Ps
    - 3.2.1. Comparison of Clauses of C/P (financial impact)
    - 3.2.2. Cases on dry bulk commodities (Grain/Iron/Ore)
    - 3.2.3. Cases on liquid bulk
4. Chartering Practice and Ethics
5. Case Studies

### Teaching and learning methods

Lecture, team assignments

### Special features

#### Demands on company training

As this is a dual programme and topics related to the theory and modelling are presented in class, students shall be given the opportunity by the employer to:

- » Familiarize with the processes related to the employment of the ship

- » Familiarize with the processes monitoring the contractual obligations of the ship under a C/P
- » Understand the financial impact of chartering
- » Understanding the rational and the claims processes of demurrage and dispatch

#### Recommended literature

- » Gaskell, N. J. J.: Chorley and Giles' shipping law / N. J. J. Gaskell.... - 8th ed.. - London : Pitman, 1987. - 704 S. ISBN 0-273-02194-X
- » Mocatta, Alan Abraham: On Charterparties and Bills of lading . - 20th ed.. - London : Sweet & Maxwell, 1996. - CXLIII, 614 S.
- » Principles of Maritime Law by Susan Hodges, Christopher Hill
- » UNCTAD (1990) Charter Parties; A Comparative Analysis, Report to the UNCTAD Secretariat
- » Shipbroking and chartering practice / Lars Gorton .... - 7th ed.. - informa : Lloyds, 2009. - XXII, 409 S. . - (BSS Business of shipping series), ISBN 978-1-84311-806-0

# Ship Finance II

## Module description

### General

Code:	SF2EN
Year of study:	2011/2012
Form of course:	Obligatory
Frequency of course offer:	In every third year
Prerequisites:	Ship Finance I
Name of lecturer:	Prof. Dr. Orestis Schinas and others
Language of teaching:	English
ECTS credits:	6
Workload and its composition:	50 hours contact, 130 hours independent study
Contact hours:	50 hours in academic year
Methods of examination:	Written examination (120 min., 100 points)
Emphasis of the grade for the final grade:	3,3 %

### Aim of course

- » Introduction to Financial Risk Management
- » Understanding risk involved in the various sources and stages of finance
- » Understanding modeling and limitations

### Contents of the module

1. Introduction to Risk Management
  - 1.1. Basics
  - 1.2. Risk Drivers in Shipping
  - 1.3. Risk Management as a Process
2. Quantitative Risk Management
  - 2.1. Correlation and Portfolio Theory
  - 2.2. Confidence Intervals, Value at Risk and Shortfall Risk
  - 2.3. Exposure, Sensitivity and Impacts
3. Application to Ship Finance
  - 3.1. Classic Approaches & Practice
  - 3.2. Mortgages, Liens and Legal securities
4. Derivatives
  - 4.1. Basics on Derivatives
  - 4.2. Swaps
  - 4.3. Options
  - 4.4. Pricing
5. Shipping Derivatives (Forward Freight Agreements etc.)
6. Investment Strategies and Shipping
  - 6.1. Review of the Theory
  - 6.2. Applications and Limitations in Ship Finance
7. Issues in Forecasting
  - 7.1. Tanker
  - 7.2. Dry Bulk
8. Resume

## Teaching and learning methods

Lecture, team assignments

## Special features

### Demands on company training

As this is a dual programme and topics related to the theory and modelling are presented in class, students shall be given the opportunity by the employer to:

- » Discuss with executives and personnel (preferably not only in-house but also of affiliated entities) the associated risks of the financial scheme selected by the employer for the financing of a project (strategic approach).
- » Familiarize themselves with risk management practices in-house or even –preferably- at an affiliated entity (tactical approach).
- » Discuss with executives the monitoring of the project from a risk management point of view.
- » Access cases and files, selected by executives, for training purposes.

