

Still battling the storm

*Global Shipping
Benchmarking Analysis 2013*



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Foreword



We are now in the fifth year of our annual Global Shipping Benchmarking Analysis, in which we provide an overview of the factors that 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.

Year 2012 was marked by sluggish economic growth and geopolitical turmoil. The shipping crisis deepened even further and almost all shipping subsectors underwent the most challenging market conditions in a long time.

Even though the macroeconomic fundamentals for 2013 are expected to show a gradual upturn, performance in the first half of 2013 indicates that downward pressures persist, with only a couple of exceptions that give some cause for optimism.

In the current publication, we have also chosen to look at sustainability reporting for shipping for the second year in a row. Our analysis shows that shipping is still lagging behind other industries in this field with only a minority of shipping companies reporting about sustainability. Sustainability reporting, is still viewed as a matter of compliance by the majority of shipping companies rather than a tool to communicate strategy and competitive advantage.

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

Socrates Leptos-Bourgi
PwC Global Shipping & Ports Leader

1. Market Developments



1.1. General outlook

Year 2012 turned out to be yet another difficult year for the shipping sector. The performance of the world economy was weak while fleet expansion remained high for a fourth consecutive year.

Global growth in 2012 was slightly above 3% and is projected to remain at the same levels in 2013 (IMF, July 2013), mainly driven by weaker domestic demand and slower growth in several key emerging market economies, as well as by a more protracted recession in the euro area.

According to the World Trade Organization, world trade growth fell to 2.0% in 2012 from 5.2% in 2011 and remained sluggish in the opening months of 2013 as the economic slowdown in Europe suppressed global import demand. World oil demand in 2012, decreased by 1.1% y-o-y (1.0m bpd) reflecting the weak economic performance of the OECD countries and the less active Chinese economy.

This year an important development in the shipping sector was the continued sharp decline in the fleet orderbook which according to RS Platou declined from 20% of the fleet a year ago to 14% at the end of 2012. This may appear as the rational response of the industry to the weak chartering rates, which significantly reduced new orders in order to rebalance demand and supply of tonnage in the market. Nevertheless, more than a few commentators in the market believe that even the reduced ordering activity observed in the market is still at a higher rate than necessary to bring a much desired improvement in hire rates.

The financial markets during the year have been calmer and signaled an improvement in overall business and consumer confidence.

Capital Markets activity picked up in 2013 with a number of shipping companies raising capital, either through an IPO or secondary offerings. The US Capital Markets continue to remain the most active in terms of transactions and funds raised. But, transactions in the Norwegian market have also drawn significant interest, with a number of private placements and listings on the Oslo Borse being announced.

Private Equity has also been a more active investor in the shipping sector with transactions announced throughout 2012 and in 2013. This has been a case of the shipping industry “discovering” private equity as much as a case of private equity “discovering” shipping. A combination of factors have played a role in this development, the most important of which have been the relative constrained lending activity of banks that have been the traditional shipping finance providers and the current position of the market in the shipping cycle, which is generally considered to be close to its lowest point, therefore, giving support to the view that this is a good time to invest in this sector.

Looking at some of the key subsectors, the dry bulk market fundamentals deteriorated during 2012 mainly due to record high deliveries of new vessels. According to Clarksons, the net dry bulk fleet expansion was above 10% in 2012 compared to the previous year, while tonnage demand increased by a lower rate, yet very reasonable 7%, thanks primarily to Chinese demand for coal and iron ore. Meanwhile the number of bulk carriers ordered in 2012 declined by almost 40% from the year before and contracting volumes fell to their lowest point since the lowest point of the newbuilding market in 2009. As a result of the continued oversupply of tonnage, average earnings for all types of vessels in the dry bulk fleet decreased further. Time charter rates also descended deeper as shown in the table below.

Average Earnings for Bulk Carriers (US\$ per day)

	2010	2011	2012	2013/June
Capesize (2000-built)				
Average Earnings	33,473	16,758	7,402	10,897
1 Year T/C Rate	32,967	16,938	13,685	13,125
Panamax (1998-built)				
Average Earnings	20,363	10,176	5,274	5,056
1 Year T/C Rate	24,559	14,663	9,706	8,156
Handymax				
Average Earnings	21,867	13,814	8,859	7,750
1 Year T/C Rate	20,847	14,108	10,130	9,500

Source: Clarksons

As far as the crude tanker market is concerned, conditions improved marginally in almost all sectors in 2012, only to decline significantly close to historical lows in the first half of 2013. Shorter travel distances and a largely unchanged tonnage demand, combined with a fleet growth of approximately 4% have been the main cause for these rates.

Crude Tanker Earnings (US\$/day)

	2010	2011	2012	2013/June
VLCC				
Average Spot Earnings	37,929	15,461	18,289	14,810
1 Year T/C Rate	37,962	24,947	22,125	18,000
Suezmax				
Average Spot Earnings	31,259	18,154	16,908	6,128
1 Year T/C Rate	28,377	19,587	17,356	15,750
Aframax				
Average Spot Earnings	19,792	12,597	12,939	10,966
1 Year T/C Rate	18,731	15,457	13,639	13,000
Panamax				
Average Spot Earnings	14,956	8,456	11,637	10,076
1 Year T/C Rate	16,604	14,745	12,995	14,875

Source: Clarksons

The product tanker market on the other hand is poised for a steady recovery as the new vessel orders in place appear to be at reasonable levels relative to the demand growth forecasts. Given the small number of shipyards capable of building high specification product tankers, there is generally a constrained

near term capacity for further product tanker additions. Strong demand, on the other hand, comes from developing economies (i.e. South America and Africa) where there is insufficient refinery capacity necessitating seaborne refined product imports.

The container shipping sector is driven by demand from the end market user. As a result it is more linked to global GDP growth than dry bulk or tankers. It is not surprising then that in 2012 box shipping continued to feel the impact of the pressure on consumers in the developed economies, with little growth in volumes into Europe and North America. World container trade, expanded by 4.1%, supported mainly by the developing world.

Oversupply and limited demand growth from liners resulted in continued under-utilization of lessor shipping capacity holding down charter rates of vessels. The containership time charter market in 2012 remained close to historic lows, unable to gain any traction. Annual average containership charter rates in 2012 were down by some 32% compared to 2011. According to brokers a 5% of the containership fleet was in laid up. The containership orderbook was significantly weighted towards the larger vessel sizes with a concentration on 8k+ teu and operators continue to search for cost efficiencies and economies of scale. Secondhand asset values have declined even further, by 44%.

1.2. Characteristics of the market

1.2.1. Newbuildings orderbook

According to Clarksons, a total of 2,597 vessels of approximate capacity of 154m dwt were delivered into the global fleet in 2012. This represents 10% of the existing fleet in terms of capacity. The respective shipyard output for 2011 was 2,677 vessels of 164m dwt, or 12% of the existing fleet in terms of capacity.

As shown on the table below, bulkers were the predominant vessel type to enter the market in 2012 with 1,200 vessels reported as being delivered of 98.7 dwt compared to 1,189 vessels of 98.5 dwt in 2011. The tanker sector, on the other hand, recorded 266 vessels of approx. 32.4m dwt delivered into the fleet in 2012, compared to 365 vessels of 39.8m dwt in 2011. In the container

sector, deliveries of vessels of more than 8,000 teu capacity grew by 11% in 2012 (by capacity) compared to 2011.

Vessel Deliveries

	2011		2012	
	No of Vessels	Dwt (m)	No of Vessels	Dwt (m)
Tankers > 10,000 dwt	365	39.8	266	32.4
Bulkers > 10,000 dwt	1,192	98.6	1,199	98.7
Containers > 8,000 teu	71	9.1	78	10.1
Containers 3-8,000 teu	59	4.1	59	3.7
Containers < 3,000 teu	60	1.2	66	1.1
LNG Carriers	16	1.0	3	0.2
LPG Carriers	54	0.5	44	0.3

Source: Clarksons

As shown on the table below the dry bulk fleet grew by approximately 10% during 2012. The tanker fleet grew by 3.7% in 2012 while the fleet growth for containerships was approximately 6% in 2012.

Fleet Development & Order book

	2010	2011	2012	2013/June
Dry Bulk Vessels				
Fleet (dwt million)	537	616	680	706
y-o-y % increase	16.9%	14.7%	10.4%	3.8%
Orderbook	302	230	140	126
Orderbook % fleet	56.2%	37.3%	20.6%	17.8%
Tankers				
Fleet (dwt million)	449	475	493	504
y-o-y % increase	3.9%	5.8%	3.7%	2.2%
Orderbook	127	86	59	49
Orderbook % fleet	28.3%	18.1%	12.0%	9.7%
Containerships				
Fleet (teu million)	14.2	15.3	16.2	16.9
y-o-y % increase	9.6%	7.9%	5.9%	3.9%
Orderbook	3.9	4.4	3.4	3.4
Orderbook % fleet	27.5%	28.8%	21.0%	20.1%

Source: Clarksons

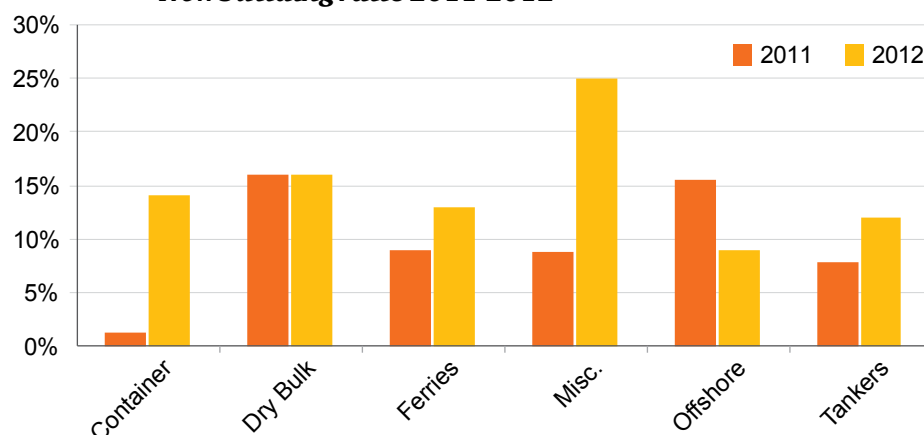
It is clear that ordering activity fell significantly in 2012 for the second year in a row. The main reasons behind this was slower world economic growth in previous years and high fleet growth in most shipping segments, which kept freight rates low.

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 drybulk subsector. The respective ratio for tankers stood at 12% and for containerships 14%. The ratio for the miscellaneous vessels category is this year 25% mainly attributed to LNG carriers included in this category,

which face a new wave of expansion. These newbuilding rates calculated by our analysis are generally in line with the reported figures for the entire shipping market. These stand as shown on the table above, at 20.6% for dry bulk vessels, 12% for tankers and 21% for containerships. The respective percentage for the LNG carriers is 24.8%.

Newbuildingratio 2011-2012



Source: PwC Analysis

1.2.2. Demolition

Motivated by adverse market pressures the demolition market had been very active in 2012 with a record of 58.2m dwt sent for demolition, surpassing 2011 volumes by almost 37%. Despite high volumes of demolition, scrap prices remained healthy at \$405/ltd for dry cargo vessels, down from \$455/ltd in 2011.

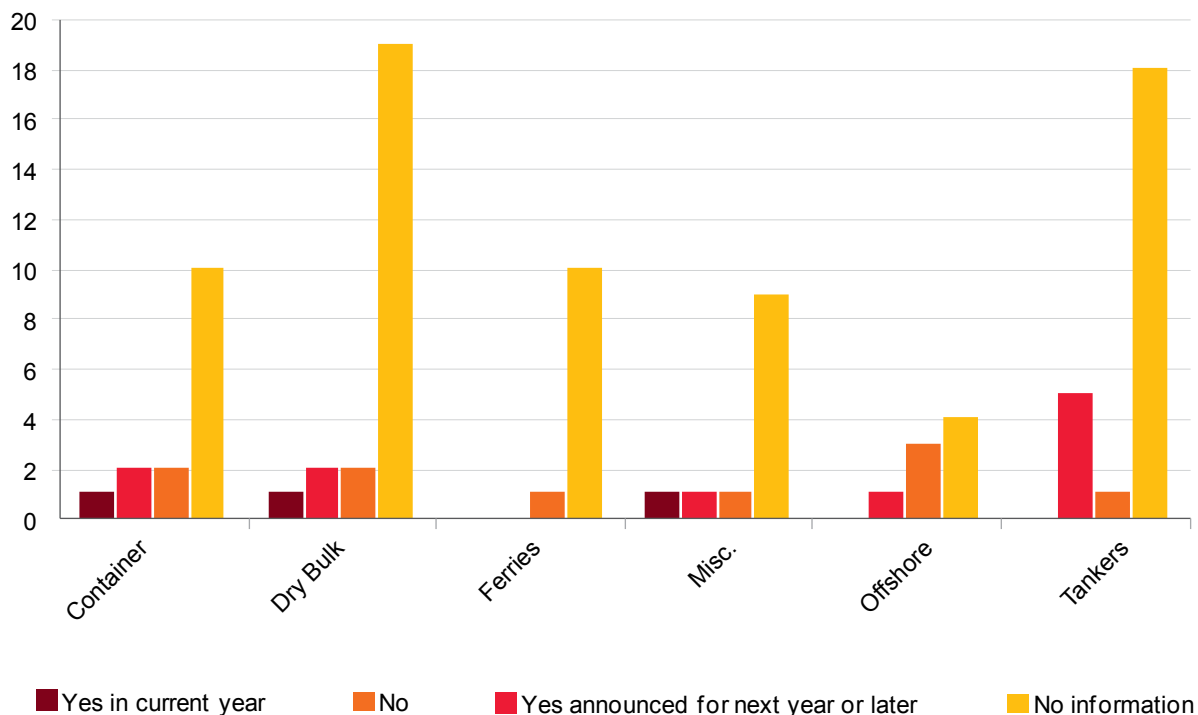
Given the poor performance of dry bulk freight rates the bulk carriers dominated the demolition market. According to Clarkson's the dry bulk demolition increased to 33mdwt from 23m dwt in 2011. It is worth noting that the average age of bulk carriers scrapped came down to 27 years in 2012 from 30 in 2011.

