

Navigating in stormy waters

Special feature: Sustainability
reporting in Shipping

*Global Shipping
Benchmarking Analysis 2012*



Table of contents

Foreword	4
1. Market developments	6
1.1 General Overview	6
1.2 Characteristics of the market	6
1.3 Year 2012 outlook	11
1.4 Concluding Remarks	13
2. Sustainability	14
2.1 Sustainability matters in shipping	14
2.2 CO2 emissions	14
2.3 Reporting about sustainability	15
2.4 Addressing stakeholders' concerns	16
3. Financial performance benchmark	18
3.1 Background	18
3.2 Benchmark model	18
3.3 Results summary by subsector	19
3.4 Performance indicators	23
4 Companies covered by the analysis	32
Appendices	36
Ratio definitions	36
List of participating shipping companies	37
Contacts	42

Foreword

We are now in the fourth year of our annual Global Shipping Benchmarking Analysis, in which we provide an overview of the factors that had impacted the shipping industry in the previous year and analyse how these have been reported by a large number of shipping companies from around the world.

Undoubtedly, almost all shipping subsectors are currently undergoing the most challenging market conditions in a long time. Our analysis shows that the financial performance of companies in the shipping sector in the year 2011 has deteriorated sharply.

The outlook for shipping remains bleak in 2012 due to the continued delivery of large numbers of ships into a depressed freight market that has little hope of improving while macroeconomic fundamentals remain rather weak and there remains significant uncertainty on how various ongoing issues might be resolved. Our analysis of the reported interim results of shipping companies for the first half of 2012 in Chapter 1 points to a further deterioration of financial performance in 2012 that will most likely continue to the end of the year.

In our current year's publication, we also discuss developments in the area of sustainability reporting and corporate social responsibility in shipping as this is rising up in the agenda of regulators,

industry bodies and consumers. Our analysis shows that shipping is still lagging behind other industries in this field and that this may be a missed opportunity.

Further analyses of the KPIs or other matters discussed in this publication can be prepared and tailored to individual needs upon request.

Should you wish to provide feedback on this publication or are interested in learning more about our services to the shipping industry and the PwC Shipping & Ports network, we will be pleased to hear from you.

Socrates Leptos-Bourgi
PwC Global Shipping & Ports Leader



1. Market developments

1.1. General Overview

Global economic activity remained relatively steady in 2011 registering a global GDP growth rate of 3.9%, noticeably lower than 2010 which registered a growth rate of 5.3% (IMF, April 2012). World trade growth decelerated sharply as the global economy struggled under the influence of natural disasters, financial uncertainty and civil conflict.

According to the World Trade Organization, the volume of world merchandise trade rose by 5.0% in 2011, accompanied by global output growth of 2.4%. Although such rates indicate growth momentum, they marked a significant slowdown from 2010, when world merchandise trade rose by 13.8% and output expanded by 3.8%.

For the shipping industry overall, 2011 was a tough year with the slowdown gaining momentum in the second half of the year. While in our previous Shipping Benchmarking Analysis we considered that various economic factors could result in the possibility that a large part of the order book could fade away leaving deliveries much reduced and taking some pressure off the market, the result was that a new record of deliveries was reached in 2011.

Looking at some of the key subsectors, the dry bulk market weakened significantly in 2011. According to RS Platou, average freight rates fell by more than 40% with Capesize rates decreasing the most with a 50% drop. The sharp 14% increase in global dry bulk fleet capacity despite

slippage and cancellations, outweighed tonnage demand which grew at a 5% rate. Unsurprisingly perhaps, the biggest portion of this growth came from the iron ore trade with China. With no other big growth candidates in the immediate horizon, dry bulk demand growth continues to be heavily dependent on the growth of Chinese economy, the pace of which is slowing down. Given the current supply – demand imbalance in this sector, the sentiment is that a real recovery of dry bulk rates will not happen before 2013 or early 2014.

Year 2011 also turned out to be a difficult year for tankers and particularly the crude oil tanker market. A marked slowdown in tonnage demand growth combined with significant new deliveries on the supply side, brought average freight rates down to the lowest level since 1994. The VLCC segment of this market fared the worst with annual average daily earnings tumbling down by more than 55% in 2011 compared to 2010, to levels that were well below the operating costs for ships of this type. Dirty product tanker spot earnings have also been significantly lower in 2011 compared to the previous year, with only clean product tankers maintaining their earnings at similar levels. According to Clarksons' average dirty product earnings in 2011 were at \$10,535/day, compared to an average of \$14,956 /day in 2010, while the earnings for clean product tankers remained relatively stable.

Finally, container vessels saw their average freight rates rising in 2011, but overall market performance was uneven. Conditions were strong in the first half

of the year but much softer in the second half as the slowdown in the US and European economies hit demand hard. The reported demand growth of 7.5% was only half of the previous year's, while fleet capacity grew by 7% resulting in capacity utilization remaining below 80%.

1.2. Characteristics of the market

1.2.1. New-buildings orderbook

According to Clarksons, a total of 2,677 vessels of approximate capacity of 162.5m dwt were delivered into the global fleet in 2011, which was the highest level in terms of capacity in more than 20 years. The respective number of vessels delivered in 2010 was 3,000 vessels of 151.3m dwt.

As shown in the table below, bulkers were the predominant vessel type to enter the fleet in 2011 and deliveries exceeded the 2010 output by more than 22% in terms of capacity. The tanker sector of vessels of more than 10,000 dwt, on the other hand, had 364 vessels of approx. 39.5m dwt delivered into the fleet in 2011, compared to 455 vessels of 41.5m dwt in 2010. This indicates a trend that vessels of bigger sizes are being ordered and built by shipyards. Similarly, in the container sector, deliveries of vessels of more than 8,000 teu capacity grew by more than 13% in 2011 (by capacity) compared to 2010.

Vessel deliveries				
	2010		2011	
	No of vessels	Dwt (m)	No of vessels	Dwt (m)
Tankers > 10,000	455	41.5	364	39.5
Bulkers > 10,000	991	80.4	1,184	98.3
LNG Carriers	27	2.3	16	1.0
LPG Carriers	63	1.0	54	0.5
Containers > 8,000 teu	63	8.0	71	9.1
Containers 3-8,000 teu	120	7.1	59	4.1
Containers < 3,000 teu	82	1.8	60	1.2

Source: Clarksons

Looking forward, there is still a large order book across all sectors that is scheduled for delivery in 2012, suggesting that the pressure on hire rates will continue well into the future.

As shown in the table below the dry bulk fleet grew by some 14% during 2011 and is expected to grow at around 12% for the whole of 2012. The tanker fleet grew by 6% in 2011 and it is expected to grow by 3.8% in 2012, while the fleet growth for containerships was 8% for 2011 (6.6% for 2012).

Fleet developments & orderbook				
	2009	2010	2011	2012 June
Dry Bulk Vessels				
Fleet (dwt million)	461	540	618	662
y-o-y % increase	9%	17%	14%	
Orderbook	303	303	228	165
Orderbook % Fleet	66%	56%	37%	25%
Tankers > 10,000				
Fleet (dwt million)	432	449	475	486
y-o-y % increase	6%	4%	6%	
Orderbook	140	127	86	67
Orderbook % Fleet	32%	28%	18%	14%
Containerships				
Fleet (dwt million)	12.9	14.2	15.3	16.0
y-o-y % increase	6%	10%	8%	
Orderbook	4.9	3.8	4.3	3.6
Orderbook % Fleet	38%	27%	28%	23%

Source: Clarksons

It is not surprising that the large number of new deliveries, continuous economic uncertainty, shortage in loan finance and the general weakness in freight rates have significantly reduced new order activity.

According to Clarksons, an estimated \$102bn was invested in new orders across all sectors in 2011, 5.6% less than in 2010 when \$108.3bn were invested in new vessels. In fact, this amount was the lowest since 2004, with the exception of 2009, which was an exceptional year due to the impact of the collapse of Lehman Brothers at the end of 2008. However, a significant portion of the investments in 2011 are attributed to the offshore sector, which experienced an increase in new investments by approx. 60%, probably as a consequence of the exceptionally good results that this sector has been experiencing over the last two years. Excluding, offshore, the decline in the amount invested on new orders for the other sectors amounts to 26%.

According to our analysis, the newbuilding ratio, (calculated as the number of vessels on order divided by the average number of vessels operated for the companies covered by our analysis), stands at 16% for the dry bulk subsector, down from 25% in the previous year. The respective ratio for tankers stood at 8% for 2011 and for containerships at only 1%. The only subsector reporting an increase was the offshore subsector with a newbuilding ratio of 15% in 2011 compared to 11% for 2010.

These newbuilding rates calculated by our analysis are markedly lower than the respective rates reported for the entire shipping market which stand at 37% for dry bulk vessels, 18% for tankers >10,000 dwt, and 28% for containerships. As we commented in our analysis last year, this may be the outcome of a more conservative approach to investing in new vessels by the companies in our sample, the majority of which are listed entities and, therefore, accountable to a large number of shareholders in the public markets, while private companies may have the flexibility to take a more aggressive approach.

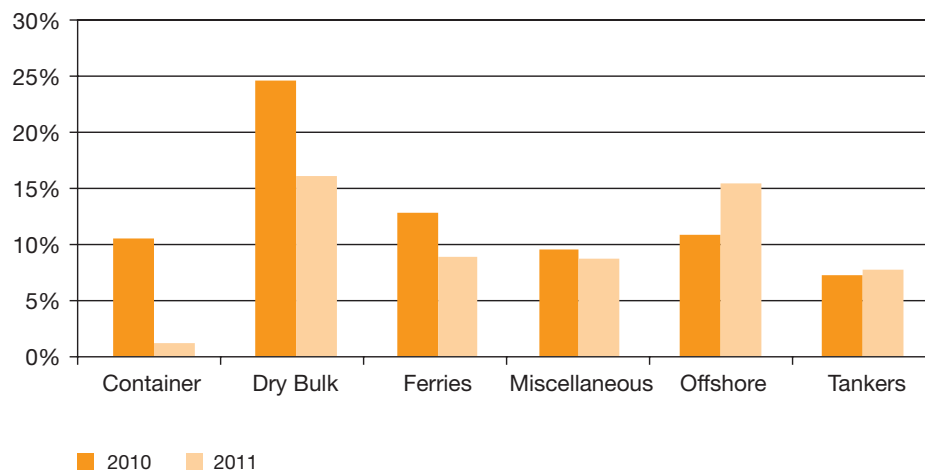
1.2.2. Cancellation of vessel orders

In recent years we have seen a significant number of new building contracts being cancelled. This trend has continued in 2011.

According to RS Platou, in the year 2011 an estimated 13m dwt of dry cargo vessel orders have been removed from the order book (which corresponds to approximately 6% of the dry-bulk carriers orderbook for 2011), while in the tanker sector some 10m dwt of new orders are estimated to have been cancelled (more than 10% of the orderbook for 2011). On the other hand, in the container segment, there was only an estimated 0.17m teu of capacity taken out of the order book as a result of cancellations. According to the same source, in the period 2008 to 2010, 56m dwt of bulk carriers, 19m dwt of tankers and 0.75m teu of container ships have been cancelled. This is consistent to estimates by Barry Rogliano Salles, according to which cancellations across all subsectors have represented more than 120m dwt since 2008, equivalent to around 30m dwt per year.

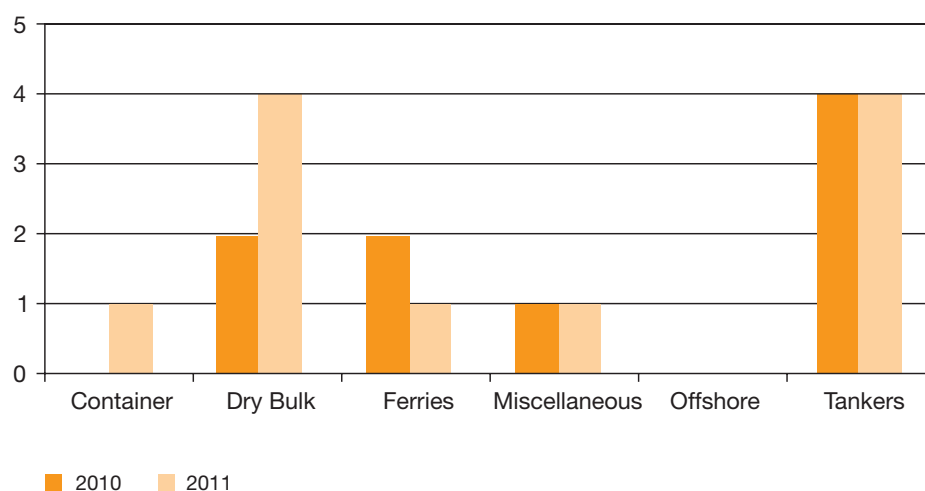
Our analysis indicates higher levels of cancellations in 2011 compared to 2010 among the companies we have covered, driven primarily by cancellations in the dry bulk sector, which also reported a significant drop in return. The tanker sector reported an equal level of cancellations as in the previous year.

Newbuilding Ratio 2010 - 2011



Source: PwC analysis

Cancellation of vessel building (number of companies)



Source: PwC analysis

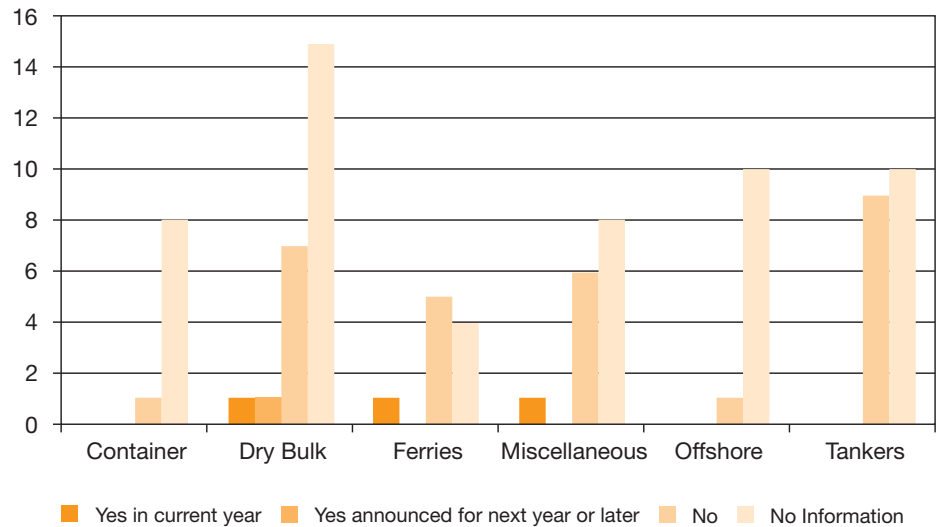
1.2.3. Demolition

The demolition market had been very active in 2011, especially for bulk carriers. According to Clarksons, bulk carriers demolition sales more than tripled in 2011, with Capesize bulk carriers accounting for 46% of the bulkers scrapped. In contrast, tanker demolitions in 2011 amounted to only 9.8m dwt compared to 12.8m dwt scrapped in 2010, possibly as a result of increased demolition activity in 2012 due to the phase out of single-hull tankers that year, which had removed many of the vessels built in the 1980s and early 1990s, leaving a relatively modern tanker fleet. Demolitions of containerships, on the other hand, have been limited since the containership fleet has a relatively modern age profile.

Despite the high volume of demolitions, scrap prices remained rather attractive (at \$480/ldt for tankers and \$460/ldt for bulk carriers), which supported the decision to send vessels to the breakers rather than seek for buyers. Even though scrapping could significantly contribute to the rebalancing of the demand & supply of tonnage, the market has this far been reluctant to demolish ships under 20 years of age, something which was experienced in previous shipping downturns.

In terms of financial reporting, there was little or no information provided in the annual reports of the companies covered by our analysis concerning their vessel scrapping activities and policy.

