THE ECONOMIC VALUE OF THE EU SHIPPING INDUSTRY

2017 update

A report for the European Community Shipowners’ Associations (ECSA)

February 2017
KEY FINDINGS

• The EU shipping industry directly employed 640,000 people and supported a €57 billion contribution to GDP in 2015.

• Once supply chain and worker spending multiplier impacts are taken into account the shipping industry’s employment contribution rises to 2.1 million.

• The total GDP contribution of the industry, including supply chain and worker spending impacts, is estimated to have been €140 billion in 2015.

• At €89,000 per worker in 2015, productivity in the EU shipping industry remains above the EU average, as well as that of sectors such as manufacturing and healthcare.
This slide pack presents updated estimates of the economic contribution of the EU shipping industry, as previously presented in Section 3 of Oxford Economics’ 2014 study ‘The economic value of the EU shipping industry’ and the 2015 study ‘The economic value of the EU shipping industry – update’.

This update focuses on two measures of the industry’s economic contribution:

• The gross value added contribution to GDP (referred to as the ‘contribution to GDP’ on the subsequent slides).
• Employment, on a head count basis.

Results are reported for the ‘EU shipping industry’ which is defined as the industry within the 28 EU member states plus Norway.
WE ESTIMATE THE ECONOMIC IMPACT OF THE EU SHIPPING INDUSTRY ACROSS THREE CHANNELS

Direct Impact
Activity within the shipping industry

Indirect Impact
Activity supported by the shipping industry’s purchases of inputs from suppliers
Suppliers’ own supply chains

Induced Impact
Activity supported as workers in the shipping industry and its supply chain spend their wages on goods and services in the wider economy

Total Impact
The sum of direct, indirect and induced impacts
Consistent with our earlier studies, the shipping industry has been defined by ECSA as:

- the transport of goods by sea (both containerised and non-containerised);
- the transport of persons by sea (both on ferries and on cruise ships);
- service and offshore support vessels, such as ships laying or repairing undersea cables or pipelines; prospecting for oil; conducting oceanographic research; diving assistance; undertaking undersea work and servicing offshore wind farms, oil and gas platforms; and
- towage and dredging activities at sea.
THE DIRECT ECONOMIC CONTRIBUTION OF THE EU SHIPPING INDUSTRY
THE EU SHIPPING INDUSTRY DIRECTLY EMPLOYED 640,000 PEOPLE IN 2015, MORE THAN TRAVEL AGENTS AND TOUR OPERATORS, FORESTRY AND LOGGING, OR AIR TRANSPORT

DIRECT EMPLOYMENT IN THE EU AND NORWAY IN 2015: SHIPPING AND COMPARATOR INDUSTRIES, 2015

000s

- Manufacture of basic metals: 1,077
- Mining and quarrying: 725
- Shipping: 640
- Travel agents and tour operators: 571
- Forestry and logging: 530
- Air transport: 380

Source: Oxford Economics, Eurostat
THE MAJORITY (58 PERCENT) OF WORKERS IN THE EU SHIPPING INDUSTRY ARE EMPLOYED IN FREIGHT TRANSPORT

Note: Employment numbers reflect all nationalities who are employed within the EU fleet.

Source: Oxford Economics
AROUND FOUR-FIFTHS OF EUROPEAN SHIPPING INDUSTRY EMPLOYMENT COMPRISSES POSITIONS AT SEA

TOTAL EMPLOYMENT IN THE EU SHIPPING INDUSTRY BY PLACE OF WORK, 2015

- **At sea**: 516,000 (81%)
- **Shore-based**: 124,000 (19%)

Source: Oxford Economics
OFFICERS ACCOUNT FOR AN ESTIMATED 42 PERCENT OF POSITIONS AT SEA, AND RATINGS 58 PERCENT

EMPLOYMENT AT SEA SPLIT BY OFFICERS AND RATINGS, 2015

- Officers: 216,000 (42%)
- Ratings: 300,000 (58%)

Source: Oxford Economics
207,000 OF THE ESTIMATED 516,000 SEAFARERS EMPLOYED IN THE EU SHIPPING INDUSTRY WERE EU/EEA NATIONALS IN 2015

EMLOYMENT AT SEA SPLIT BY EU AND NON EU NATIONALS, 2015

- 207,000 EU/EEA nationals (40%)
- 309,000 Non EU/EEA nationals (60%)

Source: Oxford Economics
THE EU SHIPPING INDUSTRY DIRECTLY SUPPORTED A €57 BILLION CONTRIBUTION TO GDP IN 2015, MORE THAN AIR TRANSPORT, FORESTRY AND LOGGING OR FISHING

DIRECT GVA IN THE EU AND NORWAY IN 2015: SHIPPING AND COMPARATOR INDUSTRIES, 2015

€ millions

<table>
<thead>
<tr>
<th>Industry</th>
<th>GVA (€ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising</td>
<td>65,000</td>
</tr>
<tr>
<td>Postal Activities</td>
<td>58,000</td>
</tr>
<tr>
<td>Shipping</td>
<td>57,000</td>
</tr>
<tr>
<td>Air transport</td>
<td>39,000</td>
</tr>
<tr>
<td>Forestry and logging</td>
<td>24,000</td>
</tr>
<tr>
<td>Fishing</td>
<td>10,000</td>
</tr>
</tbody>
</table>

