Riding the storm
Global Shipping Benchmarking
Analysis 2011
## Contents

**Foreword**  
5

1. Market developments  
   1.1 General Outlook  
   6  
   1.2 Supply and demand characteristics  
   9  
   1.3 Concluding remarks  
   12

2. Financial performance benchmark  
   2.1 Background  
   13  
   2.2 Benchmark model  
   13  
   2.3 Results summary by subsector  
   14  
   2.4 Performance indicators  
   19

3. Companies covered by the analysis  
27

Appendices  
31  
   Ratio definitions  
   31  
   List of shipping companies covered  
   32

Contacts  
36
Foreword

I believe almost everyone would agree that it has been a tough last couple of years for the world economy, global trade and the shipping industry. The markets have been particularly volatile and this has been reflected across the board, from commodity prices to freight rates, vessel values and bunker prices. Nevertheless, global trade in 2010 recovered to the same levels as in 2008 and as indicated by the results of our benchmarking analysis, the overall performance of shipping companies improved somewhat in 2010 compared to 2009.

This is not to say that the shipping industry is now on a safe path to recovery. There are many more challenges ahead and a significant amount of uncertainty in the markets and this is reflected in the 2011 half year results of shipping companies which have been worse than the same period in 2010. In July 2011, Moody’s published a negative outlook for the shipping industry for the next 12 to 18 months, saying the business from container carriers to bulk operators is facing overcapacity. Tankers are also projected to have a rather difficult year in 2011 as full year forecasts for oil demand are revised downwards and more tankers are delivered in an already crowded market, driving some companies to place vessels in lay-up.

As in prior years, in preparing this third Global Benchmarking Analysis we have analysed the performance of 150 shipping companies across the various subsectors through some basic Key Performance Indicators (KPIs) derived from their 2010 annual reports and monitored how these have evolved over the last 5 years. We have also tried to give some insight on the recent challenges and drivers of the industry on the basis of some of the qualitative information and disclosures in those annual reports. We trust that this analysis adds value to shipping companies and other participants in the shipping industry who wish to understand the impact of recent developments on the industry and facilitate their decision making.

A more detailed analysis can be prepared and tailored to individual needs upon request. We will be pleased to receive feedback from you on this publication and discuss how to further assist and provide insight into current shipping industry issues.

Socrates Leptos-Bourgi
Global Shipping & Ports Leader
1 Market developments

1.1 General Outlook

In 2010 the world economy embarked on a recovery path with gross domestic product (GDP) growing at 3.9% over the previous year and the strong correlation between industrial activity, GDP growth, merchandise and seaborne trade continuing unabated. Higher than expected trade volumes in 2010 resulted in the improvement of market conditions for the shipping sector.

According to the World Trade Organization, world trade increased by approximately 14.5% during 2010, compared to a decrease of approximately 12% in 2009.

The contribution of the emerging economies, which for the last ten years have dominated world shipping, was of great significance. High levels of utilisation rates were achieved for vessels and resumption in ordering activity, especially in the dry bulk sector, are indicators of a possible recovery, which remains, however, still at an early stage.

Inevitably, the recent developments in the global economy raise significant concerns for the shipping sector. This is compounded by the challenge of absorbing record deliveries of new vessels and an order book that continues to be substantial. According to shipbrokers Clarksons, new building deliveries in 2010 amounted to approximately 142m dwt and marked the peak of the long shipbuilding cycle starting as far back as 1975. Specifically, the dry bulk fleet grew by some 17% last year and is expected to grow at around 13% in 2011 and a further 11% in 2012. The tanker fleet grew by 4.2% in 2010, however, this is after taking into account the phase-out of some single-hulled tankers, some of which were sent for demolition and some for conversion. In the container ship sector there had been approximately 1.4m teu of deliveries in full year 2010.
Despite the significant number of deliveries, freight rates in the dry bulk sector were marginally higher than in 2009. The Handysize, Supramax and Panamax categories performed better than in 2009, with only the Capesizes performing slightly lower than 2009. According to shipbrokerClarksons, the average earnings per day of a Capesize vessel (1990-built) were $34,147 in 2009 and $27,683 in 2010 while for Panamaxes the average earnings were $15,089 in 2009 and $20,221 in 2010.

