2020



Baltic Academy courses

London / New York / Singapore

Freight Derivatives and Shipping Risk Management

Advanced Freight Modelling and Trading

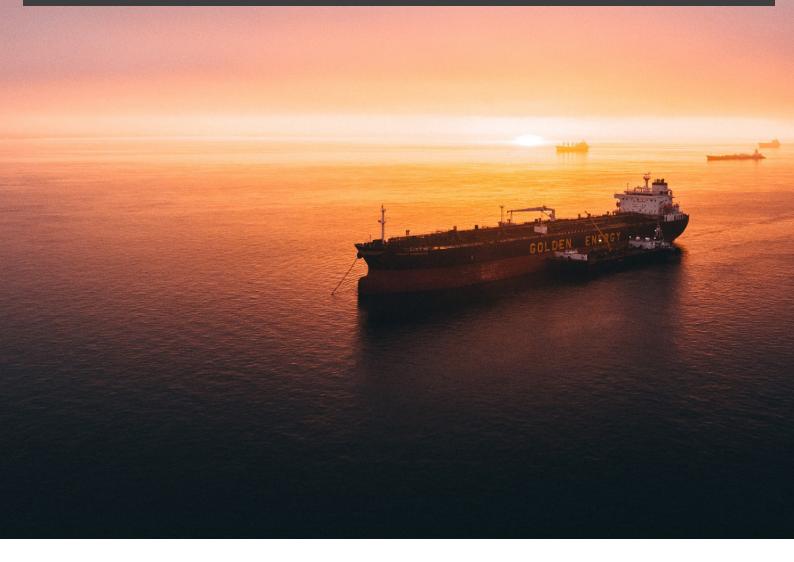
Ship Finance Executive

Shipping Economics and Investment

Bunker Hedging Post IMO 2020

Managing LNG Freight Risk Using Futures

balticexchange.com



Our word our bond

Baltic Exchange Training Courses 2020

The Baltic Exchange runs a series of professional training courses through its Academy. These take place in key shipping centres and are designed to help shipping, finance and commodity executives build on their knowledge of the maritime markets. The courses are led by experts and deliver a high level education, combining theory with real-life practical examples. By attending these courses participants will learn skills which they can use in their day to day business. Launched in 2005, each course involves a mixture of classroom teaching, practical exercises, group discussion and case study analysis. Comprehensive study notes are provided, together with a certificate of attendance.

For course dates please refer to page 9.

Freight Derivatives & Shipping Risk Management

This course provides an overview of risk in the shipping business. Topics covered include freight rate risk management, derivative instruments, freight rate options, bunker and financial risk management, ship price risk management, Value at Risk and credit risk.

The course is suitable for shipping professionals looking for an insight into the use of derivatives in their business and financial executives who need to understand how the shipping markets work.

£1575 + VAT (UK only)

Advanced Freight Modelling & Trading

This course is designed to be taken after Freight Derivatives & Shipping Risk Management, but is suitable for experienced freight traders. The advanced two day module focuses on pricing freight options, modelling freight rate dynamics and pricing options on freight. It covers constructing forward curves on freight, modelling freight rate volatility as well as hedging and trading strategies using FFA and freight options.

£1575 + VAT (UK only)

Ship Finance Executive

The course aims to raise awareness of the substantial benefits and risks of equity and debt finance, to shipping companies looking for capital and to investors looking at shipping as a market with increasing accessibility and potentially strong returns on investment.

Using a variety of real-life examples, course participants will learn how an IPO is made, what to look for when choosing an underwriter, how to identify an under-priced IPO before it is made public using only publicly available information, how to issue a high-yield bond and how to calculate the probability a high-yield bond will default.

£1575 + VAT (UK only)

Shipping Economics & Investment

The course gives delegates a theoretical foundation and practical experience of modern shipping economics and investment. The programme covers the micro-economic structure of the shipping markets. It looks at the fundamentals of shipping investment including cash flow projection and analysis, capital budgeting techniques, capital structure and cost of capital in shipping projects, investment management of shipping projects, asset allocation and shipping investment strategies.

