Anatomy of Ship Finance

30 June - 5 July 2024
Madingley Hall · Cambridge

Organised by

Cambridge Academy of Transport

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Cambridge Academy of Transport

Registration Form

ANATOMY *of* SHIP FINANCE

30 JUNE - 5 JULY 2024

To register, please complete this form and send it by email or post to Tulika Singh at the address given below.

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Family name ______________
Company position ______________

Company name ______________
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❏ Enclosed is a cheque ❏ Please invoice my Company ❏ I wish to pay by Credit Card (details below)

Seminar Fees: The fee of **£4,800** includes UK Value Added Tax, tuition, accommodation, all meals, documentation and a full social programme. Payment can be made by cheque, bankers draft or inter-bank transfer. Cheques should be made payable to Cambridge Academy of Transport in Sterling drawn on a Bank in the United Kingdom. Our Bank details are:

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Course Programme

Anatomy of Ship Finance
30 June - 5 July 2024
Madingley Hall · Cambridge

Course Leader
Rob Heijliger · Former Head of Transportation Finance, Asia · ING Bank

Sunday 30 June

Welcome and Preview of Seminar **1430-1500**

During this introductory session, the aims of the programme will be reviewed leading into the scene setting session that follows. The Ship Finance Business Game and the week's lectures will be previewed.

INTRODUCTION & PRINCIPLES OF SHIP FINANCE

Session 1
Introduction to Ship Finance **1500-1615**

The aim of this lecture is to provide a broad overview which will "set the scene" for the many detailed lectures provided by experts during the week. Beginning with a look at the demand for trade that supports the shipping industry, the session will then examine the structure of the industry and the multitude of markets it serves. Along the way, the varying ship types ranging form the very large vessels for volume trades to the smallest ships for the shorter haul, more regional trades with be discussed.

After examining the value of the fleet at cost, the session will consider how the capital needed to support new build and second-hand transactions is raised. The range of financing alternatives will be revealed in anticipation of later sessions on the course developing some of these in detail. Similarly, a number of challenges which the industry is facing on the road to de-carbonisation targets set for 2050 will be introduced.

Session 2
Where Does the Money Come From? **1630-1800**

The session begins with a survey of the several sources of capital for the purchase of ships including:

- Equity: shipowners and Private Equity (PE) providers
- Public equity markets
- Bond Market
- Leasing including the sale and leaseback option
- ECAs
- Banks – historically the main provider of funds to the largely privately owned fleets.

It will then address a number of concerns, including:

- The resilience of the different groups of suppliers of capital and the development of their products over time.
- Suitability of their product, pros and cons
- The shift from North America to Europe and then to Asia
- Current issues
- Future obstacles and opportunities

SHIP FINANCE BUSINESS GAME

Session 3
Business Game Handouts and Assignments 1815-1915

In anticipation of the three day Business Game that the participants will begin shortly, this session will provide a brief overview of what to expect before handing-out the various documents which form the backbone of the Game.

The Game is divided into five rounds, each representing consecutive years in the evolution of the Game, with the current year being Year 1. During each round the Bank or Shipping Company will enter into loan agreements with an opposite Owner or Bank, and have the freedom to choose whichever opposite team they so decide. Following the conclusion of a mutually acceptable loan agreement, Teams will complete the Loan Term Sheet and pass the details of the agreement to John Doviak who will enter the relevant figures into the Game Model spreadsheets. In the case of shipowners, any sale and purchase transactions and chartering decisions will also have to be recorded.

At the end of the session representing a single year, with transaction details correctly entered, the Game model will provide an accurate summary of all the bank and shipowning companies finances. At each of these successive stages, the model will have incorporated the latest "Market Factors" for the year being analysed. Market factors for each successive year include freight rates, vessel values, interest rates and scrap prices. On the basis of each year's results, banks and owners will then decide what actions they wish to take in the following year. After all five rounds of the Game are completed, the final position of the banks and owners will be revealed, with the winner in each category being the team that has achieved the best return on (starting) equity.

RISK MANAGEMENT

Monday **Session 4**
1 July **Daily Review 0815-0845**

Review of Day 1 in form of quick Q&A.