Recycling / Scrapping vessels 2011 (number of companies)



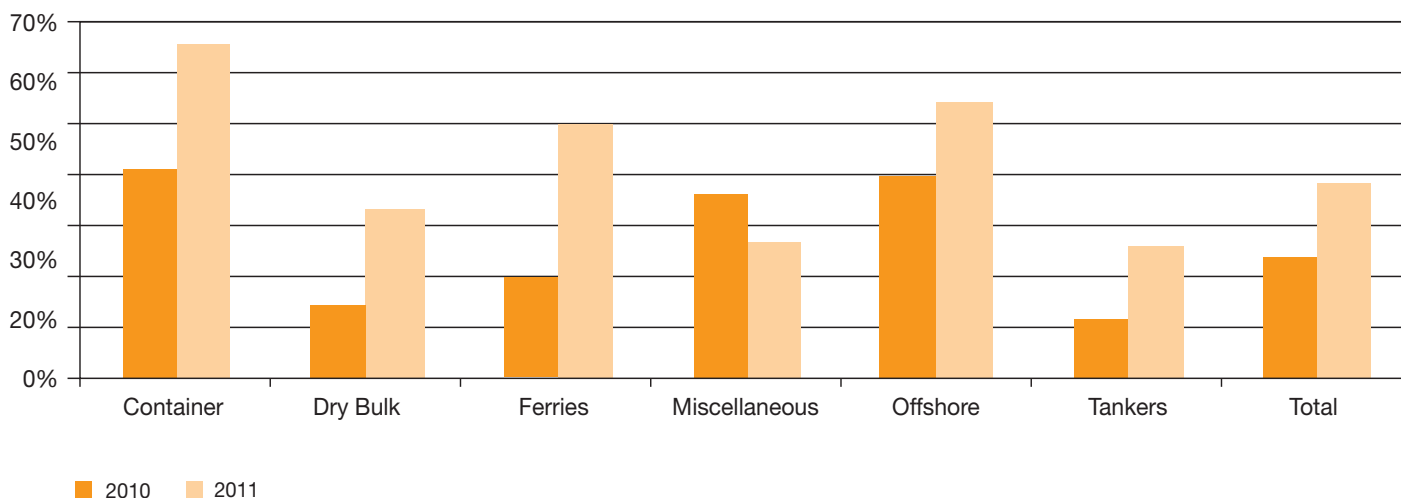
Source: PwC analysis

1.2.4. Vessel values and impairment losses

Vessel values incurred a significant decline in 2011, both for new buildings and for second hand vessels across almost all subsectors. According to shipbrokers RS Platou, new-building prices fell by approximately 10% for tankers and 15% for bulkers. Second hand prices also fell by approximately 20% for tankers and close to 30% for dry bulk carriers. The fall in asset values along with decreasing freight rates contributed to making 2011 a year of significant losses in shipping. The decline in vessel values accelerated after the summer due to the eurozone debt crisis and the growing difficulty in securing finance from a number of European banks traditionally active in shipping. Demand for second hand vessels has been put under pressure by poorly performing markets. There were only 1,070 vessel sales in 2011, a decline by 17.8% compared to 2010.

Of the companies covered by our analysis, 39% reported vessel impairments in 2011 against 24% in 2010. Our analysis indicates that asset impairments have been recognized by a higher percentage of companies in our sample in 2011 compared to 2010 in almost all sectors. As shown in the diagram below (showing the percentage of companies reporting impairment to the total of companies per sector we have analyzed), the container sector reported the largest share of impairments on vessels with 67% of the companies belonging in the sector incurring impairment losses. The respective percentage for 2010 was 42%.

Impairment losses on vessels (number of companies)



Source: PwC analysis

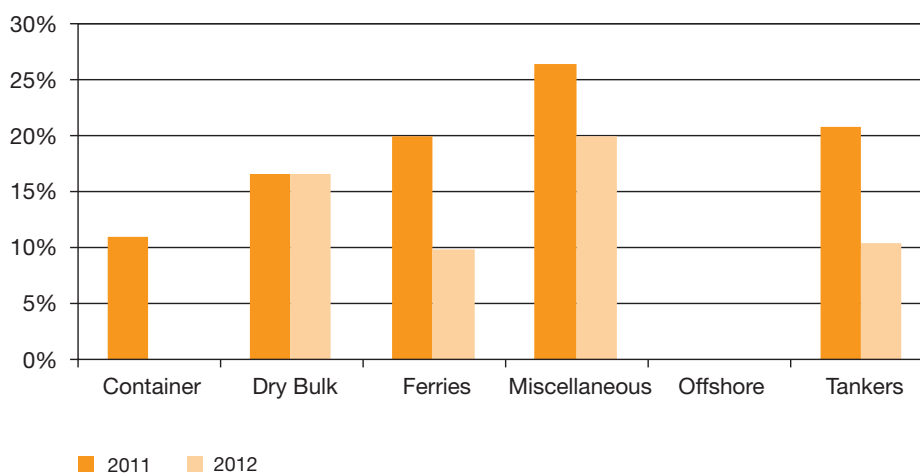
From the companies in our sample that report under IFRS the 40% reported impairment losses on vessels. The corresponding percentage for the companies reporting under US GAAP is 42%.

1.2.5. Shipping finance

Considering the sharp drop in vessel values during 2011, many shipping companies have breached loan-to-value and liquidity covenants and have had to request lenders to either provide them with waivers or to revise loan terms.

Furthermore, even companies that had accumulated cash balances in the boom years prior to 2008, are now finding themselves in a difficult situation as the crisis is prolonged and rates fail to cover even operating expenses in some cases. Accordingly, banks may be soon forced to repossess ships, particularly where continued restructurings have failed to find a solution. There are no easy fixes anymore. Banks are less optimistic about recovery in the main bulk markets and they

Restructuring debt in 2011 compared to the estimation for 2012



Source: PwC analysis

are testing their shipping loans against more pessimistic assumptions about the future. The situation is critical with the exit of some traditional shipping banks, the severe tightening of funding and the increased cost of new funding for ship owners.

Among the companies covered by our analysis, 17% have reported that they have restructured their loan facilities. Approximately 21% of the tanker companies in our sample have reported a restructuring of their loan obligations during 2011. The percentage for dry bulk owners was 17%.

1.3. Year 2012 outlook

Continuous downward adjustments of the world economy and surplus capacity seriously affected the first half year of 2012 results for the shipping companies.

In the dry bulk sector the severe oversupply kept rates at low levels. In June 2012 Capesize earnings averaged \$3,553 per day, significantly below levels required to cover owner's operating expenses. The average earning for both Panamax and Handymax have also decreased.

The continued weakness of the freight market in the dry bulk sector combined with the challenging shipping finance environment have kept second hand ship values under pressure with all asset segments falling low in value. On the other hand, newbuilding prices are more stable as they are now near breakeven levels for shipyards.

The first half of 2012 turned out to be better than feared for tanker owners in general. However, the oil tanker market remains also in a difficult state. The VLCC average earnings experienced a sharp fall being well below the industry break even rate. Ship values are kept under pressure.

Average Earnings for Bulk Carriers (US\$ per day)						
	2009	2010	2011	2012		
				Apr	May	June
Capesize	39,064	30,587	14,443	3,699	6,021	3,553
Panamax	15,089	20,221	11,340	7,882	8,669	6,526
Handymax	16,914	21,867	13,746	10,217	11,469	10,850

Source: Clarksons

Vessel Second Hand Prices (in US\$ m)						
	2009	2010	2011	2012		
				Apr	May	June
Bulk Carriers (5 yrs old)						
Capesize	180,000 dwt	55.0	50.0	36.0	35.0	35.0
Panamax	76,000 dwt	36.0	36.0	26.5	22.0	23.5
Handymax	56,000 dwt	27.0	29.0	24.5	24.0	23.5
Handysize	32,000 dwt	22.0	25.0	21.0	18.0	17.0

Source: Clarksons

Crude Tanker Earnings						
	2009	2010	2011	2012		
				Apr	May	Jun
VLCC						
Average Earnings	32,009	37,929	16,856	36,386	36,348	19,167
1 Year T/C Rate	39,577	37,962	24,947	22,750	23,500	26,000
Suezmax						
Average Earnings	28,211	31,259	19,217	13,667	28,228	21,026
1 Year T/C Rate	30,577	28,377	19,587	17,000	17,250	18,250
Aframax						
Average Earnings	15,483	19,792	13,528	13,350	14,257	20,628
1 Year T/C Rate	20,077	18,731	15,457	13,750	13,750	13,500
Panamax						
Average Earnings	12,738	14,956	10,535	14,401	20,533	19,607
1 Year T/C Rate	19,375	16,604	14,745	12,500	12,500	12,500

Source: Clarksons

Box freight rates which saw substantial volatility in 2011 which continued in the first quarter of 2012 seemed to somewhat stabilize in the second quarter. In the first half of 2012 the containership time-charter market remained rather weak and significantly below historical average levels. The 6-12 months time charter rate of a 2,750 teu vessel was 7,000\$/day in June 2012 from 17,250\$/day that it was in June 2011. Similarly for a 1,700 teu vessel the 6-12 months time charter rate was 6,500\$/day in June 2012 from 12,000\$/day in June 2011.

We have looked at the performance of 85 listed shipping companies across the various shipping sectors and their 1H2012 results and compared these to their performance on the respective period in 2011.

With the exception of the companies belonging to the offshore segment which showed a very positive trend as deep water

Vessel Second Hand Prices (in US\$m)							
		2009	2010	2011	2012		
					Apr	May	June
Tankers (5 yrs old)							
VLCC	310,000 dwt	79.0	85.0	58.0	65.0	65.0	65.0
Suezmax	160,000 dwt	56.5	59.0	47.0	45.0	47.0	47.0
Aframax	105,000 dwt	41.5	40.0	35.0	30.0	32.0	32.0
Panamax	73,000 dwt	35.0	36.0	31.0	26.0	26.0	26.0

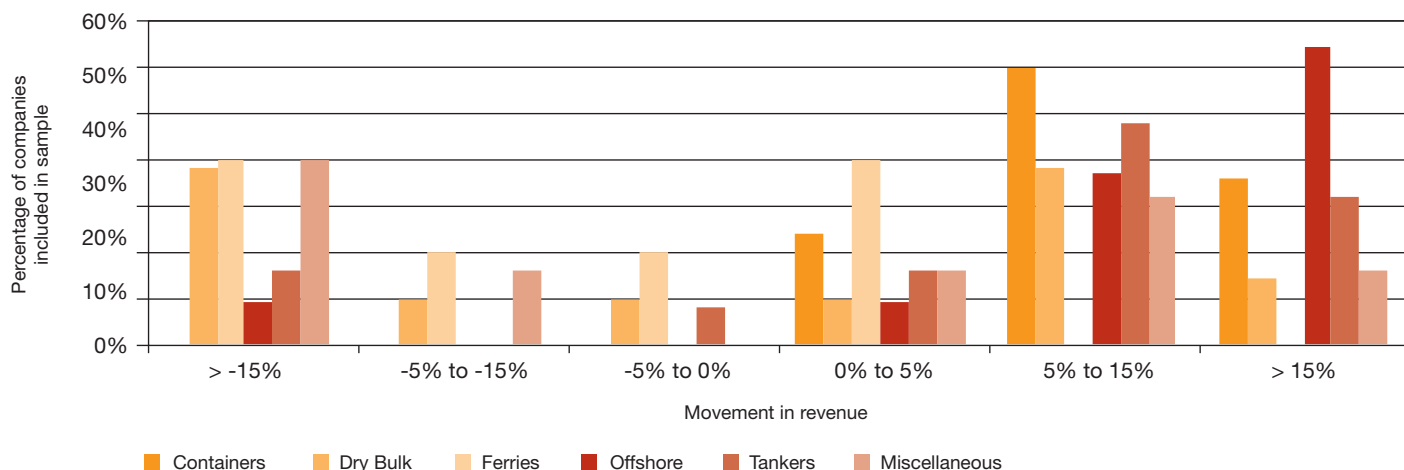
Source: Clarksons

oil exploration and production as well as maintenance of offshore installations gained momentum, there is a clear deterioration in the shipping companies' results.

The dry bulk market was the hardest hit by weakening demand growth, reluctance to replenish stores due to anticipated commodity price declines and large

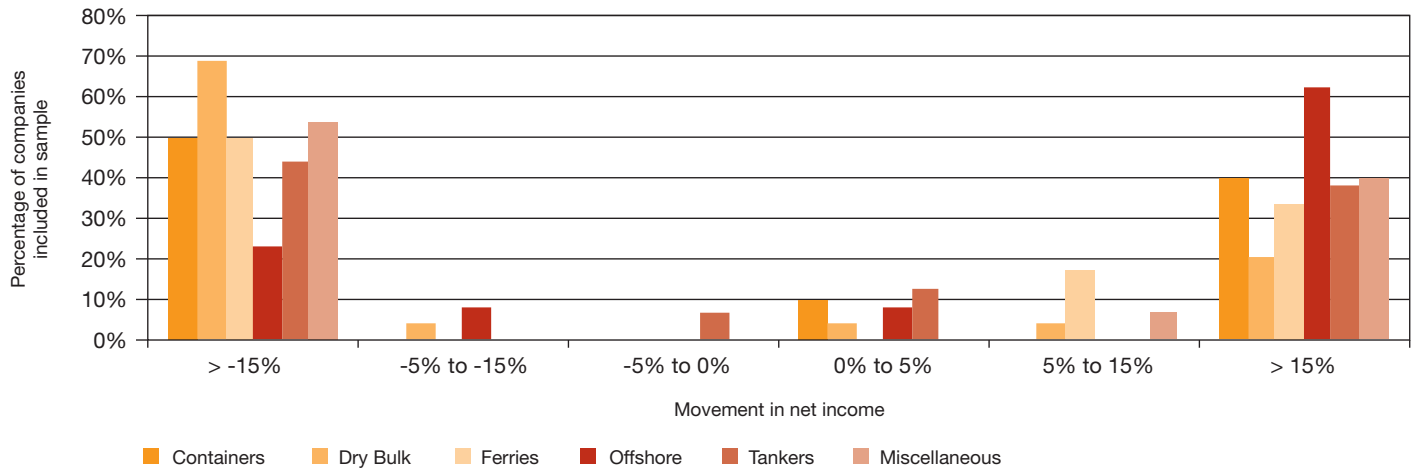
newbuilding deliveries. Results for the first half of 2012 showed that 32% of the companies belonging to this sector and included in our sample, reported a more than 15% decrease in their revenue, while 68% reported a more than 15% decrease in their net income.

Revenue movement – 1H2012 - 1H2011



Source: PwC analysis

Net income movement – 1H2012 - 1H2011



Source: PwC analysis

For the tankers sector, 40% of the tanker companies included in our sample, reported an increase between 5-15% in their revenues, but a significant percentage of approximately 44% reported a decrease in their net income.

Finally, 50% of the containership companies reported a decrease of more than 15% in their net income, the same percentage as that of companies in the Ferry subsector.

1.4. Concluding remarks

In conclusion, the vulnerabilities of the global economy have been exposed and have more than played their part in making year 2011 one of the worst years of shipping in terms of financial performance.

Unfortunately, the macroeconomic environment continues to be very uncertain and estimated growth rates have been revised on several occasions downwards. Combined with the delivery of new vessels into the existing fleet as a result of the tail end of the massive orderbook that was built in the years prior to the crisis, the future for most subsectors of the shipping industry looks bleak.

Our analysis has shown that the financial ratios across most subsectors have deteriorated significantly. Returns are particularly unattractive and equity investors have certainly incurred significant losses in the value of their investments. For seasoned participants in the shipping industry, this state of affairs may not come as a surprise, although the extent and depth of this downturn may have been hard to predict. Nevertheless, for some investors who understand the cyclical nature of this industry, it is at this particular time that the best opportunities to enter the market are provided.

2. Sustainability

2.1. Sustainability matters in shipping

This year, as part of our annual Global Benchmarking Analysis, we have decided to take a closer look at sustainability reporting in the shipping industry for the first time.

