OXFORD ECONOMICS

The economic impact of the UK Maritime Services Sector

A Report for Maritime UK
(including regional breakdown)

February 2013

OXFORD ECONOMICS

Contents

1 Executive summary

The UK maritime services sector …

- This report, prepared for on behalf of Maritime UK[1], assesses the economic impact of the UK maritime services sector, here defined to include the activity of UK ports, shipping and maritime business services. It therefore excludes sectors such as North Sea oil and gas extraction, the manufacture of marine equipment and the naval defence industry.

…directly created 262,700 jobs…

- It is estimated that the maritime services sector created approximately 262,700 jobs in 2011 or 0.8% of total UK employment. This figure implies that the industry was a larger employer than, for example, either the maintenance and repair of motor vehicles or the renting and operating of owned or leased real estate.

- Removing the impact of foreign seafarers in the shipping industry suggests the maritime services sector created 165,400 jobs in the UK. This represents a 6.1% increase in employment since 2009, equivalent to the creation of an extra 9,500 jobs in the UK. In comparison, economy-wide employment has fallen by 0.4% over the same period.

…contributed £13.8 billion to UK GDP…

- The maritime services sector made an estimated £13.8 billion direct value-added contribution to GDP in 2011, equivalent to 0.9% of the UK economy. Therefore, the maritime services sector made a larger contribution to UK GDP than both civil engineering and the activities of postal and courier service providers.

…and generated £2.7 billion in tax receipts

- In addition, the maritime services sector directly generated nearly £2.7 billion for the UK Exchequer, through a combination of taxes paid by both employees and firms in the industry.

The industry also supports considerable activity in other sectors…

- Service providers will source goods and services from UK-based suppliers, which, in turn, have their own domestic supply chain. In addition, people employed by the maritime services sector and its suppliers will spend their wages on consumer goods and services in the UK economy. Such effects are typically referred to as the 'indirect' and 'induced' impacts respectively.

[1] Maritime UK is an overarching body comprising the Baltic Exchange, the British Ports Association, the UK Chamber of Shipping, the Institute of Chartered Shipbrokers, Maritime London, the Passenger Shipping Association and the UK Major Ports Group.

….in total, including the indirect and induced effects, it supported 634,900 jobs and contributed £31.7 billion to UK GDP…

- Including direct, indirect and induced impacts, the maritime services sector is estimated to support 634,900 jobs, or 1 in every 50 jobs in the UK. Moreover, once these multiplier effects are accounted for, the sector makes a value added contribution to GDP of £31.7 billion, equivalent to 2.1% of the UK economy.

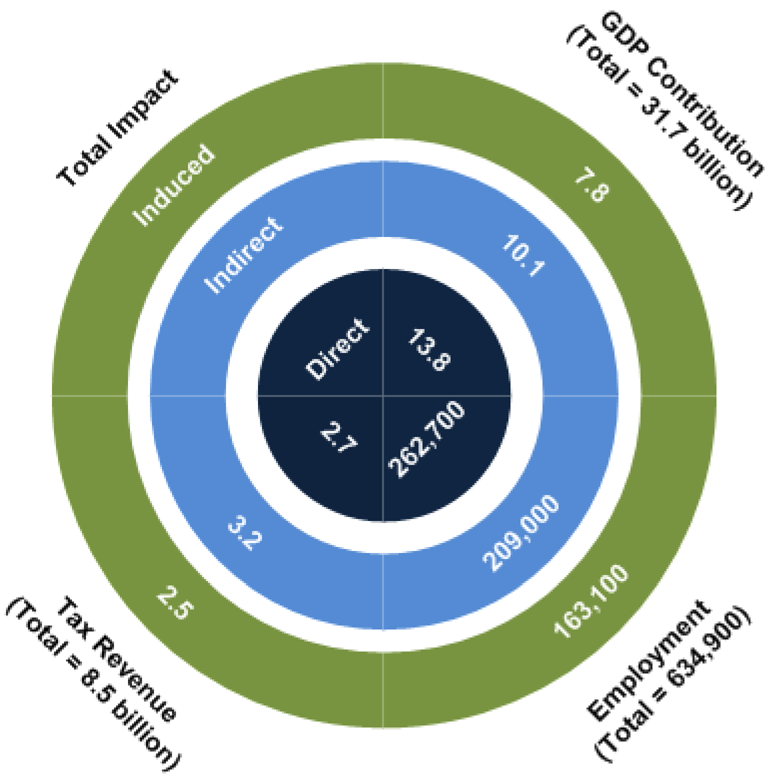
- In terms of UK-based jobs, the maritime services sector supported approximately 537,500 jobs in total (removing foreign officers and ratings employed on UK-registered vessels in the shipping industry).

…and generated £8.5 billion for the UK Exchequer

- Finally, inclusive of these multiplier impacts, the maritime service sector's total contribution to the UK Exchequer was approximately £8.5 billion, equivalent to £1 in every £71 of government revenue collected.

The full economic impact of the maritime services sector, in terms of employment, GDP contribution and revenue generated for the Exchequer, through each channel of impact, is summarised in Figure 1.1.