The tanker market was characterised by a strong first half of the year and a weak second half of the year, a pattern which was most evident in the larger vessel categories. For example, VLCCs achieved on average approximately $51,000/day in the first half of 2010 and $19,000/day in the second half of the year.

Global container trade grew by approximately 12% in full year 2010 and $19,000/day in the second half of the year.

Per Clarksons reports, following a contraction of 8.9% recorded in 2009, Containership charter rates registered an upward trend over the year as a whole, although rates remain below long term averages.

While the world economy continues to be fragile and faced with increased volatility and uncertainty, businesses continue to face tightening credit conditions and limited liquidity. Financial institutions have toughened their positions, both for existing exposures and when making new facilities available.

The tanker market was characterised by a strong first half of the year and a weak second half of the year, a pattern which was most evident in the larger vessel categories. For example, VLCCs achieved on average approximately $51,000/day in the first half of 2010 and $19,000/day in the second half of the year.

Global container trade grew by approximately 12% in full year 2010 per Clarksons reports, following a contraction of 8.9% recorded in 2009. Containership charter rates registered an upward trend over the year as a whole, although rates remain below long term averages.

While the world economy continues to be fragile and faced with increased volatility and uncertainty, businesses continue to face tightening credit conditions and limited liquidity. Financial institutions have toughened their positions, both for existing exposures and when making new facilities available.

The tanker market was characterised by a strong first half of the year and a weak second half of the year, a pattern which was most evident in the larger vessel categories. For example, VLCCs achieved on average approximately $51,000/day in the first half of 2010 and $19,000/day in the second half of the year.

Global container trade grew by approximately 12% in full year 2010 per Clarksons reports, following a contraction of 8.9% recorded in 2009. Containership charter rates registered an upward trend over the year as a whole, although rates remain below long term averages.

While the world economy continues to be fragile and faced with increased volatility and uncertainty, businesses continue to face tightening credit conditions and limited liquidity. Financial institutions have toughened their positions, both for existing exposures and when making new facilities available.

These factors and the overall economic environment has led many companies to restructure their loan facilities in an attempt to rectify existing issues with their facilities or in preparing for a tougher year ahead. Among the companies covered by our analysis, the container sector companies appeared to have been the first and hardest hit, as approximately 60% of the container vessel owners covered by our analysis have reported a restructuring of their loan obligations during 2010. The corresponding percentage for the dry bulk sector was 29% and for the tanker sector 12%. Significantly less ship owners foresee debt restructuring in 2011 with the exception of tanker owners which seem to foresee more difficult market conditions forcing them to restructure their debt at similar levels as 2010.

1.2 Supply and demand characteristics

While new building deliveries in 2010 were at a historical peak, these could have been even higher had it not been for order cancellations or delays and postponements of delivery, which according to shipbrokers R.S. Platou, have reduced the growth rate of the world fleet by some 3 percentage points in the year.

Despite the difficulties in establishing the exact number of order cancellations in the market, it is estimated that around 640 vessels were confirmed as cancelled in 2010, compared to around 700 in 2009. Brokers estimate that only 60% of the dry bulk and containership order book at the beginning of 2010 scheduled to be delivered during the year was actually built. The remaining capacity was rescheduled for later delivery, cancelled or removed from the order book. In the tanker sector it is estimated that of the 64 million dwt tankers and chemical carriers that were scheduled to be delivered in 2010, only some 40 million dwt of these were actually delivered to ship owners, as orders totalling 10 million dwt were postponed, while 14 million dwt were cancelled or otherwise removed from the order book.

Our analysis shows clearly lower levels of cancellations compared to 2009 among the companies we have covered, with the exception of the ferry sector which reported new building order cancellations in 2010 at the same level as 2009. In the dry bulk sector there was a dramatic reduction of vessel cancellations as only 2 companies covered by our analysis reported that they cancelled vessel orders compared to 11 companies in 2009. The remaining companies participating in our survey provided no information in their annual reports on this matter.