£1575 + VAT (UK only)

Bunker Hedging Post IMO 2020

This half day course is for bunker buyers, traders and suppliers wishing to understand how IMO 2020 may affect the hedging of bunker fuel prices as the 'old' contract disappear and 'new' ones emerge. Attendees will learn best practices in bunker fuel price risk management, using new low sulphur fuel oil contracts and gasoil contracts as well as basis risk between ports and how to manage regional discrepancies.

US\$ 600/ S\$ 800

Managing LNG Freight Risk Using Futures

How to trade and use FFAs effectively to manage pricing risk from volatility in LNG freight rates. This half day course is designed to help build confidence in using new indices from the Baltic Exchange in managing risk for shipping and is suitable for both LNG and shipping company executives.

US\$ 600/ S\$ 800

The course leaders



Professor Nikos Nomikos

Professor Nikos Nomikos of Cass Business School, is the director of the highly-respected Shipping, Trade and Finance MSc course and co-author of the leading reference book on shipping risk management – Shipping Derivatives and Risk Management.

Professor Nomikos has collaborated with a number of companies both as consultant as well as educator and has published more than 50 papers in leading international academic journals. His views on commodity and shipping markets are also frequently profiled in the press. He has published more than 50 papers in leading international academic journals in the areas of shipping finance, asset pricing and commodity risk management. His views on commodity and shipping markets are also frequently profiled in the press.

Professor Nomikos holds a number of faculty visiting positions at University of Geneva, Copenhagen Business School, International Hellenic University and Singapore Management University. He has a BSc in Economics from Athens University of Economics and Business, an MSc in Shipping, Trade & Finance (Distinction) from Cass Business School and a PhD in Finance from Cass Business School. He is also a Member of the Institute of Chartered Shipbrokers.



Dr Nikos Papapostolou

Nikos has been with the Costas Grammenos Centre for Shipping, Trade and Finance since 2002. He is a Senior Lecturer in Shipping Finance, acts as the Associate Director to the Centre and he is the Director of the MSc in

Shipping, Trade and Finance and Stelios Scholars Programme Lead at Cass Business School. His research interests are in the field of shipping investment and finance, with a focus on capital markets as a source of finance for shipping companies, investors' sentiment and behaviour in the shipping industry, freight options pricing and vessel valuation, technical analysis trading rules, and commodity derivatives. He holds a BSc in Money, Banking and Finance from the University of Birmingham, an MSc in Shipping, Trade and Finance and a PhD in Finance from City, University of London.



Professor Michael Tamvakis

Michael Tamvakis is a Professor of Commodity Finance at Cass Business School, City University London. He has a degree in economics from the Athens University of Economics and Business, and MSc and PhD from Cass Business School. He is also a

visiting Professor at the University of Geneva.

He lectures in international commodity trade, commodity derivatives and trading, energy economics and shipping economics. His research interests are in the areas of commodity economics, energy derivatives and shipping economics. Michael has been involved in many research and consultancy projects, presented and delivered talks at many international conferences, and published many articles in energy and finance journals, as well as a textbook on Commodity Trade and Finance.



Professor Amir Alizadeh

Amir Alizadeh is Professor of Shipping Economics and Finance and a member of faculty at the Centre for Shipping Trade and Finance. Currently, he lectures in Advanced Quantitative Methods, Shipping Investment

and Finance, Oil and Energy Transportation & Logistics, Econometric Modelling, Shipping Risk Management, Energy & Weather Derivatives, and Energy Project Investment and Finance. His research interest includes, modelling freight markets and markets for ships, derivatives and risk management in financial and commodity markets, and forecasting. He has published in several academic journals in the area of transportation, finance and economics. He also has visiting positions at University of Geneva and Copenhagen Business School, ESCP Europe, and serves on the Editorial Board of Transportation Research Part E and Journal of Multinational Finance, and is a member of the scientific committee of the Swiss Research Institute on Commodities (SRIC). He has been in close contact with the industry, acting as an adviser and consultant for a number of the trading and shipping companies and institutions including the A P Moller Maersk, Danish Maritime Cluster, Geneva Shipping and Trading Association (GTSA), Barclays Capital, Standard Chartered Bank, amongst others.