Session 5
Identifying Risk in Ship Finance 0845-1000

Lending money for ship purchases is a risky business. Vessel value risk, the most obvious, is but one of many risks facing the shipowner and his financier. In this session which will be both a workshop and a lecture, participants will group into small teams to:

- identify as many risks as possible when providing capital to the shipping markets
- discuss the risk types presented by different groups
- expose the opposing objectives of capital providers and takers
- Offer some solutions and mitigants to the risks identified and
- Consider various analytical methods

Session 6
Regulation in Ship Finance: Sanctions 1015-1115

The United Nations describes the objective of sanctions as: "The use of mandatory sanctions is intended to apply pressure on a State or entity to comply with the objectives set by the Security Council without resorting to the use of force. Sanctions thus offer the Security Council an important instrument to enforce its decisions."

As banks operate within national territories, it is the responsibility of each particular state to implement the Security Council resolutions; to ignore them with possible consequences; or to make the sanctions more rigorous. Thus banks may find themselves internationally operating in sanctions regimes that are not always the same.

This session will review the range of sanctions which banks and other entities may encounter and the restrictions that will apply to their ability to enter into financial transactions. Along the way, the following topics will be considers:

- What are sanctions?
- Relevance of sanctions to the shipping industry
- Introduction to sanctions – key concepts
- Types of sanctions impacting the shipping industry
- Recent developments and OFAC guidance (Office of Foreign Assets Control – part of the US Treasury)
- How to address the risks?
- Common issues in ship finance transactions
- Example enforcement actions in the shipping industry

STRUCTURING FINANCIAL TRANSACTIONS

Session 7

Key Factors Regarding Security in Debt Structures 1130-1300

Any debt transaction is accompanied by a wealth of documentation which is intended to clearly spell-out the relationship between the parties and to provide protection for the lender. This session will review recent developments, highlighting the following:

A. Introduction: the loan agreement
B. Structure of security
C. Implications of flag for mortgagees
D. Mortgage requirements and registration; dual registration problems
E. Insurance aspects of ship finance
F. Earnings, charter-parties and pooling
G. Covenants; subordination of second mortgages; events of default
H. Priority of maritime liens; pollution claims
I. Insolvency: enforcement
J. Work-outs

GROUP PHOTOGRAPH 1300

Session 8

Cash Flow Analysis 1400-1500

This lecture will review how a cash flow analysis is carried out and how financial risks can be quantified, focusing on the practical use of cash flow analysis in support of loan/investment decisions. It will review cash flow forecasting methodology and the practicalities of developing input assumptions including:

- OPEX - Operating Expenses
- Freight rates
- Scrap values
- Operating days per annum
- Repair and maintenance costs

One of the most important reasons for a cash flow analysis of a transaction is to be able to undertake "what if" assessment of the deal. Shipping is a volatile business and few financial deals are immune to the vagaries of the spot market. The better deals, however, are robust enough to withstand these fluctuations without threatening the fabric of the transaction.

Session 9
Valuing Ships **1515-1645**

Any public offering or debt finance requires a valuation to be placed on a ship or fleet. This valuation is particularly important in a major placing where the value of the fleet will appear in a "prospectus", the accuracy of which is covered by numerous stock exchange regulations in the major financial centres. Although important, it is not only for major stock market flotations that ship valuation is sought. This session will:

- review the many uses to which valuations are put
- show how a valuation is undertaken
- highlight the factors that need to be taken into account in preparing a valuation
- point out the many pitfalls that threaten the accuracy of a valuation, and
- discuss the problems which may arise during and as a consequence of the valuation of a ship or fleet.

Session 10
Regulation in Ship Finance: A Cluttered Field **1700-1800**

Banking has changed considerably in recent years, particularly since the financial crisis following the collapse of Lehman Brothers in 2008. Ten years on has brought with it an increase in political and regulatory intervention in the activities of banks and other financial institutions. The main thrust of current regulatory controls is to create a financial resilience to enable banks and other financial institutions to withstand any future major financial shocks. These regulations sit alongside those regarding sanctions which were covered in an earlier session.