The reduced shipbuilding cancellations were accompanied with a resumption of ordering activity. Several companies followed an aggressive policy in order to place themselves in a stronger position after the economic downturn. Clarksons estimates that orders for 130.5m dwt of new vessels worth US$ 96 billion were placed in 2010, of which 81m dwt for bulk carriers and 35.6m dwt for tankers, which account for approximately 30% of the total order book in each of these two sectors, while approximately 8.4m dwt corresponded to orders for containerships (15% of the total order book for containerships) and a handful of other vessel types.

This may have been a result of both a resumption of cargo demand and lower shipbuilding prices following downward trend during the first half of 2010, (although this trend was somewhat reversed in the second half of the year). Notably, these trends for new building orders are expected to change in 2011 as slower growth in world trade than originally expected combined with a significant increase in supply of new vessels drive ship owners’ interest to other sectors such as gas carriers (LNG, LPG) and vessels offering perceived economic advantages (e.g. post-Panamax containerships).

Cancellation of vessel building

<table>
<thead>
<tr>
<th>Cancellation of vessel building</th>
<th>Container</th>
<th>Dry Bulk</th>
<th>Ferries</th>
<th>Miscellaneous</th>
<th>Offshore</th>
<th>Tankers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2009</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The reduced shipbuilding cancellations were accompanied with a resumption of ordering activity. Several companies followed an aggressive policy in order to place themselves in a stronger position after the economic downturn. Clarksons estimates that orders for 130.5m dwt of new vessels worth US$ 96 billion were placed in 2010, of which 81m dwt for bulk carriers and 35.6m dwt for tankers, which account for approximately 30% of the total order book in each of these two sectors, while approximately 8.4m dwt corresponded to orders for containerships (15% of the total order book for containerships) and a handful of other vessel types.

This may have been a result of both a resumption of cargo demand and lower shipbuilding prices following downward trend during the first half of 2010, (although this trend was somewhat reversed in the second half of the year). Notably, these trends for new building orders are expected to change in 2011 as slower growth in world trade than originally expected combined with a significant increase in supply of new vessels drive ship owners’ interest to other sectors such as gas carriers (LNG, LPG) and vessels offering perceived economic advantages (e.g. post-Panamax containerships).
In 2010, the number of orders for new vessels in the dry bulk sector increased two-fold. The firming of freight rates likely had an impact giving ship owners an incentive to invest in new tonnage. Part of the reason for all these new orders may also be that new building prices for bulk carriers were significantly lower in 2010 than during their peak two years ago. According to Clarkson, a Capesize vessel which cost $88m to build in 2008, could be built for $57m in 2010. Similarly, the price for a new-built Panamax in 2008 was around $46.5m, while this had dropped to around $34.5m in 2010.

Such patterns in contracting for new vessels are a familiar characteristic of the cyclical shipping markets. While a significant order book may be an indication of a supply-demand imbalance that will depress freight rates in the future, owners are tempted by lower new-built prices that will provide better returns when the markets recover. This is in effect continues to build the order book putting further pressure on freight rates.

According to our analysis, the new building ratio (calculated as the number of vessels on order divided by the average number of vessels operated for the companies in our sample), stands at 25% for dry bulk vessels, 7% for tankers and 10% for containerships. For the whole shipping market, the order book as a percentage of the fleet for each subsector is reported at 49% for dry bulk, 22% for tankers and 28% for containers. This indicates a relatively more conservative approach for companies in our sample, possibly because most of these companies are listed companies and are accountable to a number of shareholders in the public markets, while private companies controlled by a single person or family may take a more aggressive view of the market.

Scraping activity declined in 2010 compared to 2009, although market analysts expected much higher levels of scraping or recycling. Despite very strong scrap prices (on average $490/ldt for tankers and $435/ldt for bulkers) and relatively weak hire rates, the total capacity of vessels that were scrapped in the year of 26.5m dwt represented approximately 2% of the fleet which is considered to be within historical norms.

Scraping remained relatively non-existent in the dry bulk sector in the second half of 2010. Public company management teams have been highlighting for two years how the removal of older vessels from the fleet can help offset some of the new-built deliveries, yet with the exception of a brief pick-up in scrapping activity during the depths of the credit crisis, these older ships have generally continued to trade. This reluctance to scrap may be changing, though, as scrap prices are now exceeding the $500/lightweight ton (ldt) threshold (relative to a long-term scrap price average of about $200/ldt) and as freight rates remain depressed.

