INTRODUCTION
SHIPPING IS A VITAL FACILITATOR OF WORLD TRADE

- Real-terms increase in world GDP in the last two decades: 73%
- Increase in world seaborne trade over the same period: 112%
- IMO estimate of the value of world trade carried by sea: 90%
- Value of EU’s trade with the rest of the world in 2015: €3.5 trillion
The European Community Shipowners’ Associations (ECSA) asked Oxford Economics to:

- Assess the economic contribution of the shipping industry
  - Directly
  - Through its European supply chain
  - Through the spending of workers and those in the supply chain
- Estimate the impact of measures permitted under Community guidelines on state aid to maritime transport
- Review the contribution of maritime academies

Extending the analysis to the wider maritime cluster – example from the UK
### DEFINITIONS

#### The shipping industry

- **Transport of goods by sea** (containerised and non-containerised)
- **Transport of persons by sea** (on ferries and cruise ships)
- **Service and offshore support vessels** (e.g. ships laying or repairing undersea cables or pipelines; prospecting for oil; conducting oceanographic research; diving assistance; undertaking undersea work; servicing offshore wind farms, oil and gas platforms)
- **Towage and dredging at sea**

#### “The EU”

- EU flag
- Norwegian flag

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ECONOMIC IMPACT ANALYSIS
THE STUDY ASSESSES THE ECONOMIC IMPACT OF THE EU SHIPPING INDUSTRY ACROSS THREE CHANNELS

Direct impact
- e.g. Freight services
- Passenger services
- Towing & dredging
- Service and offshore support activities
- Renting and leasing

Indirect impact
- e.g. Ship building
- Ship repairs
- Port services
- Insurance
- Shipping-related financial and legal services, etc.

Induced impact
- e.g. Food and beverages
- Other consumer goods
- Restaurants
- Recreation services
- etc.

Total economic impact
WE ASSESSED THE ECONOMIC VALUE OF SHIPPING ACROSS THREE METRICS

Gross value added contribution to GDP
The contribution to the economy of each individual producer, industry or sector. Aggregated across all industries to form the basis of GDP

Employment
Measured on a headcount basis

Tax revenues
Employee income taxes
Employee and employer social security contributions
Tonnage and corporation tax
VAT on employees’ consumption
THE STUDY DREW UPON ON EXISTING RESEARCH, OFFICIAL STATISTICS AND THE OXFORD ECONOMICS GLOBAL INPUT-OUTPUT MODEL

Direct impact
- Previous national studies
- Eurostat national accounts and Structural Business Statistics datasets
- Estimation to align time periods and sector definitions

Indirect impact

Induced impact

Oxford Economics Global Input-Output model
- Impact of the shipping industry on firms in its supply chain
- ‘Induced’ impact of spending by shipping industry employees and those in the supply chain
- Estimates impacts that occur within countries, and cross-country impacts amongst other EU countries
THE EU SHIPPING INDUSTRY IS ESTIMATED TO HAVE DIRECTLY EMPLOYED 590,000 PEOPLE IN 2012

This means shipping employs more people than...

- Travel agents & tour operators: 530,000
- Forestry & logging: 500,000
- Air transport: 425,000

590,000 people employed
- Sea based jobs
- Land based jobs
Almost two-thirds of shipping employees are employed in freight transport.

- Freight transport (incl. towing & dredging): 372,000
- Passenger transport: 158,000
- Service & offshore support vessels: 54,000
- Renting & leasing: 7,000

Source: Oxford Economics
IN 2012, THE EU SHIPPING INDUSTRY IS ESTIMATED TO HAVE DIRECTLY CONTRIBUTED €56 BILLION TO EU GDP

- €47bn to EU GDP in 2004
- +18%
- €56bn to EU GDP in 2012

2012 GDP per worker:
- EU average: €53,000
- Shipping: €88,000
- Water supply: €86,000
- Film & TV: €84,000
- Air transport: €71,000
- Land transport: €44,000
THE TOTAL GDP CONTRIBUTION OF THE EUROPEAN SHIPPING INDUSTRY IN 2012 IS ESTIMATED TO HAVE BEEN €145 BILLION.