Figure 1.1: Summary of the economic contribution of the UK maritime services sector in 2011



The impact of the maritime services sector varies across the UK's regions

- It is in Scotland where the maritime services sector maintains its strongest presence in terms of employment; with the devolved country accounting for one in every four employees. London ranked top in terms of GVA, despite a relatively low level of employment. This is largely down to business services cluster located in the region.

- The sector also made a significant direct contribution to the English regions of the South East, North West and the East of England. As such, in 2011 the sector contributed over 15,000 jobs in each region.

- When including the wider impacts through the indirect and induced channels, the maritime services sector supported tangible impacts in regions with a limited direct impact, such as the East Midlands and West Midlands. Indeed, it is estimated that over 1% of employment in each region was supported by activity generated by the maritime services sector in 2011.

- In terms its relative contribution to the UK's regions, it is in Scotland where the maritime services sector has the greatest impact. The sector supported an estimated 3.5% of the devolved country's GDP and 2.9% of employment in 2011. Other notable contributions include those in Northern Ireland and the North East of England, where the sector supported over 2.5% of GDP.

2 Introduction

This report, prepared by Oxford Economics, evaluates the economic contribution of the UK maritime services sector in 2011, providing an update on previous research[2]. Here 'maritime services' refers to the combination of the ports, shipping and maritime business services industries, whose economic contribution is analysed individually in a separate set of reports.

2.1 The channels of economic impact

A standard economic impact analysis investigates three channels of impact. These are:

- **Direct impact** – employment and economic activity in the UK maritime services sector itself, including the ports, shipping and maritime business services sectors.
- **Indirect impact** – employment, contribution to GDP and tax receipts supported down the supply chain as a result of UK maritime companies purchasing goods and services from UK suppliers. This includes, for example, jobs supported through the demand for iron and steel and other raw materials; shipping services; communications; and a wide variety of activity in the business services sector (accountancy, IT etc).
- **Induced impact** – employment, contribution to GDP and tax receipts supported by those directly and indirectly employed in the UK maritime services sector, spending their wages on goods and services in the wider UK economy. This helps to support jobs in the industries that supply these purchases, and includes jobs in retail outlets, companies producing consumer goods and in a range of service industries.

When dealing with a single firm/sector the total economic impact of its activities would be defined simply as the sum of these three individual effects. However, due to the interconnections between the three industries under consideration it is important that adjustments are made to avoid the possibility of 'double counting'. This issue is explored in more depth in Chapter 4.

2.2 Report structure

The rest of this report is structured as follows:

- **Chapter 3** outlines the economic impact of each of the three industries in isolation, in terms of their contribution to GDP, employment and revenue raised for the Exchequer.
- **Chapter 4** examines their combined economic impact, focusing on the same three metrics.
- **Chapter 5** provides a breakdown of the regional impacts.
- **Chapter 6** concludes.

[2] Oxford Economics, (2011), 'The economic impact of the UK's maritime services sector', May.

3 The Economic Impact of Each Individual Sector

This chapter details the economic impact of each of the three separate sectors (ports, shipping and maritime business services) focusing on three key metrics (jobs, contribution to GDP and tax revenue). For more detail on any of these sectors, consult the separate individual reports which were produced in conjunction with this study[3].

KEY POINTS

- The UK ports industry supported just nearly **£21.2 billion in UK GDP, 391,800 jobs** and **over £6.2 billion in tax receipts for the UK Exchequer.**
- The UK shipping industry has, in general, enjoyed buoyant growth over the past decade, following the introduction of the tonnage tax in 2000. In total, the shipping industry supported **almost £12.5 billion in UK GDP**, **287,000 jobs** (of which 48,200 were UK-based) and **£2.8 billion in tax receipts**.
- In 2011, including direct, indirect and induced effects, the maritime business services sector supported a **£3.7 billion contribution to UK GDP**, **55,000 jobs** and **over £1.1 billion in tax revenue.**

3.1 Economic impact of the ports industry

The UK ports industry employed an estimated 117,200 people and contributed nearly £7.9 billion to UK GDP in 2011 (equivalent to 0.5% of UK GDP). This was more than the contribution of both the aerospace industry and advertising and market research. Moreover, this activity generated nearly £2.0 billion in tax revenue for the UK Exchequer. The impact of the ports industry extends beyond its direct contribution, however, producing significant spillover benefits in the form of both indirect and induced effects. These helped to raise the industry's overall contribution to GDP to nearly £21.2 billion, activity which supported approximately 391,800 jobs (equivalent to 1 in every 80 jobs) and raised over £6.2 billion for the UK Exchequer (chart 3.1).