Source: Oxford Economics, Eurostat
FREIGHT TRANSPORT ACCOUNTED FOR 57 PERCENT (€32 BILLION) OF THE EU SHIPPING INDUSTRY’S TOTAL CONTRIBUTION TO GDP

DIRECT GVA CONTRIBUTION TO GDP OF THE EU SHIPPING INDUSTRY BY SUB-SECTOR, 2015

<table>
<thead>
<tr>
<th>Sub-sector</th>
<th>Direct GVA Contribution (€ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight transport (incl. towing &amp; dredging)</td>
<td>32,000</td>
</tr>
<tr>
<td>Service &amp; offshore support vessels</td>
<td>10,000</td>
</tr>
<tr>
<td>Passenger transport</td>
<td>10,000</td>
</tr>
<tr>
<td>Renting &amp; leasing</td>
<td>4,000</td>
</tr>
</tbody>
</table>

Source: Oxford Economics
THE EU SHIPPING INDUSTRY’S PRODUCTIVITY IS GREATER THAN THE MANUFACTURING INDUSTRY, HEALTHCARE AND THE EU AVERAGE

DIRECT PRODUCTIVITY IN THE EU AND NORWAY IN 2015: SHIPPING AND COMPARATOR INDUSTRIES, 2015

<table>
<thead>
<tr>
<th>Industry</th>
<th>Direct Productivity (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining and quarrying</td>
<td>224,000</td>
</tr>
<tr>
<td>Air transport</td>
<td>104,000</td>
</tr>
<tr>
<td>Shipping</td>
<td>89,000</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>65,000</td>
</tr>
<tr>
<td>Health care</td>
<td>49,000</td>
</tr>
<tr>
<td>EU average</td>
<td>56,000</td>
</tr>
</tbody>
</table>

Source: Oxford Economics, Eurostat
THE TOTAL ECONOMIC CONTRIBUTION OF THE EU SHIPPING INDUSTRY
ADDING DIRECT, INDIRECT AND INDUCED IMPACTS SUGGESTS THAT THE EU SHIPPING SUPPORTED A TOTAL GDP CONTRIBUTION OF €140 BILLION IN 2015

THE TOTAL GVA CONTRIBUTION OF THE EU SHIPPING INDUSTRY, 2015

€ billions

<table>
<thead>
<tr>
<th></th>
<th>Direct</th>
<th>Indirect</th>
<th>Induced</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>54</td>
<td>57</td>
<td>29</td>
<td>140bn</td>
</tr>
</tbody>
</table>

Source: Oxford Economics

For every €1 million the EU shipping industry contributes to GDP itself, it creates a further €1.6 million elsewhere in the European economy.
THE EU SHIPPING INDUSTRY IS ESTIMATED TO HAVE SUPPORTED A TOTAL OF 2.1 MILLION JOBS IN 2015, EITHER DIRECTLY, THROUGH ITS SUPPLY CHAIN, OR THOUGH WORKERS’ SPENDING.

For every direct job the shipping industry supports, a further 2.3 are supported elsewhere in the European economy.
METHODOLOGY AND DATA SOURCES

To analyse the economic contribution of the EU shipping industry it is necessary to identify the best possible fit between our preferred definition of the industry, and the categories for which economic data are available. Eurostat categorises economic activity according to its NACE system. This identifies a number of sectors which include activities that predominantly fall within our definition of the shipping industry.

Using these definitions it has been possible to gather information from the Eurostat national accounts and Structural Business Statistics datasets on gross value added and employment in passenger water transport, freight water transport, and the renting and leasing of water transport equipment.

Wherever possible, the Eurostat data have been complemented with information provided by ECSA members, who have in turn drawn information from previous economic impact studies and national sources.

Some elements of the preferred definition of the shipping industry cannot easily be identified within the Eurostat classification. This is a particular issue for service and offshore support vessels, for which output and employment are often incorporated within the categories for the type of activity they support (most notably in the energy sector). A similar issue arises in the case of dredging, which is included within Eurostat data for the mining and quarrying sector.

For these sub-sectors it has not been possible to obtain information across all EU countries. Nonetheless, a number of national shipowners’ associations hold information for their own country on offshore support vessels and dredging. This has been included in the estimates of employment and GVA wherever it is available.

Further details of the methodology and data sources used for this work are set out in our 2014 study.
As part of the data collection process for this update, national shipping associations were asked to provide their latest estimates of shipping industry employment and GVA for the last few years. This new information has not only enabled us to produce the estimates of the economic contribution of the shipping industry in 2015, but has also allowed us to update the results for 2013 which were presented in our previous report to ECSA.

The latest data from national associations suggest that the GDP contribution of the shipping industry in Italy may have been lower than estimated in 2015, while the industry’s impact in the Netherlands may have been higher. The net impact of these changes is that the direct GVA contribution of the EU shipping industry in 2013 is now estimated to have been €55.8 billion, compared to the €56.1 billion estimated at the time of our 2015 report. For employment, the latest estimates for Italy are higher than previously assessed. The net impact this change is to increase the direct employment contribution from the 615,000 reported in our previous report, to 632,000 using the latest data.

To consider how the economic impact of the EU shipping industry has changed between 2013 and 2015, reference should be made to the updated 2013 values, which have been calculated on a consistent basis to our new 2015 estimate. Making this comparison suggests that the industry’s direct GDP contribution increased by around €1.2 billion between 2013 and 2015, while employment increased by around 9,000.
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The modeling 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.

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