In a year where almost all financial performance indicators have declined, one may argue that sustainability is not an issue that lies at the top of the agenda for shipping companies. However, as we will discuss below, we believe that sustainability efforts will draw the line between future winners and losers as it increasingly impacts the bottom line, either directly or indirectly.

Sustainability is much more than responding to regulations, although this is where it starts in many cases. An example of this is the extension of the Emissions Controlled Areas under MARPOL. Not only the Baltic Sea, the English Channel and the North Sea are subject to Annex VI of MARPOL, but as from August 1, 2012 so is North America and, as from January 1, 2014, so will be parts of the Caribbean Sea. Under Annex VI of MARPOL, sulphur emissions as well as nitrogen oxides and particle emissions will have to be included.

Port authorities also deploy their own initiatives. The Environmental Shipping Index (“ESI”) is a voluntary program in which ships are rewarded for their emissions performance. For example the Port of Rotterdam provides a discount of approximately 5% in port fees to about 1/3 of the 1.089 ‘ESI ships’ based on their score on the ESI (www.portofrotterdam).

com). And this is just one example where sustainability hits the bottom line. In an environment with higher oil prices, improvements in fuel efficiency will have an immediate impact on financial performance.

Sustainability is also increasingly becoming a competitive driver. An example of this is that customers of shipping companies are increasingly asking for sustainable transportation of their products and take this element into account when closing contracts. Consequently, it would be in the interest of shipping companies to track, document and report their sustainability efforts.

Nevertheless, we have found shipping companies to be very quiet regarding their sustainability performance. Other than a missed opportunity, we consider that integrated reporting of sustainability performance with the financial figures would provide external and internal benefits to shipping companies. External benefits might include increased confidence and trust across all stakeholders; improvement in relationships with regulators and enhanced corporate reputation. However, the most important benefits will likely be internal, primarily through better insight that the company will have on its internal organization, leading to better management decision making, board review and employee awareness.

In this respect, the shipping industry has certain similarities to the airline industry. One of the most important similarities between the two industries is that fuel

costs largely determine the cost base and the environmental impact of the two industries. Being more sustainable means ship owners can reduce fuel consumption either for themselves or for their charterers and thereby increase profitability.

On the environmental side in particular, being more sustainable will become more and more important for the shipping industry. The European Commission has now targeted the shipping industry as the next sector that will become subject to strict regulations regarding greenhouse gas (GHG) emissions. There are several options open with regard to monitoring and reporting of emissions but it is evident that the sector will have to pay, in one way or another, for their CO2 emissions.

2.2. CO2 emissions

Although 30 times more carbon efficient than aviation in transporting cargo, the shipping industry still accounts for around 3% of the world’s CO2 emissions according to IMO. Compared to the airline industry, the shipping industry has so far not been regulated or had any form of market based measures imposed on it on a large scale.

At the end of 2011 the International Chamber of Shipping (ICS), representing over 80% of the world merchant fleet, together with Oxfam and the WWF have joined forces and issued a joint statement to call for clear guidance from the International Maritime Organization (IMO) on the reduction of CO2 emissions in the shipping industry by market based measures (MBM’s).

At the beginning of October the European Commission announced that it will no longer pursue a European system for reducing CO2 emissions. Instead the European Commission will now facilitate a worldwide approach in reducing CO2 emissions generated by the shipping industry. This does not mean the European Commission will cease its attempts. To speed up a worldwide initiative driven by IMO, the European Commission will implement a monitoring system based on fuel consumption to get insight in CO2 emissions by the shipping industry.

Taking into account the recent developments with regard to CO2 emissions within the shipping industry, one would expect companies would also report about their CO2 emissions in their annual (sustainability) report. However, the current interest in CO2 emissions from the shipping industry is not reflected in the annual reports we have analysed. Our results show that reporting about CO2 emissions is not widespread, as only 20% of the shipping companies covered by our analysis report on their CO2 emissions. Interestingly, approximately 40% of ferry companies and 22% of container companies report about their CO2 emissions compared to only 10-15% of the shipping companies operating in the dry bulk, offshore, and tanker sector.

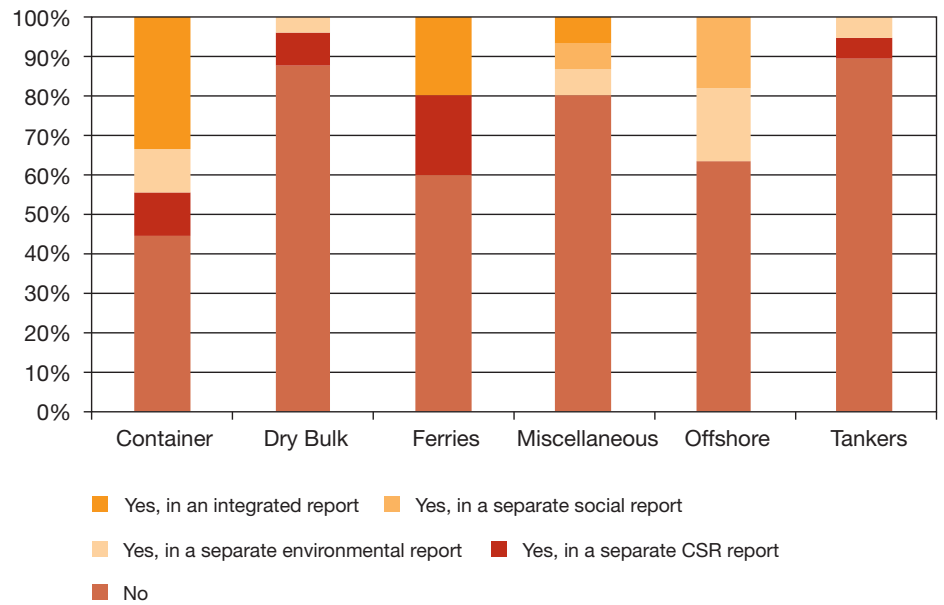
2.3. Reporting about sustainability

Reporting about sustainability is not widespread within the shipping industry. Only 24% of the companies in our sample have a form of sustainability report. The container sector is the clear frontrunner with 56% of the companies we have covered reporting about sustainability, followed by the ferry sector (40%), offshore (36%), dry bulk (13%) and tankers (11%). Compared to the airline

industry, where 38% of the airlines report about sustainability, the shipping industry as a whole is clearly trailing behind.

The format in which companies report is rather widespread. Most companies choose to either integrate their sustainability reporting with the annual financial report (6), publish a separate CSR report (6) or issue a separate environmental report (6).

Does the company report about sustainability?



We also noted that verification of sustainability information is rather limited. Only 6 of the 21 shipping companies (29%) reporting about sustainability have their reports verified, compared to 37% in the airline industry.

2.4. Addressing stakeholders' concerns

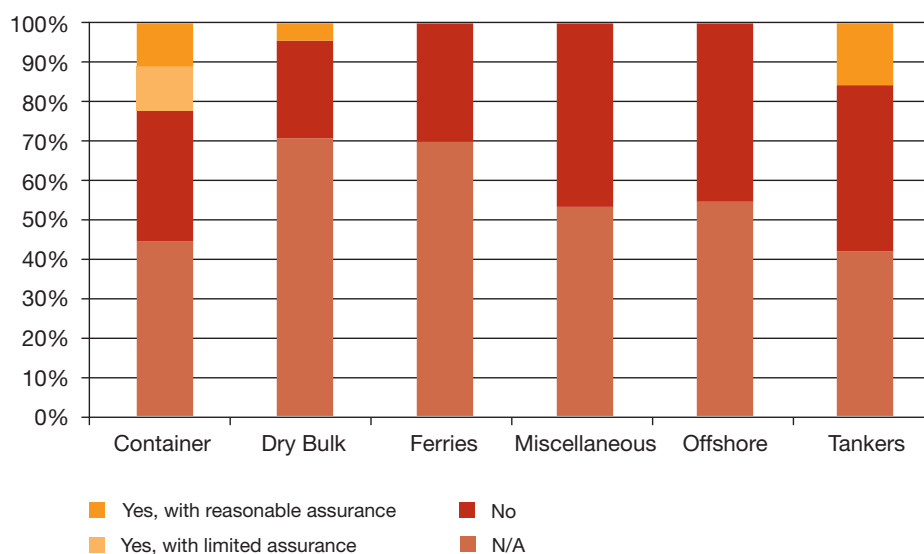
When shipping companies explain how their actions impact various stakeholders they take the first step towards entering into a productive dialogue. Listening is important too, and so is taking action to address the issues most important to those placing their trust in the company.

A good example of a company that has engaged itself in a stakeholder dialogue is A.P. Moller Maersk ("Maersk"). In 2011 Maersk has carried out a reputation assessment under almost 1.400 of its global stakeholders. This provides Maersk with a good insight in the topics that matter to their stakeholders and report about these topics accordingly.

That stakeholders value the disclosure of sustainability information is proven by the drybulk company Norden. According to their 2011 corporate social responsibility report, sustainability played an important role in obtaining the third largest cargo contract in the company's history.

Identifying and reporting about the most important sustainability topics for stakeholders is an important step in making reports more relevant. A stakeholder materiality matrix can help shipping companies in identifying the most important topics.

Has the sustainability report been audited/reviewd?



Stakeholder materiality matrix



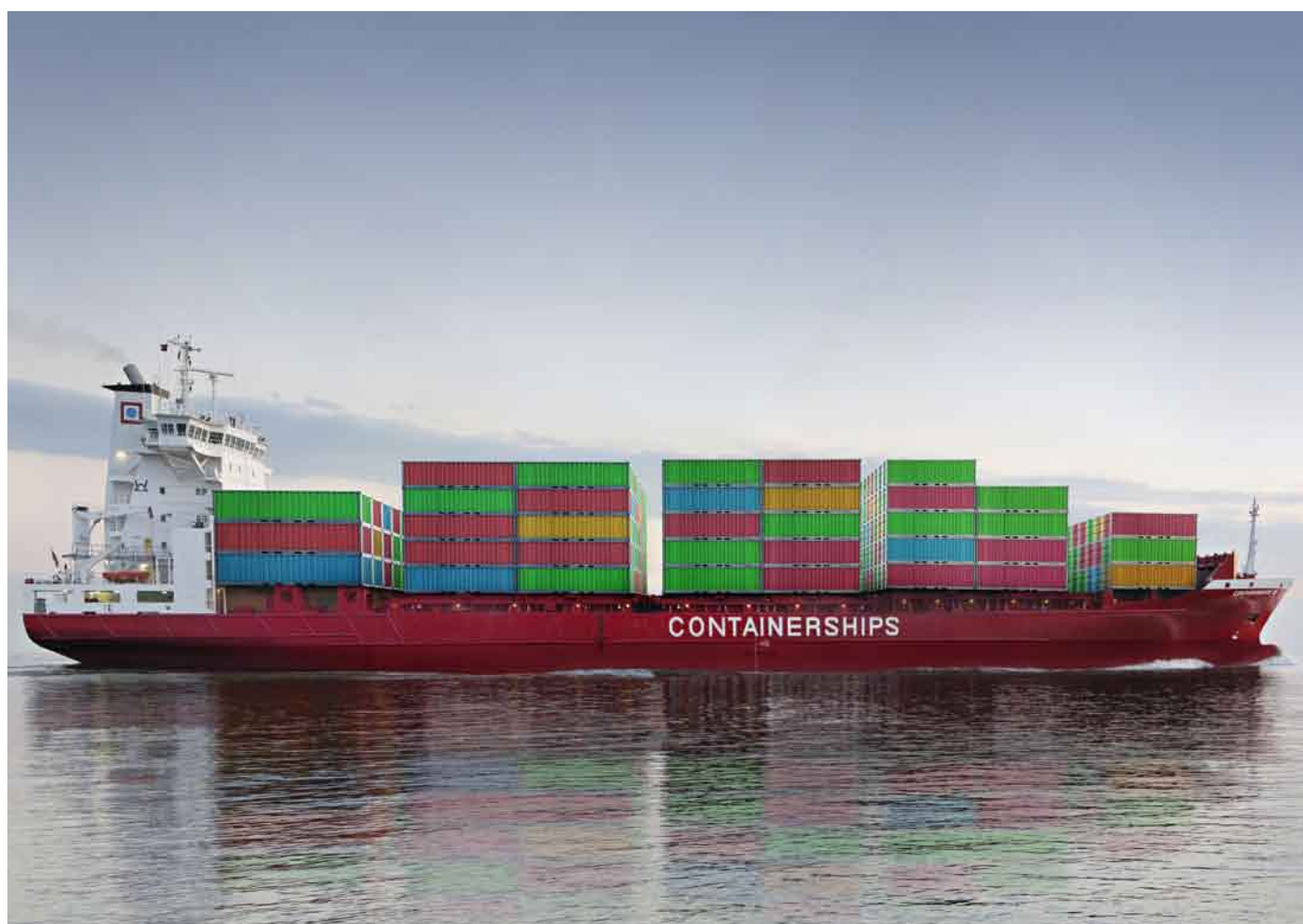
Of the 21 companies reporting about sustainability in our sample, 17 explicitly mention their most important stakeholders. Specifically, the environment (15) and employees (12) are reported to be the most important stakeholders, followed by shareholders (8), governments (4) and ports (4). The four ferry companies that identify their stakeholders in their

sustainability report, have all identified their port/local community as one of the most important stakeholders.

Conclusion

Although sustainability reporting is increasingly important to shipping, the majority of shipping companies seem fail to cease this opportunity. Reporting about

sustainability is no longer a matter of compliance but, more importantly, it has an impact on the bottom line. Therefore, every shipping company should start thinking about sustainability reporting and the upcoming regulations on CO2 emissions in Europe might just be the ideal starting point to take this matter into more serious consideration.



3. Financial performance benchmark

3.1. Background

Our financial benchmark analyses key performance indicators (KPIs) of companies in different subsectors of the shipping industry, namely container, tanker, dry bulk, off shore, ferries and miscellaneous (companies active in different or several sectors of the shipping industry). More than 150 companies have been selected for this benchmarking analysis. Financial data have been derived from publicly available financial statements and annual reports of these companies from 2007 to 2011.

The purpose of this benchmarking analysis is measuring the financial performance of individual companies in subsectors, comparing performance between subsectors and the overall shipping industry and identifying trends and developments.

In this publication we present the average financial performance in each sub sector. Individual companies can obtain tailor made benchmark presentations upon request. An individual report enables a shipping company to benchmark its own financial performance with other companies in its sub sector on the basis of key performance indicators. Individual reports can be commissioned by contacting any of our shipping industry group contacts at your local PwC office as presented at the end of this publication.

3.2. Benchmark model

The financial performance of the shipping companies has been measured on the basis of the following key performance indicators:

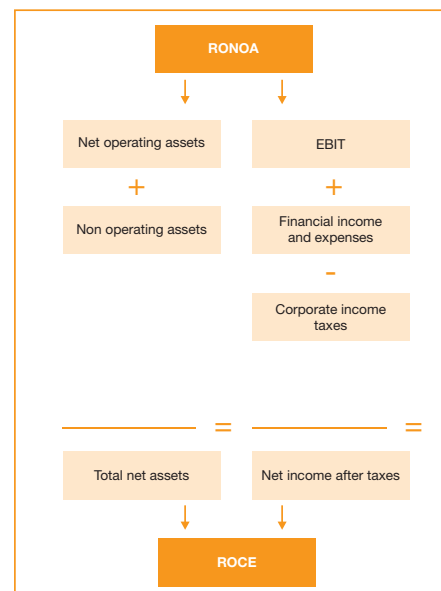
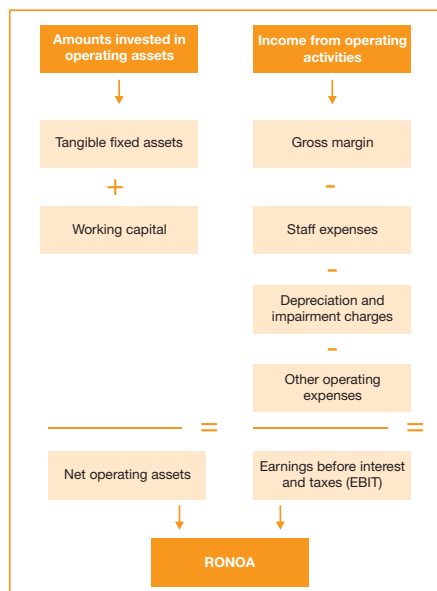
Profitability ratios

RONOA, being **Return On Net Operating Assets**, is one of the most important performance indicators for measuring returns on investments in companies. RONOA measures returns on operating activities of a company.