Source: Oxford Economics
THE SHIPPING INDUSTRY ALSO SUPPORTED EMPLOYMENT FOR AN ESTIMATED 2.3 MILLION PEOPLE

Source: Oxford Economics
THE SHIPPING INDUSTRY HAS SIGNIFICANT ‘MULTIPLIER’ EFFECTS ACROSS THE WIDER EU ECONOMY

For every €1 million the shipping industry contributes to GDP itself, it creates another €1.6 million elsewhere in the economy.

For every direct job the shipping industry creates, another 2.8 are created elsewhere in the EU economy.
THE SHIPPING INDUSTRY SUPPORTED TOTAL TAX REVENUES OF AROUND €41 BILLION IN 2012

**Tax revenues estimated**

- Employee income taxes
- Employee and employer social security contributions
- Tonnage and corporation tax
- VAT on employees’ consumption

Source: Oxford Economics
THE IMPACT OF MEASURES PERMITTED UNDER THE COMMISSION’S GUIDELINES ON STATE AID TO MARITIME TRANSPORT
OVER AND ABOVE ITS ROLE IN FACILITATING TRADE, THE SHIPPING INDUSTRY HAS A NUMBER OF UNIQUE FEATURES AND WIDER BENEFITS WHICH PROVIDE A JUSTIFICATION FOR STATE SUPPORT

- Inherent mobility
- Core of the wider maritime cluster
- Security of energy supply
- Military support & peacekeeping
- Safety standards
- Trained seafarers
THE UK INTRODUCED A TONNAGE TAX IN 2000. BY 2012 THE UK CONTROLLED FLEET HAD MORE THAN TRIPLED IN SIZE

Source: UK Chamber of Shipping, Oxford Economics
THE UK INTRODUCED A TONNAGE TAX IN 2000. By 2012 the UK controlled fleet had more than tripled in size.
FRANCE INTRODUCED A TONNAGE TAX IN 2003, AND SIMPLIFIED ITS SOCIAL SECURITY EXEMPTIONS IN 2006

![Graph showing the impact of a tonnage tax on DWT (000s) from 1994 to 2012. The graph compares the controlled fleet with and without a tonnage tax, showing a 61% decrease.](image)

Source: ISL Bremen; counter-factual scenario estimated by Oxford Economics
GERMANY INTRODUCED A TONNAGE TAX AND A SEPARATE WAGE RETENTION SCHEME IN 1999

Source: ISL Bremen; counter-factual scenario estimated by Oxford Economics
SWEDEN INTRODUCED SOCIAL SECURITY AND INCOME TAX INCENTIVES IN 2001, BUT HAS NOT INTRODUCED A TONNAGE TAX

Source: UNCTAD, ISL Bremen
APPLYING THIS APPROACH TO NINE COUNTRIES SUGGESTS THE ECONOMIC CONTRIBUTION OF THE EU SHIPPING INDUSTRY COULD HAVE BEEN 50 PER CENT LOWER IN 2012 WITHOUT STATE AID MEASURES

Source: Oxford Economics
MARITIME ACADEMIES
IT IS ESTIMATED THAT THERE WERE AROUND 38,000 STUDENTS/CADETS IN MARITIME ACADEMY–TYPE TRAINING ACROSS THE EU AND NORWAY IN 2012

+11% since 2004

Source: Oxford Economics
THE ECONOMIC VALUE OF THE EU SHIPPING INDUSTRY

Direct economic impact

- 590,000 people employed
  - Sea based jobs
  - Land based jobs
- 38,000 Students and Cadets
- €56 billion to EU GDP
- €6 billion tax revenue

EU average: €53,000
Shipping: €88,000
GDP per worker

Indirect impacts

- €59 billion contribution to GDP
- 1.1 million jobs

Induced impacts

- €30 billion contribution to GDP
- 550,000 jobs

Total economic impact

- €145 billion to EU GDP
- 2.3 million jobs
- €41 billion tax revenue

For every €1 million of GDP the shipping industry creates, another €1.6 million is created elsewhere in the EU economy.