Mikal Bøe

Mikal is a senior executive with 28 years' experience in shipping, technology and commodities; with particular focus on risk management.

Prior to starting CORE-POWER in 2016, Mikal served as Chief Risk

Officer and Director in charge of Singapore office for Thoresen Thai Agencies (BKK:TTA) an Asian industrial group stock listed in Thailand. He previously served as Chief Risk Officer for Eagle Bulk Shipping (NASDAQ:EGLE) in Singapore and New York; and spent many years at IMAREX, the first regulated marketplace for freight derivatives.

Several unique new businesses were started by Mikal, including bunkerworld.com (1997) sold to S&P Platts in 2013, Cleartrade Exchange, now part of the EEX and owned by Deutsche Boerse and CORE-POWER - established to spearhead the development of a commercial market for the 'Liquid Fluoride Thorium Reactor' in transport and industry.

Freight Derivatives & Shipping Risk Management

Day One

Introduction to shipping risk

- Types of shipping contracts
- Sources of risk in shipping
- Market segmentation and sectoral differences
- Comparison of risk across different shipping markets

A primer on risk management

- Introduction to derivative instruments
- Forwards, futures, options and swaps: Exchange-Traded vs Over-the-Counter
- Credit risk and clearing

Freight rate risk management

- Freight market information
- The practicalities of FFA trading
- Documentation and settlement
- Electronic trading
- FFA and hedging examples for spot, time-charter container and tanker routes
- Exercise on freight risk management

Freight rate options

- Option terminology
- Using freight options for hedging
- Option trading strategies
- Freight options pricing

Day Two

Bunker risk management

- Bunker market fundamentals
- Importance of bunker risk management in shipping
- Use of bunker derivatives
- Forward bunker contracts: hedging and trading
- Options on bunker prices
- Exercise on bunker risk management

Financial risk management in shipping

- Interest rate risk
- Financing examples and sources of interest rate risk
- Hedging interest rate risk using forwards and futures

- Interest rate caps, floors and collars
- Interest rate and currency swaps and swaptions

Case study on shipping risk management

- Highlight as Practical Example
- Integrating all aspects of shipping risk
- Presentation of the case
- Using spreadsheets to solve the case
- Discussion

Ship price risk management

- Portfolio theory
- Diversification and risk-return optimisation
- Baltic Sale & Purchase Assessment, Baltic Demolition Assessment, Sale & Purchase Forward Agreements

Value at Risk (VaR) in shipping

- Estimating volatility daily vs yearly
- Measuring and estimating VaR: single asset vs multi-asset portfolio
- VaR methodologies
- Examples of estimating VaR of FFA portfolios

Credit risk in shipping

- Probability of default vs loss given default
- How to measure credit risk: qualitative vs quantitative methods
- Credit risk and credit ratings
- Credit risk measurement in shipping
- Credit derivatives and credit risk management in shipping

Advanced Freight Modelling & Trading

Day One

Introduction to the freight market

- Freight contracts
- Characteristics of the freight market
- Relationship between spot and time-charter freight rates

Forward Freight Agreements

- Practicalities of trading
- Hedging and trading examples

Spot price dynamics

- Mathematical models for freight rates
- Mean reversion, seasonality and jump diffusion models: Estimating and setting up models

Forward curves

- Forward curve construction

Technical analysis & freight trading

- Chart analysis
- Technical trading rules
- Spread trading
- Implied TC rates

Risk management using options

- Freight options
- Hedging with options
- Option trading strategies

Day Two

Modelling freight rate volatility

- Volatility models: Historical, time-varying and implied
- Estimation and interpretation
- Forecasting volatility

Pricing freight options

- Determinants of option prices
- Pricing Asian options using closed-form models
- Monte Carlo Simulation

Real options in shipping

- Key option value drivers
- Different types of real options
- Option to choose (spot vs time-charter)
- Option to lay-up
- Real options and ship valuation
- Real options and extended Net Present Value
- Identifying & valuing real options in shipping