To calculate RONOA the ratios ‘**Working Capital/net sales**’, ‘**Net fixed assets/net sales**’ and ‘**EBIT/net sales**’ are measured in our analysis.

If a company has also invested money in other companies or granted loans, ROCE is another important performance indicator. **ROCE**, being **Return On Capital Employed**, presents total net returns on all assets, not just on operating assets.

The following graph presents a breakdown of the components of RONOA and ROCE:



In addition to RONO and ROCE we have also measured **Return on Equity (ROE)**, defined as net income after taxes over average shareholders' equity.

Finance structure ratios

To assess the financing structure of the companies analysed, as well as their ability to pay their long term liabilities, we have measured the **Solvency Ratio**. In addition to RONO and ROCE, the Solvency Ratio is of special interest for companies that invest money in (or lend money to) a shipping company such as banks. For the same reason, we have measured the **Net Debt Ratio** of the companies analysed. Maximum requirements for net debt ratios are often included in bank covenants.

Another ratio that is often included in bank covenants is **EBITDA / Net Finance Cost** which has also been included in our benchmarking analysis. This ratio indicates how many times a company's interest expenses can be covered from operating cash earnings (earnings before interest, depreciation and amortisation).

Liquidity

Meeting long term liabilities is only relevant when a company is able to pay its short term liabilities in the short run. To obtain an understanding of the liquidity of the shipping sector including the developments in the last 5 year we have measured the **Current Ratio** of the companies covered by our analysis.

3.3. Results summary by subsector

The radar charts on this and the following pages show the outcomes of the key performance indicators by subsector in 2011.

The outcomes of the ratios have been ranked on a scale from zero to ten. A score of 10 (the outside line of the chart) means a favourable outcome on that ratio and a score of zero (centre of the graph) a very unfavourable outcome of the ratio.

The radar charts we have presented include the following scores:

- Average score overall shipping industry 2011 (light orange area)
- Average score subsector 2011 (yellow line)
- Best in class in subsector 2011 (red line)

The radar chart provides a very quick overview of the financial performance of the subsector and overall shipping industry.

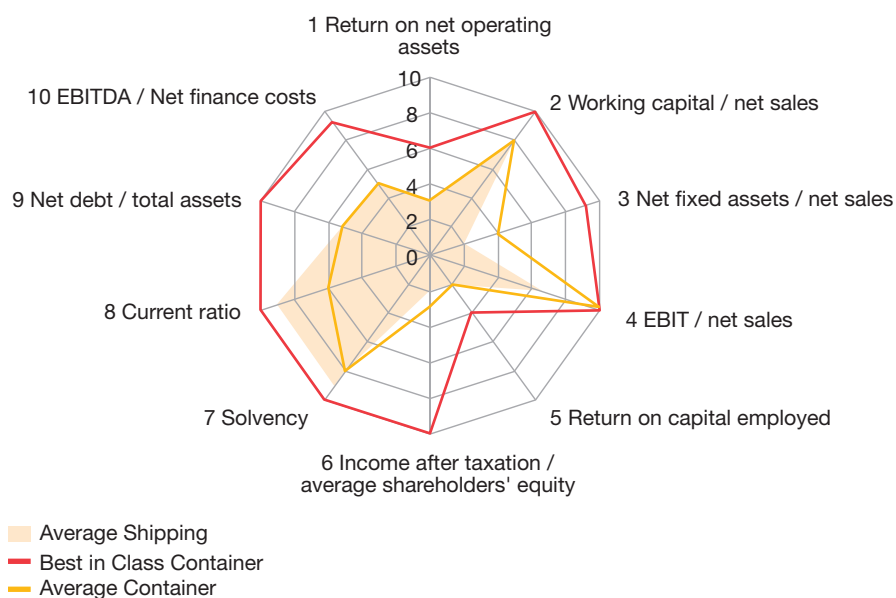
As demonstrated by this summary, the dry bulk shipping subsector and offshore subsector have been the most attractive

subsectors in 2011 followed by the ferries subsector. In 2010 the container subsector and the dry bulk shipping subsector were the most attractive subsectors, followed by the offshore shipping subsector.

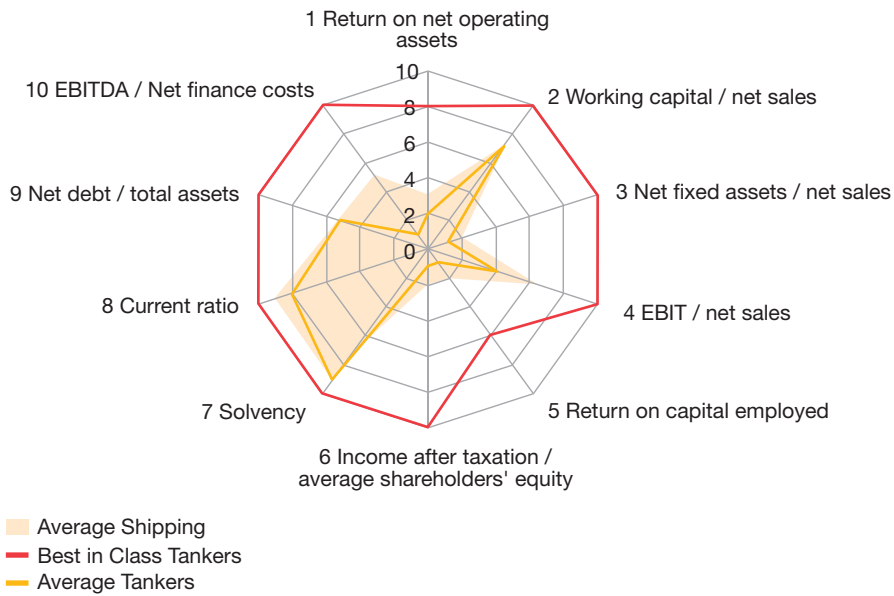
For all subsectors the total performance for 2011 deteriorated compared to 2010, except for the ferries subsector which reported a slightly better performance.

The tanker subsector remains the least attractive subsector in 2011, followed by companies that have been allocated to the miscellaneous category.

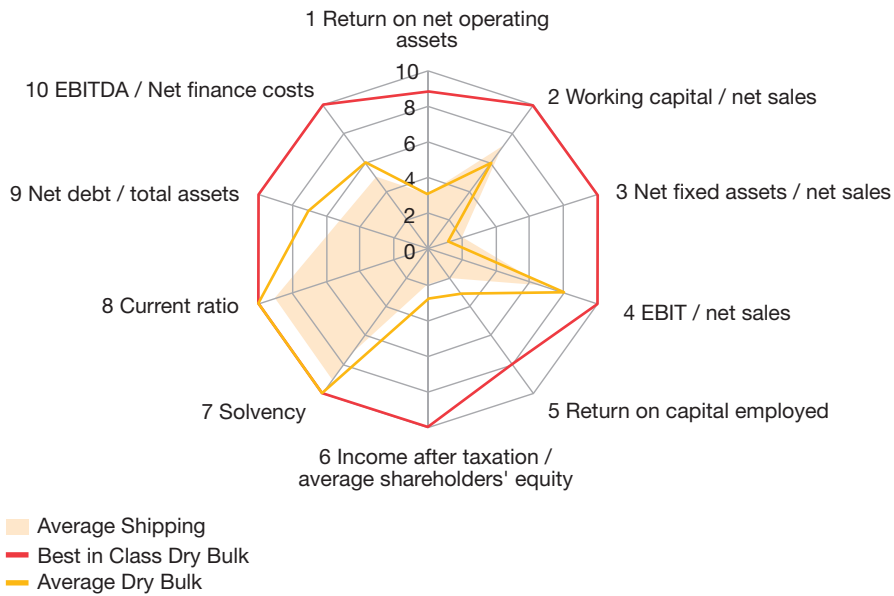
Radar chart 2011 - Container



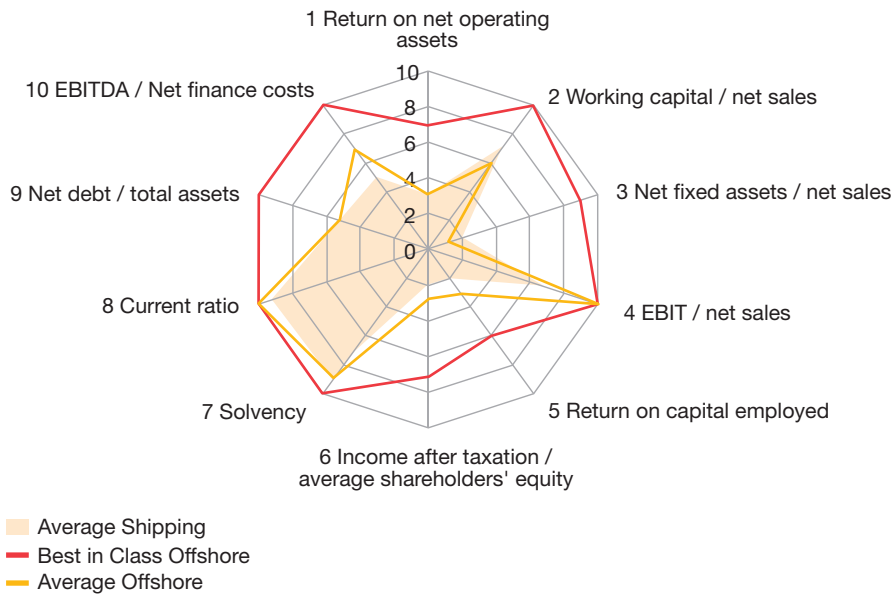
Radar chart 2011 - Tankers



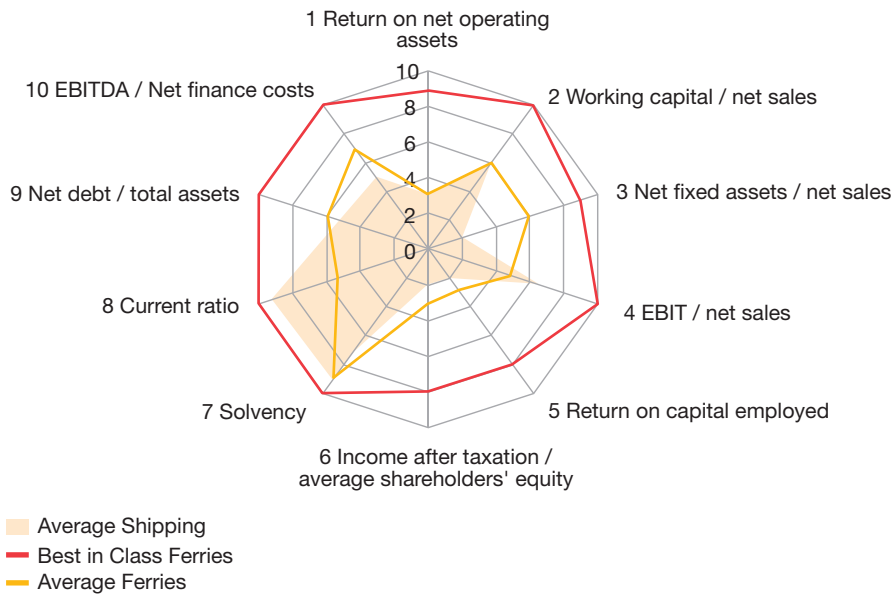
Radar chart 2011 - Dry Bulk



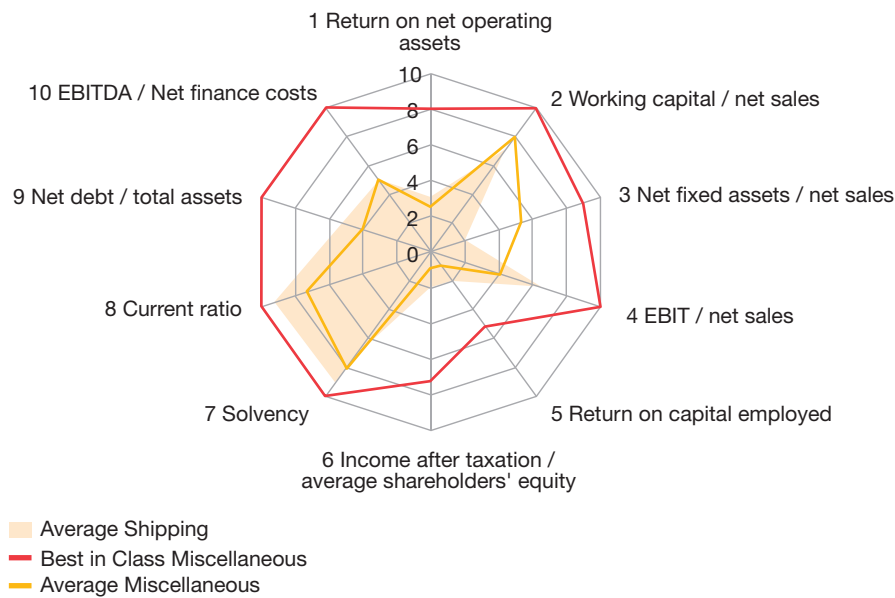
Radar chart 2011 - Offshore



Radar chart 2011 - Ferries

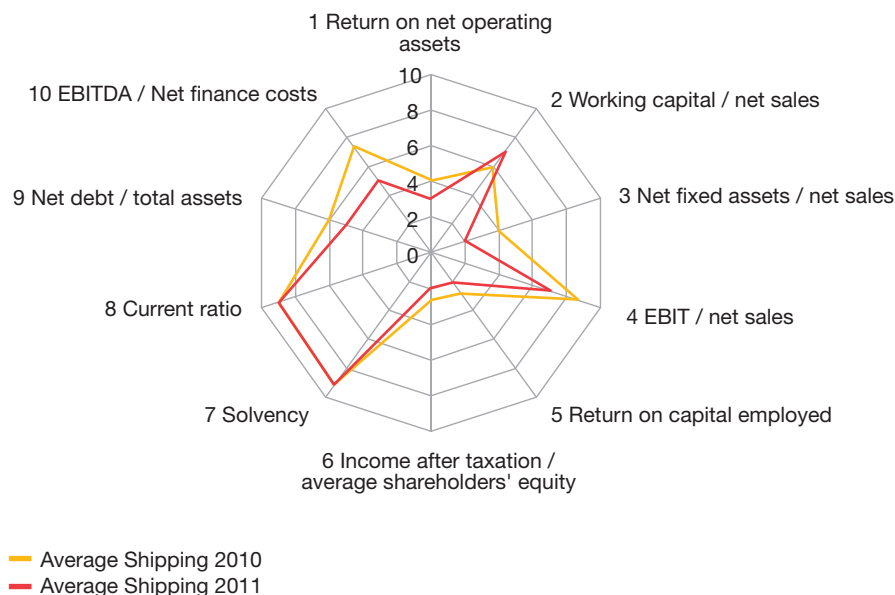


Radar chart 2011 - Miscellaneous



In the following radar chart we have presented the development in the performance indicators in the years 2010 and 2011 for the overall shipping industry:

Radar chart 2010 - 2011 Shipping sector



With the exception of the working capital to net sales, all financial performance indicators stabilized or deteriorated in 2011 compared to 2010. However the so-called positive development in working capital has been assessed and rated from a financing cost perspective. On average, working capital has become negative in 2011 which is a cost efficient way of financing, but of course it could also be an indicator that a company is facing difficulties in meeting its short term obligations.