The situation in the containership market also accelerated recycling. With 4.9m dwt sold for scrapping compared to 1.2m dwt in 2011, heavily concentrated in the under 3,000 teu size group. Tanker demolition remained more modest representing some 2.3% of the fleet which is normal rather than distress scrapping.

High demolition volumes are also expected for 2013 as freight markets have continued to underperform. A total of 521 ships of a combined 23m dwt have been sent for scrapping in the first half of 2013. Issues of fuel efficiency and upcoming environmental regulations may lead owners to come up with the decision to scrap inefficient tonnage at an age below historical averages.

Unfortunately, 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. However, considering that most of the companies covered in our analysis are listed in public markets, they generally operate younger fleets than average which would explain the small number of companies actually reporting the sales of vessels for demolition.

Recycling/scrapping vessels 2012 (number of companies)



Source: PwC Analysis

1.2.3. Vessel values and impairment losses

With limited access to finance and no great improvement in earnings for the major cargo sectors, the level of activity in both the second hand and newbuilding markets was relatively low. A total of 1,246 vessels were sold in the second hand market in 2012 with the majority of sales (34.7%), being in the dry bulk sector.

Year 2012 was another year of falling asset values both for newbuildings and second hand vessels across all

subsectors as shown on the tables. The drop in second hand values is attributed not only to weak freight markets but also to ship-owners shifting to new propulsion technology and vessel design with a focus on fuel efficiency and low emissions.

The introduction of energy efficient designs by shipbuilders added a new factor to the equation in 2012, forcing down prices for the less efficient designed second hand ships which in turn had a knock-on effect on newbuilding prices.

The jury is still out on whether the newly designed “eco” vessels will continue to earn a premium to other

vessels in the market, especially if hire rates start to increase and bunker costs start to decline.

With regards to second hand prices, some market observers have argued that these prices should have been even lower than they are today had the banks taken a much stronger stance towards borrowers that have been in default or breach of covenants.

According to RS Platou asset values fell in 2012 but the rate of decline has slowed. The newbuilding prices fall across the board by 5-10% for most vessels. Second hand values also declined with dry bulk to fall by 20-30% and tankers by 5-10%.

Bulk Carriers - Second Hand Prices (in US\$m)

	2010	2011	2012	2013		
Bulk Carriers (5 yrs old)				Apr	May	Jun
Capesize	50	36	32.5	33	34	34
Panamax	36	26.5	18	19	22	22
Handymax	29	24.5	19.5	20	20.5	21.5
Handysize	25	21	15.5	17	18	18

Source: Clarksons

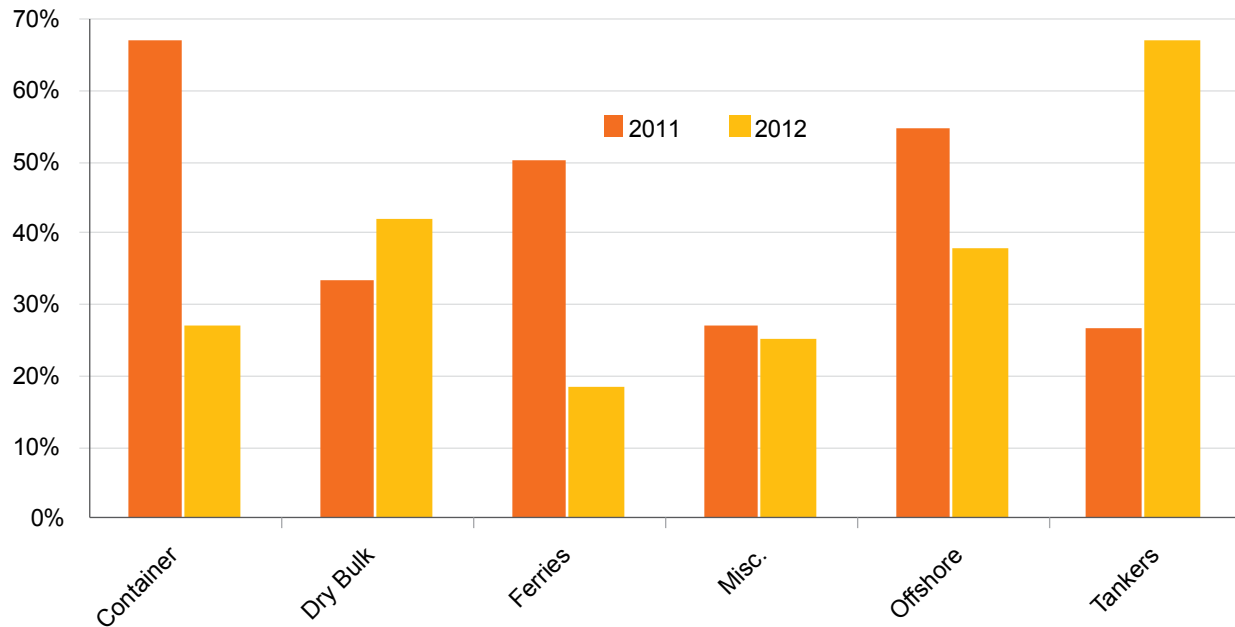
Tankers - Second Hand Prices (in US\$m)

	2010	2011	2012	2013		
Tankers (5 yrs old)				Apr	May	Jun
VLCC 310,000 dwt	85	58	57	55	55	55
Suezmax 160,000 dwt	59	47	40	40	40	40
Aframax 105,000 dwt	40	35	27,5	30	30	28
Panamax 73,000 dwt	36	31	25	27	27	27

Of the companies covered by our analysis, 40% reported vessel impairments in 2012 against 39% in 2011. As shown in the diagram on page 13 (showing the percentage of companies reporting impairment to the total of companies per sector we have

analyzed) the tanker 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 2011 was 26%.

Impairment losses on vessels (number of companies)



Source: PwC Analysis

1.2.4. Shipping finance

The long period of depressed shipping markets has led to heavy losses for many traditional owners, the wiping out of considerable equity, radical restructuring schemes, refinancing schemes, and new roles for several players in the market, including banks, private equity funds, hedge funds etc.

Bank lending in the shipping industry has been tightening. Only a handful of domestic banks are actively lending and international banks are pulling back. The causes are in part shipping related and in part due to wider economic

conditions and continuous regulatory pressure in the banking sector. Only financially strong companies having good, established relationships with local banks seem to be able to raise some limited available funding.

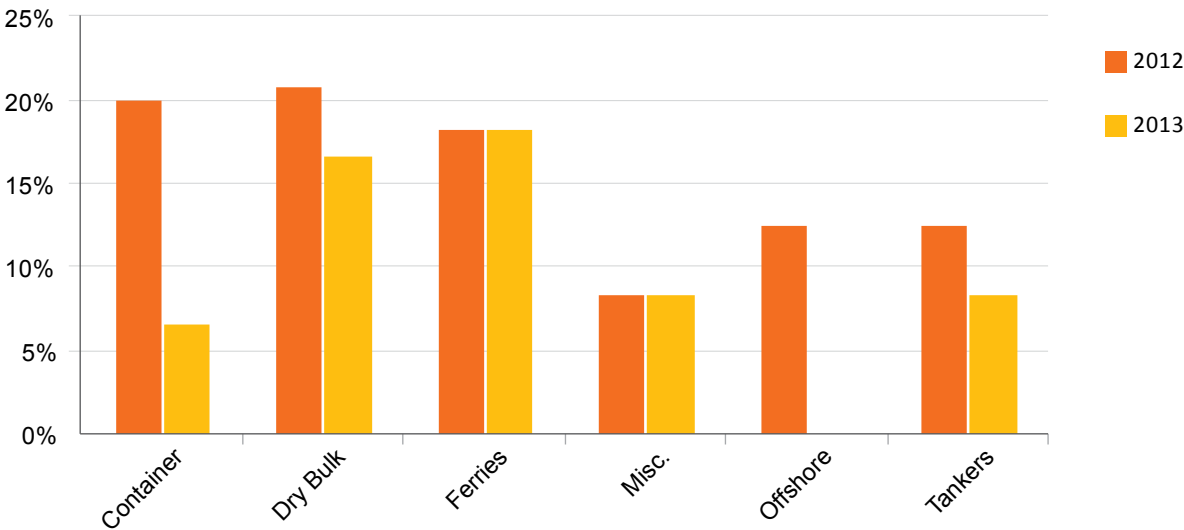
Considering the sharp drop in vessel values, many ship owners have breached loan-to-value and liquidity covenants and have had to request lenders to either provide them with waivers or to revise loan terms.

Among the companies covered by our analysis, 16% have reported that they restructured their loan facilities in 2012 while 11% foresee debt restructuring for 2013. Approximately 20% of the container companies in our sample have

reported a restructuring of their loan obligations in 2012. The percentage for dry bulk owners was 21% and for the tanker owners 13%.

Unless market conditions change, this pattern is expected to continue in 2013, with the difficulty being that some banks are facing increasing regulatory pressure and are keen to improve liquidity and exit problematic exposures. With a number of such exposures substantially provided against by the banks, already in the first half of 2013, there have been more banks reporting disposals of specific problematic loans to private equity or hedge funds.

Restructuring debt in 2012 compared to the estimation for 2013



Source: PwC Analysis



1.3. Year 2013 outlook

Based on performance to date, there are few signs for optimism in 2013.

Albeit at a lower level than in previous years, the delivery of large numbers of ships will continue into a depressed freight market already marked by overcapacity. It is expected that in 2013, 120m dwt will be delivered, while according to brokers in 2014 deliveries are expected to fall to around 102m dwt. The orderbook which appeared in the past to be as high as 50% of the fleet, has now been decreased to 15% of the fleet.

The bulk carrier market continues to look vulnerable with an expected 5% growth in dry bulk trade and an estimated 63m dwt of deliveries in 2013. The demand growth reflects the continued strong performance of Asian economies. But despite the firm growth in demand the fleet oversupply remains an overhang on charter rates.

Meanwhile the crude fleet growth is projected to slow in 2013 to 2.2% down from 5% in 2012 but pressure remains due to surplus of tonnage. With 12% of the fleet on order and a modern fleet in service there are only a few candidates to be scrapped. On the other hand demand growth from developing economies will continue to be overwhelmed by the adverse economic conditions in developed economies. The crude tanker market also remains challenged mainly due to the growth of U.S. oil production that is likely to reduce global demand of seaborne crude imports in the future.

For one more year the global containership demand will remain unevenly distributed across trade lanes. Current oversupply and limited demand growth from liners will result in continued underutilization of lessor shipping capacity holding down charter rates for vessels.



2. Sustainability



2.1. Sustainability still matters in shipping in 2013

For the second year in a row we have decided to have a look at sustainability reporting in the shipping industry as part of the Global Benchmarking Analysis. Last year we concluded that sustainability is becoming more important to the shipping industry as sustainability is more than just being compliant with laws and regulations as it impacts the bottom line. Did shipping companies identify this opportunity and made their business more sustainable and have improved their sustainability reporting over 2012? Given the relevance of sustainable operations, not just from a financial point of view, for a company and its stakeholders we expect this aspect will become a recurring research area in our survey.

The shipping industry has a widespread impact on the world's economy, as about 90% of the international trade is shipped around the globe by sea. According to various studies the shipping industry is responsible for about 3% of the worldwide CO₂ emissions. But CO₂ emissions are not the only relevant sustainability topic that is currently of interest to the shipping industry. Also the social and wider environmental impact of the shipping industry is getting more and more attention from its stakeholders. However, as we have seen last year, the shipping industry is lagging behind other industries when it comes to addressing and reporting these issues. Other industries in the transport and logistics sector show higher scores compared to the shipping industry. In the airline industry over 40% of the airlines report about sustainability compared to only 27% of the shipping companies. We do see that sustainability is getting higher priority

on the agenda of the shipping industry. The IMO (International Maritime Organization) has chosen sustainable development as its central theme for the World Maritime Day 2013. It will not only focus on the environmental aspects of sustainable growth but also on the economic and social impacts. This is clearly captured in the statement made by the Secretary-General of the International Maritime Organization, Mr. Koji Sekimizu who states: "Our understanding of sustainable development today embraces a concern both for the capacity of the earth's natural systems, and for the social, economic and cultural challenges faced by humanity". Also on the long-term initiatives are deployed to address sustainability like the Sustainable Shipping Initiative with its 2040 vision addressing a wide range of sustainability topics like renewable energy sources, improvements in the design of ships to realize energy efficiency gains, supply chain efficiency gains and the improvement of labor standards.

Despite all these initiatives and greater focus on sustainability within the shipping industry, we do not see improvements in the reporting by shipping companies about this subject. We would expect to see a more prominent role for sustainability in the corporate strategies of shipping companies. However our analysis shows that only 17% of the shipping companies do report about their corporate social responsibility vision and strategy in their corporate reporting. The container and ferry companies are leading the way in communicating their corporate social responsibility vision.

2.2. CO₂ emissions

Within the European Union the international shipping industry is currently the only transportation mode that is not included in the Greenhouse Gas (GHG) emissions reduction commitment. Within the European Union 4% of the total CO₂ emissions are generated by the shipping industry and it is the expectation that by 2050 the CO₂ emissions from ships are more than doubled. Despite the recent efforts made by the International Maritime Organization (IMO) with the adoption of the Energy Efficiency Design Index (EEDI), the European Commission decided to take the first step to include the shipping industry in its target to reduce emissions.

In June 2013 the European Commission announced its strategy to reduce the CO₂ emissions from the shipping industry. It is the European Commission's intention to develop a scheme on a regional level that should provide input for a scheme on a global

level. The current strategy of the European Commission includes three steps which are the following:

1. The development of a Monitoring, Reporting and Verification (MRV) system for CO₂ of ships using ports situated within the European Union.
2. Setting GHG reduction targets for the shipping industry
3. Application of market-based measures

As of January 1, 2018 shipping companies are required to monitor and report their CO₂ emissions, with the possibility that other air emissions (e.g. SO_x and NO_x) will be included as well. The monitoring and reporting of CO₂ emissions for shipping companies applies to all ships that are over 5,000GT and that sail to, from and between ports situated within the European Union.