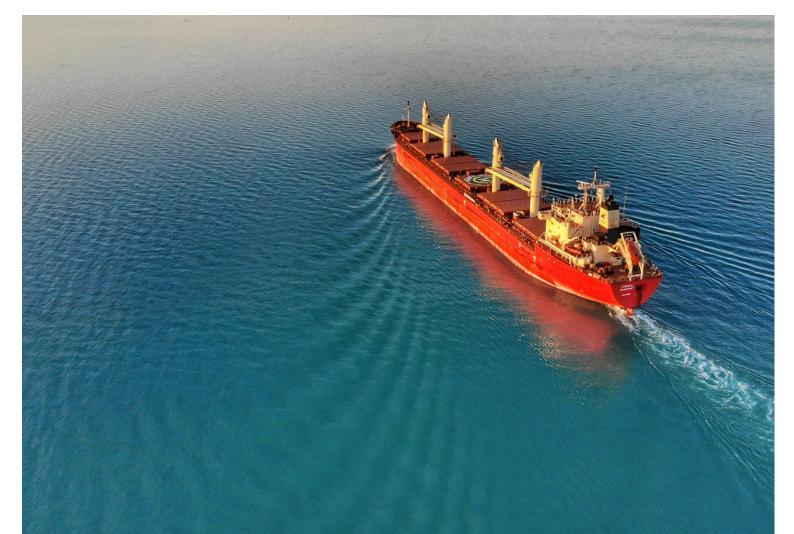
Writing and risk management of option positions

- Option price sensitivities (Greeks)
- Dynamic & Static Delta Hedge
- Delta-Gamma hedging
- Greeks of Asian options

Value at Risk of shipping freight rates

- Estimation & interpretation
- VaR methodologies
- VaR for nonlinear instruments

The lecturers are at the top of their game Freight Trader, Cargill



Ship Finance Executive

Day One / Banking and Equity Capital Markets

Introduction to ship finance

- Overview of sources of finance available to shipping companies: bank debt, bonds, public and private equity, leasing and mezzanine finance.
- Current trends and developments in ship finance

Equity public offerings

- Reasons for going public; advantages and disadvantages for shipping companies
- Company valuation techniques, underwriters and the IPO process
- Institutional investors and shipping stocks

Pricing of shipping stocks

- Underpricing; factors affecting first day trading returns of shipping stocks
- Estimation of probability of underpricing of shipping IPOs

Practical example (excel-based): Selection of

IPOs for asset allocation and investment purposes

Financial strength and ranking of public shipping companies

 Choice and estimation of financial metrics; Ranking process

Practical example (excel-based): Ranking of shipping companies and financial strength index

Initial public offering case study

Practical analysis of a shipping IPO prospectus focusing on the: deal structure; strengths and weaknesses; timing and pricing of the offering; financial strength of issuer relative to the industry average

Day Two / The high yield bond market; Risk management of real assets; Shipping investor sentiment, and shipping assets and stock investment

High yield bond issues

- Advantages and disadvantages for shipping companies, and the issuance process
- Role of credit rating agencies; process of assigning a credit rating (excel-based illustration)

- Defaults and restructuring options in shipping
- Probability of default for shipping high yield bond issues

Practical example (excel-based): Estimation

of default probability by employing readily available information

Bank credit

- Types of Bank Credit Facilities

Practical example (excel-based): Preparing a Bank Proposal for a Shipping Term Loan

Portfolio management of shipping loans

- Risk models and quantitative risk analysis of shipping loans
- Cash flow analysis for shipping projects.