[3] Oxford Economics (2012), 'The economic impact of the UK Maritime Services Sector: Shipping', 'The economic impact of the UK Maritime Services Sector: Ports', and 'The economic impact of the UK Maritime Services Sector: Business Services', December

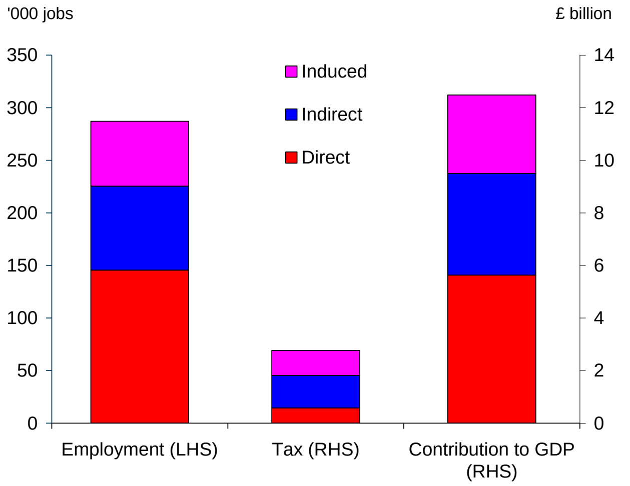
Chart 3.1: Summary of the economic impact of the ports industry in 2011

Source : ONS, HMRC, Oxford Economics

3.2 Economic impact of the shipping industry

The UK shipping industry has, in general, enjoyed rapid growth over the past decade following the introduction of the tonnage tax regime in 2000. In 2011, the industry employed 145,500 workers, of which 48,200 were UK-based (removing the impact of foreign officers and ratings employed on UK-registered vessels), contributing an estimated £5.6 billion to GDP, equivalent to 0.4% of the UK economy. This activity helped to raise nearly £581 million in tax receipts for the UK Exchequer. In total (including the indirect and induced impacts) the shipping industry supported a £12.5 billion contribution to UK GDP, 287,000 jobs (189,700 UK-based jobs) and £2.8 billion in tax revenue (Chart 3.2).

Chart 3.2: Summary of the economic impact of the shipping industry in 2011

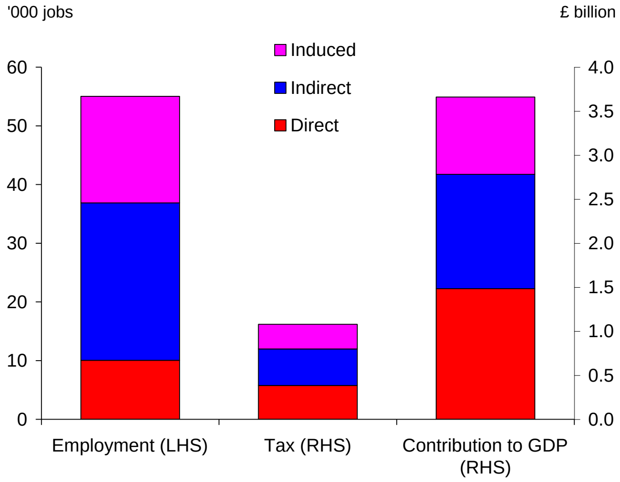


Source : UK Chamber of Shipping, ONS, HMRC, Oxford Economics

3.3 Economic impact of the maritime business services industry

Estimates by Oxford Economics, which lean heavily on intelligence gathered by Wei (2012)[4] on behalf of the Baltic Exchange, suggest that the industry employed an estimated 10,100 people in 2011, helping to generate nearly £1.5 billion in GVA and raise £385 million for the UK Exchequer. Since workers in the industry are on average very productive[5], this activity creates proportionately large multiplier effects, with 26,800 jobs created indirectly via the UK-based supply chain. In total it is estimated that the maritime business services industry supported 55,000 jobs, a value added contribution to UK GDP of £3.7 billion and £1.1 billion for the UK Exchequer. The results are summarised in Chart 3.3.

Chart 3.3: Summary of the economic impact of the maritime business services sector in 2011



Source : Baltic Exchange, ONS, HMRC, Oxford Economics

[4] Wei, S, (2012) 'Updates on UK maritime professional services revenue and employment', the Baltic Exchange

[5] Each employee generated nearly £147,600 of GVA on average compared to an economy-wide average of just over £48,400.

4 The Combined Economic Impact of the Ports, Shipping and Maritime Business Services Industries

When combining the results of our three individual impact studies, it is important to account for issues of 'double counting' due to the interconnected nature of the three industries. This is explored in more detail in this chapter, presenting the results of the combined estimates in terms of their contribution to GDP, employment and revenue raised for the Exchequer.