Little or no information was provided in the annual reports of the companies participating in our survey on their vessel scrapping activities or policy on this matter. However in last years benchmarking analysis that we performed, approximately 50% of the companies in the container segment and 45% of the companies in the miscellaneous vessels segment had disclosed their intention to proceed to some level of vessel recycling within 2010 or later.

---

**New building ratio 2010**

<table>
<thead>
<tr>
<th>Container</th>
<th>Dry Bulk</th>
<th>Ferries</th>
<th>Miscellaneous</th>
<th>Offshore</th>
<th>Tankers</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>7%</td>
<td>10%</td>
<td>25%</td>
<td>7%</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Recycling/Scraping vessels 2010 (number of companies)**

- Yes in current year
- Yes announced for next year or later
- No
- No information

**Recycling/Scraping vessels 2009 (number of companies)**

- Yes in current year
- Yes announced for next year or later
- No
- No information
Second hand vessel sale & purchase activity was considerably lower in 2010 than in 2009. The number of reported sales was down by close to 20% compared to 2009. Vessel values were under pressure reflecting a weaker freight market, an increasing concern about the order book and in general a large number of potential sales candidates.

Of the companies covered by our analysis, 24% reported vessels impairment in 2010. Our analysis indicates that asset impairments are at lower levels in 2010 compared to 2009 in most sectors, especially in the dry bulk and the tanker sector. As shown in the diagram below (showing the percentage of companies reporting impairment to the total companies we have analysed), the container sector reported the largest share of impairments on vessels with 42% of the companies belonging in this sector incurring impairment losses.

1.3 Concluding remarks

To conclude, the shipping industry’s performance in 2010 has probably exceeded the expectations of most market participants. Increasing demand in the first half of 2010 and positive trading conditions throughout the remainder of the year, saw lifting volumes nearing 2008 levels. Improvements in freight rates across all trades, combined with cost savings implemented in 2009, have produced improved profits for shipping operations in 2010.

In the meantime, as fuel and other cost pressures are again re-emerging, companies are likely to continue to do some necessary “house-keeping”. Continued focus on operational efficiency and effective cost control will accordingly remain important in the current year.

2 Financial performance benchmark

2.1 Background

Our 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 analysis. Financial data have been derived from publicly available financial statements and annual reports of these companies from 2006 to 2010.

The purpose of this 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.

2.2 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. RONA measures returns on operating activities of a company. To calculate RONA 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 RONA and ROCE:

In the diagram below, 'Working Capital / net sales' and 'EBIT / net sales' are calculated to determine RONA. The ratios 'EBIT / net sales' and 'EBIT / net fixed assets' are calculated to determine ROCE.
In addition to RONOA 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 surveyed, as well as their ability to pay their long term liabilities, we have measured the Solvency Ratio. In addition to RONOA 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 regularly included in bank covenants is EBITDA / Net Finance Cost which has been added to the KPIs we measure 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.

2.3 Results summary by subsector

The radar charts on the following pages show the outcomes of the key performance indicators by subsector in 2010. 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 2010 (yellow area)
- Average score subsector 2010 (pink line)
- Best in class in subsector 2010 (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 container sector and the dry bulk shipping sector have been the most attractive subsectors in 2010 followed by the offshore shipping sector. In 2009 the dry bulk shipping sector was the most attractive sector, followed by the offshore shipping sector.

The container subsector was the least attractive subsector in 2009, while it has become one of the most attractive subsectors in 2010. The improvement of the container shipping sector compared to 2009 is mainly due to improvement of the profitability of this subsector in 2010.

The tanker subsector was the least attractive subsector in 2010.
In the following radar chart we have presented the development in the performance indicators in the years 2009 and 2010 for the overall shipping industry:

With the exception of the net debt ratio and the ratio of net fixed assets to sales, all financial performance indicators stabilised or improved in 2010 compared to 2009.