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, last year we noted that only 20% of the shipping companies that were included in our benchmark reported on their CO₂ emissions. For 2012 we only see a marginal increase to 22%. Compared to last year the ferry companies 36% (2011: 40%) and the container companies 27% (2011: 22%) remain the leaders in reporting CO₂ emissions. Interestingly, the other sectors show a significant increase in the number of shipping companies reporting about CO₂ emissions. This year the tanker and offshore sector show a huge improvement with 21-25% (2011: 10-15%) reporting about CO₂ emissions. Only the dry bulk companies remain about the same level as last year with a score of 12%.

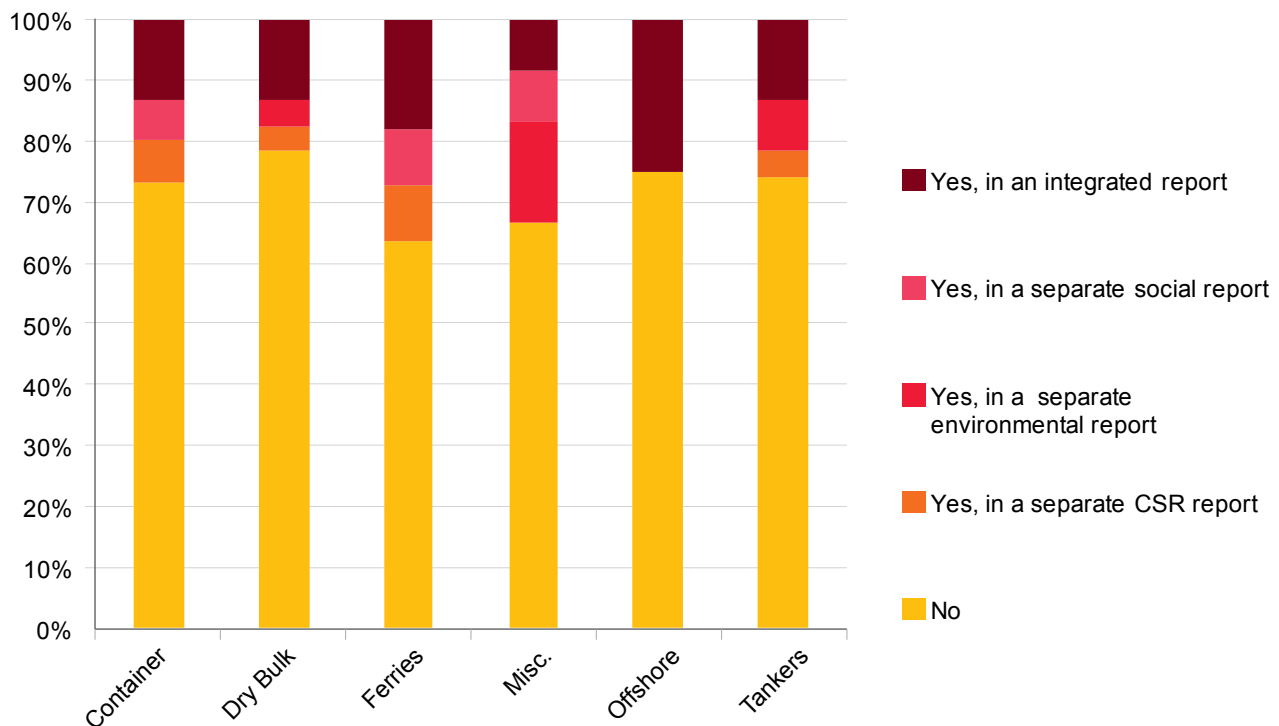


2.3. Reporting about sustainability remains limited

Reporting about sustainability remains limited to a minority within the shipping industry. Only 27% (2011: 24%) of the companies in our sample have a form of sustainability report. The Ferries sector remains the frontrunner with 36% of the companies we have covered reporting about sustainability, followed by the miscellaneous (33%),

container (27%), offshore (25%), tankers (25%) and drybulk (21%). The format in which companies report is rather widespread. Most companies choose to either integrate their sustainability reporting with the annual financial report (13), publish a separate CSR report (4) or issue a separate environmental/social report (8).

Does the company report about sustainability?

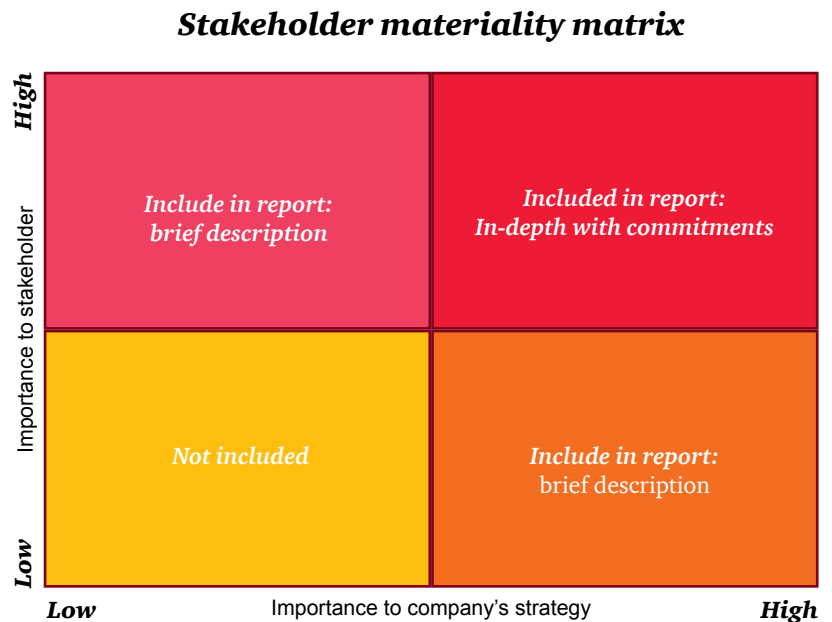


We also noted that verification of sustainability information remains rather limited. Only 5 of the 25 shipping companies (20%) reporting about sustainability have their reports verified. This is less than a year ago when 29% of the shipping companies had their CSR reports verified.

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. 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.

Of the 25 companies reporting about sustainability in our sample, 10 explicitly mention their most important stakeholders. Specifically, the environment (12) and employees (8) are reported to be the most important stakeholders, followed by shareholders (4), governments (3) and ports (2).

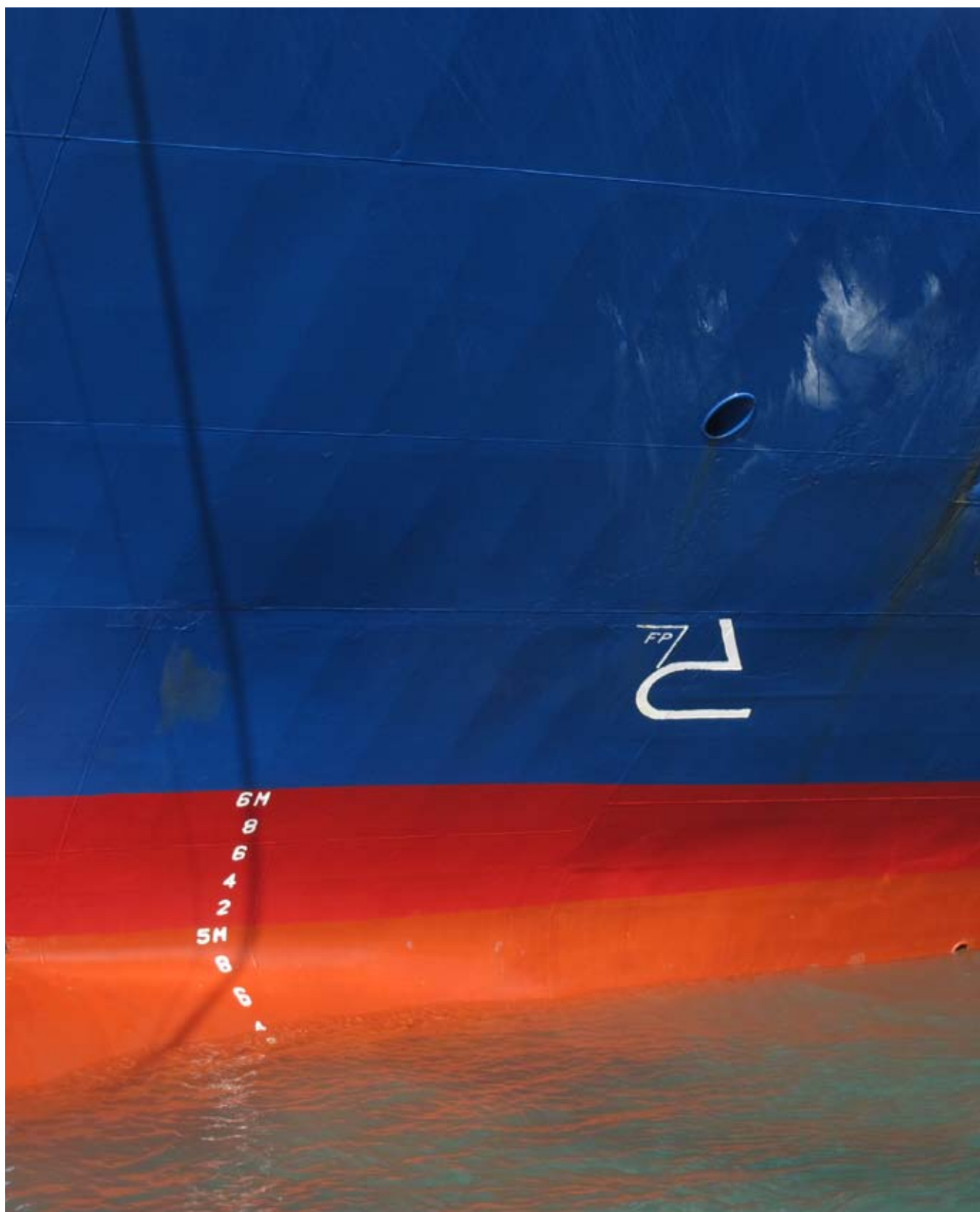


2.5. Conclusion

Taking into account the recent developments regarding CO₂ monitoring, reporting and verification as proposed by the European Commission as well as the interest for the topic of sustainability from the shipping industry, we still see a mismatch with the way shipping companies report about sustainability. Although reporting about CO₂ emissions has increased, on most other indicators we have investigated the scores went down compared to last year's survey. This still indicates that sustainability by the majority of the shipping companies is still seen as a matter of compliance.



3. Financial Performance review



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, offshore, 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 2008 to 2012.

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 subsector.

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 subsector 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.

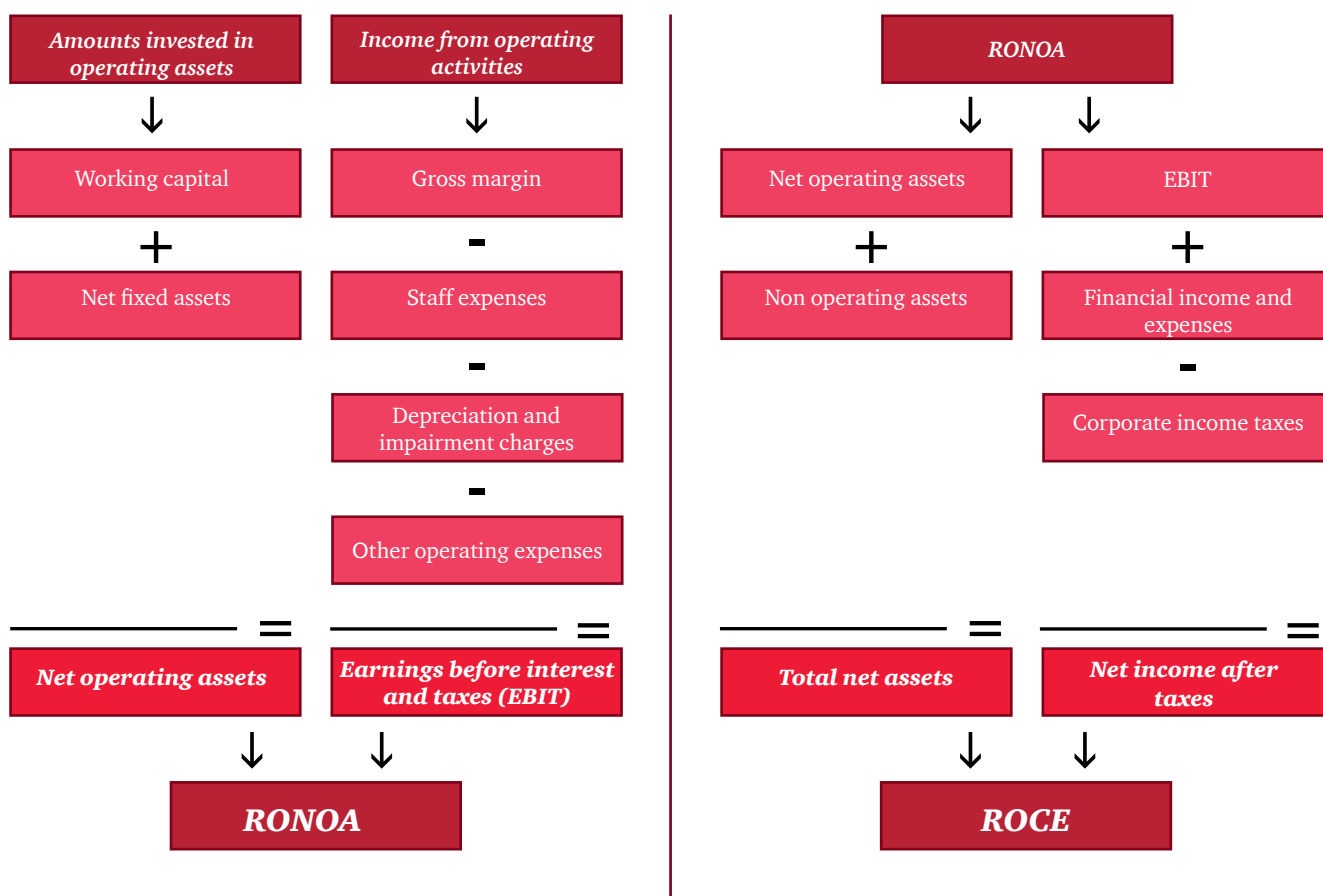
3.2. Benchmark model

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 years 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 2012. 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 2012 (yellow area)