OXFORD ECONOMICS
EXTENDING THE ANALYSIS TO THE WIDER MARITIME CLUSTER – AN EXAMPLE FROM THE UK
SIMILAR TECHNIQUES CAN BE USED TO ASSESS THE IMPACTS OF THE WIDER MARITIME CLUSTER

• In 2015, Maritime UK asked Oxford Economics to assess the economic contribution of the UK maritime cluster

• Defined to include:
  • Shipping
  • Ports (cargo handling, warehousing, storage, transport services, shipbuilding and repair undertaken within UK ports)
  • Maritime business services (ship broking, insurance, maritime financial and legal services, classification societies)
WE USED DETAILED LOCAL DATA TO ESTIMATE EMPLOYMENT WITHIN A SAMPLE OF PORTS

£7.7 billion in direct GVA (outer ring)

118,000 direct jobs after scaling (inner ring)
INCLUDING MULTIPLIER EFFECTS, WE ESTIMATE THAT PORTS CONTRIBUTED £19 BILLION IN GDP AND 344,000 JOBS IN 2013
IDENTIFYING MARITIME BUSINESS SERVICES ACTIVITY POSES CHALLENGES

- Maritime business services typically do not have their own category within official statistics.
- Our estimates of the industry’s direct employment and GDP contribution therefore relied on detailed research by the industry. That in turn used a survey, interviews and industry yearbooks to identify relevant firms and the size of those firms.
- Total direct employment was estimated to have been just over 10,000 workers in 2013, slightly more than in cargo handling.

![Pie chart showing the distribution of maritime business services: Shipbroking 39%, Insurance services 37%, Legal services 15%, Classification 8%, Financial services 1%]
INCLUDING MULTIPLIER EFFECTS WE ESTIMATE THAT MARITIME BUSINESS SERVICES CONTRIBUTED £3.5 BILLION TO UK GDP IN 2013.
IN TOTAL, THE MARITIME CLUSTER SUPPORTED £22 BILLION IN GDP AND 489,000 JOBS IN THE UK ECONOMY IN 2013

Source: Oxford Economics
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The modelling and results presented here are based on information provided by third parties, upon which Oxford Economics has relied in producing its report and forecasts in good faith. Any subsequent revision or update of those data will affect the assessments and projections shown.

To discuss the report further please contact:
Andrew P Goodwin: apgoodwin@oxfordeconomics.com

Oxford Economics
Broadwall House, 21 Broadwall, London, SE1 9PL, UK
Tel: +44 207 803 1400
Europe, Middle East, and Africa:

- Global headquarters
  - Oxford Economics Ltd
  - Abbey House
  - 121 St Aldates
  - Oxford, OX1 1HB
  - UK
  - Tel: +44 (0)1865 268900

- London
  - Broadwall House
  - 21 Broadwall
  - London, SE1 9PL
  - UK
  - Tel: +44 (0)20 7803 1418

- Belfast
  - Lagan House
  - Sackville Street
  - Lisburn
  - County Down, BT27 4AB
  - Tel: +44 (0)2892 635400

- Paarl
  - 12 Cecilia Street
  - Paarl 7646
  - South Africa
  - Tel: +27(0)21 863-6200

- Frankfurt
  - Mainzer Landstraße 41
  - 60329 Frankfurt am Main
  - Germany
  - Tel: +49 69 95 925 280

Americas:

- New York
  - 5 Hanover Square, 19th Floor
  - New York, NY 10004
  - USA
  - Tel: +1 (646) 786 1879

- Philadelphia
  - 303 West Lancaster Avenue
  - Suite 2e
  - Wayne, PA 19087
  - USA
  - Tel: +1 (610) 995 9600

- Mexico City
  - Emerson 150, Despacho 802
  - Col. Polanco, Miguel Hidalgo
  - México D.F., C.P. 11560
  - Tel: +52 (55) 52503252

- Boston
  - 51 Sawyer Rd
  - Building 2 - Suite 220
  - Waltham, MA 02453
  - USA
  - Tel: +1 (617) 206 6112

- Chicago
  - 980 N. Michigan Avenue, Suite 1412
  - Chicago
  - Illinois, IL 60611
  - USA
  - Tel: +1 (773) 372-5762

- Florida
  - 8201 Peters Road
  - Suite 1000,
  - Plantation,
  - FL 33324
  - USA
  - Tel: +1 (954) 916 5373

Asia Pacific:

- Singapore
  - 6 Battery Road
  - #38-05
  - Singapore 049909
  - Tel: +65 6850 0110

- Hong Kong
  - 30/F, Suite 3112
  - Entertainment Building
  - 30 Queen’s Road Central
  - Hong Kong
  - Tel: +852 3103 1097

- Sydney
  - Level 4, 95 Pitt Street
  - Sydney, 2000
  - Australia
  - Tel: +61 (0)2 8249 8286

Email:
- mailbox@oxfordeconomics.com

Website:
- www.oxfordeconomics.com