The 2008 financial crisis and economic downturn that followed it had a huge impact on freight volumes and rates in almost all shipping subsectors in 2009. Year 2010 shows a mild recovery, although results are mixed between subsectors.

2.4 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.
With the exception of the container and tanker subsectors which increased by 19 percentage points and decreased by 3 percentage points respectively during 2010, RONOA has remained relatively stable compared to the previous year.

The container subsector RONOA was higher than the dry bulk subsector’s in 2010 on the back of a recovery in container trade volumes, higher freight rates and improved results following measures taken primarily by liner companies, such as slow steaming, rescheduling of non-core/loss-making routes and the lay-up of a number vessels.

The dry bulk sector had consistently been the best performing subsector over the last 5 years, but its RONOA has suffered in 2010, primarily as a result of moderate commodities trading and a substantial growth in new tonnage being delivered in this subsector. This is a trend that is likely to continue in 2011.

Working capital to net sales and fixed assets to net sales have both incurred an increasing trend in 2010 for all subsectors, when compared to 2007/2008. This is caused primarily by decreasing net sales as a result of weak freight and hire rates across the shipping industry.

**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. Another factor impacting the ROCE in 2010 would be higher interest margins incurred on borrowings, as lenders had taken advantage of restructurings and waiver requirements to push for increased margins that reflect the higher cost of capital of the banking sector.

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

In 2009 ROCE and RONOA in the offshore sector are in line, however, in 2010 ROCE deteriorates while RONOA improves 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.
**Return on equity**

Developments in return on equity in the years 2006 – 2010 are very different in each subsector.

In 2009 return on equity decreased significantly in all subsectors but not in the offshore and ferry industry. Returns on equity deteriorated even to negative outcomes for the container and miscellaneous subsectors in 2009.

In 2010 return on equity decreased in all subsectors, except for the container and miscellaneous subsector. However the miscellaneous sector still has a negative outcome in 2010. The improvement of the ratio of the container industry is due to increased profitability of this sector in 2010.

Notably, the dry bulk sector continues to have the highest return on equity than all other subsectors in 2010, which is consistent to the previous four years, although as indicated previously, this is not reflected in either RONOIA or ROCE, whereby the dry bulk subsector was the second best performing trailing the container subsector. This is possibly an impact of a higher leverage in this subsector compared to the others.

**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 stabilised or even increased in 2009. This is possibly the result of financial restructuring in 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 decreases slightly for the offshore and miscellaneous subsectors.
The current ratio in the dry bulk sector decreased significantly in 2010 compared to 2009, the 2010 level is more or less in line with the 2008 level. In 2010, 6 companies have a critical score less than 1, compared to 5 companies in 2009.

The 2010 liquidity ratio of the offshore industry is the lowest of the period 2006-2010. For the offshore industry in 2010, 3 companies have a critical score compared to 2 in 2009.

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 2006-2010 vary between subsectors, however the average totals have a clear increasing trend.

This is primarily driven by the dry bulk subsector and the miscellaneous subsector. A likely cause of the trends observed relate to increased impairments at the end of 2008 (when this ratio had a notable increase for most subsectors) and the impact of deteriorating cash positions in following years.

Net debt has been the highest in the tanker industry for six years in a row. Net debt is the lowest in the dry bulk industry for the last four years. The dry bulk industry also has the highest average solvency rate and highest current ratio.
The ratio EBITDA/net finance cost is included in our benchmark as from 2009 and therefore only available for the years 2008 till 2010. 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 2009 the EBITDA/net finance cost ratio decreased in all sectors, while in 2010 the developments vary from subsector to subsector. In 2010 the ratio for the container, offshore, ferry and miscellaneous subsectors significantly increases while the ratio in the tanker and dry bulk subsectors decreases. These trends mirror how freight and hire rates have fared in these subsectors during these years.

The shipping companies participating in the analysis operate in the tanker, container, dry bulk, offshore or ferry industry. Companies operating in different or several subsectors and have been categorised as 'miscellaneous'.