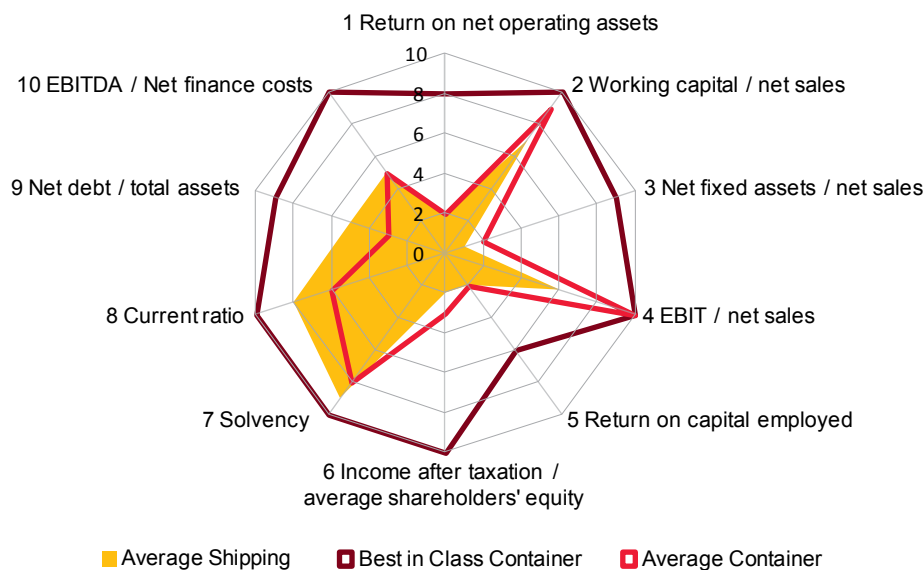
- Average score subsector 2012 (red line)
- Best in class in subsector 2012 (dark red line)

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 has been the most attractive subsector in 2012 followed by the offshore and container

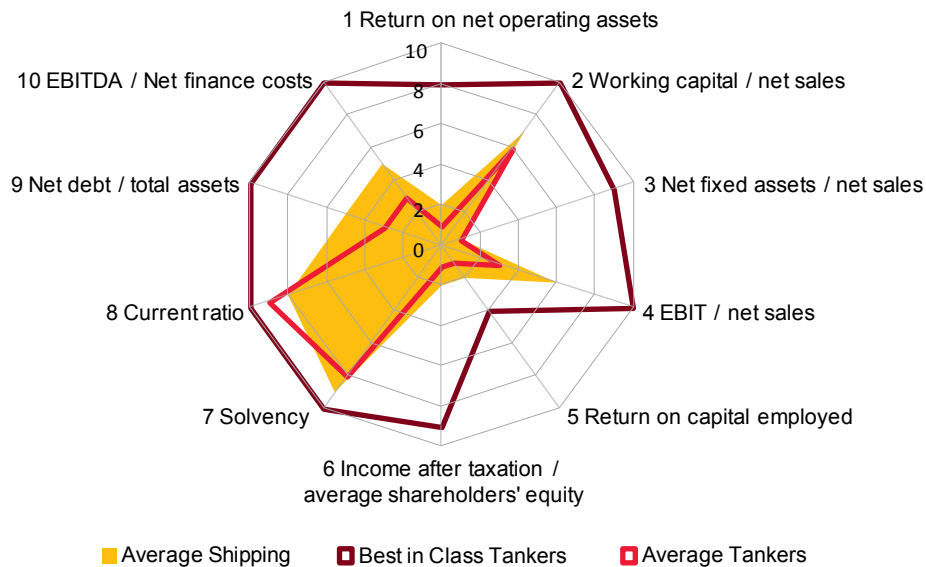
subsectors. In 2011 the dry bulk shipping subsector and the offshore subsector were the most attractive, followed by the ferries subsector. For all subsectors the total performance for 2012 deteriorated compared to 2011, except for the miscellaneous subsector which reported a slightly better performance and the dry bulk subsector which reported the same performance as in 2011. The tankers subsector became the least attractive in 2012, followed by the ferries subsector.

2012 - Container



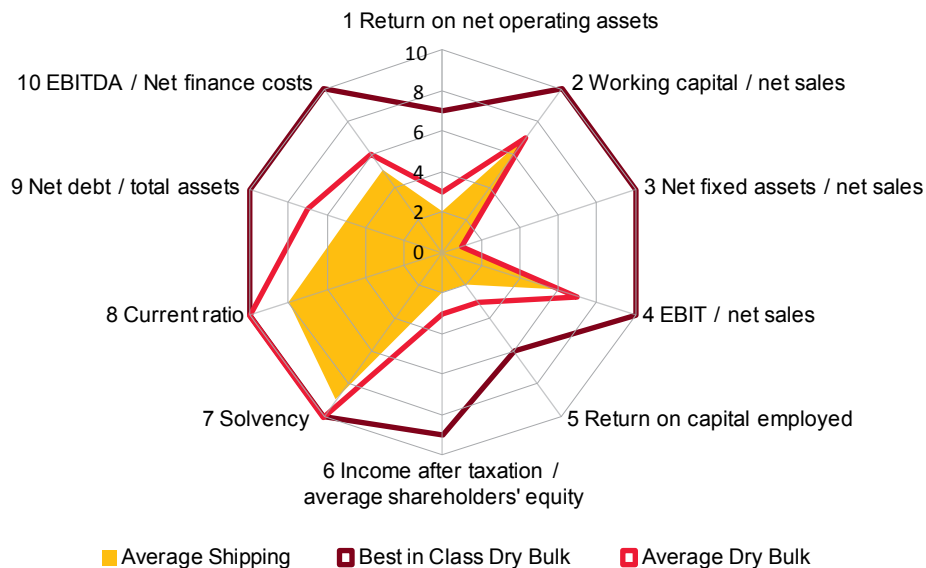
Based on the observed ratios of both “Net fixed assets / net sales” and “Return on net operating assets” the container subsector reported a slight deterioration of its performance compared to 2011. All other indicators remained almost unchanged.

2012 - Tankers



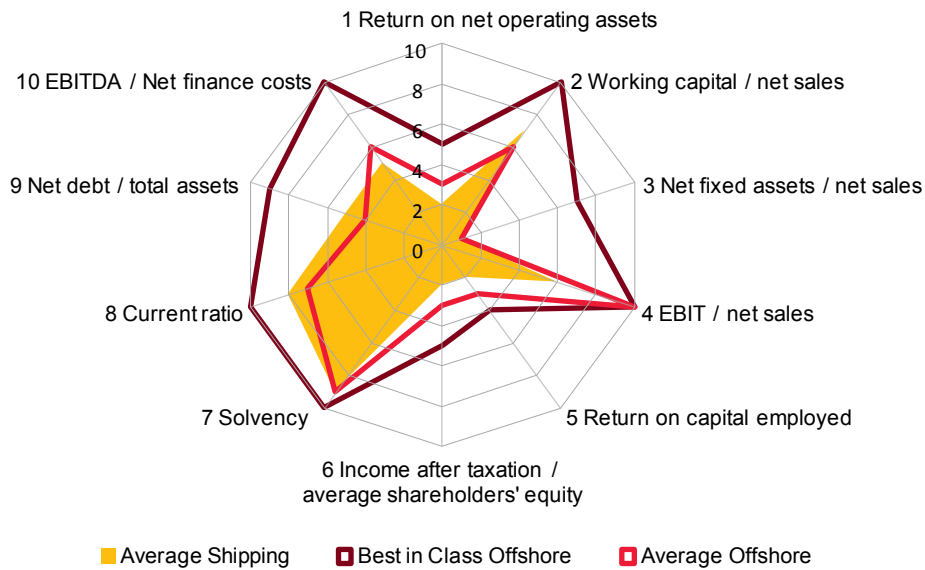
Based on the observed ratios of “Net debt / total assets” the tankers subsector reported a slight deterioration of its performance compared to 2011. All other indicators remained almost unchanged.

2012 - Dry Bulk



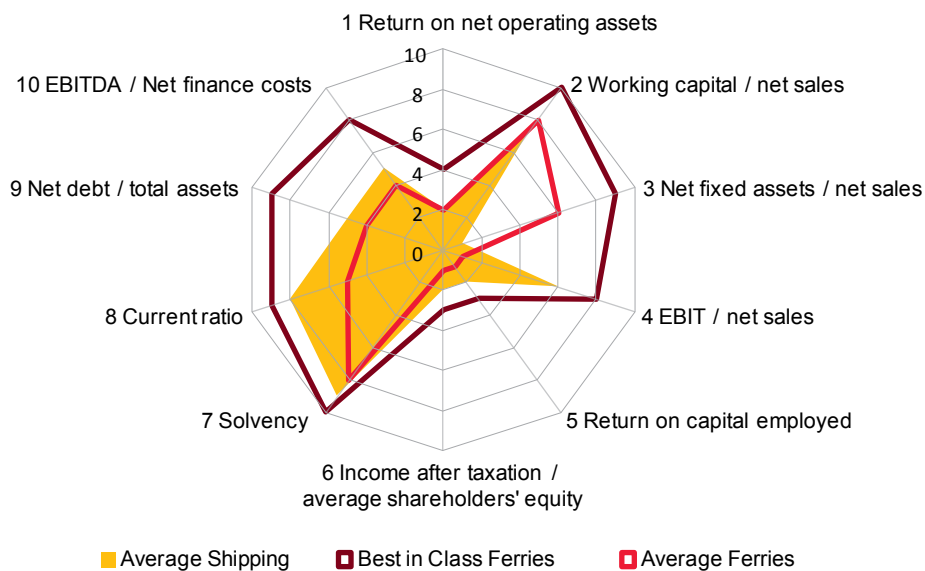
After a sharp deterioration in 2011 (compared to 2010) the dry bulk subsector has been able to level its performance in 2012. A small decrease of “EBIT/net sales” has been offset by a small increase of “EBITDA/Net finance costs”.

2012 - Offshore



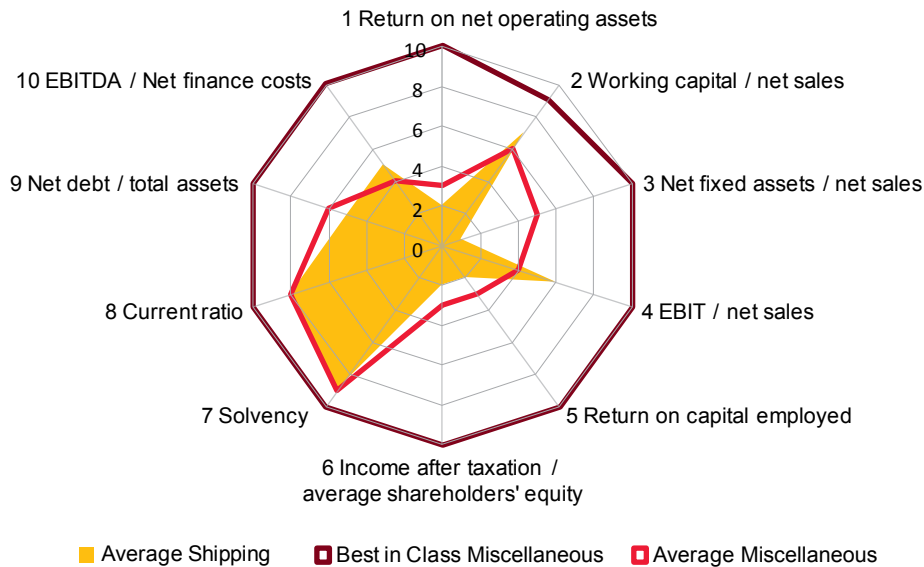
Although the total performance of the offshore subsector deteriorated slightly compared to 2011, it is still one of the three most attractive subsectors. The decrease of “Current ratio” has been offset by the increase of “Net debt/total assets” compared to 2011. All other indicators remained unchanged.

2012 - Ferries



The financial crisis and the subsequent economic downturn had eventually a significant impact on the ferries subsector. Although this subsector was a relatively good performer in 2011, it encountered a substantial deterioration of its performance during 2012. Not only the average of this subsector, but also the best in class scores show substantial decline in almost all indicators.

2012 - Miscellaneous

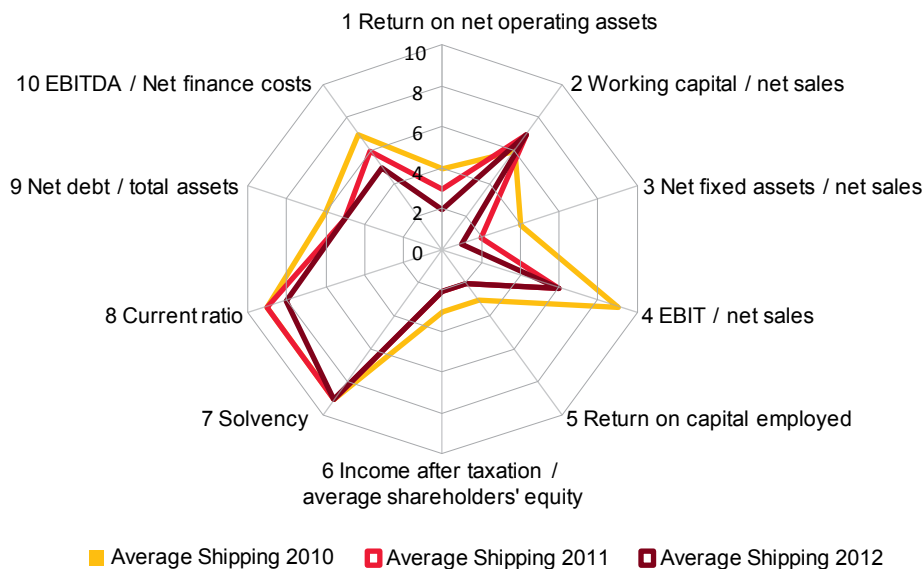


This subsector shows a slight increase of its performance compared to 2011, mainly on “Solvency” and “Net debt/total assets”.