KEY POINTS

- The UK maritime services sector contributed nearly **£13.8 billion to UK GDP** in 2011; **employed 262,700 people** in a number of different activities and raised **nearly £2.7 billion for the UK Exchequer**.
- Excluding the employment of foreign seafarers on UK-registered vessels, the maritime services sector employed an estimated **165,400 people in the UK**. This represents an increase in UK employment of **6.1% since 2009**, equivalent to the creation of 9,500 jobs, compared to a fall in whole economy employment of 0.4% over the same period.
- In addition, it is estimated that the maritime services sector supported 209,000 jobs indirectly via its UK-based supply chain, with a further 163,100 supported by the spending of those employed directly and indirectly in the industry. In total, the maritime services sector supported **634,900 jobs,** equivalent to 1 in every 50 jobs in the UK.
- In terms of GVA, the maritime services sector supported approximately £10.1 billion in UK GDP via its supply chain and a further £7.8 billion due to induced effects. In total, the industry supported an estimated **£31.7 billion in contribution to GDP**, or 2.1% to the UK economy.
- Moreover, this activity helped to support £3.2 billion of tax revenue for the Exchequer indirectly and over £2.5 billion via the induced impact. Therefore, in total the maritime services sector supported **£8.5 billion in tax receipts for the Exchequer**. This is equivalent to £1 in every £71 received by the government in tax revenue.

4.1 Issues with 'double counting'

In order to combine the economic impacts of the three sectors together there were two key issues that needed to be addressed:

- firstly, the definitions of each sector were not mutually exclusive, implying that by simply summing the three direct impacts would lead to an over-estimation, i.e. including the impact of certain sub-sectors more than once, or 'double counting'; and

- secondly, it is evident that, particularly in the case of shipping, the supply-chain effects (identified as part of the indirect impact) would have already been counted as part of the direct estimates of either the ports industry or the maritime business services industry. For example, some workers in UK ports and in the ship broking industry would already be captured as part of the shipping industry's supply chain. As such, Oxford Economics identified the proportion of the shipping industry's supply chain that would have been accounted for by the ports and maritime services sector. Subsequently, the indirect and induced impacts of the shipping industry were adjusted accordingly (see section 4.3).

4.2 The combined direct economic impact

As outlined above, when assessing the combined direct economic impact, consideration had to be given to the fact that the definitions of the individual sectors were not mutually exclusive. Indeed, the ports industry included local employment in both the 'sea and coastal transport sector' (part of the shipping industry) and the 'non-life insurance' sector (part of the maritime business services sector). To account for this, the employment and GVA attributed to those sectors were subtracted from the direct estimate of the ports industry, with the tax figures also adjusted to take account for the lower number of jobs created and industry profits.

The results are summarised in Tables 4.1 and 4.2, which compare the direct and total economic impact of each sector in terms of the three standard metrics, in isolation and then in aggregate. Due to the adjustments to avoid double counting, the direct contribution to GDP of the ports sector falls from £7.9 billion to £6.7 billion, with a consequent fall in jobs to 107,200 and revenue generated for the Exchequer to £1.7 billion. In total, this implies that, in 2011, the aggregate contribution to GDP of the combined maritime services sector was £13.8 billion (equivalent to 0.9% of UK GDP); helping to create 262,700 jobs (0.8% of UK employment or nearly 1 in every 120 jobs) and raise nearly £2.7 billion for the UK Exchequer. Removing foreign seafarers employed on UK-registered vessels from the direct employment suggests that the maritime services sector employed over 165,400 UK-based people. This represents an increase in UK-based employment of 6.1% since 2009 (9,500 jobs). Over the same period, employment in the wider UK economy contracted by 0.4%. It is also notable that the maritime services sector is relatively productive. In 2011, the combined maritime services sector was almost 10% more productive than the economy-wide average (£48,400).

Table 4.1: Comparison of the direct economic impact of each sector in isolation versus in aggregate in 2011

Industry	In Isolation			In Aggregate		
	Contribution to GDP	Employment	Tax Revenue	Contribution to GDP	Employment	Tax Revenue
	£ million	'000	£ million	£ million	'000	£ million
Ports	7,900	117	1,968	6,670	107	1,716
Shipping	5,633	146	581	5,633	146	581
Business Services	1,484	10	385	1,484	10	385
Maritime Services	**15,017**	**273**	**2,933**	**13,787**	**263**	**2,681**

Source: Baltic Exchange, Chamber of Shipping, ONS, HMRC, Oxford Economics

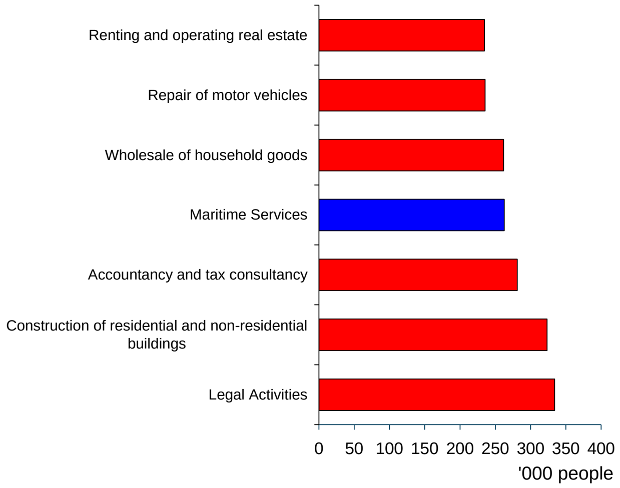
Table 4.2: Comparison of the total economic impact of each sector in isolation versus in aggregate in 2011