This session will therefore focus on:

- Regulation takers and regulation providers
- Tools used to measure a bank's capital adequacy
- Stress testing products and portfolios
- Concentration risk/limits
- Financial crime
- AML (Anti-Money Laundering)
- AB&C (Anti-Bribery & Corruption)
- ESG – Environmental, Social & Governance
- Basels 1, 2, 3 (which will be phased in beginning January 2021) and the new Basel 4
- Their impact on shipping finance

Session 11
Business Game Briefing **1800-1915**

Having received the Game documentation the previous evening, this final briefing session is intended to allow questions arising amongst the teams to be answered. Time should also be set aside for each team to meet and consider its financing strategy at the outset of the Game

Tuesday **Session 12**
2 July **Daily Review** **0815-0845**

RISK MITIGATION

Session 13
Fundamentals of Leasing/Chartering **0845-0945**

With the exception of some very high valued assets financed within tax heavy markets, leasing has never been a main provider of funds for ship acquisition. However, it does have its place in the plethora of funding methods available to an owner and should be included in a study of the ship finance sector. The session will therefore cover the following topics:

- types of lease and why lessees use leases
- how tax leasing works
- history of leasing
- alternatives to leasing
- leasing versus chartering
- why would lessees choose finance over operating leases
- leasing and ship finance today

Session 14

Derivatives **1000-1115**

Ship owners and charterers face many different types of risk, including freight market volatility, exchange rate variations and interest rate swings. One way to control or mitigate these risks is to make use of the derivative markets. Derivatives are financial contracts between two or more parties where the value of the contract is determined by an underlying asset or a market index. These contracts can be traded over an exchange or, where the parties trust each other, as OTC – Over-the-Counter deals.

Traditionally freight market risk was covered by booking physical cover for forward dates, an efficient but not a very flexible solution. During the past three decades a number of financial instruments have been introduced to the international shipping industry, specifically FFAs and Futures. Freight Futures were traded on the Baltic International Freight Futures Exchange, but these have now been completely displaced by the FFA contracts. BIFFEX closed its doors to business in the early part of this century.

This session will consider the various forms of derivative available to owners and other risk holder in shipping and elaborate on the following:

- Derivatives in general
- Currency swaps
- Interest rate swaps
- What are Shipping Derivatives – FFAs
- FFA Options
- Reasons for using derivatives

To help in understanding how these tools can be applied in the day-to-day running of a shipping company, several practical examples will be provided.

Session 15

Marine Insurance: What Lenders and Investors Should Know? **1145-1315**

Shipping has many risk factors and a number of these have already been mentioned earlier in the course. Included amongst these risks are:

- Exchange rates
- Bunker prices
- Interest rates
- Sale & Purchase markets
- Freight rates
- Economic issues

Missing from this list, and perhaps the hidden risk from the perspective of a banker or investor lending to a shipowner, is insurance. Most shipowners are likely to have three forms of cover:

- Hull & Machinery Insurance (H&M) to cover mainly physical losses to the asset (the hull and its machinery)
- Protection & Indemnity (P&I) for liability risks, and

- War Risk Insurance to cover losses which are excluded from the above two basic policies

Following a brief review of how each of these insurances work and the risks that each covers, the session will look at how the expected cover for losses can go wrong. It is for this reason that two other forms of insurance exist:

- Mortgagees Interest Insurance (MII), and
- Mortgagees Additional Perils (Pollution)

How each of these works, their relationship with owners' main insurance policies and the protection they provide to lenders will be explained.

Session 16
Export Credits Newbuilding Finance **1400-1500**

During the past five decades, a considerable volume of financing for ship purchases has been concluded with government assistance. Most usually these transactions were for newbuildings and in particular newbuildings from shipyards located in the country providing the financial assistance. In the early days of Japan's expansion as a shipbuilding powerhouse, many of these schemes were put in place to protect the yards operating in high cost countries, for example in Europe. As a consequence of what appeared to be unbridled government interference with the workings of a "free" market, the OECD stepped in to lay down some ground rules.

That, of course, is all history. Today, the main movers of shipbuilding activity are Korea and China, and it will not be a surprise to learn that these two governments also offer financial incentives to bolster their shipbuilding industries. This session will consider the types of funding available and how the financial package is structured. While there are many advantages to taking cheap money, shipowners must also recognise that there are also disadvantages.

Session 17
Business Game: Investment Decisions - 1 January 2024 **1515-1800**

Madingley Tour **1815-1900**

A local Cambridge guide will take the group into parts of Madingley Hall which are not open to the Public, and along-the-way give some insight into the rich history surrounding the Hall and the Estate which goes back over a thousand years.