In the following radar chart we have presented the development in the performance indicators in the years 2010, 2011 and 2012 for the overall shipping industry. In 2012 all financial performance indicators deteriorated

or stabilized compared to 2011. The financial crisis and the subsequent economic downturn had a huge impact on freight volumes and rates in almost all shipping subsectors which is shown in this chart. Vessel capacity clearly exceeds demand. The year 2010 showed a mild recovery, although results were mixed between subsectors. The recovery in 2010 did not continue in 2011 nor in 2012.

2010 - 2011 - 2012 Shipping sector

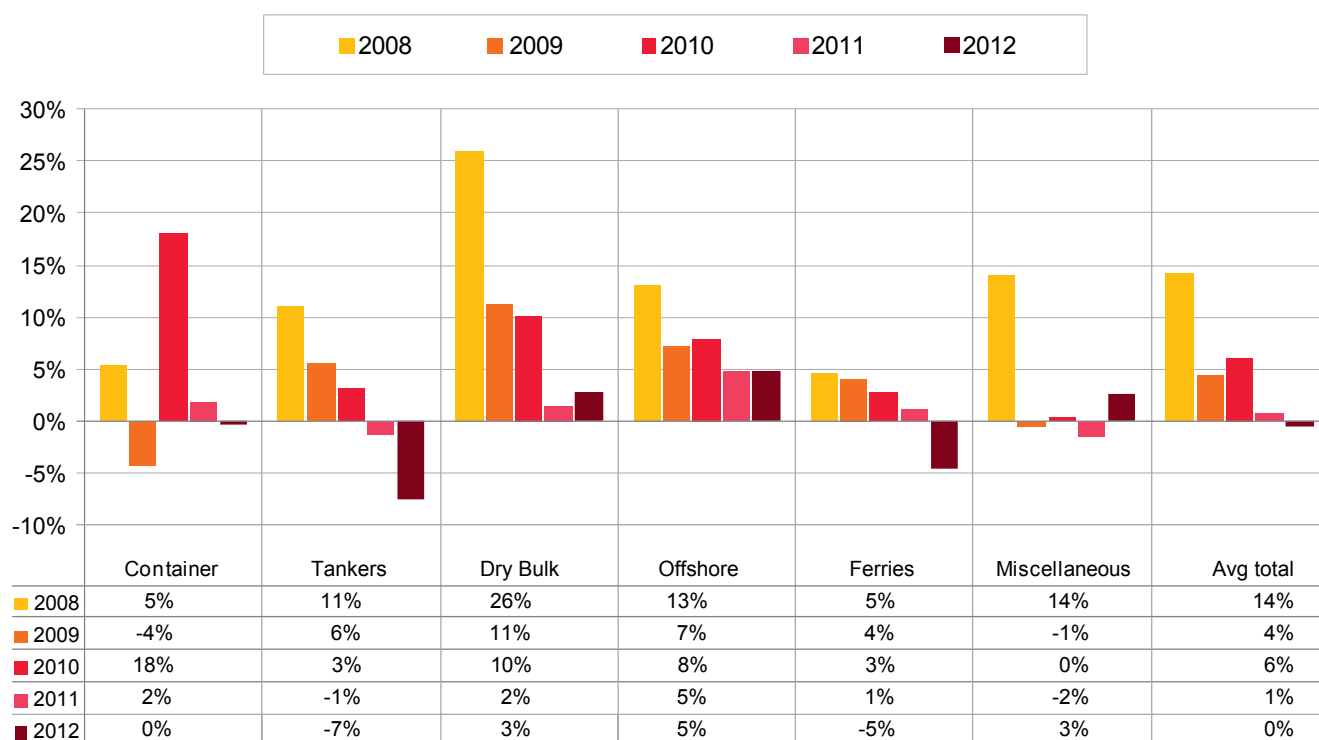


3.4. Performance indicators

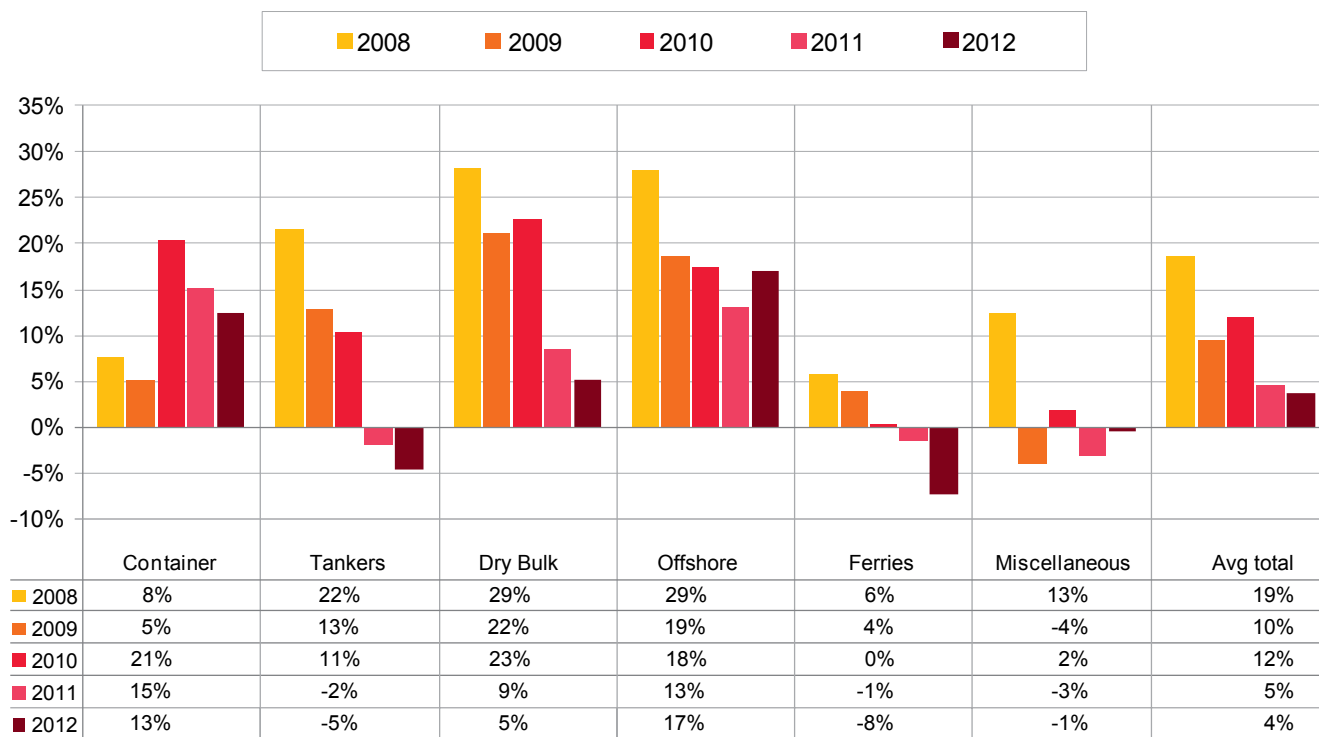
Return on net operating assets (RONOA)

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.

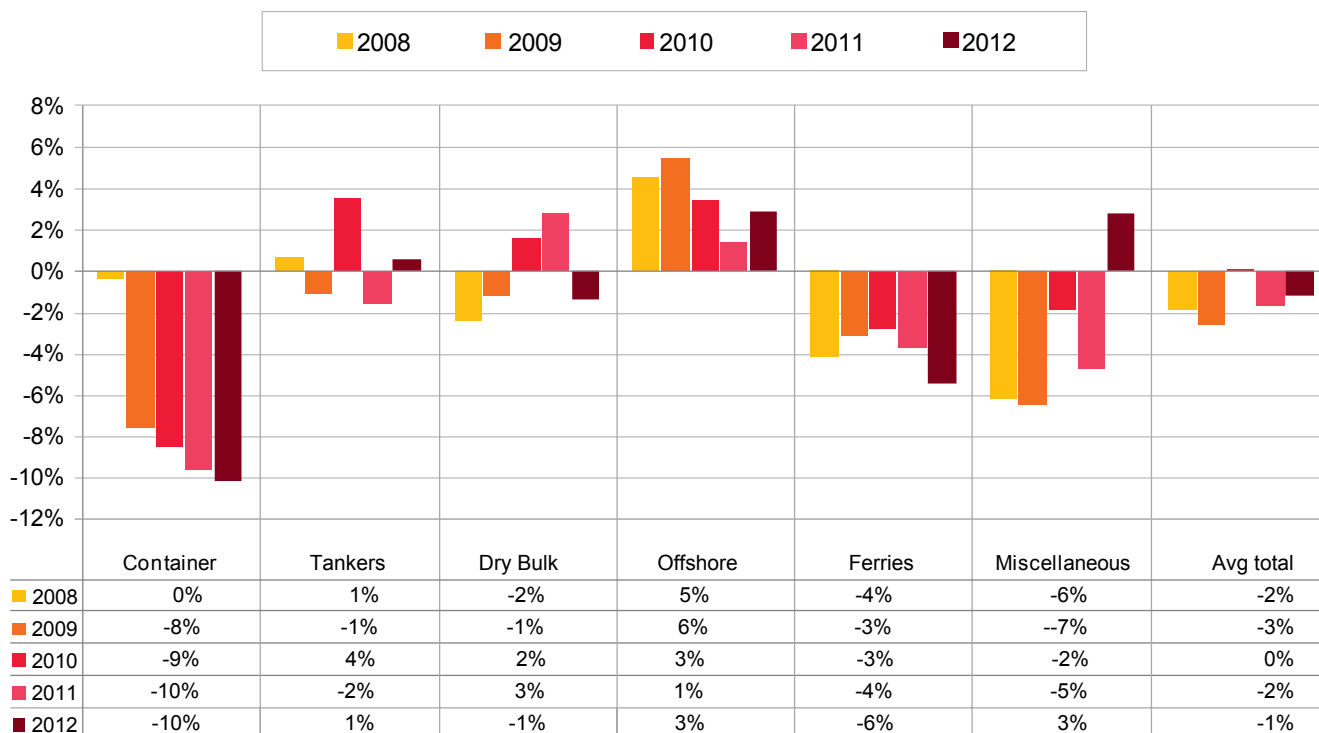
Return on net operating assets (RONOA)