Industry	In Isolation			In Aggregate		
	Contribution to GDP	Employment	Tax Revenue	Contribution to GDP	Employment	Tax Revenue
	£ million	'000	£ million	£ million	'000	£ million
Ports	21,194	392	6,243	18,038	342	5,371
Shipping	12,484	287	2,767	10,027	238	2,003
Business Services	3,661	55	1,079	3,661	55	1,079
Maritime Services	**37,339**	**734**	**10,089**	**31,727**	**635**	**8,454**

Source: Baltic Exchange, Chamber of Shipping, ONS, HMRC, Oxford Economics

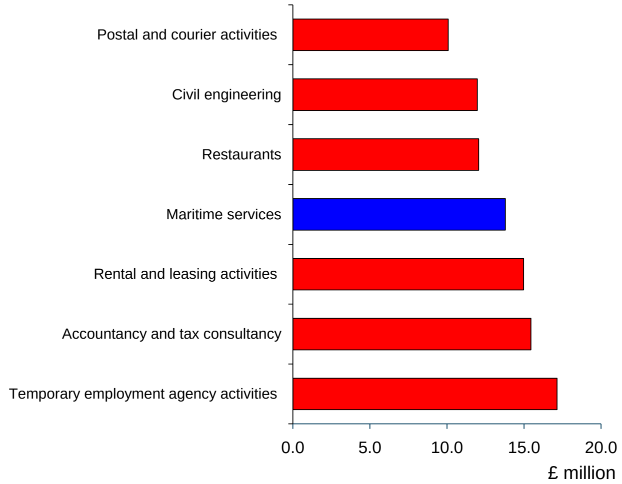
To place these figures into context, in 2011 the maritime services sector employed more people than the wholesale of household goods, the maintenance and repair of motor vehicles and the renting and operating of owned or leased real estate. Meanwhile, the maritime services sector's contribution to GDP was larger than the restaurant and mobile food service sector, civil engineering and the activities of postal and courier services. These comparisons are illustrated graphically in Charts 4.1 and 4.2.

Chart 4.1: Comparison of employment contribution to other industries in 2011



Source : ONS, Oxford Economics

Chart 4.2: Comparison of GDP contribution to other industries in 2011



Source : ONS, Oxford Economics

4.3 The combined total economic impact

In order to calculate the total impact (i.e. including indirect and induced effects) of the maritime services sector, it is important to account for the fact that part of the indirect impact (via the supply chain) of the shipping industry would have already been included in our definition of the direct impact of ports and maritime business services industries. Making use of ONS analytical input-output tables[6], it is estimated that just over 48% of the shipping industry's supply chain was in industries which are already defined as part of the ports or maritime business services industries. Therefore, Oxford Economics scaled down the estimates of GVA and employment appropriately, which consequently impacted the induced impact (as a consequence of there

[6] ONS (2012), 'Input-Output Supply and Use Tables, 2012 Edition', 31 July.

being fewer indirect employees). Leading on from this, estimates for tax revenue generated for the Exchequer are adjusted according to the new assumptions about jobs created etc. In addition, as the direct contribution of the ports industry is assumed to be lower when estimating an aggregate impact of the maritime services sector, Oxford Economics had to scale down the indirect and induced impacts of the ports industry accordingly.

In total, the maritime services sector supported a £31.7 billion contribution to UK GDP in 2011, equivalent to 2.1% of the total economy, approximately 634,900 jobs, or 1 in every 50 jobs in the UK, and £8.5 billion in tax receipts for the UK Exchequer (Table 4.3). In terms of UK-based jobs, it is estimated that the maritime services sector supported an estimated 537,500 people in employment (removing foreign officers and ratings from the employment impact of the shipping industry).

Table 4.3: Comparison of the total economic impact of each sector in isolation versus in aggregate, 2011

Industry	In Isolation			In Aggregate		
	Contribution to GDP	Employment	Tax Revenue	Contribution to GDP	Employment	Tax Revenue
	£ million	'000	£ million	£ million	'000	£ million
Direct	15,017	273	2,933	13,787	263	2,681
Indirect	13,235	273	4,243	10,120	209	3,246
Induced	9,087	188	2,912	7,820	163	2,527
Total	**37,339**	**734**	**10,089**	**31,727**	**635**	**8,454**

Source: Baltic Exchange, Chamber of Shipping, ONS, HMRC, Oxford Economics

5 Regional impact of the UK maritime services sector

This chapter expands on the figures outlined in Chapter 4, providing a geographical breakdown of the maritime services sector in the UK. Results are presented for employment and contribution to GVA, accounting for adjustments made to remove elements of 'double counting' highlighted in section 4.1. Details on the methodology for calculating the breakdown of the impacts for each of the three individual industries comprising the maritime services sector are detailed in the individual impact studies that accompany this report[7].