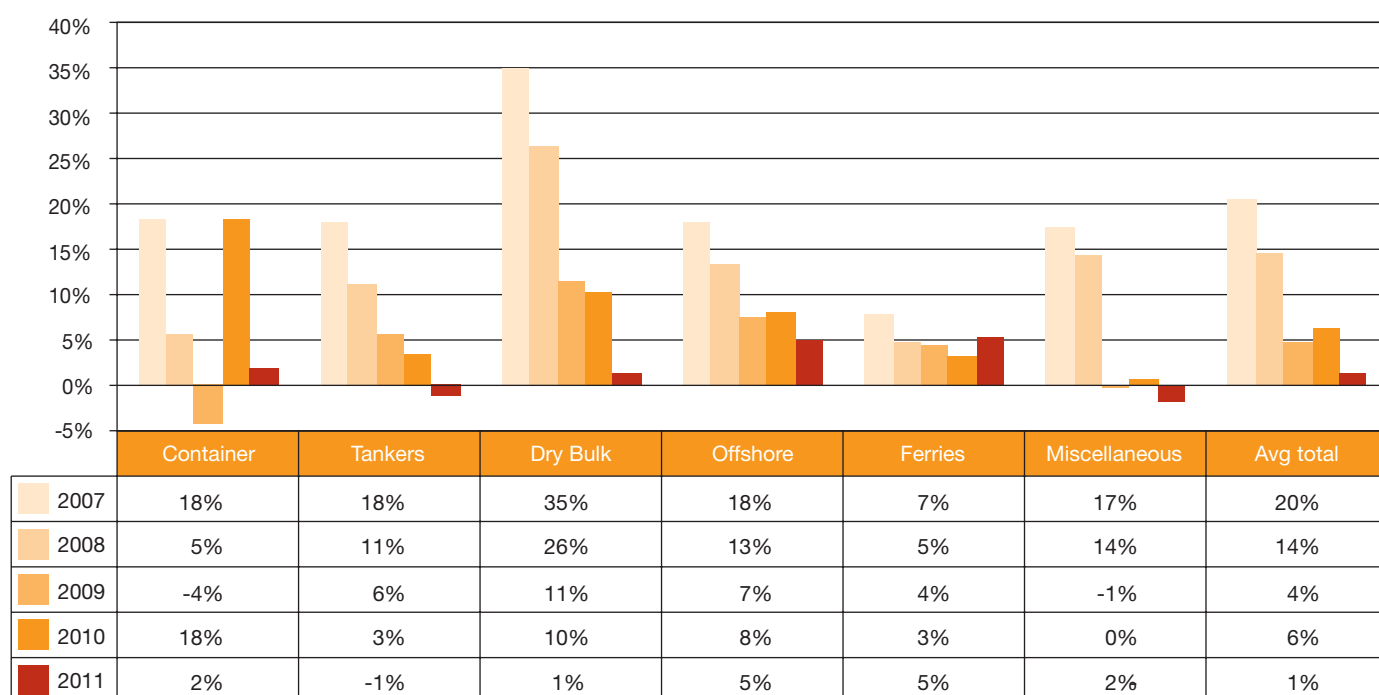
The 2008 financial crisis and the economic downturn that followed it had a huge impact on freight volumes and rates in almost all shipping subsectors in 2009. Year 2010 showed a mild recovery, although results were mixed between subsectors. The recovery in 2010 did not continue in 2011. We see a deterioration of the results for the whole shipping sector (except for the ferries subsector).

3.4. Performance indicators

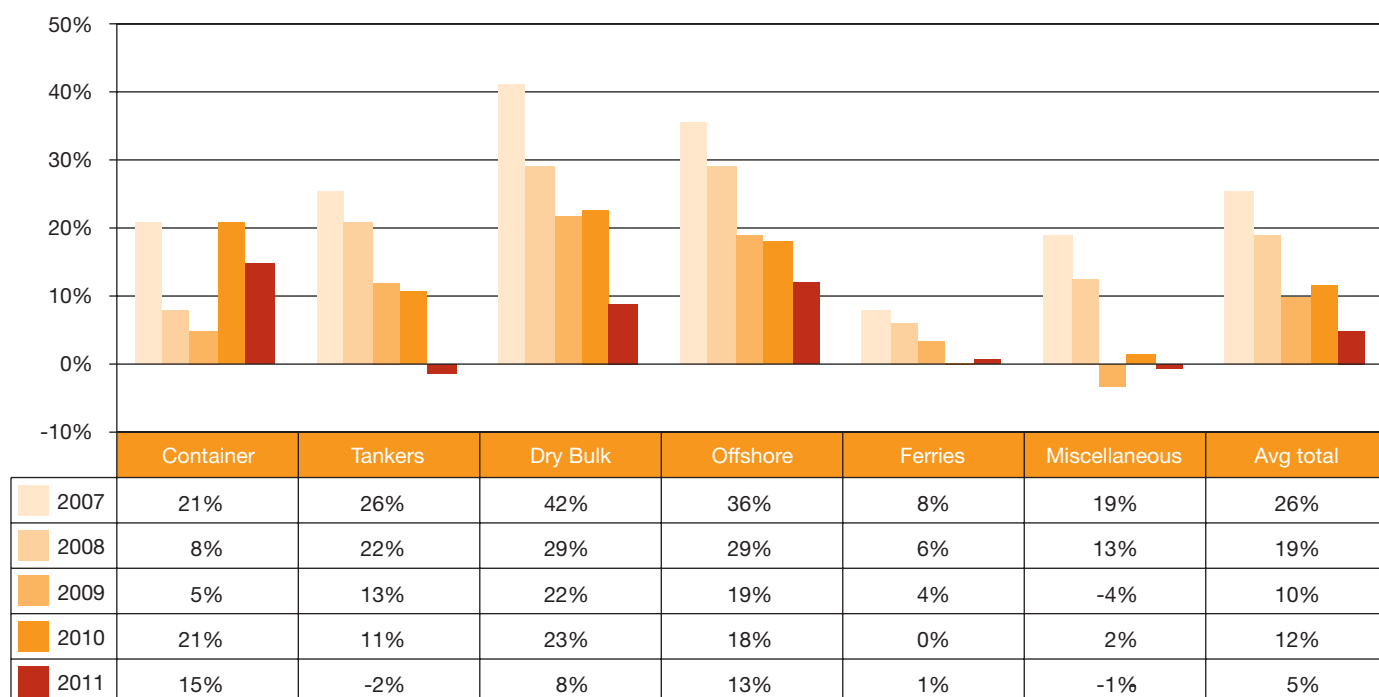
Return on net operating assets (RONOA)

The following charts present the RONOA by subsector over the last 5 years, and the evolution of some of the components that affect RONOA, such as Earnings Before Interest and Tax (EBIT), working capital and fixed assets.

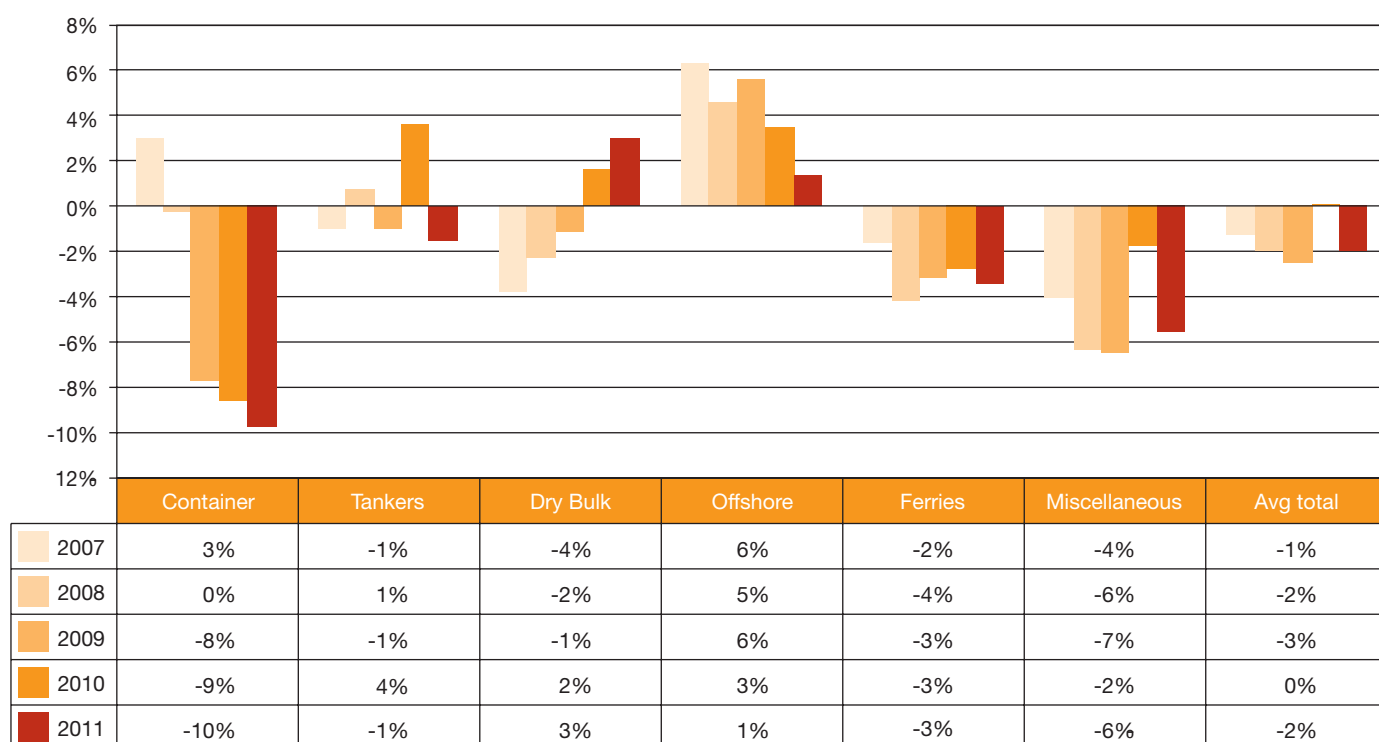
Return on net operating assets (RONOA)



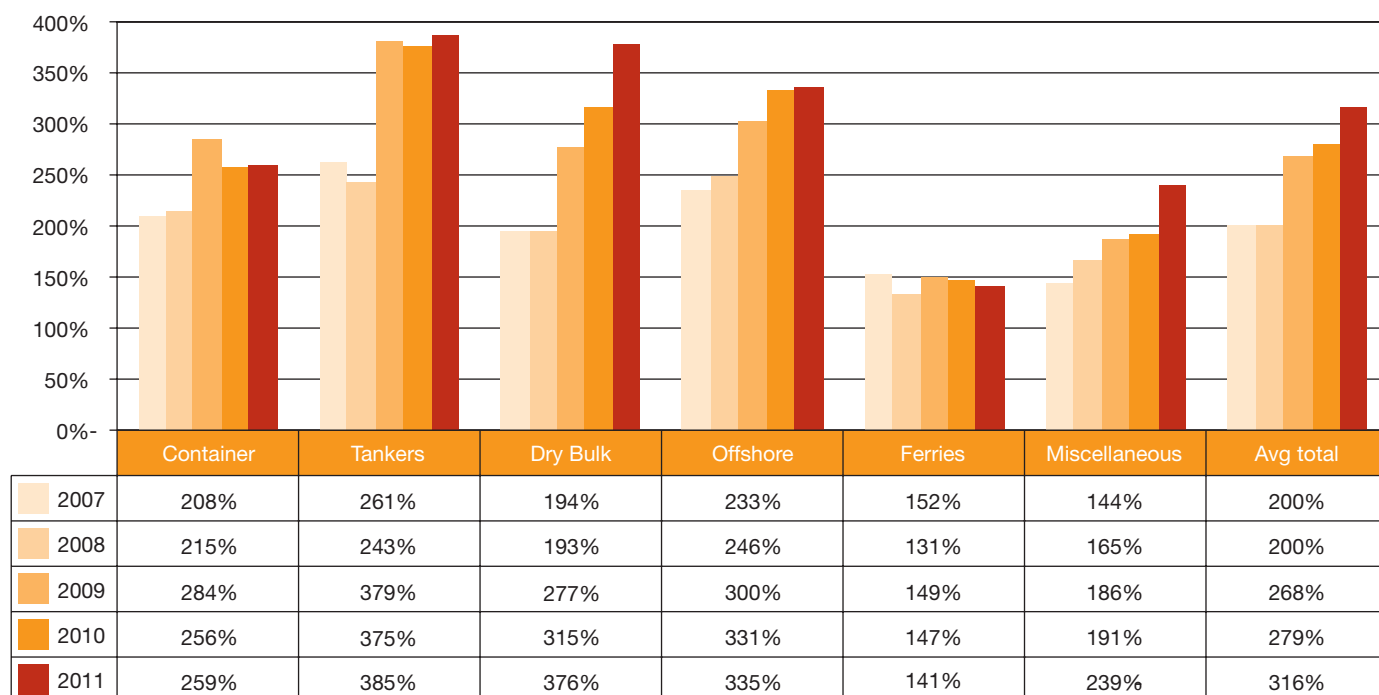
EBIT / net sales



Working capital / net sales



Net fixed assets / net sales



With the exception of the ferries subsector, RONOA decreased for all subsectors compared to the previous year.

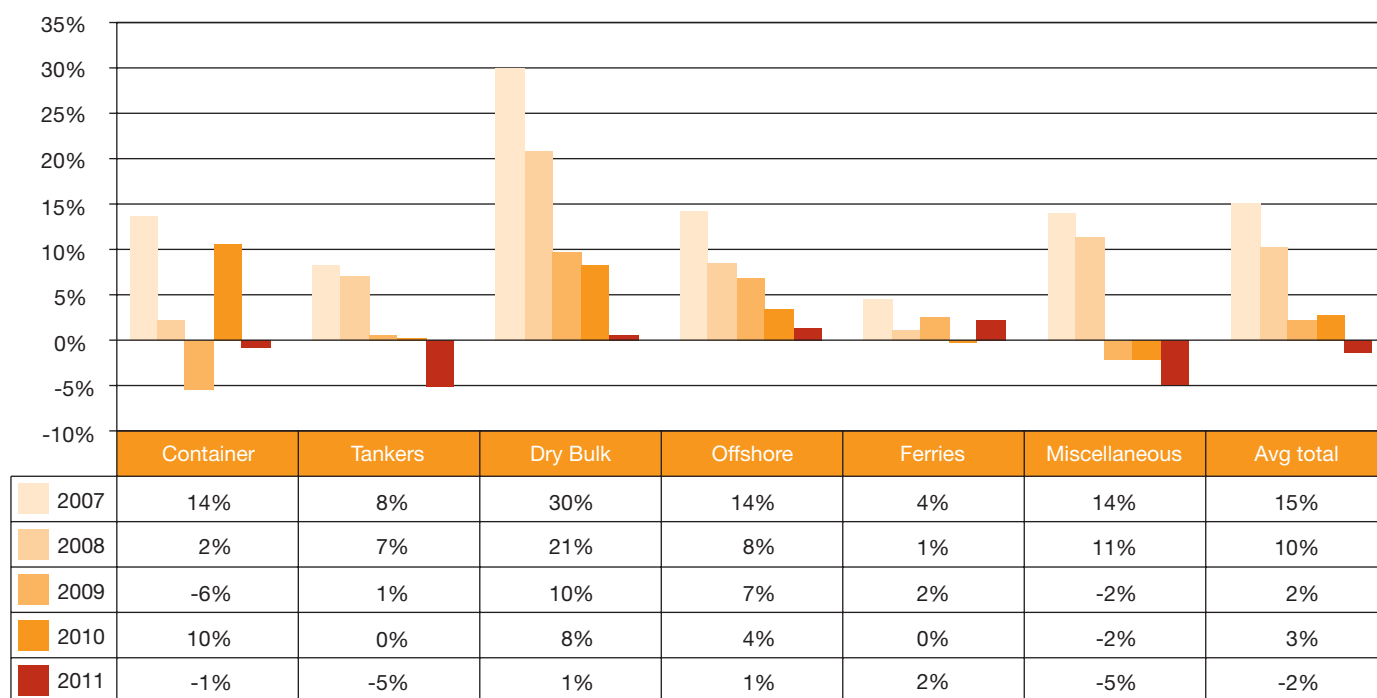
The container subsector RONOA was the best performing subsector in 2010 but shows the largest decline for RONOA by 16 percentage points in the 5 years presented. This appears to be mainly due to a decrease in EBIT to net sales.