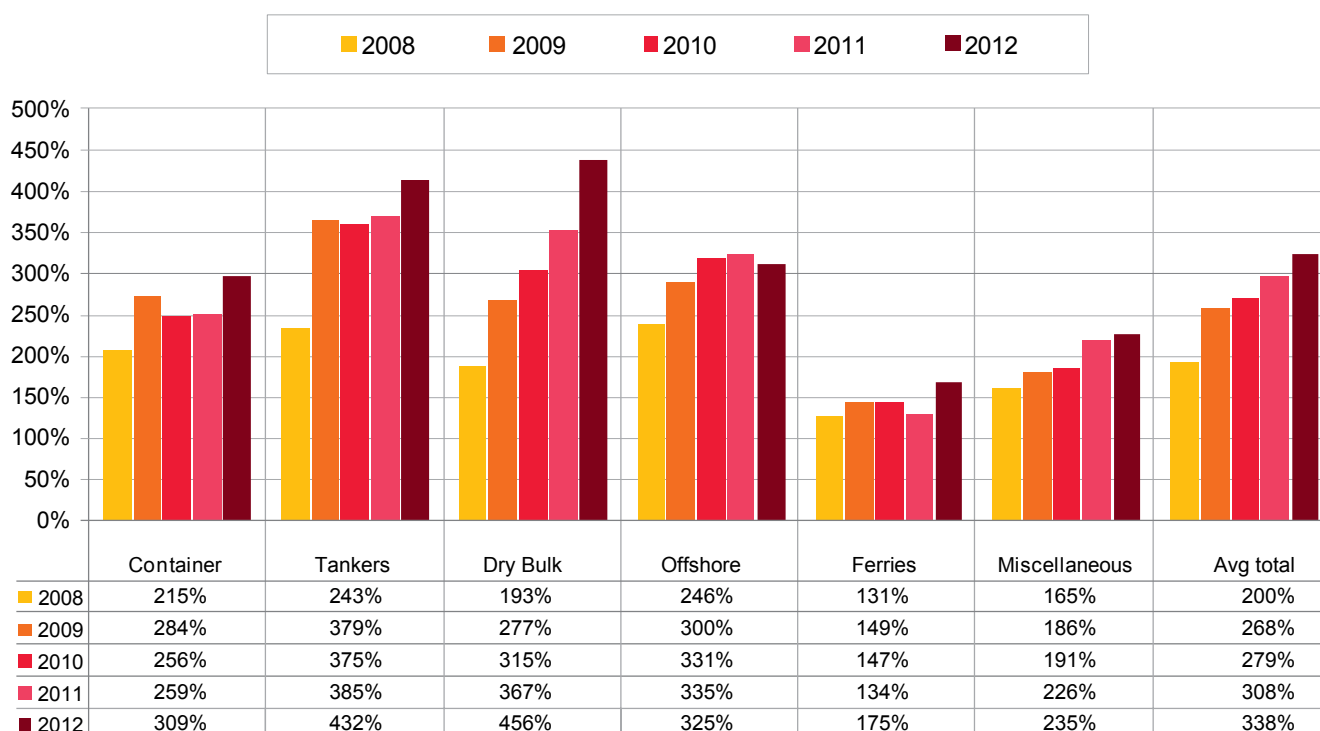


EBIT / net sales



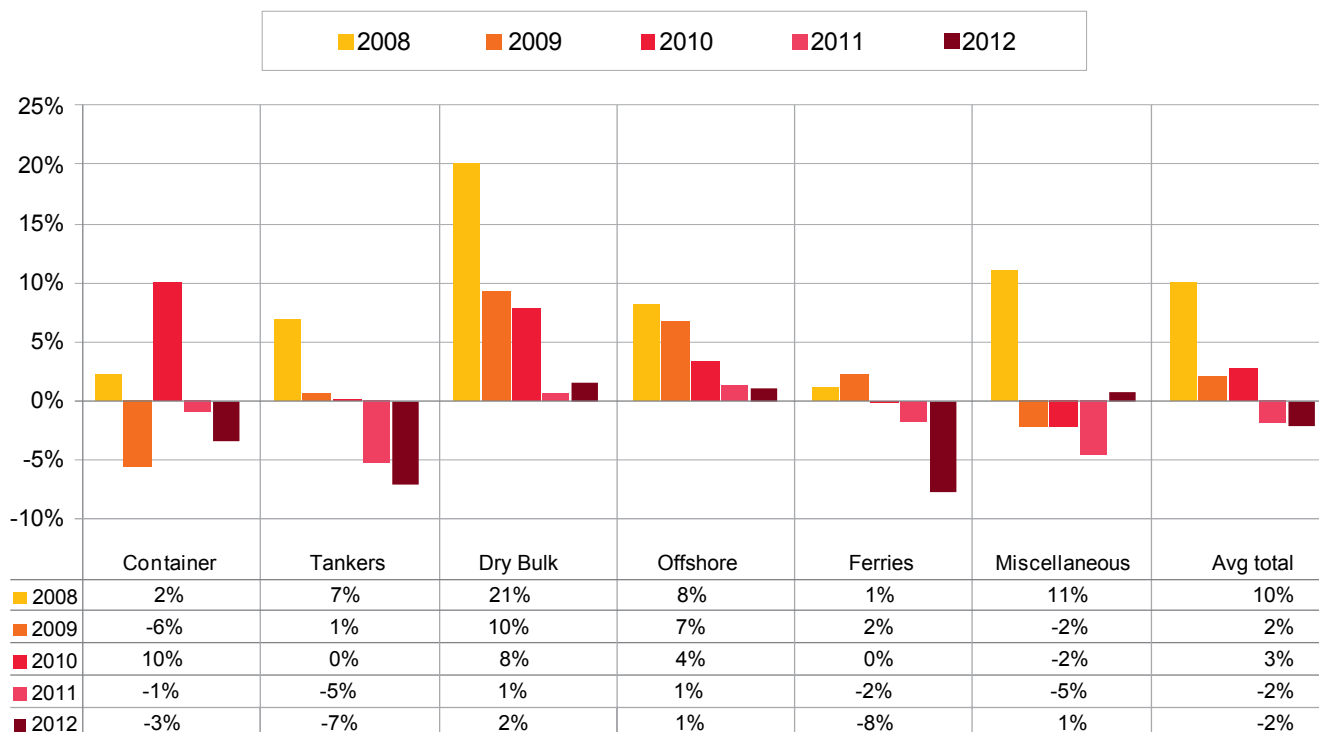
Working capital / net sales



Net fixed assets / net sales

On average RONO decreased to zero in 2012, however the different subsectors show different trends in 2012. The container, tanker and ferry sectors experienced a deterioration of RONO, offshore remained at the level of 2011 and the dry bulk and miscellaneous subsectors even increased RONO. But if we compare 2012 numbers to those of 2008 we notice a large decline to RONO. More specifically the decline for Dry Bulk and Tankers subsectors are 23% and 18% respectively. 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 up till 2010, its RONO has suffered in 2011 and 2012, 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 newbuild vessels in this subsector. It is the offshore subsector which shows the highest RONO for the second year in a row. A positive factor for this subsector could be the

recently found new oil fields in the Northern part of the North Sea but also new exploration activities in offshore Africa and South America. Working capital to net sales decreased in 2012 for one third of the subsectors. The other subsectors show an increase. 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. Compared to the other subsectors, the container subsector shows a very negative working capital to net sales. In 2012 the net fixed assets to net sales ratio increased for the second year in a row for all subsectors except for the offshore subsector. Although the explanation for the increase could lie in the increase of investments in the fixed assets, it is more likely that the increase is caused by companies not able to convert their assets into sales due to the global economic downturn. The imbalance between supply and demand did not resolve overall.

Return on capital employed (ROCE)**Return on capital employed (ROCE)**

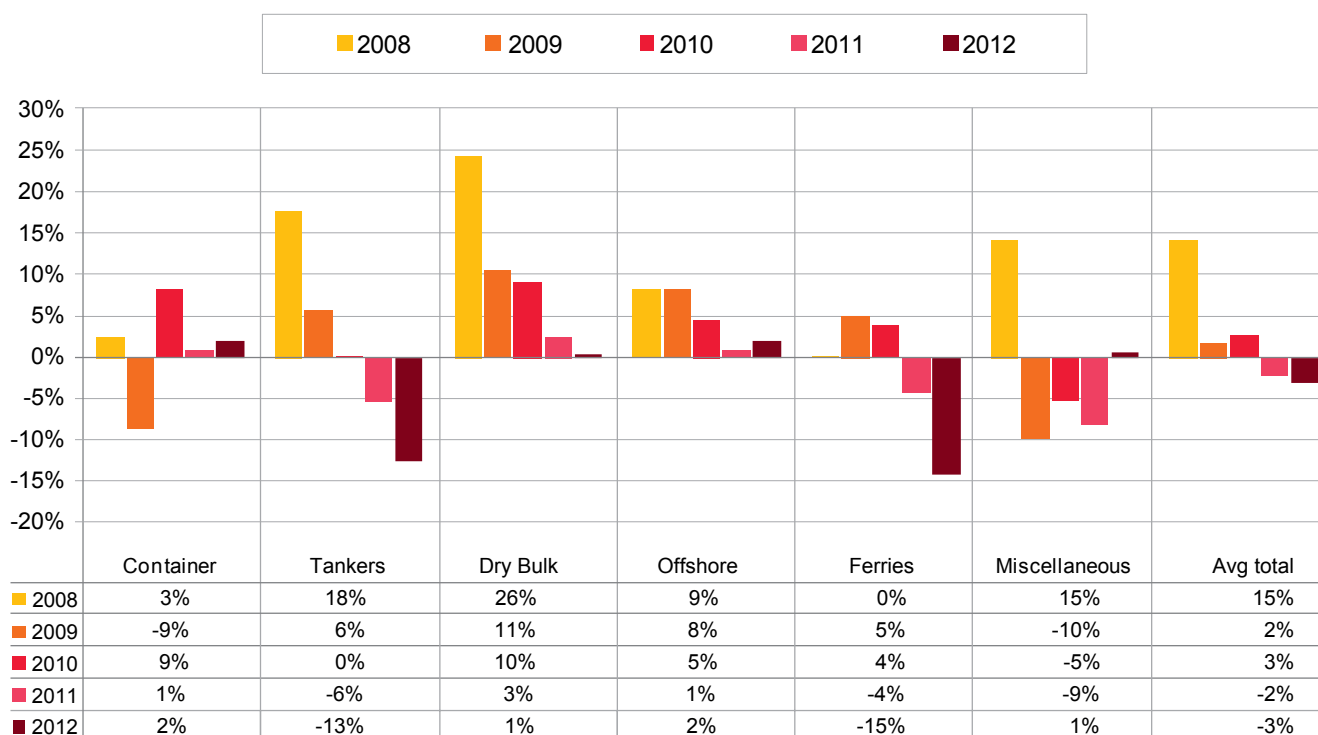
ROCE is structurally lower than RONO which can be explained by the fact that net income after taxes is generally lower than EBIT in a normal course of business and all investments are taken into account. The trends over the last 5 years in ROCE trace the trends evidenced in the RONO. For the tankers sector in 2012 ROCE deteriorated by 2% compared to 2011 while RONO deteriorated by 6% compared to 2011. These developments are possibly due to hedge results and large exchange rate translation differences in 2012 on foreign currencies at several Norwegian companies that comprise the majority of the companies in this sector.

Return on equity

Developments in return on equity in the years 2008 – 2010 show a wide differentiation between subsectors. In 2011 return on equity decreased in all subsectors, primarily due to decreased profitability of the companies in this sector in 2011. In 2012 return on equity shows again a wide differentiation between subsectors. Return on equity increased in the container, offshore and miscellaneous subsectors, but decreased in the other three subsectors,

with a negative outcome for the tankers and ferries subsectors. More than 70% of the companies in these two categories reported losses in 2012. In contrast to previous years the offshore subsector has the highest return on equity of all other shipping subsectors in 2012, although this was lower than the highest of 2011 (dry bulk shipping sector). The highest outcome for the offshore sector is also reflected in both the RONO and ROCE.

Income after taxation / average shareholders' equity

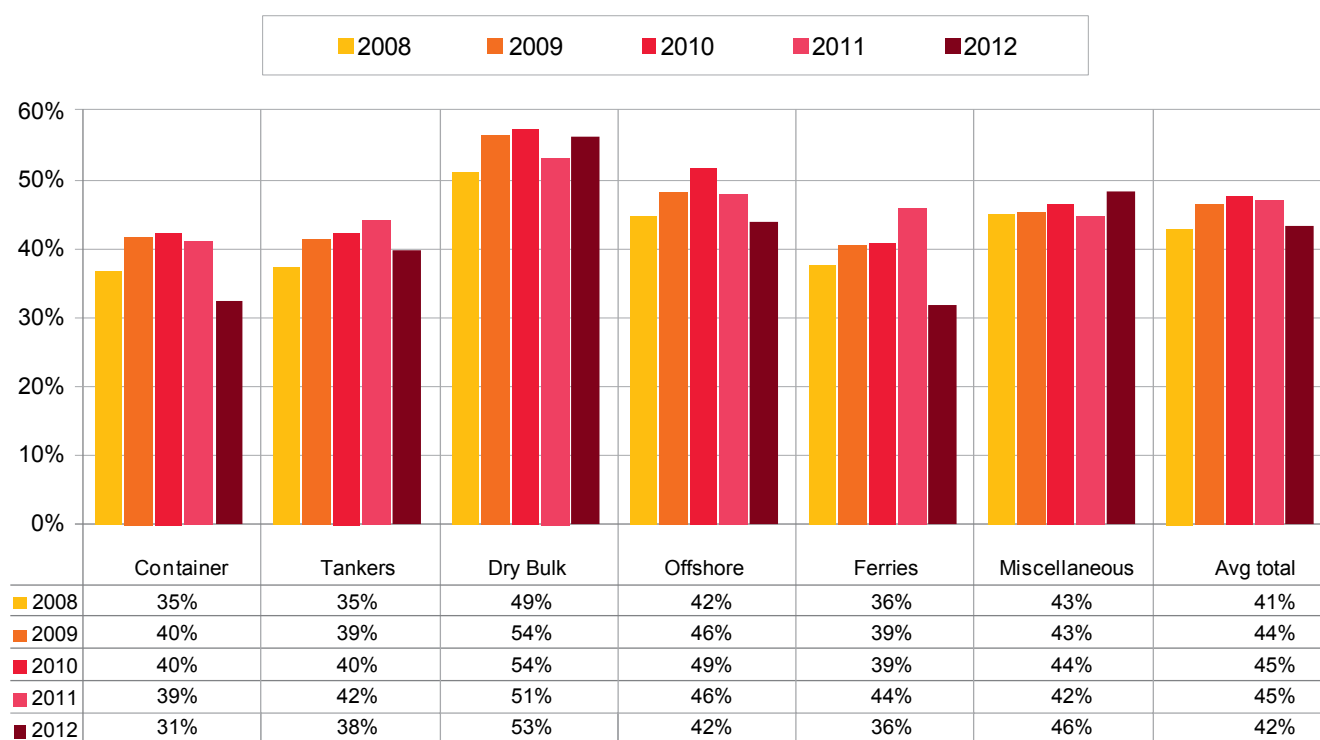


Solvency

Solvency rates are relatively high in all shipping sectors and do not show significant changes during the last 5 years, except for the sharp decrease of the solvency in the ferries and container sector during 2012 compared to the previous years. Due to the impact of the economic downturn, one would have

expected large decreasing solvency rates in more subsectors, but the solvency rates decreased slightly or even increased in 2012. The increase of the solvency rate of the dry bulk subsector seems to be influenced by the capital fundings several dry bulk companies received from the shareholders.

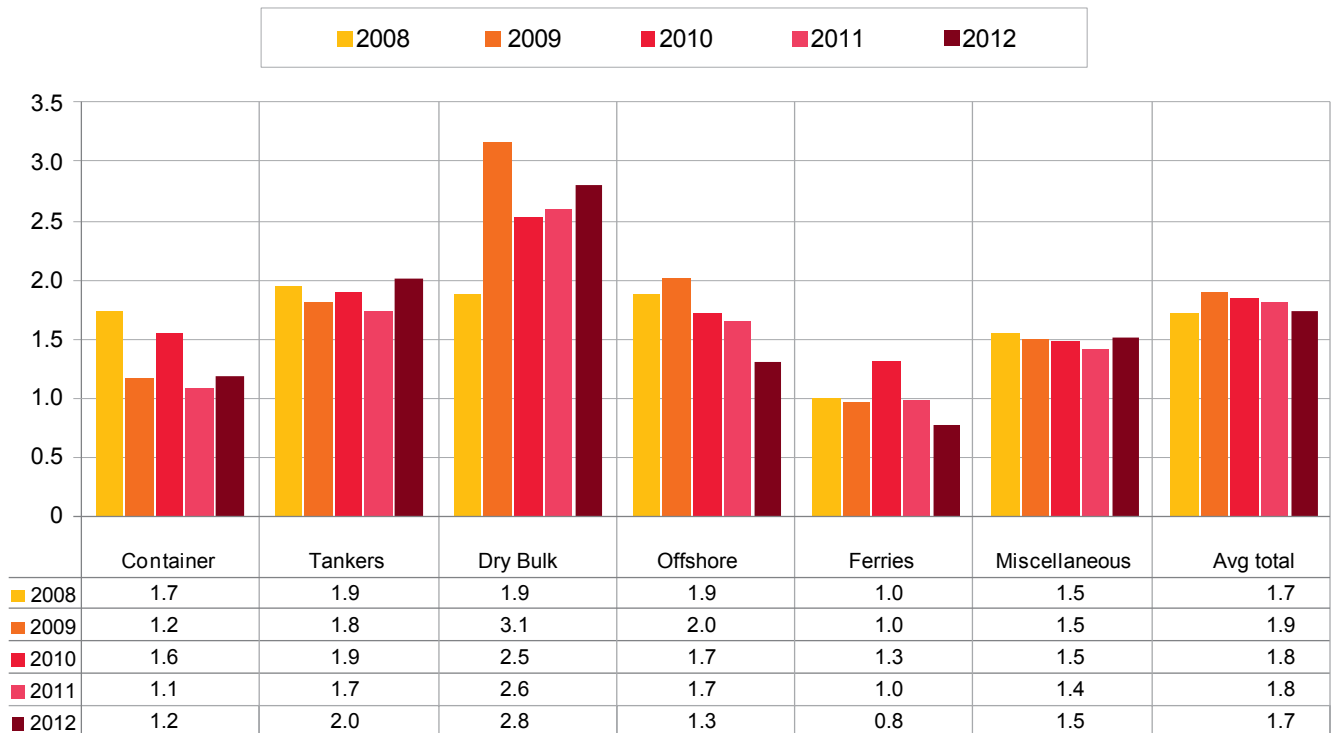
Solvency



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 2012 the average liquidity in the ferries subsector and offshore subsector decreased. Within the ferries sector 5 (out of 11) companies have a critical score less than 1 (2011: 5). In the offshore subsector this number amounts to 4 out of 8 (2011: 3).