KEY POINTS

- Around **1 in every 4 of people (or 41,600 people)** employed by the maritime services sector in the UK were based in Scotland in 2011. This is nearly twice as many as employed in the South East, the second largest region in terms of employment.
- The maritime services sector generated the largest contribution to GDP in **London at approximately £2.6 billion**, largely as a result of the maritime business services cluster.
- When including the wider multiplier effects of the indirect and induced impacts, London supports both the largest levels of employment and GVA. As such, significant supply chain activity located in the region resulted in the maritime services sector supporting a total contribution to **GDP of £6.6 billion, equivalent to 2.2% of the regional economy, and 96,400 jobs.**
- In terms of its relative contribution to the UK's regions, it is in Scotland where the maritime services sector has the greatest impact. Indeed, the sector supports an estimated **3.5% of the devolved country's GDP and 2.9% of its employment.** Other notable contributions include those in Northern Ireland and the North East of England, where the sector supports 3.5% and 2.5% of GDP respectively.
- Even in the English regions of the East and West Midlands, where the sector has a limited direct footprint, GVA and employment supported through the multiplier impacts mean that over 1% of employment in each region is reliant on the activity generated by the maritime services sector.

5.1 Regional contribution to employment

When combining the regional impacts of the three industries that comprise the maritime services sector, it is evident that the largest number of jobs are based in Scotland. As such, there are over 41,600 people directly employed in the combined maritime services sector in Scotland, representing approximately 25% of total employment (Table 5.1). Indeed, there are nearly twice as many people

[7] Oxford Economics (2012), 'The economic impact of the UK Maritime Services Sector: Shipping', 'The economic impact of the UK Maritime Services Sector: Ports', and 'The economic impact of the UK Maritime Services Sector: Business Services', December

directly employed in maritime activities in Scotland than in any other UK region, with the South East (21,400) and East of England (19,100) following Scotland as the next largest areas in terms of employment. In contrast, there are less than 1,000 people employed in the maritime services sector in each of the West Midlands and East Midlands regions. In London, most of the employment is in the maritime business services industry.

The geographic distribution is altered when reviewing the impact of the indirect and induced effects. The results, illustrated in Chart 5.1, show that when including the wider multiplier impacts, the maritime services sector supports the most jobs in London, at nearly 96,400 jobs. It is especially evident that a significant proportion of the supply chain activity is located in London; a quarter of all employment supported through the indirect channel of impact is in London. Other regions benefiting from relatively large supply chain impacts include the South East, as well as West Midlands and East Midlands, both of which support very few direct employees in the sector. As such, the results illustrate how the importance of the maritime services sector extends beyond the regions traditionally viewed as strong in this sector.

In terms of the relative contribution of the sector, figures range from around 1% of total regional employment supported in the East Midlands, to around 1.7% in the East of England and as much as 2.9% up in Scotland (Table 5.3).

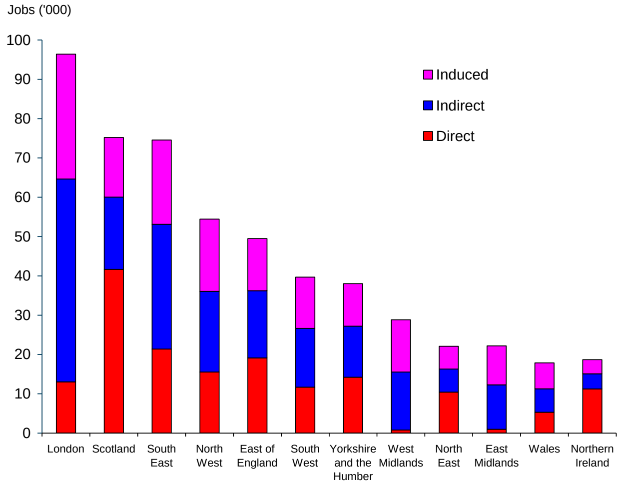
Table 5.1: Direct employment in Maritime Services in 2011[8]

Region	Direct Employment in Maritime Services Sector			
	Ports	Shipping	Business Services	**Total**
South West	6,500	4,900	200	**11,600**
South East	15,700	5,500	200	**21,400**
London	1,900	1,900	9,300	**13,100**
East of England	16,800	2,300	0	**19,100**
East Midlands	200	700	0	**900**
West Midlands	0	800	0	**800**
North West	9,800	5,700	100	**15,600**
Yorkshire and the Humber	10,900	3,300	0	**14,200**
North East	5,100	5,100	200	**10,400**
England	66,900	30,200	10,000	**107,100**
Wales	2,700	2,600	0	**5,300**
Northern Ireland	10,200	1,100	0	**11,300**
Scotland	27,300	14,300	100	**41,700**
United Kingdom	**107,100**	**48,200**	**10,100**	**165,400**

Source: Baltic Exchange, UK Chamber of Shipping, ONS, Oxford Economics

[8] Figures have been adjusted to remove the impact of double counting. Foreign seafarers have been excluded from the Shipping impact. Figures may not sum due to rounding.