Our benchmark analysis was based on the participating companies’ financial statements over the last 5 years and the review of the 2010 annual reports for information on current relevant themes.
Shipping companies of different sizes have been included in our analysis. The composition of our population, using the 2010 sales as benchmark, is as follows:

- Of the companies included in our survey, 83% are public companies listed on various stock exchanges, mainly in Europe and the US. A categorisation of the listings on stock exchanges is presented in the following chart:

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 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 reporting for these companies applying IFRS is also allowed.

As shown on the graph below, 18% of companies are using accounting principles other than 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](image)

**Appendices**

**Ratio definitions**

**RETURN ON NET OPERATIONAL ASSETS (RONOA)**

\[ \frac{EBIT}{average \ NOA^*} \] 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)**

\[ \frac{Income \ after \ taxation}{average \ of \ capital \ employed^*} \] reflected as a percentage.

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

**RETURN ON EQUITY**

\[ \frac{Net \ income \ after \ taxation}{average \ shareholder's \ equity^*} \] 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**

\[ \frac{EBITDA}{(interest \ expenses \ after \ deduction \ of \ interest \ income)} \]

EBITDA: Earnings Before Interest, Taxation, Depreciation and Amortization

\[^*\] Average is calculated by balance as at year end 2009 + balance as at year end 2010 divided by 2
**List of shipping companies covered**