Although the dry bulk shipping subsector had consistently been the best performing subsector between 2007 and 2009, its RONOA has suffered in 2010 and 2011, presumably as a result of the weak hire rates for dry bulk vessels as a result of the supply-demand imbalance caused by significant new deliveries of new-build vessels in this subsector.

Working capital to net sales decreased in 2011 for all subsectors, except for the dry bulk subsector and the ferries subsector. A relatively low working capital or even negative working capital to net sales is a cost efficient way of financing but may also indicate that a company faces difficulties in meeting its short-term obligations.

In 2011 the net fixed assets to net sales ratio increased for all subsectors, indicating the weaker revenues companies across most of the sectors have been able to generate during 2011. An exception to this has been the ferries subsector.

Return on capital employed (ROCE)



Return on capital employed (ROCE)

ROCE is structurally lower than RONOA which can be explained by the fact that net income after taxes is generally lower than EBIT in a normal course of business and all investments are taken into account.

The trends over the last 5 years in ROCE trace the trends evidenced in the RONOA, except for the offshore subsector in 2010 and the ferries subsector in 2009.

For the offshore sector in 2010 ROCE deteriorated while RONOA improved compared to 2009. These developments are possibly due to positive hedge results and large positive exchange rate translation differences in 2009 on foreign currencies at several Norwegian companies that comprise the majority of the companies in this sector. In 2011 ROCE decreases in line with the decrease of RONOA.

In 2011 the ferries subsector is the best performing subsector on ROCE and is

the only subsector with an increase on ROCE which is in line with the increase on RONOA.

Return on equity

Developments in return on equity in the years 2007 – 2010 show a wide differentiation between subsectors.

In 2010 return on equity decreased in all subsectors, except for the container subsector, primarily due to increased profitability of the companies in this sector in 2010.

In 2011 return on equity decreased in all subsectors with a negative outcome for the tankers subsector and for companies categorised as “miscellaneous”. More than 50% of the companies in these two categories reported losses in 2011. The dry bulk shipping subsector continues to have the highest return on equity of all other shipping subsectors in 2011, although this was lower than the previous year’s ratio by

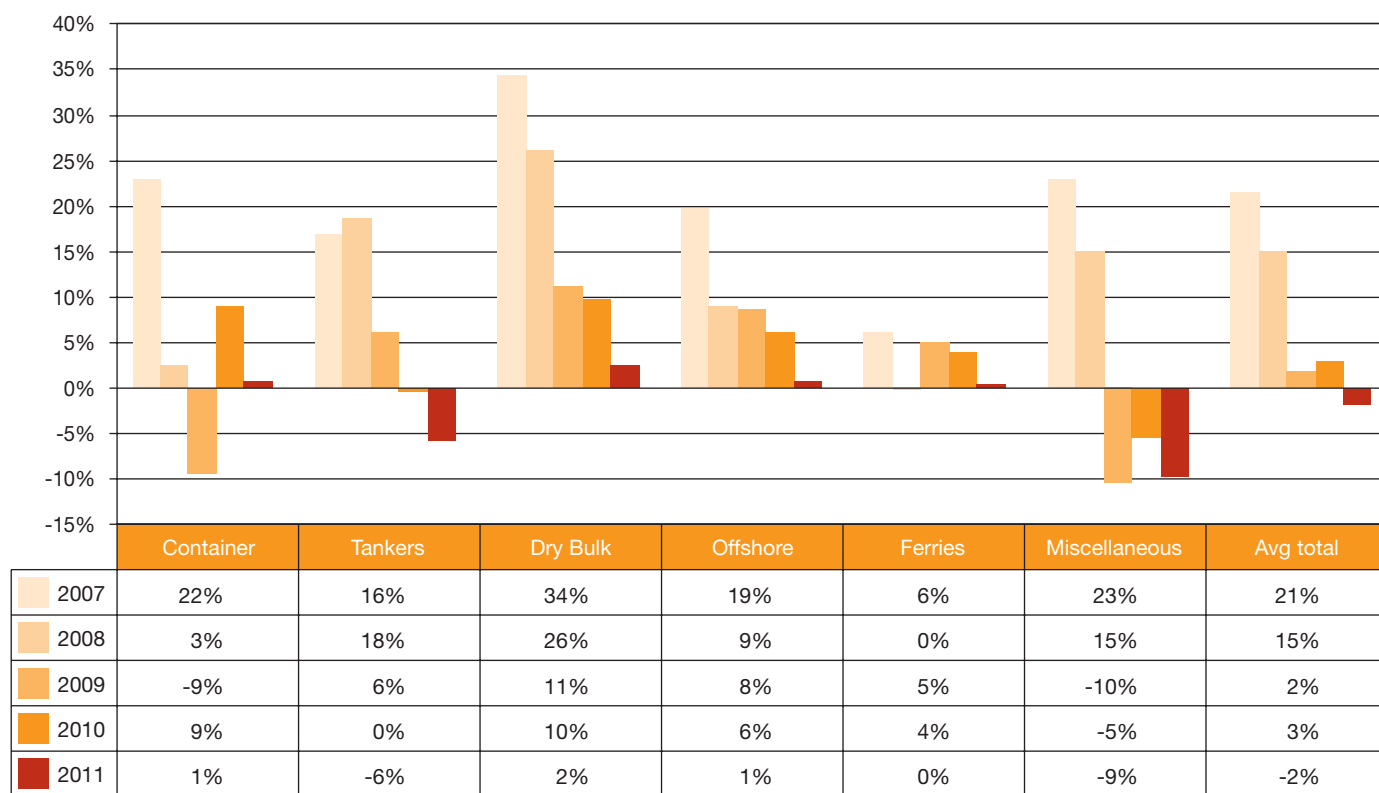
8 percentage points. The highest outcome for the dry bulk shipping sector is not reflected in either RONOA or ROCE.

Solvency

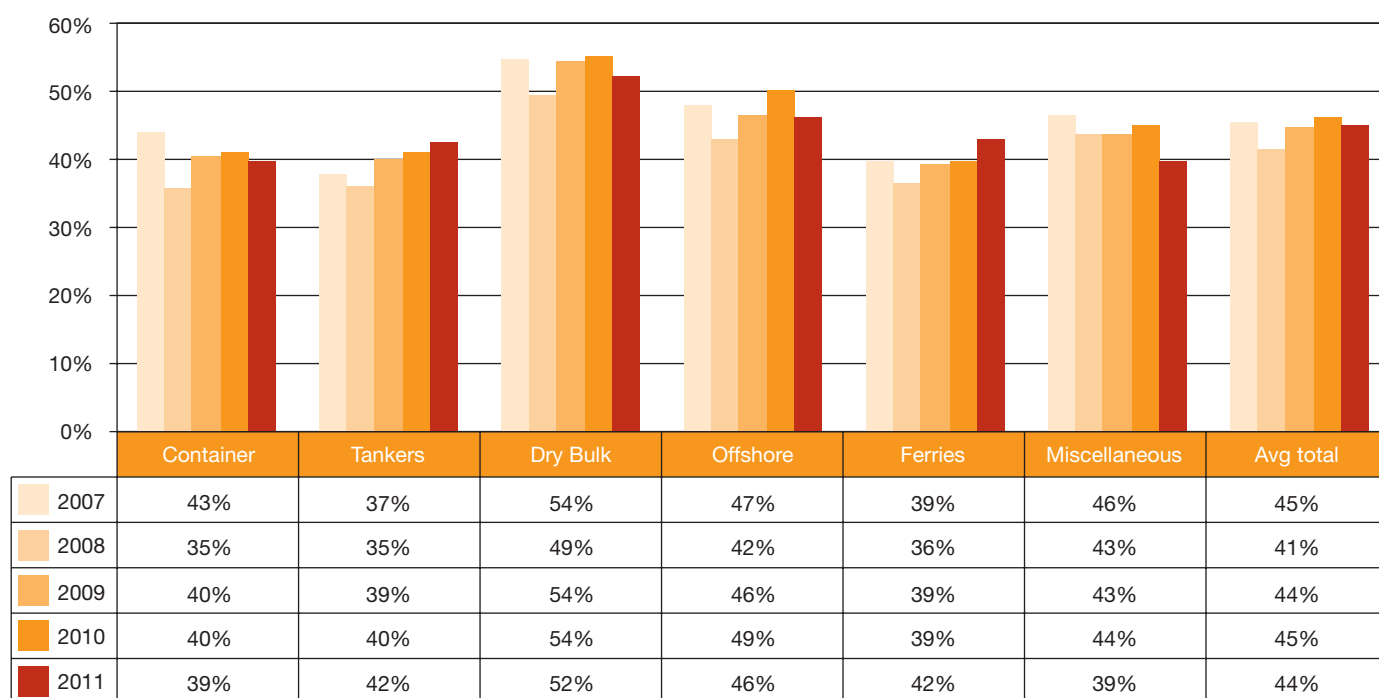
Solvency rates are relatively high in all shipping sectors and do not show significant changes during the last 5 years.

Due to the impact of the economic downturn, one would have expected decreasing solvency rates in 2009, but the rates stabilized or even increased in 2009. This is possibly the result of financial restructuring at many shipping companies in 2009. Another explanation is that companies have already impaired their vessels and other assets in 2008 (which indicates the most significant decrease in this ratio), and thus it had stabilised in the subsequent periods. For 2010 the ratio is relatively stable compared to 2009. For the tankers subsector and ferries subsector solvency improves in 2011 while for the other subsectors it deteriorates.

Income after taxation / average shareholders' equity



Solvency



Liquidity

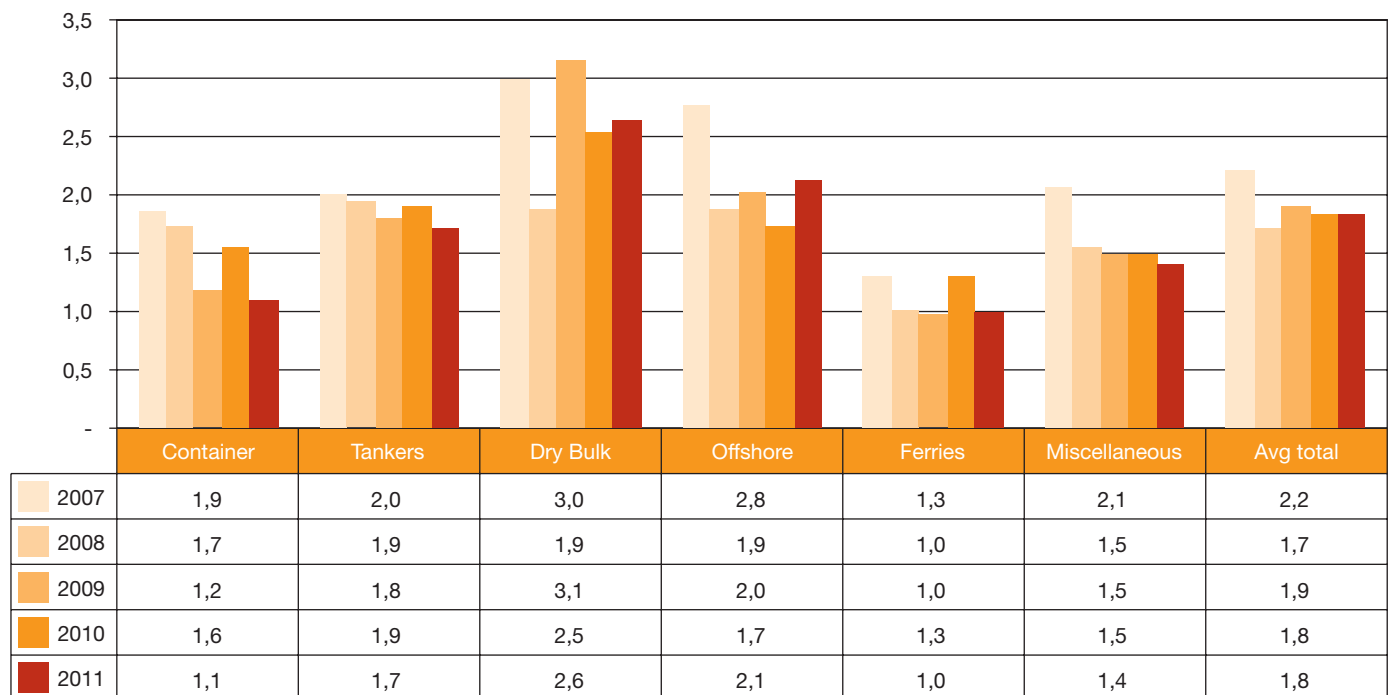
The current ratio indicates the ability of the company to pay its short term liabilities in the short run and is calculated by dividing the amount of current assets by the amount of current liabilities. As a rule of thumb, a current ratio of approximately 1.5 is generally deemed to be healthy while current ratios less than 1 are generally deemed to be unhealthy.

In 2011 the average liquidity in the dry bulk shipping subsector and offshore subsector improves. However for the dry bulk shipping subsector 9 companies have a critical score of less than 1, compared to 6 companies in 2010. For the offshore subsector 3 companies have a score of less than 1 in both 2010 and 2011.

The tanker subsector and miscellaneous category show a slight deterioration in 2011 of liquidity. However, the number of companies with a critical score of less than 1 for these subsectors compared to 2010 is relatively stable.

Liquidity dropped significantly for the container subsector and ferries subsector in 2011. For the container subsector, 6 companies have a critical score of less than 1 compared to 2 companies in 2010. For the ferries subsector 5 companies have a critical score of less than 1 compared to 4 companies in 2010.