Chart 5.1: Regional breakdown of employment in 2011



Source : Baltic Exchange, UK Chamber of Shipping, ONS, Oxford Economics

5.2 Regional contribution to GDP

As would be expected, the regions in which the maritime services sector supports the most employment also tend to be the largest in terms of their contribution to GDP. As such, the maritime services sector generated significant levels of GVA in Scotland (£2.2 billion), the South East (£1.5 billion) and the East of England (£1.2 billion) (Table 5.2). The sector also generated a large contribution to GDP in London, despite the relatively low level of employment in the region. This can be explained by two factors. Firstly, the maritime business services sector, clustered in London, is characterised by a high level of productivity such that on average, each employee generates over three times the contribution to GDP of the UK average. Secondly, a significant proportion of shipping companies are located in the region, despite employing seafarers from across the UK and abroad. As a consequence, London is the largest region in terms of the contribution of the maritime services sector to GDP, despite being only the sixth largest region in terms of employment.

Table 5.2: Direct contribution to regional GDP in Maritime Services in 2011[9]

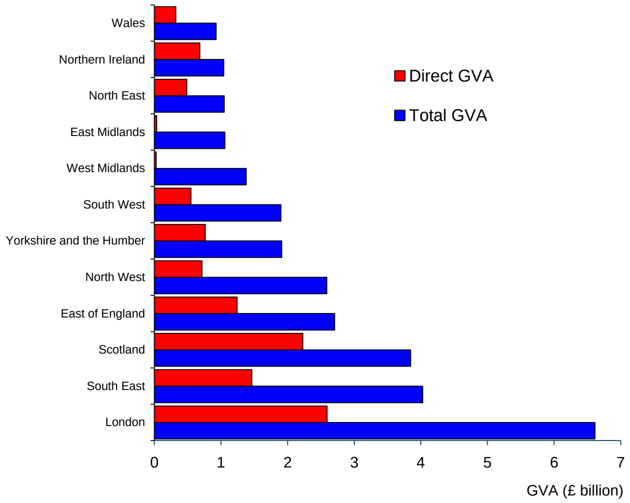
Region	Direct GDP contribution in Maritime Services Sector			
	Ports	Shipping	Business Services	**Total**
South West	370	140	40	**550**
South East	1,020	440	10	**1,470**
London	110	1,110	1,380	**2,600**
East of England	1,100	140	0	**1,240**
East Midlands	20	20	0	**40**
West Midlands	0	30	0	**30**
North West	540	170	0	**710**
Yorkshire and the Humber	660	100	0	**760**
North East	300	140	40	**480**
England	4,120	2,290	1,470	**7,880**
Wales	180	150	0	**330**
Northern Ireland	650	30	0	**680**
Scotland	1,730	500	0	**2,230**
United Kingdom	**6,680**	**2,970**	**1,470**	**11,120**

Source: Baltic Exchange, UK Chamber of Shipping, ONS, Oxford Economics

When including the wider multiplier effects of the indirect and induced channels of impact, it is again apparent that London supports the greatest activity of the maritime services sector. As such, the sector contributed an estimated £6.6 billion to the region's GDP, equivalent to 2.2% of the regional economy. Chart 5.2 illustrates both the direct and total GDP impacts of the maritime services sector in the UK's regions. As indicated by the size of the blue bar (total GVA) compared to the red bar (direct GVA), it is clear that GVA supported through the supply chain and through employee expenditure is also relatively large in regions such as the South East, the South West and the East and West Midlands. It is in Scotland however where the sector is most important in terms the local economy, with maritime services accounting for approximately 3.5% of the devolved country's GDP in 2011 (Table 5.3). Other notable contributions occur in Northern Ireland (3.5%) and the North East (2.5%). Even in the landlocked region of West Midlands, the sector still supports an estimated 1.4% of the regional economy.

[9] Figures have been adjusted to remove the impact of double counting. Figures may not sum due to rounding. It is not possible to apportion the element of employee compensation that would accrue to foreign seafarers. As such, this element of the Shipping industry's contribution to UK GDP has not been allocated regionally.

Chart 5.2: Direct and Total GVA breakdown by region in 2011



Source : Baltic Exchange, UK Chamber of Shipping, ONS, Oxford Economics

Table 5.3: Geographical breakdown of the total economic impact of Maritime Services in 2011[10]

	GVA (£million)					Employment				
	Direct	Indirect	Induced	**Total**	% of GVA	Direct	Indirect	Induced	**Total**	% of Employment
South West	550	720	630	1,900	**1.9%**	11,700	15,000	13,100	**39,700**	**1.5%**
South East	1,460	1,540	1,030	4,030	**2.1%**	21,400	31,700	21,500	**74,600**	**1.7%**
London	2,590	2,500	1,520	6,610	**2.2%**	13,000	51,600	31,800	**96,400**	**2.0%**
East of England	1,240	830	640	2,710	**2.3%**	19,100	17,100	13,300	**49,500**	**1.7%**
East Midlands	40	550	480	1,060	**1.2%**	1,000	11,300	9,900	**22,200**	**1.0%**
West Midlands	30	710	640	1,380	**1.4%**	800	14,800	13,300	**28,800**	**1.1%**
North West	720	990	880	2,590	**2.0%**	15,500	20,500	18,400	**54,400**	**1.6%**
Yorkshire and the Humber	760	630	520	1,910	**2.0%**	14,200	13,000	10,800	**38,000**	**1.5%**
North East	490	280	280	1,050	**2.5%**	10,400	5,900	5,800	**22,100**	**2.0%**
England	7,880	8,750	6,620	**23,240**	**2.0%**	107,100	180,900	137,900	**425,700**	**1.6%**
Wales	320	290	320	930	**1.9%**	5,300	6,000	6,600	**17,900**	**1.3%**
Northern Ireland	680	190	170	1,040	**3.5%**	11,300	3,800	3,600	**18,700**	**2.3%**
Scotland	2,230	890	730	3,850	**3.5%**	41,600	18,400	15,200	**75,200**	**2.9%**
United Kingdom	**11,110**	**10,120**	**7,840**	**29,060**		**165,300**	**209,100**	**163,300**	**537,500**	