Shipping company valuation case study

Practical analysis of a company valuation case study using different methodologies

Shipping sentiment, cycles and shipping assets investment

- Quantifying shipping sentiment using market variables
- Sentiment and shipping cycles

Practical example (excel-based): Shipping cycles prediction using shipping sentiment

Practical example (excel-based): Shipping sentiment as an investment trading tool for the sale and purchase of second-hand vessels

Shipping stocks investment

- Passive vs. active portfolio management
- Index tracking and shipping stocks portfolio construction
- Shipping investor sentiment and stocks investment

Practical example (excel-based): Formulation of trading strategies based on index tracking

Practical example (excel-based): Sentimentbased trading strategies for shipping stocks and stock market indices

Shipping Economics and Investment

Day One / Shipping Economics

Introduction to the shipping industry

- Overview of shipping market structure, shipping sectors, fleet and international trade
- Ownership structure, ship registries and international shipping regulations

Economic analysis of shipping markets

- Freight market, micro and macro analysis and freight market
- Second-hand market, the S&P process, key value drivers, and vessel valuation
- New building and scrap markets, ship building supply and demand factors, determinants of new building prices, scrap price determination

Shipping costs and revenue management

- Types of shipping contracts, negotiation and pricing
- Charter parties, voyage, time-charter and bareboat charter parties
- Costs: Capital, operating and voyage costs, voyage estimation

Exercise: voyage cash flow analysis Specialised shipping sectors

– Economics of LNG, LPG and Chemical

shipping, supply-demand analysis and freight determination, major trades and players

 Liner and container shipping, structure of liner shipping industry, standardisation, pricing strategies and key factors in pricing

Overview of current trend and developments in shipping and freight markets

- Environmental: Regulations, ballast water, and emissions
- Operational: ship design, fuel efficiency, and operational optimisation
- Discussion on trend and developments in different shipping sectors

Day Two / Shipping Investment

Cash flow analysis of shipping projects

- Cash flow projection, operating costs and revenue, capital cost, repairs and special surveys
- Cost of capital, break even analysis, and loan repayment in shipping projects

Exercise: cash flow projection

Project appraisal and investment decision in shipping

- Capital budgeting techniques, NPV, IRR, PI, and Payback analysis
- Investment appraisal of shipping projects
- Asset and project valuation techniques, second-hand, new building and scrap valuation

A full on two day programme. Great mix of theory and practical examples Senior Charterer, Rio Tinto

Capital structure and cost of capital in shipping projects

- Determination of cost of capital, Capital asset pricing model, Multifactor model
- Capital structure, WACC and optimal leverage
- Market condition, loan structure and capital costs

Exercise: WACC calculation

Investment decision and uncertainty in shipping

- Application of risk analysis in shipping projects and investment
- Scenario analysis, probabilistic scenarios and Monte Carlo Simulation techniques
- Real Option Analysis (ROA), optionalities in ship valuation and projects

Exercise: Monte Carlo Simulation and investment appraisal

Investment management in shipping

- Shipping investment strategies, optimum timing, and diversification
- Dynamic and adaptive asset allocations, and performance evaluation
- Risk based asset allocation and asset play
- Tactical asset allocation and shipping equity investment

Bunker Hedging Post IMO 2020

Bunker risk management essentials

- The economics of a bunker hedge in a COA and for bunkers on redelivery
- Classic signs of when to hedge and when to float on the spot market
- Tried and tested hedging strategies practical examples
- How IMO 2020 changes bunker hedging, and why

Hedging bunker price exposure with new contracts

- Term structure and oil market dynamics
- The new low sulphur fuel oil contracts, market mechanics post 2020
- Low sulphur marine gasoil contracts
- Basis risk and regional price differentials, best practice hedging
- New hedging strategies practical examples
- Execution, clearing, collateral and cash management

Managing LNG Freight Risk Using Futures

The Baltic BLNG Index

- Comprehensive understanding of the BLNG Baltic Index and Index methodology
- The role of panels and integrity of the market
- Pricing of the Index on time charter and voyage charter
- Calculating 'Basis Risk' between the LNG Index and main LNG trading routes
- Index Settlement mechanisms and correlations
- Term structure of the LNG forward curve
- Contango, backwardation, inversions and seasonality

Putting it all together with FFAs

- Composition, construction and use of an LNG FFA derivatives contract
- Practical application of LNG FFAs to freight contracts and time charters
- Calculating pricing risk, calendar risk and cash flow
- Settlement mechanisms
- Leverage and Margining and mark-to-market
- Stress testing
- Examples and practical uses of an LNG FFA contract

Bookings to:

Navigate PR

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+44 (0)20 3326 8450 training@navigatepr.com