Current ratio

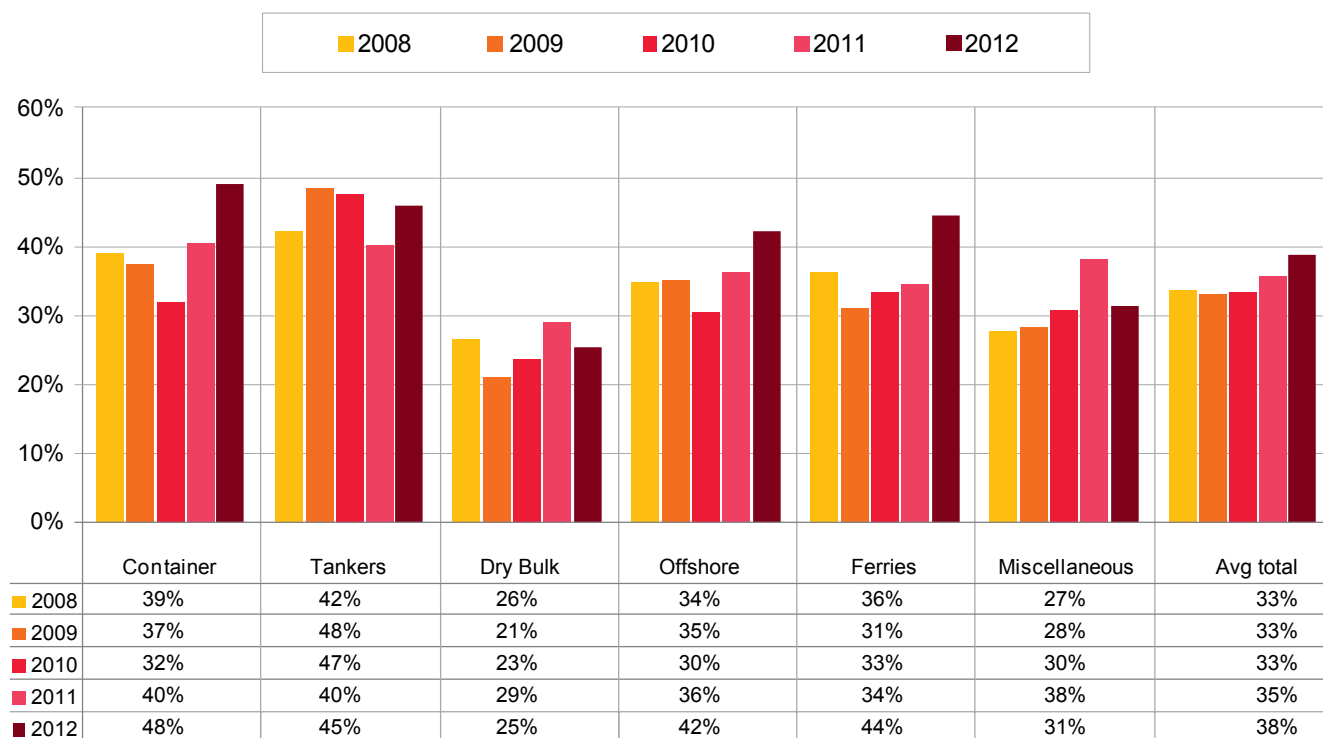


Net debt

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 2008-2012 vary between subsectors, however the average totals appear to have an increasing trend. This ratio increased in 2012 for all subsectors except for the dry bulk and the miscellaneous

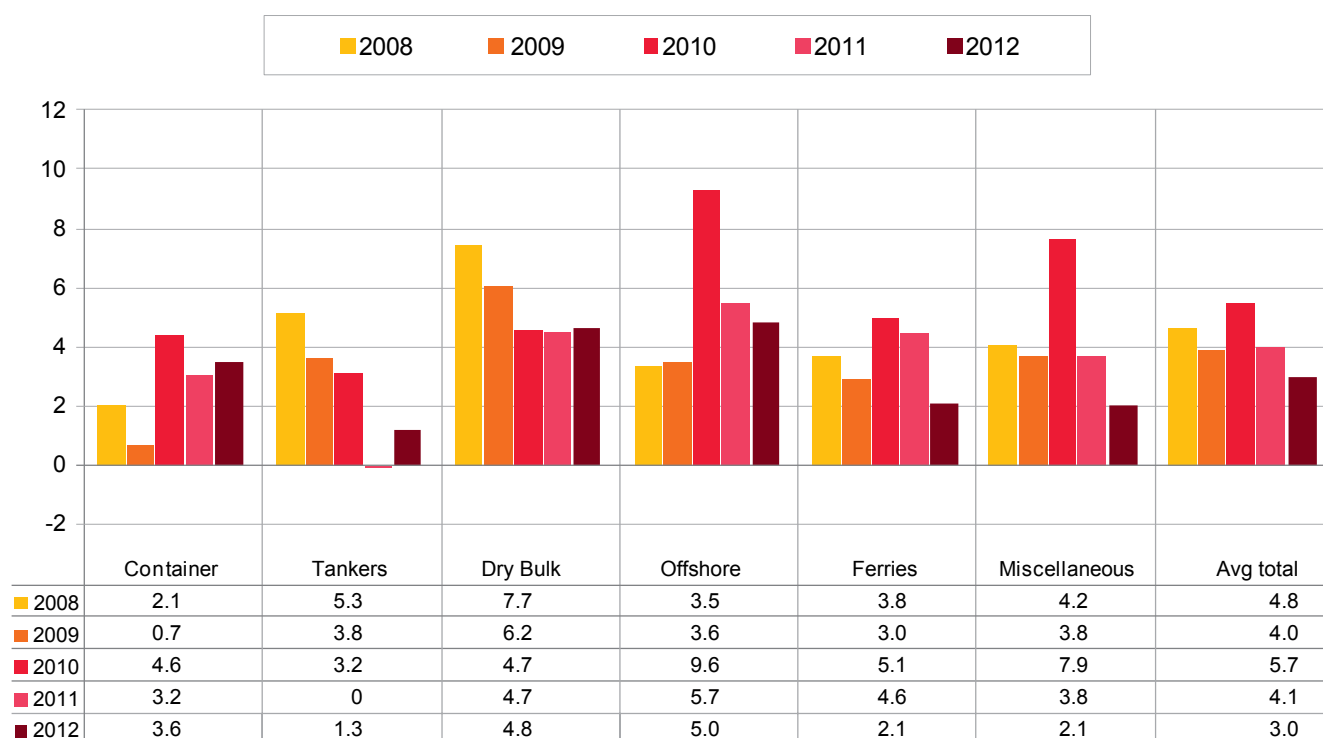
subsector. A likely cause for the trends observed relates to increased impairments during 2008, 2011 and 2012 (when this ratio had a notable increase for most subsectors) and the impact of decreasing cash positions. Net debt has been the highest in the tanker subsector for years 2008 to 2011. For 2012 the container subsector has the highest outcome on this ratio followed by the tankers 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

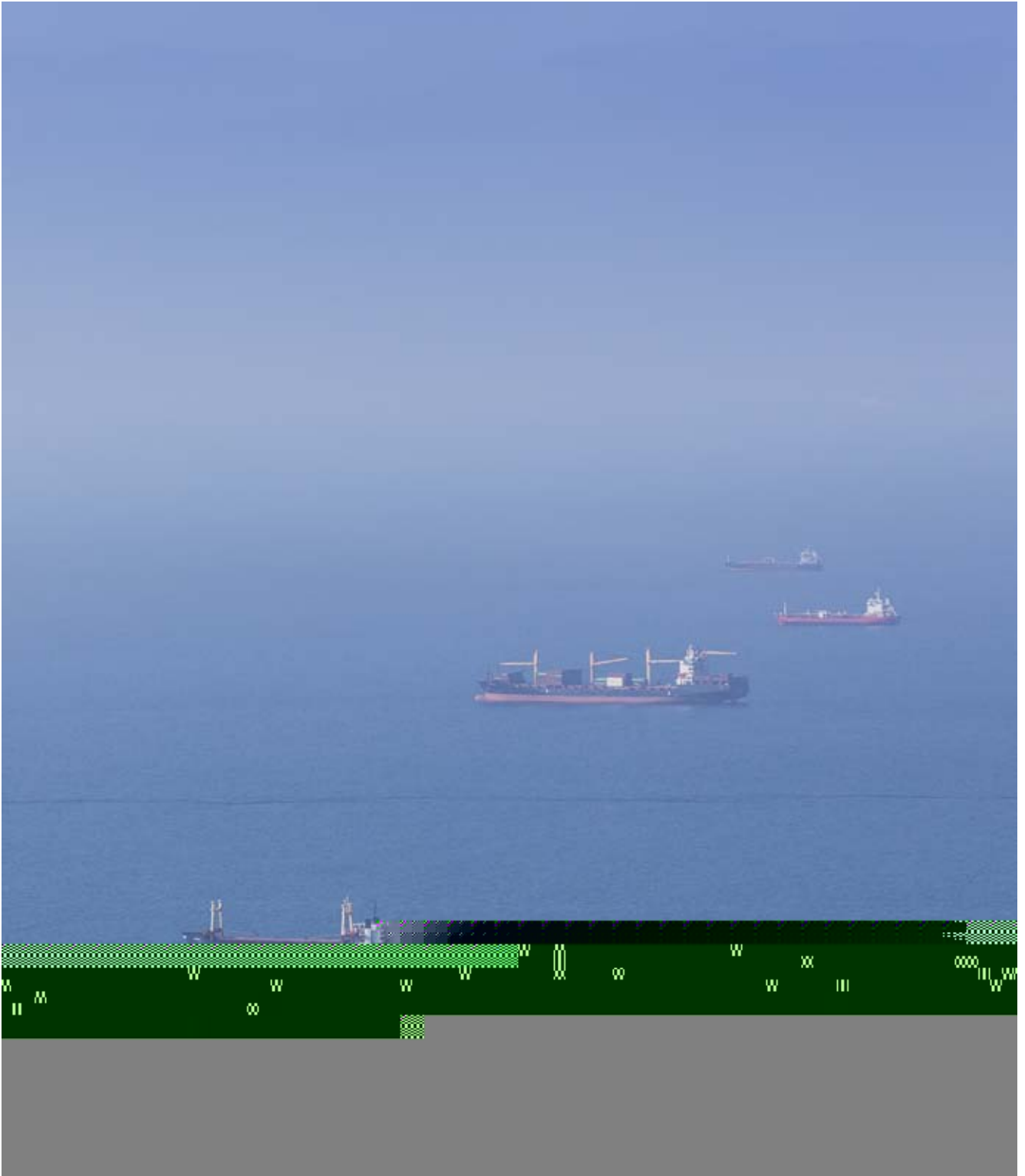


EBITDA/net finance cost

This ratio indicates how many times interest expenses (after deduction of interest income) can be paid from earnings before interest, taxes, depreciation and amortization. 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 2012 the EBITDA to net finance cost ratio deteriorates for half of the subsectors. In total the average in 2012 is the lowest of all 5 years indicating that companies will face further challenges requiring additional (or new) debt from credit institutions.

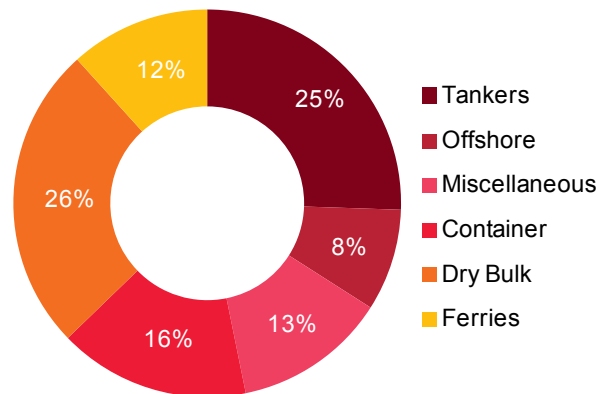
EBITDA / Net finance cost

4. Companies covered by the analysis



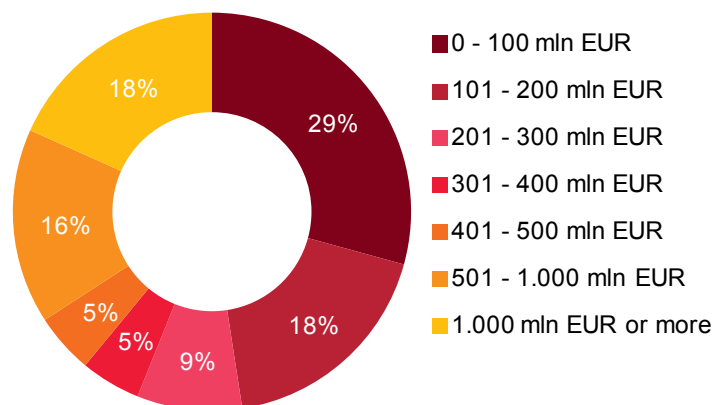
Analysis by subsector

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 2012 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.