Source: UK Chamber of Shipping, Nautilus International, Baltic Exchange, ONS, Oxford Economics

[10] Figures have been adjusted to remove the impact of double counting. Figures may not sum due to rounding.

6 Conclusion

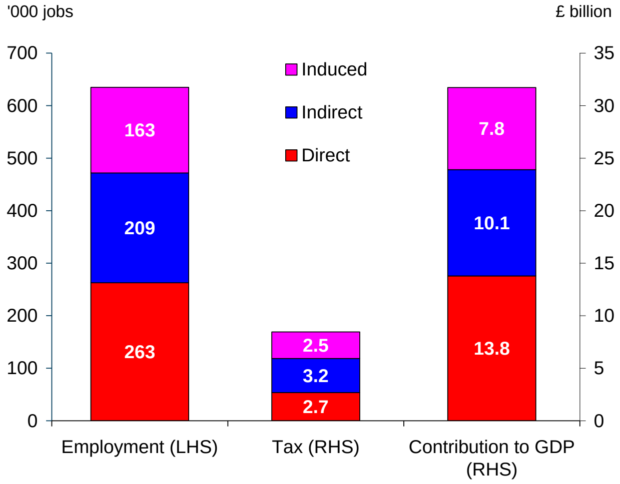
This report has examined the economic impact of the maritime services sector, here defined to include the ports, shipping and maritime business services industries. Each industry was assessed in more detail in three individual reports, conducted in conjunction with this study[11]. When aggregating these results together to form a combined economic impact, it was important to avoid double counting, an issue which is explored in more depth in Chapter 4.

The results imply that the sector's economic impact in 2011 was considerable. In total it employed approximately 262,700 people (0.8% of total employment), made a £13.8 billion value-added contribution to GDP (0.9% of total), and generated nearly £2.7 billion of tax revenue for the UK Exchequer.

Moreover, this activity generates multiplier impacts though its supply chain (indirect effects) and wage consumption effects from those employed directly and indirectly by the sector (induced effects). Having accounted for these, it is estimated that in total, the maritime services sector supported around 634,900 jobs, equivalent to 1 in every 50 jobs in the UK, made a value-added contribution to GDP of £31.7 billion, or 0.9% of UK GDP, and supported nearly £8.5 billion in tax revenue for the UK Exchequer (amounting to £1 in every £71 of revenue collected by the UK government). The results are summarised in Chart 5.1.

This report has also examined the impact of the maritime services sector in the UK's regions. The results, presented in Chapter 5, indicate that the sector is particularly strong in the economies of Scotland, Northern Ireland and the North East, supporting over 2.5% of total GDP in each region. Even in the English regions of West Midlands and East Midlands, where the direct impact is relatively low, activity supported through the multiplier impacts means that over 1% of employment in both regions is reliant on the maritime services sector.

Chart 6.1: Summary of economic impact in 2011



Source : Baltic Exchange, UK Chamber of Shipping, HMRC, ONS, Oxford Economics

[11] Oxford Economics (2012), 'The economic impact of the UK Maritime Services Sector: Shipping', 'The economic impact of the UK Maritime Services Sector: Ports', and 'The economic impact of the UK Maritime Services Sector: Business Services', December

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OXFORD
Abbey House, 121 St Aldates
Oxford, OX1 1HB, UK
Tel: +44 1865 268900

LONDON
Broadwall House, 21 Broadwall
London, SE1 9PL, UK
Tel: +44 207 803 1400

BELFAST
Lagan House, Sackville Street
Lisburn, BT27 4AB, UK
Tel: +44 28 9266 0669

NEW YORK
5 Hanover Square, 19th Floor
New York, NY 10004, USA
Tel: +1 646 503 3050

PHILADELPHIA
303 Lancaster Avenue, Suite 1b
Wayne PA 19087, USA
Tel: +1 610 995 9600

SINGAPORE
Singapore Land Tower, 37th Floor
50 Raffles Place
Singapore 048623
Tel: +65 6829 7068

PARIS
9 rue Huysmans
75006 Paris, France
Tel: + 33 6 79 900 846

Email: mailbox@oxfordeconomics.com

www.oxfordeconomics.com

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