Book online at bit.ly/1tFX2BQ



2020 Schedule London / New York / Singapore

Freight Derivatives and Shipping Risk Management

9-10 March 2020 (London)7-8 September 2020 (Singapore)5-6 October 2020 (London)7-8 December 2020 (Houston)

Advanced Freight Modelling and Trading

11-12 March 2020 (London)9-10 September 2020 (Singapore)7-8 October 2020 (London)9-10 December 2020 (Houston)

Ship Finance Executive

9-10 November 2020 (London)

Shipping Economics and Investment (London)

13-14 January 2020 (London) 26-27 October 2020 (London)

Bunker Hedging Post IMO 2020

4 February 2020 (Singapore)

Managing LNG Freight Risk Using Futures

5 February 2020 (Singapore)

Please note that the above dates are subject to the latest government advice and subject to further change.

Terms & conditions

The Baltic Exchange must be in receipt of full payment prior to the day of the training course or your nominated delegate(s) may not be allowed entry to the seminar. Cancellations 14 days or more prior to the course will be refunded at 50% of delegate fee. Cancellations within 14 days cannot be refunded. All cancellations must be received in writing. Names of delegates may be changed at any time without charge and notifi cation of name changes should be made in writing. Registration fees include lunch and refreshments and course notes.

About the Baltic Exchange

The Baltic Exchange is the world's only independent source of maritime market information for the trading and settlement of physical and derivative contracts. Its international community of over 640 members encompasses the majority of world shipping interests and commits to a code of business conduct overseen by the Baltic.

Baltic Exchange members are responsible for a large proportion of all dry cargo and tanker fixtures as well as the sale and purchase of merchant vessels.

In November 2016, the Baltic Exchange was acquired by Singapore Exchange ("SGX"), bringing together complementary strengths of Singapore and London, two of the world's most important maritime centres.

Baltic Exchange services

- Independent, high quality dry, wet and gas freight market information
- Self-regulated chartering, sale and purchase and freight derivatives markets
- Central forum for competing freight market interests
- Framework ensuring high standards of business practice and co-operation
- London-based business facilities for members



Who attends?

Representatives from the following companies have attended the courses:

A Bilborough ADM International Aegean Shipping Management SA Aegir Management Aegis Overseas **AET** Tankers AgriService Alfred C Toepfer Alpha Shipping and Chartering **AM Nomikos** Amaggi Amarante Shipping Anglo American Apex Bulk Carriers Aquila Maritime Management Arch Coal Ardmore Shipping Services Arista Shipping S.A. Augustea Holding Avra Asia **Baere Maritime** Banchero Costa Bank of Ireland Bank of Nova Scotia Baringa Partners Barry Rogliano Salles Berenberg Bank Berge Bulk Shipping BHP Billiton **Bibby Line BNP** Paribas Bominflot **BP** Shipping **BRS Brokers** Brunei Gas Carriers Bulcom Bunge BW Maritime Pte Ltd **Byzantine Maritime Corporation** Calyon Canadian Forest International Canchart Pte Ltd Cape Tankers Cargill International Castallia Fund Management **CBH** Group CC Maritime Chandris (Hellas) Chart-it Ship Brokers b.v Chartworld Shipping Chinese Maritime Transport Chios Navigation (Hellas) Chubu Energy Trading CIT Maritime Finance Clarksons Clipper Group CMC Coal Marketing Company Ltd Cobelfret Coli Schiffahrt & Transport Bremen Concord Energy ConocoPhilips Constellation