## Recommended literature

- » Amir Alizadeh & Nikos Nomikos, *Shipping Derivaties and Risk Management*, Palgrave 2009.
- » Bengstock & Vergotis, *Econometric Modelling of World Shipping (International Studies in Economic Modelling)*, ISBN-13: 978-0412367205
- » Clarksons' Shipping Intelligence Network: Electronic Database
- » Containerization International: Electronic Database
- » *Data, Models and Decisions: The Fundamentals of Management Science*, Dimitris Bertsimas and Robert Freund, ISBN 0-9759146-0-X
- » *Maritime Economics*, Martin Stopford
- » *Shipping Company Strategies: Global Management under Turbulent Conditions*, Peter Lorange, ISBN-13: 978-0080446110
- » *The Handbook of Maritime Economics and Business*, K. Grammenos, Whithrbys
- » John C. Hull, *Options, Futures and Other Derivatives*, Prentice Hall, 2010.
- » Lorange, P. (2009) *Shipping Strategy*; Cambridge University Press, Cambridge

# Ship Finance III

## Module description

### General

Code:	SF3EN
Year of study:	2011/2012
Form of course:	Obligatory
Frequency of course offer:	In every third year
Prerequisites:	Shipping I, Ship Management I, Business Administration I, Finance I
Name of lecturer:	Prof. Dr. Orestis Schinas and others
Language of teaching:	English
ECTS credits:	7
Workload and its composition:	36 hours contact, 154 hours independent study
Contact hours:	36 hours in academic year
Methods of examination:	Presentation
Emphasis of the grade for the final grade:	3,8 %

### Aim of course

1. Modeling actual Ship Finance Problems
2. Analysis of actual cases

### Contents of the module

1. Set-up of SF Problem (Review)
  - 1.1. Financial Plan of a Bank (Lender)
  - 1.2. Financial Plan – KG
  - 1.3. Re-financing of a shipping company
  - 1.4. Comparative Analysis
2. Group Assignments
  - 2.1. Analysis of selected cases
  - 2.2. SF Problems (Numerical Approach)
  - 2.3. SF Game (multi-stage game of roles and behavior)

### Teaching and learning methods

Lecture, individual & team assignments

### Special features

#### Demands on company training

As this is a dual programme and topics related to the theory and modelling are presented in class, students shall be given the opportunity by the employer to:

- » Familiarize themselves with planning issues and specifically the decisions determining a plan
- » Discuss with executives and personnel (preferably not only in-house but also of affiliated entities) the benchmarking and reporting issues of the financial scheme selected by the employer for the financing of a project (strategic approach).
- » Familiarize themselves with financial benchmarking practices in-house or even – preferably- at an affiliated entity (tactical approach).
- » Access cases and files, selected by executives, for training purposes.

## Recommended literature

- » Bengstock & Vergotis, Econometric Modelling of World Shipping (International Studies in Economic Modelling), ISBN-13: 978-0412367205
- » Clarksons' Shipping Intelligence Network: Electronic Database
- » Containerization International: Electronic Database
- » Data, Models and Decisions: The Fundamentals of Management Science, Dimitris Bertsimas and Robert Freund, ISBN 0-9759146-0-X
- » Derivatives and Risk Management in Shipping, Kavussanos, Prof. Dr. Manolis G and Visvikis, Prof. Dr. Ilias D, ISBN : 9781856093101
- » Developing Spreadsheet-Based Decision Support Systems; Using Excel and VBA for Excel, by Michelle Seref, Revindra Ahuja, Wayne Winston, ISBN 0-9759146-5-0
- » Introduction to Derivative Financial Instruments: Bonds, Swaps, Options, and Hedging, Dimitris N Chorafas, ISBN-13: 978-0071546638
- » Maritime Economics, Martin Stopford
- » Shipping Company Strategies: Global Management under Turbulent Conditions, Peter Lorange, ISBN-13: 978-0080446110
- » The Handbook of Maritime Economics and Business, K. Grammenos, Whithrbys