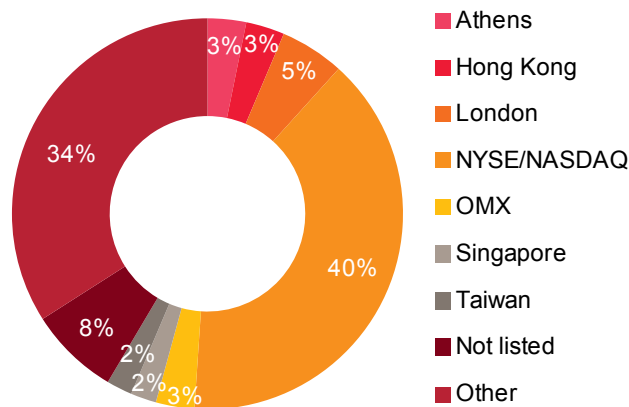
Analysis by revenue

Shipping companies of different sizes have been included in our benchmarking analysis. The composition of our population, using the 2012 sales revenue as a benchmark, is shown in this chart.



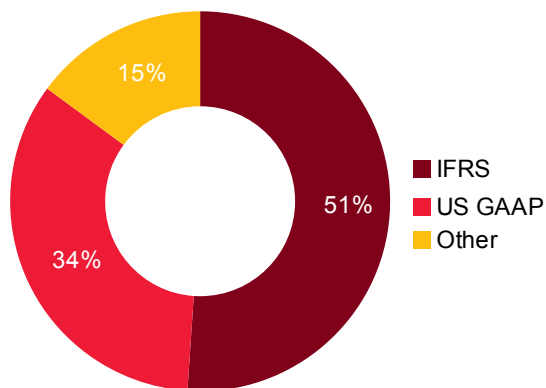
Stock exchange

Of the companies included in our benchmarking analysis for 2012, 90% 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:



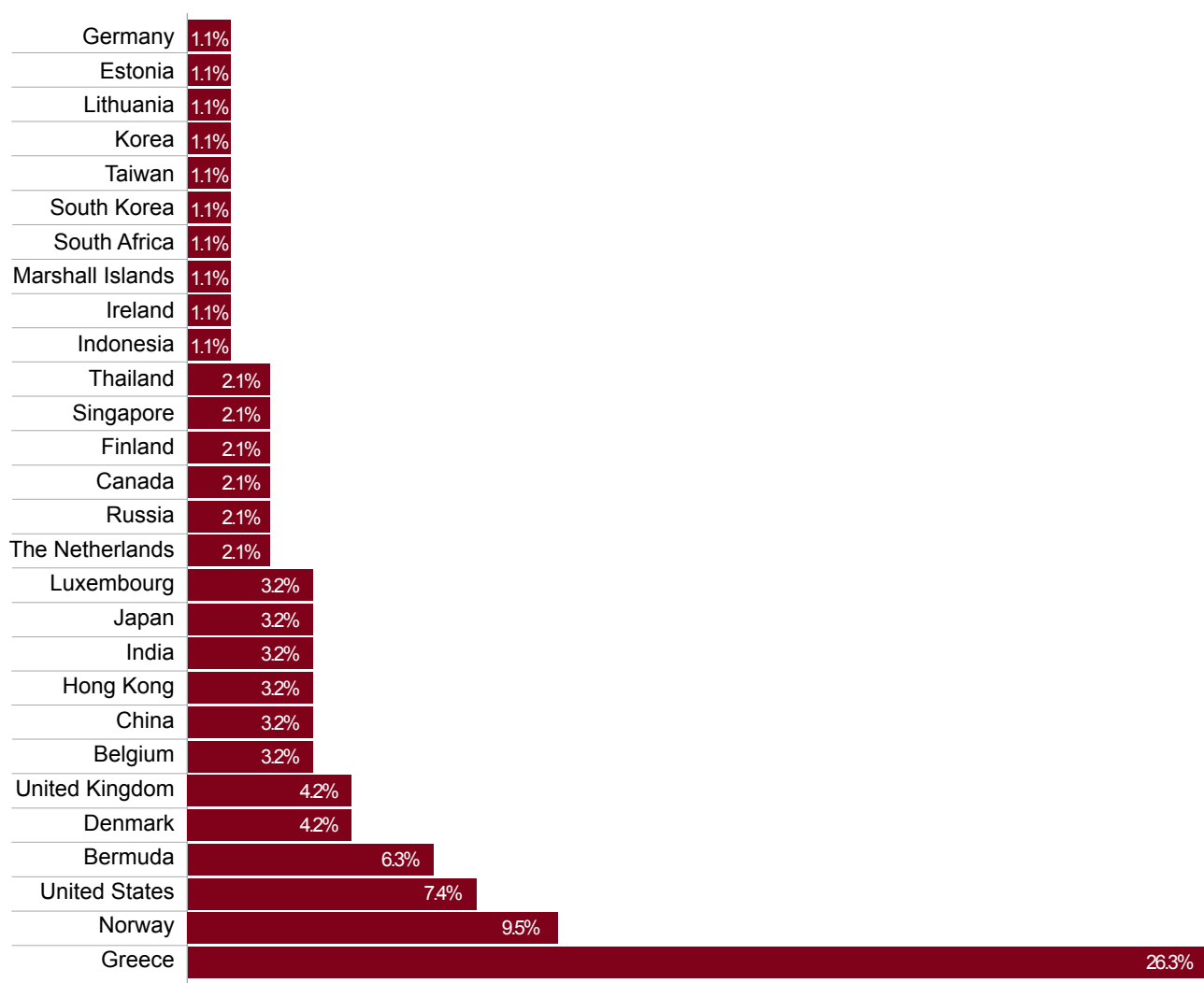
Reporting framework

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. 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, 15% 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



List of participating shipping companies

Company Name	Country	Company Name	Country
Aegean Marine	Greece	Ektank	Sweden
Algoma Central Corporation	Canada	Essar Shipping	India
Anek Lines	Greece	Euroceanica	United Kingdom
Anthony Veder	The Netherlands	Euronav	Belgium
Aries Maritime	Australia	Euroseas	Greece
Aspo Group	Finland	Evergreen Marine	Taiwan
Atlanska	Croatia	Excel Maritime	Greece
Attica Enterprises	Greece	Exmar	Belgium
Azuma Shipping	Japan	Fairmount Marine	The Netherlands
B+H Ocean Carriers	Greece	Farstad	Norway
Baltic Trading	United States	Fesco	Russia
Belships	Norway	Finaval	Norway
Berlian Laju Tanker	Indonesia	Finnlines	Finland
Blue Star Maritime	Greece	Flinter Group	The Netherlands
Borgestad	Norway	Freeseas	Greece
Bourbon	France	Frontline	Norway/United Kingdom
Box Ships	Greece	Garware	India
Brostrom	Sweden	Gaslog	Greece
BW Gas	Norway	Genco Shipping	United States
Caledonian Macbrayne	United Kingdom	General Maritime Corporation	United States
Camilo Eitzen	Norway	Global Ship Lease	UK
Capital Product Partners	Greece	Globus Maritime	Greece
China Shipping		Golar LNG	Norway
Container Lines (CSCL)	China	Golden Ocean	Norway
Chuan Hup Holding	Singapore	Goldenport	Greece
CMB GROUP	Belgium	Great Eastern Shipping	India
Color Group	Norway	Greenreefers	Norway
Concordia Maritime	Sweden	Grindrod Ltd	South Africa
Cosco	China	GulfMark Offshore	United States
Costamare	Greece	Hanjin Shipping	South Korea
Crude Carriers	Greece	Hapag Lloyd	Germany
CSAV	Chile	Havila Shipping	Norway
Daiichi Chuo Kisen Kaisha	Japan	Hellenic Carriers	UK (Jersey)
Danaos	Greece	Horizon Lines LLC	United States
d'Amico International Shipping	Luxemburg	Hornbeck Offshore	United States
Deep Ocean	Norway	Hyundai Merchant Marine	Korea
DFDS	Denmark	International Shipholding Corp.	United States/Shanghai
Diana Shipping	Greece	Irish Continental	Ireland
Dockwise	The Netherlands	Jadroplov	Croatia
Dof	Norway	Jinhui	Hong Kong/Norway
Double Hull Tankers	Norway	Kahn Holding	The Netherlands
DryShips	Greece	Kawasaki Kisen (K-Line)	Japan
Eagle Bulk Shipping	United States	Knightsbridge	Norway
Eidsiva	Norway	Koninklijke Wagenborg	The Netherlands
Eimskip	Iceland	Latvian Shipping Company	Latvia

Company Name	Country	Company Name	Country
Lauritzen	Denmark	Skaugen	Norway
Lesvos Maritime	Greece	Sloman Neptun	Germany
Limarko	Lithuania	Smit Internationale	The Netherlands
Maersk	Denmark	Solstad	Norway
Mercator Lines	Singapore	Solvang	Norway
Minoan Lines	Greece	Spliethoff's	
Mitsui OSK Lines	Japan	Bevrachtingskantoor	The Netherlands
Mols-Linien	Denmark	SRAB shipping	Sweden
Navios Maritime	Greece	Star Bulk	Greece
Neptune Orient Lines	Singapore	Star Reefers	United Kingdom
Nile Dutch Holding	The Netherlands	Stealthgas	Greece
Nippon Yusen Kabushiki (NYK)	Japan	Stolt-Nielsen	United Kingdom/Norway
Norden	Denmark	STX Panocean	Korea
Nordic American Tankers Corp	United States	Subsea 7	Norway
Novoship	Russia	Svithoid	Sweden
Odfjell	Norway	Tallink	Estonia
Omega Navigation	Greece	Tarbit Shipping	Sweden
Orient Overseas International	Hong Kong	TBS International	United States
OSG Inc.	United States	Teekay Corp.	Canada
Pacific Basin Shipping	Hong Kong	Temas Lines	Indonesia
Paragon Shipping	Greece	Thoresen Thai	Thailand
Precious Shipping	Thailand	Tide	Norway
Premuda	Italy	Tidewater Marine	United States
Rederi ab Gotland	Sweden	Tirrenia	Italy
Rickmers Maritime	Singapore	Top Ships	Greece
Rieber shipping	Norway	Torm	Denmark
Royal Arctic	Denmark	Transatlantic Rederi	Sweden
Safe Bulkers	Greece	Trico Marine	Canada
Saga Tankers	Norway	Tsakos	Greece
Samudera Shipping	Singapore	U Ming Marine Transport	Taiwan
Scandferries	Germany	Ultrapetrol Ltd	Bahamas
Scorpio Tankers	United States	Union Transport	United Kingdom
Seacontainer	Romania	United European Car Carriers	Norway
Seacor Holdings Inc.	United States	US Shipping Partners	United States
Seanergy Maritime	Greece	Van Weelde Beheer	The Netherlands
Seaspan Corporation	Canada/Hong Kong	Varun Shipping	India
Seatrade Holding	The Netherlands	Viking Line	Finland
Ship Finance	Norway	Vroon	The Netherlands
Shreyas	India	Wan Hai Lines Ltd	Taiwan
Siem Offshore	Norway	Wilhelmsen	Norway
Sincere Navigation	Taiwan	Wilson Carriers	United Kingdom
Singamas Container	Hong Kong	Yang Ming Marine Transport	Taiwan
Sinotrans Ltd	Hong Kong		

Financial statements for year 2012 of companies printed in dark red have not been included in the benchmarking analysis as the 2012 financial statements were not yet available at the time that the data was collected.

Contacts

Key contacts for the global shipping benchmark

Global Shipping & Ports leader

Socrates Leptos-Bourgi

+30 210 6874630

socrates.leptos.-bourgi@gr.pwc.com

T&L leader, The Netherlands

Isis Bindels

+31 887923606

isis.bindels@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 leader Transportation & Logistics

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

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

China / Hong Kong

Alan Ng

+852 2289 2828

alan.ng@hk.pwc.com

Cyprus

Liakos Theodorou

+357 0 25 555 201

liakos.m.theodorou@cy.pwc.com

Denmark

Bo Schou-Jacobsen

+45 39 45 36 39

bo.schou-jacobsen@dk.pwc.com

Finland

Mikko Nieminen

+358 9 22 801 257

mikko.nieminen@fi.pwc.com

France

Vincent Gaide

+33 1 56 57 8391

vincent.gaide@fr.pwc.com

Germany

Claus Brandt

+49 406 378 1607

c.brandt@de.pwc.com

Greece**Socrates Leptos-Bourgi**

+30 210 6874630

socrates.leptos.-bourgi@gr.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.nakabachi@jp.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

Middle East**Anil Khurana**

+971 4 304 3100

anil.khurana@ae.pwc.com

The Netherlands**Isis Bindels**

+31 887923606

isis.bindels@nl.pwc.com

New Zealand**Karen Shires**

+64 4 462 7667

karen.shires@nz.pwc.com

Norway**Rita Granlund**

+47 0 95 26 02 37

rita.granlund@no.pwc.com

Portugal**Jorge Costa**

+351 213 599275

jorge.costa@pt.pwc.com

Russia**Alexander Sinyavsky**

+7 495 232 5469

alexander.sinyavsky@ru.pwc.com

Singapore**Kok Leong Soh**

+65 6236 3788

kok.leong.soh@sg.pwc.com

South Africa**Andrew Shaw**

+27 82 941 6257

andrew.shaw@za.pwc.com

South Korea**Bong-Jun Baeg**

+82 2 709 0657

bong-jun.baeg@kr.pwc.com

Spain**David Samu Villaverde**

+34 915 684 013

david.samu.villaverde@es.pwc.com

Sweden**Fredrik Göransson**

+46 31 7931146

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.ulul@tr.pwc.com

United Kingdom**Coolin Desai**

+44 20 721 24113

coolin.desai@uk.pwc.com

United States of America**Jonathan Kletzel**

+1 312 298 6869

jonathan.kletzel@us.pwc.com

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 2011 + balance as at year end 2012 divided by 2

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