Conti Reederei Cooperative Bulk Handling Coordinadora Copenhagen Business School Copenship Copersucar Core Petroleum CSAV Norasia Cumulus Asset Management D/S Norden Dae Yang Shipping D'Amico Dry D'Amico Tankers Dana Shipping & Trading **DH** Tankers **DNB** Bank Drax Power Station **DVB** Bank **Dynacom Tankers** EA Gibson Shipbrokers Eastern Bulk Carriers ED&F Man Shipping EDF Man Asia **EDF** Trading Singapore Eitzen Electric Power Development Co. Emarat Maritime **Embiricos Shipbrokers Emerald Grain** Emirates Ship Investment Co Enel Trade **Energy Argus** Eni Trading and Shipping E.ON Equinox Euro Marine Logistics Euroceanica European Energy Exchange AG Excel Maritime Carriers ExxonMobil Fednav Femis Financial Conduct Authority **FinnFleet Tankers** Fokus Bank Foresight Fortuna Chartering Frachtcontor Junge GC Tankers **GDF** Suez **GE** Transportation Finance Gearbulk UK Genshipping **Gestion Maritime GK** Compass Glencore Glory Ship Management Golden Flame Shipping Goldman Sachs Goodrich Maritime Goulandris Brother Graig Ship Management Great Eastern Shipping Heidmar Holbud HSBC HSH Nordbank Hua Dao Shipping **ICAP** Shipping lfchor **IINO Shipping** Imerys Ince & Co Intermar

International Shipping and Logistics Ispat Industries Itoro Corp J Aron J Lauritzen JERA Trading K Line Bulk Shipping KC Maritime Kirk Capital Kuwait Petroleum Lalemant Laskaridis Shipping LCH Clearnet LERBRET & CIE SAS Leros Management Lorentzen & Stemoco Louis Dreyfus Lykiardopulo & Co M2M Management Maersk Mainline Shipping Marenave Schiffahrts Maritime 24 Masterbulk Mctaggart Shipping and Management Co Mercator Lines Mercuria Energy Trading Merill Lynch Mid-Ship Marine Milestone Shipping Mitsubishi Corporation International Mitsubishi Corporation International (Europe) Mitsui & Co Europe Mitsui OSK Morgan Stanley MPA Singapore **MUR** Shipping Murmansk Shipping National Bank of Fujirah Navigator Gas Navix Maritime Chartering AB Neoria Compania de Naegacion SLU NEPA Shipping Nero Shipmanagement Newport Shipping Newlead **NIBC Bank** Nidera Holland Noble Agri Nom UK Nordea Bank Nordic Bulk Carriers Nova Shipping & Logistics NS Lemos NS United NYK Bulkship (Atlantic) NV **Olam International Oldendorf Carriers** OSG Paccship UK Ltd Pacific Basin Shipping Pacific Carriers SG Pacific Rim Shipping Paradise Navigation Paralos Maritime Corporation Pasternak Baum & Co PCL Shipping Perdue Grain **PETCO Trading** Petrochina International Petronas

Phoenix Bulk Carriers Pretrobas Petroleo Prime Marine **Prosperity Marine** P-Ships Qatar Gas Transport Company Qatar Navigation Qawareb Ship Management Quadra Commodities **RBS** Shipping Redpath Sugar **Reliance Industries** Reuters **Rio Tinto Riverlake Shipping RMK Maritime** Royal Bank of Scotland RWE Saga Welco Saltwater Bulk Shipping Salzgitter Flachstahl San Miguel Corp Scanmills Scottish Power SCS Seatrek Trans SEB SGM Shipping Services SGX Shell Sims Metal Management Siva Bulk Shipping SK Gas International SKS Sobelnord South32 Southampton Solent University Sovcomflot Standard Bank Standard Chartered Bank Statoil Stena Bulk Suek Tailwind Shipping Taipan Shipbrokers Tata NYK Shipping **TBS** Shipping Teekay Shipping The China Navigation Company The Hadley Shipping Co. The Lion Group Thoresen & Co Thurlestone Shipping Torm Toru Bulk Torvald Klaevness Total Trafigura Transcenden Global Triworld Trust Energy Resources United Arab Shipping Co Univan Shipmanagement Ursachart Vale International Veson Nautical Viterra Vroon Watson Farley & Williams West Asia Maritime Western Bulk Wisdom Lines Wolid International Services Worldscale Assoc Zim

This course, through its knowledgeable instructors, delivers an invaluable understanding of the critical, yet often under-utilised function of risk management as it pertains specifically to the various aspects of the maritime sector Bunker Manager, Heidmar

Gave me an insight into the derivatives markets

Chartering Manager, Teekay Shipping