Current ratio



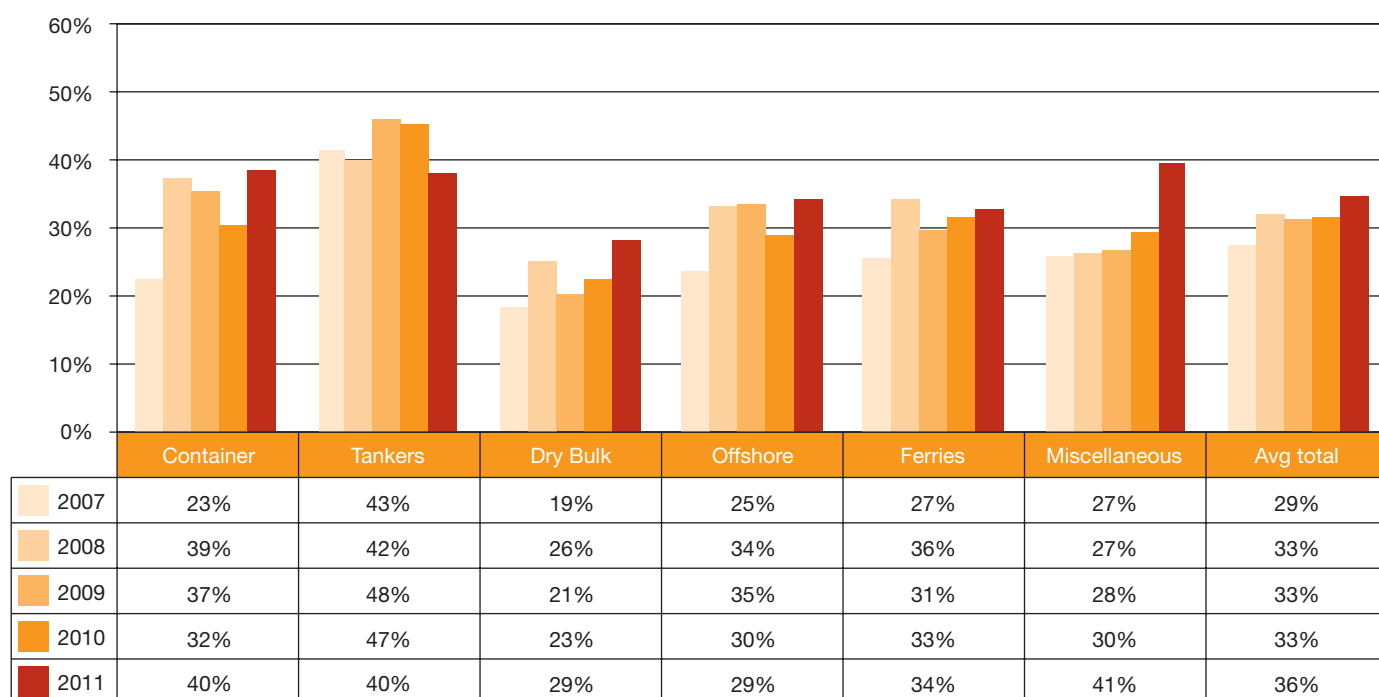
Net debt

The net debt ratio is calculated as the ratio of interest bearing debt less cash divided by total assets. The higher the ratio the more the company has been financed by interest bearing liabilities. Borrowing capacity of the company decreases when net debt on total assets increases. For this reason, this ratio is usually monitored by banks or other finance providers.

The developments in this ratio in the years 2007-2011 vary between subsectors, however the average totals appear to have an increasing trend. This ratio increased in 2011 for all subsectors except for the tanker subsector. A likely cause of the trends observed relates to increased impairments during 2008 and 2011 (when this ratio had a notable increase for most subsectors) and the impact of decreasing cash positions.

Net debt has been the highest in the tanker subsector for years 2007 to 2010. For 2011 the miscellaneous subsector has the highest outcome on this ratio followed by the container subsector and tanker subsector. Net debt is still the lowest in the dry bulk shipping subsector. The dry bulk shipping subsector also has the highest average solvency and highest liquidity.

Net debt / total assets



EBITDA/net finance cost

The ratio EBITDA/net finance cost is included in our benchmarking analysis as from 2009 and therefore only available for the years 2008 till 2011. This ratio indicates how many times interest expenses (after deduction of interest income) can be paid from earnings before interest, taxes, depreciation and amortisation. This ratio is important for credit institutions as it indicates the ability of the company to pay the interest expenses on the debts. This ratio is often monitored as part of bank covenants.

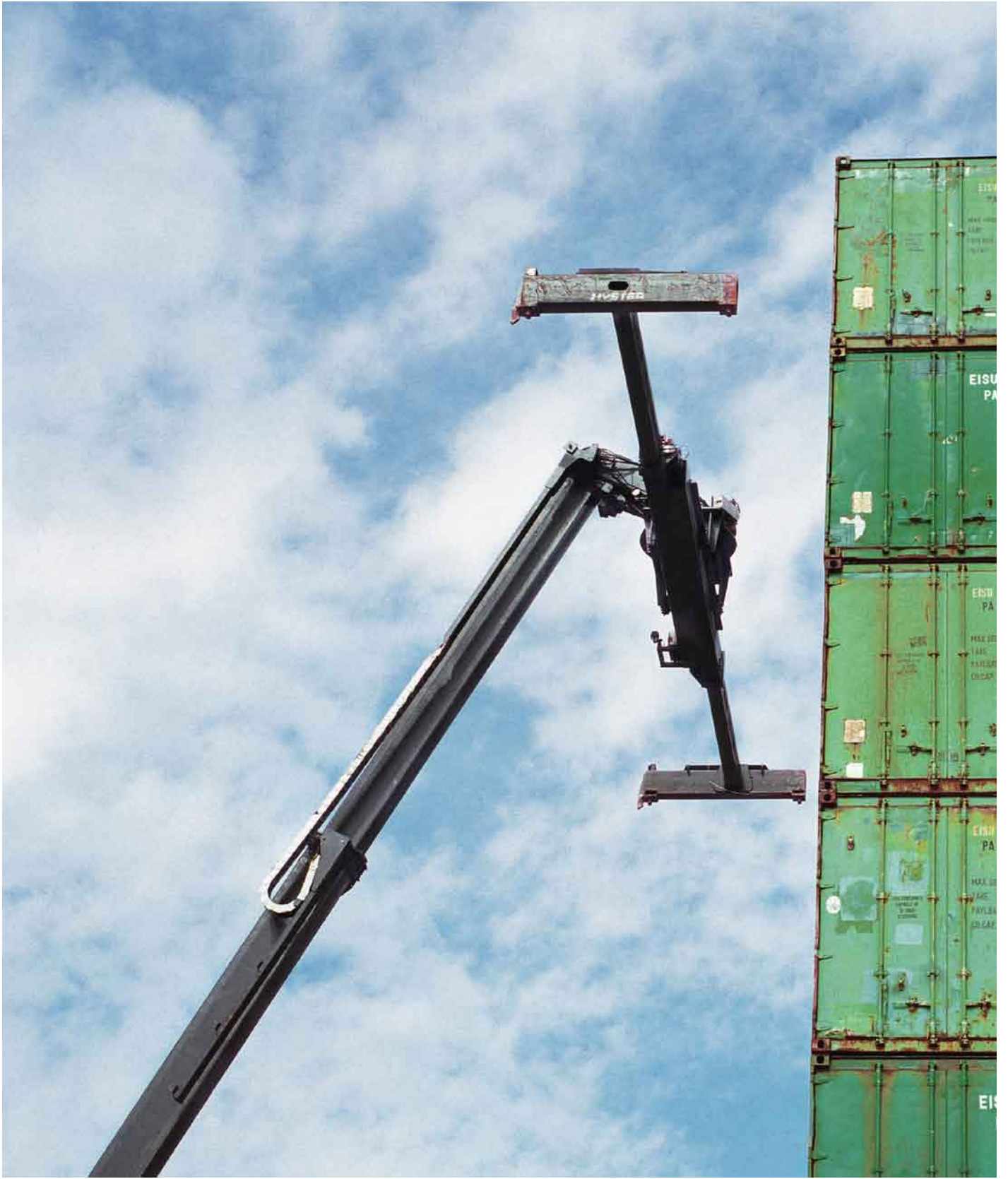
In 2011 the EBITDA to net finance cost ratio deteriorates for all subsectors, except for the ferries subsector. These trends are in line with the deterioration of the results for the subsectors in 2011 and an improvement in the results in the ferries subsector.

Our analysis of the annual reports of the companies we selected indicates that 20% had waivers of loan covenants or a covenant reset in 2011 and 35% did not have any issues concerning waivers on loan covenants to report. The remaining

companies provided no information in the annual reports on this matter.

EBITDA / Net finance cost





4. Companies covered by the analysis

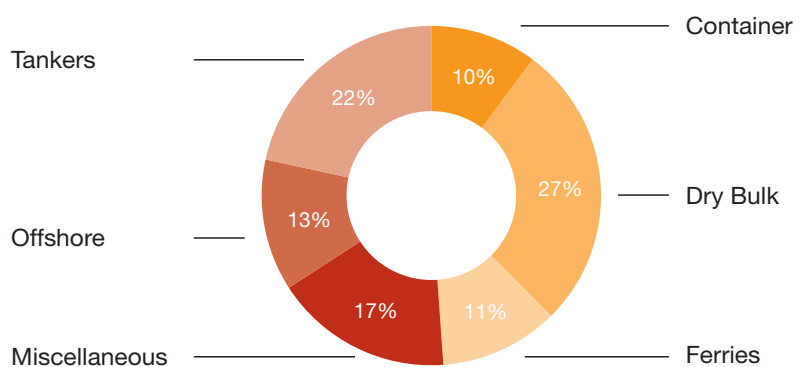
Our benchmarking analysis was based on the financial statements the companies presented in the Appendix to this publication for the last 5 years and the review of the 2011 annual reports for information on current relevant themes.

The shipping companies included in the benchmarking analysis operate in the tanker, container, dry bulk, offshore or ferry industry. Companies operating in different subsectors to the above (e.g. LNG carriers) or in more than one subsector and have been categorised as “miscellaneous”.

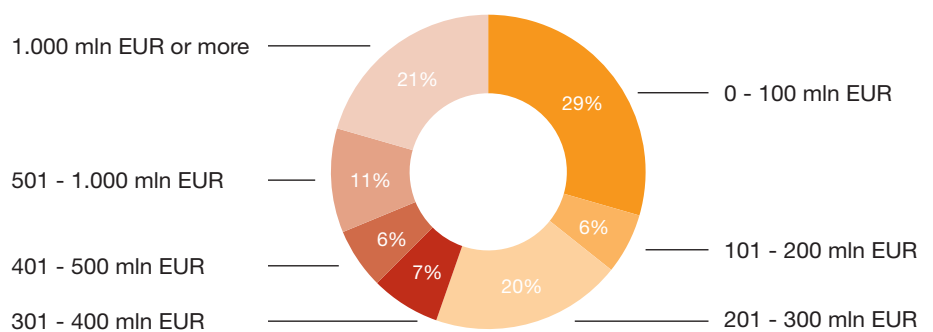
The first chart presents the segmentation of the shipping companies in our benchmarking analysis.

Shipping companies of different sizes have been included in our benchmarking analysis. The composition of our population, using the 2011 sales revenue as a benchmark, is shown in the second chart.

Analysis by subsector

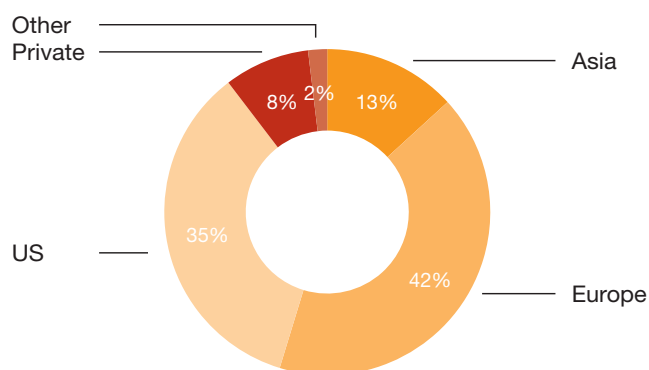


Analysis by revenue



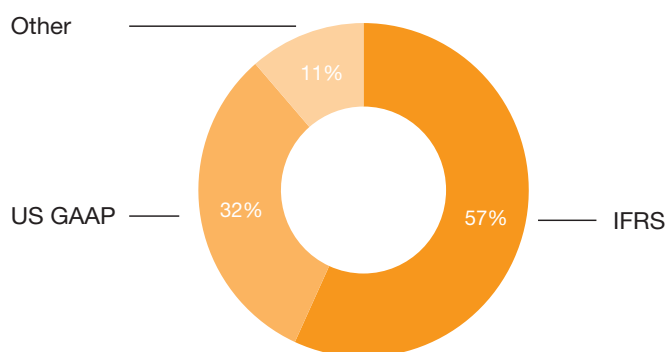
Of the companies included in our benchmarking analysis for 2011, 92% are public companies listed on various stock exchanges, mainly in Europe and the United States. A categorization of the listings on stock exchanges is presented in the following chart:

Stock Exchange



The ratios for the financial performance benchmark have been calculated on the basis of their publicly available financial statements and annual reports without any adjustment for possible differences in generally accepted accounting principles (GAAP) applied.

Reporting Framework

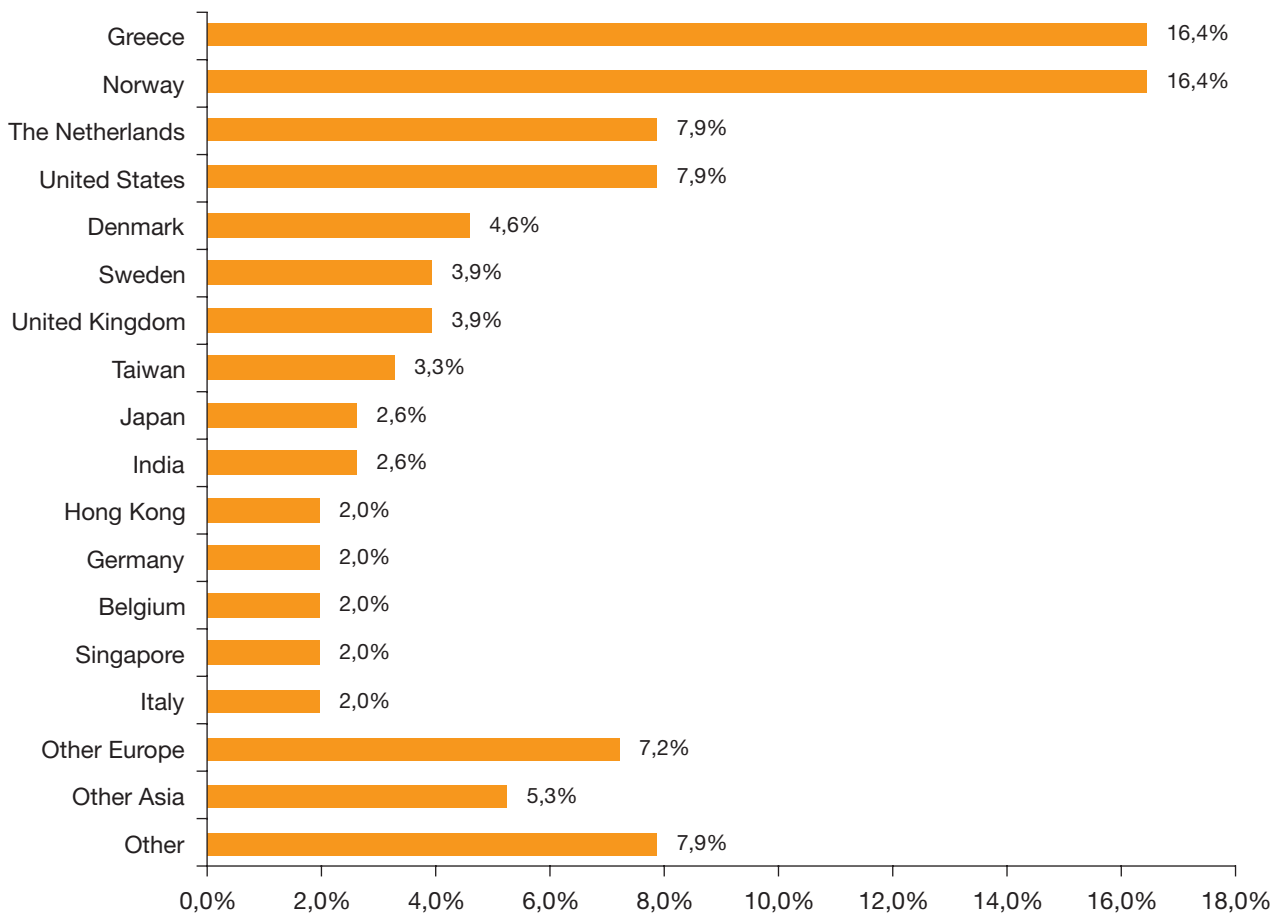


A significant number of the companies in our benchmarking analysis have prepared their financial statements based on the International Financial Reporting Standards (IFRS). Application of IFRS is required when listed in Europe and further accepted in several other jurisdictions. Up until the end of 2007, financial reporting under US GAAP was a requirement for companies listed on a US stock exchange. From 2008 onwards, IFRS is also considered an acceptable reporting framework for these companies.

As shown on the next graph, 11% of the companies we have analysed use accounting principles different from IFRS or US GAAP, for example Greek GAAP, Dutch GAAP, Hong Kong GAAP etc.