Wednesday 3 July

Session 18
Daily Review **0815-0845**

Session 19
Private Equity & Hedge Funds: What's the Deal **0845-0945**

Private equity has a fickle relationship with shipping, although it must be said that virtually all shipowners will have some equity position in their fleets. However, the private equity we are considering in this session is new money coming in to the industry from non-traditional sources. These investors will only be attracted in to shipping investments when the market conditions and the future prospects align in such a way as to suggest a significant return on the investment. They are unlikely to be long-term players in the business, but their investment horizon is generally much longer than a hedge fund which often moves in and out of markets relatively quickly.

While the investor profile of hedge funds and private equity funds may look similar, it is the focus of the investments that are likely to determine how best to describe the fund. A hedge fund will look to a variety of investments which are liquid – thus allowing more scope for frequent entries and exits to suit the fund managers perception of opportunities. Private equity funds will generally acquire whole companies or a substantial stake in the companies hoping to influence its future trading success. During the session, the lecturer will:

- describe private equity from a maritime perspective
- draw a distinction between hedge funds and private equity
- provide some examples from real life and what has been seen in practice

Session 20
Business Game: Investment Decisions - 1 January 2025 **0945-1130**

PROBLEM LOANS

Session 21
How to Spot a Loan Going Wrong **1130-1230**

All loans carry with them a risk, and it is to the covenant package that a banker looks to for protection in the event that the transaction turns sour. What actually happens before, during and after a creditor exercises any lien or other authority is a mystery to most borrowers and lenders - and most hope never to go through such an experience.

For any lender to the industry, monitoring the owner's financial movements and vigilance for tell-tale signs that something may be amiss are extremely important. With over 30 years experience of the industry and a history of assisting banks when times are tough, the speaker will give a personal account of the areas to watch for when a loan begins to go wrong. Any relationship banker does not enter into a loan agreement expecting it will go wrong, but some of the biggest failures were also the deals that looked brilliant on paper at the time of their signing. Early action often reduces the risk so knowledge of what to look for is a critical skill in the banker's armoury.

Session 22
Workouts: A Banker's View **1315-1415**

Over the years there has been considerable talk in the market about foreclosures and loan restructurings. But it appears to be the case that recent shipping recessions have not seen the same level of bankruptcies as in the previous major shipping crisis of the mid-1980s. None-the-less, problem loans exist and it is how the lender identifies and then deals with a borrower who is on the ropes which will be addressed.

This session will therefore focus on the consequences of the recent shipping recession which began with the collapse of the freight markets at the end of 2008. Lenders, especially the commercial banks, were exposed to the risks of the markets as the valuations of their shipping portfolios fell in parallel with the charter markets. Traditionally, banks could enforce their mortgage and repossess the ship. But the dynamics of the banking market well outside the control of the shipping sector have had a significant impact on the action (or some would say, inaction) of the banks.

How do shipowners view the pressures exerted upon them by their lenders; what is the market practice for dealing with shipowners unable to pay as contracted; what are the signs of an owner in trouble? These and other issues will be covered during this session.

Session 23
Business Game: Investment Decisions - 1 January 2026 **1415-1545**

Visit & Tour of Cambridge

Thursday 4 July

Daily Review **Session 24 0815-0845**

Business Game: Investment Decisions - 1 January 2027 **Session 25 0845-1000**

PERSPECTIVES ON THE SHIP FINANCE SCENE

Overview of ESG for Shipping **Session 26 1015-1145**

ESG stands for Environmental, Social & Governance and is a set of criteria that might be considered as a form of “ethical” behaviour concerning business operations. Banks, conscious of their key role in creating future wealth and the constant exposure to governmental and investor scrutiny, are beginning to apply ESG criteria when advancing funds in a financial transaction.

Taken individually, each criteria can be considered as follows:

- Environmental: how well does the company (and if a bank, its borrowers) perform in its obligations to the natural environment in which it operates.
- Social: how well does the company manage its relationships with staff, suppliers, customers and the local community.
- Governance: concerned with how well a company manages itself. So, access of staff to the promotion ladder, pay equality enforcement, shareholder rights, external audits and internal controls.