The distribution of shipping companies participating in the benchmarking analysis is as follows:

Participating Shipping Companies by Country





Appendices

Ratio definitions

RETURN ON NET OPERATIONAL ASSETS (RONOA)

EBIT/average NOA* – reflected as a percentage

EBIT: Earnings Before Interest and Taxation

NOA: Net Operational Assets calculated as net fixed assets (excluding financial assets) + working capital (excluding cash) + net fixed assets (excluding financial assets)

WORKING CAPITAL/NET SALES

Average working capital*/net sales - reflected as a percentage

Working capital: Current assets minus non-interest bearing current liabilities

NET FIXED ASSETS/NET SALES

Average of net fixed assets*/net sales - reflected as a percentage

EBIT/NET SALES

EBIT/net sales - reflected as a percentage.

RETURN ON CAPITAL EMPLOYED (ROCE)

Income after taxation/average of capital employed* - reflected as a percentage.

Capital employed: intangible, tangible and financial fixed assets + working capital

RETURN ON EQUITY

Net income after taxation/average shareholder's equity* - reflected as a percentage

SOLVENCY

Shareholders' equity/total assets

LIQUIDITY (CURRENT RATIO)

Current assets/current liabilities.

NET DEBT/TOTAL ASSETS

Interest bearing liabilities less cash/total assets

EBITDA/NET FINANCE COST

EBITDA/(interest expenses after deduction of interest income)

EBITDA: Earnings Before Interest, Taxation, Depreciation and Amortization

* Average is calculated by balance as at year end 2010 + balance as at year end 2011 divided by 2

List of participating shipping companies

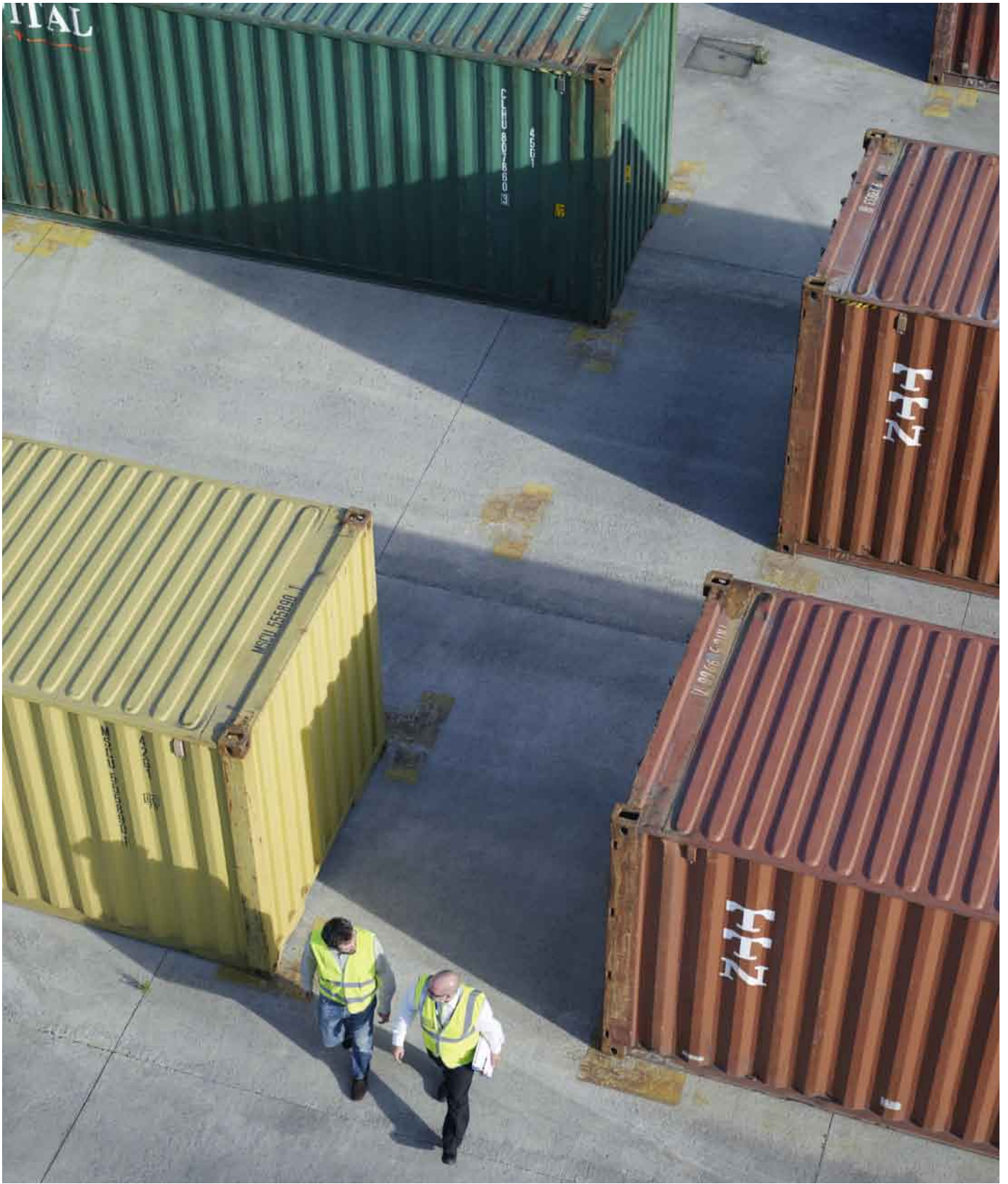
Company Name	Country
Aegean Marine	Greece
Algoma Central Corporation	Canada
Anek Lines	Greece
Anthony Veder	The Netherlands
Aspo Group	Finland
Attica Enterprises	Greece
B+H Ocean Carriers	Greece
Baltic Trading	United States
Belships	Norway
Berlian Laju Tanker	Indonesia
Bourbon	France
BW Gas	Norway
Caledonian Macbrayne	United Kingdom
Camilo Eitzen	Norway
Capital Product Partners	Greece
China Shipping Container Lines (CSCL)	China
CMB GROUP	Belgium
Color Group	Norway
Concordia Maritime	Sweden
Cosco	China
Costamare	Greece
Crude Carriers	Greece
CSAV	Chile
Danaos	Greece
d'Amico International Shipping	Luxemburg
DFDS	Denmark
Diana Shipping	Greece
Dockwise	The Netherlands
Dof	Norway
Double Hull Tankers	Norway
DryShips	Greece
Eagle Bulk Shpg.	United States
Eidsiva	Norway
Eimskip	Iceland
Ektank	Sweden
Essar Shipping	India
Euroceanica	United Kingdom
Euronav	Belgium
Euroseas	Greece
Evergreen Marine	Taiwan
Excel Maritime	Greece
Exmar	Belgium

Company Name	Country
Fairmount Marine	The Netherlands
Farstad	Norway
Fesco	Russia
Finaval	Norway
Finnlines	Finland
Flinter Group	The Netherlands
Freeseas	Greece
Frontline	Norway/United Kingdom
Genco Shipping	United States
Globus Maritime	Greece
Golar LNG	Norway
Golden Ocean	Norway
Goldenport	Greece
Great Eastern Shipping	India
Greenreefers	Norway
Grindrod Ltd	South Africa
GulfMark Offshore	United States
Hanjin Shipping	South Korea
Hapag Lloyd	Germany
Havila Shipping	Norway
Hellenic Carriers	UK (Jersey)
Horizon Lines LLC	United States
Hornbeck Offshore	United States
Hyundai Merchant Marine	Korea
International Shipholding Corp	United States/Shanghai
Irish Continental	Ireland
Jadroplov	Croatia
Jinhui	Hong Kong/Norway
Kahn Holding	The Netherlands
Kawasaki Kisen (K-Line)	Japan
Knightsbridge	Norway
Koninklijke Wagenborg	The Netherlands
Latvian Shipping Company	Latvia
Lauritzen	Denmark
Limarko	Lithuania
Maersk	Denmark
Mercator Lines	Singapore
Minoan Lines	Greece
Mitsui OSK Lines	Japan
Mols-Linien	Denmark
Navios Maritime	Greece
Neptune Orient Lines	Singapore
Newlead Holdings	Greece
Nile Dutch Holding	The Netherlands
Nippon Yusen Kabushiki (NYK)	Japan
Norden	Denmark
Nordic American Tankers Corp	United States
Novoship	Russia

Company Name	Country
Odffjell	Norway
Orient Overseas International	Hong Kong
OSG Inc.	United States
Pacific Basin Shipping	Hong Kong
Paragon Shipping	Greece
Precious Shipping	Thailand
Premuda	Italy
Rederi ab Gotland	Sweden
Rickmers Maritime	Singapore
Rieber shipping	Norway
Royal Arctic	Denmark
Safe Bulkers	Greece
Saga Tankers	Norway
Samudera Shipping	Singapore
Scandferries	Germany
Scorpio Tankers	United States
Seacor Holdings Inc.	United States
Seanergy Maritime	Greece
Seaspan Corporation	Canada/Hong Kong
Seatrade Holding	The Netherlands
Ship Finance	Norway
Shreyas	India
Siem Offshore	Norway
Sincere Navigation	Taiwan
Sinotrans Ltd	Hong Kong
Skaugen	Norway
Sloman Neptun	Germany
Solstad	Norway
Solvang	Norway
Spliethoff's Bevrachtungskantoor	The Netherlands
SRAB shipping	Sweden
Star Bulk	Greece
Star Reefers	United Kingdom
Stealthgas	Greece
Stolt-Nielsen	United Kingdom, Norway
STX Panocean	Korea
Subsea 7	Norway
Tallink	Estonia
Tarbit Shipping	Sweden
TBS International	United States
Teekay Corp.	Canada
Temas Lines	Indonesia
Thoresen Thai	Thailand
Tide	Norway
Tidewater Marine	United States
Tirrenia	Italy
Top Ships	Greece
Torm	Denmark

Company Name	Country
Transatlantic Rederi	Sweden
Tsakos	Greece
U Ming Marine Transport	Taiwan
Ultrapetrol Ltd	Bahamas
Union Transport	United Kingdom
United European Car Carriers	Norway
US Shipping Partners	United States
Van Weelde Beheer	The Netherlands
Varun Shipping	India
Viking Line	Finland
Vroon	The Netherlands
Wan Hai Lines Ltd	Taiwan
Wilhelmsen	Norway
Wilson Carriers	United Kingdom
Yang Ming Marine Transport	Taiwan

Financial statements for year 2011 of companies printed in orange have not been included in the benchmarking analysis as the 2011 financial statements were not yet available at the time that the data was collected.



Contacts

Key contacts for the global shipping benchmarking analysis

Global Shipping & Ports leader

Socrates Leptos-Bourgi
+30 210 687 4693
socrates.leptos.-bourgi@gr.pwc.com

Netherlands Transportation & Logistics leader

Isis Bindels
+31 887923606
isis.bindels@nl.pwc.com

Global Sustainability contact for the shipping industry

Jeroen Kruijd
+31 887926472
jeroen.kruijd@nl.pwc.com

PricewaterhouseCoopers' transportation & logistics practice provides industry-focused assurance, tax and advisory services to public and private T&L companies throughout the world. For more information, please contact the transportation & logistics leader in your country.

Global Transportation & Logistics leader

Klaus-Dieter Ruske
+49 211 981 2877
klaus-dieter.ruske@de.pwc.com

Global Transportation & Logistics Business Development

Peter Kauschke
+49 211 981 2167
peter.kauschke@de.pwc.com

Global Transportation & Logistics Knowledge Management

Usha Bahl-Schneider
+49 30 2636 5425
usha.bahl-schneider@de.pwc.com

Africa Central

Vishal Agarwal
+254 20 2855581
vishal.agarwal@ke.pwc.com

Australia

Joseph Carrozzi
+61 2 8266 1144
joseph.carrozzi@au.pwc.com

Belgium

Peter Van den Eynde
+32 0 3 259 33 32
peter.van.den.eynde@be.pwc.com

Canada

Stephen Shepherdson
+1 403 509 7486
stephen.d.shepherdson@ca.pwc.com

Central and Eastern Europe

Nick C. Allen
+42 0 251151330
nick.allen@cz.pwc.com

China

Alan Ng
+852 2289 2828
alan.ng@hk.pwc.com

Cyprus

Yiangos Kaponides
+357 99617792
yiangos.kaponides@cy.pwc.com

Denmark

Bo Schou-Jacobsen
+45 39 45 36 39
bo.schou-jacobsen@dk.pwc.com

France

Vincent Gaide
+33 1 56 57 8391
vincent.gaide@fr.pwc.com

Germany

Klaus-Dieter Ruske
+49 211 981 2877
klaus-dieter.ruske@de.pwc.com

Greece

Socrates Leptos-Bourgi
+30 210 687 4693
socrates.leptos-bourgi@gr.pwc.com

Hong Kong

Alan Ng
+852 2289 2828
alan.ng.@hk.pwc.com

India

Bharti Gupta Gamola
+91 124 3306020
bharti.gupta.ramola@in.pwc.com

Indonesia

Thomson Batubara
+62 21 527 9109
thomson.batubata@id.pwc.com

Italy

Luciano Festa
+39 0 6 57025 2488
luciano.festa@it.pwc.com

Japan

Hirokazu Nakabachi
+81 80 1247 5338
hirokazu.h.nakabachi@jp.pwc.com

Luxemburg

Anne Murrath
+352 4948 481
a.murrath@lu.pwc.com

Malaysia

Azizan Zakaria
+60 (3) 2173 0512
azizan.zakaria@my.pwc.com

Mexico

Martha Elena Gonzalez
+52 55 5263 5834
martha.elena.gonzalez@mx.pwc.com

The Netherlands

Isis Bindels
+31 887923606
isis.bindels@nl.pwc.com

New Zealand

Karen Shires
+64 4 462 7667
karen.f.shires@nz.pwc.com

Norway

Rita Granlund
+47 0 95 26 02 37
rita.granlund@no.pwc.com

Philippines

Rodel Acosta
+63 2 8452728
rodel.acosta@ph.pwc.com

Portugal

Jorge Costa
+351 213 599275
jorge.costa@pt.pwc.com

Russia

Simon-Ferrers Dunn
+7 495 287 1128
simon.ferrers-dunn@ru.pwc.com

Singapore

Moon-Sub Song
+82 2 709 0217
moon-sub.song@kr.pwc.com

South Africa

Akhter Moosa
+27 12 429 0546
akhter.moosa@za.pwc.com

South and Central America

Henrique Luz
+55 11 3674 3601
henrique.luz@br.pwc.com

Spain

Ignacio Rel Pla
+34 963 032 064
ignacio.rel.pla@es.pwc.com

Sweden

Fredrik Göransson
+46 10 2131146
fredrik.goransson@se.pwc.com

Switzerland

Thomas Bruederlin
+41 58 792 5579
thomas.bruederlin@ch.pwc.com

Taiwan

Charles Lai
+886 2 2729 5186
charles.lai@tw.pwc.com

Turkey

Cenk Ulu
+90 212 3266060
cenk.uldu@tr.pwc.com

United Kingdom

Coolin Desai
+44 20 721 24113
coolin.desai@uk.pwc.com

United States of America

Kenneth Evans
+1 646 471 1058
kenneth.evans@us.pwc.com

© 2012 PricewaterhouseCoopers B.V. (KvK 34180289). All rights reserved. In this document 'PwC' refers to PricewaterhouseCoopers B.V., which is a member firm of PricewaterhouseCoopers International Limited, each member firm of which is a separate legal entity.
'PwC' is the brand under which member firms of PricewaterhouseCoopers International Limited (PwCIL) operate and provide services. Together these firms form the PwC network. Each firm in the network is a separate legal entity and does not act as agent of PwCIL or any other member firm. PwCIL does not provide any services to clients. PwCIL is not responsible or liable for acts or omissions of any of its member firms nor can it control the exercise of their professional judgment or bind them in any way.