With a number of decarbonisation targets planned for the future, banks will become more focussed on their customers commitment to reduction of CO_2 emissions and Green House Gas reduction. These more ethical lending criteria can transform the future look of the industry and the basis of the relationship between an owner and his bank(s).

ESG is intrinsically linked to sustainability upon which the future of the industry is dependent. In addition to developing the background and current application of ESG principles within shipping, the speaker will also make a case for sustainability.

Business Game: Investment Decisions - 1 January 2028 **Session 27 1200-1330**

Poseidon Principles **Session 28 1430-1530**

The Poseidon Principles is an initiative amongst the major lenders to the shipping industry to provide a framework within which their lending to clients in the industry may be viewed as encouraging alignment with the E part of ESG. Specifically, the framework is used for

> “assessing and disclosing the climate alignment of ship finance portfolios. They set a benchmark for what it means to be a responsible bank in the maritime sector and provide actionable guidance on how to achieve this.”

Thus, IMO targets, sustainability and GHG emissions all feature in the guidelines for compliance with the “Principles”. It forms a part of a bank’s ESG performance but goes further in trying to eliminate the financing of owners and vessels which are not contributing to the long term benefit of mankind.

Issues and Opportunities: View from an Analyst **Session 29 1545-1745**

The speaker will take a long term look at the industry and highlight current and future issues with a special interest in capital and capital providers. Some of the challenges expected in the future will require the cooperation of owners, capital providers and other stakeholders

The speaker will draw heavily on his knowledge and experience of the container business, perhaps one of the most innovative and expansive of the shipping sectors. Containerisation is no longer simply the shipping of containers; it is a system that integrates land and sea and is inextricably linked to all our critical supply chains.

- What is container shipping today, and how does it sit alongside the other shipping sectors
- What has been the impact of the pandemic on container shipping and supply chains – will 'normality' return – if ever
- What has been the financial performance of the container lines
- The 'laws' of supply and demand and their brutal application to container freight rates: both the highs and the lows
- The drive for scale economies across the shipping sectors
  - Vessel size
  - Alliances
  - Mergers and Acquisitions

  Have scale economies run their course?
- Opportunities for investment
  - Decarbonisation and alternative fuels – impact for ships and ports
  - Autonomous Shipping
  - Supply Chain Challenges

Friday 5 July

Session 30 0830-0900

Business Game: Results

Dr John M Doviak, Director, Cambridge Academy of Transport and Rob Heijliger, Former Head of Transportation Finance, Asia, ING Bank

Session 31 0900-1100

Shipping Market Outlook – The Power of Forecasting

The shipping market operates within the framework of a supply/demand mechanism which means that future earning levels depend as much on how the industry manages supply as on the growth of demand for ships. This session looks at the various factors which determine freight market earnings and discusses the directions and drivers that will emerge. The session will consider:

- Demand drivers for shipping
- Supply-side developments
- Earnings for the different sectors of shipping
- Newbuilding prices
- Second-hand prices
- Where are opportunities to be found in the medium term.
- Highlights of the big three: Bulkers, Tankers and Containerships.

Session 32 1115-1230

How Big Shipowners Finance their Fleets: What will be the impact of 2050 emissions targets

Large shipowners rarely go to the market for a single investment, even when it may appear so. Generally they will have a fleet investment plan that requires more than a single loan agreement. So how will they source the huge sums of money needed to fund the decarbonisation replacement requirement?

There are large companies and large companies. What do we mean by this? Companies such as Maersk or Anangel Shipping are clearly in the private (ie non-state) owned sector. COSCO on the other hand represents one of the few largely state-owned enterprises which in size can compete with the largest of the privately owned fleets.

As the speaker has experience working for owners from these two distinct extremes of the large shipowning sector, he will give a personal view of how the funding possibilities differ. State-owned fleets may have more political constraints, but they may also have the ear of the political masters who will determine state investment policy. Is this an advantage in an industry like shipping where markets have a tendency to deliver feasts and famines. Let’s wait to hear what the speaker has to say.

As the course has will have been taking place against the backdrop of the International Climate Change Conference COP26 in Glasgow, the speaker will offer a quick review of any significant developments with particular regard to their impact on the future of shipping investment.

Conclusion **1230-1245**

Programme content and lecturers subject to change.