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

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exmar</td>
<td>Belgium</td>
</tr>
<tr>
<td>Fairmount Marine</td>
<td>The Netherlands</td>
</tr>
<tr>
<td>Farstad</td>
<td>Norway</td>
</tr>
<tr>
<td>Fesco</td>
<td>Russia</td>
</tr>
<tr>
<td>Finavial</td>
<td>Norway</td>
</tr>
<tr>
<td>Finnlines</td>
<td>Finland</td>
</tr>
<tr>
<td>Flinter Group</td>
<td>The Netherlands</td>
</tr>
<tr>
<td>Freeseas</td>
<td>Greece</td>
</tr>
<tr>
<td>Frontline</td>
<td>Norway/United Kingdom</td>
</tr>
<tr>
<td>Genco Shipping</td>
<td>United States</td>
</tr>
<tr>
<td>General Maritime Corporation</td>
<td>United States</td>
</tr>
<tr>
<td>Globus Maritime</td>
<td>Greece</td>
</tr>
<tr>
<td>Golar LNG</td>
<td>Norway</td>
</tr>
<tr>
<td>Golden Ocean</td>
<td>Norway</td>
</tr>
<tr>
<td>Goldersport</td>
<td>Greece</td>
</tr>
<tr>
<td>Great Eastern Shipping</td>
<td>India</td>
</tr>
<tr>
<td>Greenreefers</td>
<td>Norway</td>
</tr>
<tr>
<td>Grindrod Ltd</td>
<td>South Africa</td>
</tr>
<tr>
<td>GulfMark Offshore</td>
<td>United States</td>
</tr>
<tr>
<td>Hanjin Shipping</td>
<td>South Korea</td>
</tr>
<tr>
<td>Hapag Lloyd</td>
<td>Germany</td>
</tr>
<tr>
<td>Havila Shipping</td>
<td>Norway</td>
</tr>
<tr>
<td>Hellenic Carriers</td>
<td>UK (Jersey)</td>
</tr>
<tr>
<td>Horizon Lines LLC</td>
<td>United States</td>
</tr>
<tr>
<td>Hornbeck Offshore</td>
<td>United States</td>
</tr>
<tr>
<td>Hyundai Merchant Marine</td>
<td>Korea</td>
</tr>
<tr>
<td>International Shipholding Corp</td>
<td>United States/Shanghai</td>
</tr>
<tr>
<td>Irish Continental</td>
<td>Ireland</td>
</tr>
<tr>
<td>Jadroplav</td>
<td>Croatia</td>
</tr>
<tr>
<td>Jinhsu</td>
<td>Hong Kong/Norway</td>
</tr>
<tr>
<td>Kawasaki Kisen (K Line)</td>
<td>Japan</td>
</tr>
<tr>
<td>Knightsbridge</td>
<td>Norway</td>
</tr>
<tr>
<td>Koninklijke Wagenborg</td>
<td>The Netherlands</td>
</tr>
<tr>
<td>Latvian Shipping Company</td>
<td>Latvia</td>
</tr>
<tr>
<td>Lauritzen</td>
<td>Denmark</td>
</tr>
<tr>
<td>Limarko</td>
<td>Lithuania</td>
</tr>
<tr>
<td>Maersk</td>
<td>Denmark</td>
</tr>
<tr>
<td>Mercator Lines</td>
<td>Singapore</td>
</tr>
<tr>
<td>Minoan Lines</td>
<td>Greece</td>
</tr>
<tr>
<td>Mitsui OSK Lines</td>
<td>Japan</td>
</tr>
<tr>
<td>Mols-Linien</td>
<td>Denmark</td>
</tr>
<tr>
<td>Company Name</td>
<td>Country</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Navios</td>
<td>Greece</td>
</tr>
<tr>
<td>Neptune Orient Lines</td>
<td>Singapore</td>
</tr>
<tr>
<td>Newlead Holdings</td>
<td>Greece</td>
</tr>
<tr>
<td>Nile Dutch Holding</td>
<td>The Netherlands</td>
</tr>
<tr>
<td>Nippon Yusen Kabushiki (NYK)</td>
<td>Japan</td>
</tr>
<tr>
<td>Norden</td>
<td>Denmark</td>
</tr>
<tr>
<td>Nordic American Tankers Corp</td>
<td>United States</td>
</tr>
<tr>
<td>Novoship</td>
<td>Russia</td>
</tr>
<tr>
<td>Ocean Freight</td>
<td>Greece</td>
</tr>
<tr>
<td>Odfjell</td>
<td>Norway</td>
</tr>
<tr>
<td>Omega Navigation</td>
<td>Greece</td>
</tr>
<tr>
<td>Orient Overseas International</td>
<td>Hong Kong</td>
</tr>
<tr>
<td>OSG Inc.</td>
<td>Hong Kong</td>
</tr>
<tr>
<td>Pacific Basin Shipping</td>
<td>United States</td>
</tr>
<tr>
<td>Paragon shipping</td>
<td>Thailand</td>
</tr>
<tr>
<td>Precious Shipping</td>
<td>Italy</td>
</tr>
<tr>
<td>Premuda</td>
<td>Sweden</td>
</tr>
<tr>
<td>Rederi ab Gotland</td>
<td>Singapore</td>
</tr>
<tr>
<td>Rickmers Maritime</td>
<td>Norway</td>
</tr>
<tr>
<td>Rieber shipping</td>
<td>Denmark</td>
</tr>
<tr>
<td>Royal Arctic</td>
<td>Greece</td>
</tr>
<tr>
<td>Safe Bulkers</td>
<td>Norway</td>
</tr>
<tr>
<td>Saga Tankers</td>
<td>Singapore</td>
</tr>
<tr>
<td>Samudera Shipping</td>
<td>Germany</td>
</tr>
<tr>
<td>Scandferries</td>
<td>United States</td>
</tr>
<tr>
<td>Scorpio Tankers</td>
<td>United States</td>
</tr>
<tr>
<td>Seaco Holdings Inc.</td>
<td>Greece</td>
</tr>
<tr>
<td>Seawen Maritime</td>
<td>Canada/Hong Kong</td>
</tr>
<tr>
<td>Seatead Holding</td>
<td>The Netherlands</td>
</tr>
<tr>
<td>Ship Finance</td>
<td>Norway</td>
</tr>
<tr>
<td>Shreyas</td>
<td>India</td>
</tr>
<tr>
<td>Siem Offshore</td>
<td>Norway</td>
</tr>
<tr>
<td>Sincere Navigation</td>
<td>Taiwan</td>
</tr>
<tr>
<td>Sinotrans Ltd</td>
<td>Hong Kong</td>
</tr>
<tr>
<td>Skaugen</td>
<td>Norway</td>
</tr>
<tr>
<td>Sloman Neptun</td>
<td>Germany</td>
</tr>
<tr>
<td>Solstad</td>
<td>Norway</td>
</tr>
<tr>
<td>Solvang</td>
<td>Norway</td>
</tr>
<tr>
<td>Spliethoff’s Bevrachtingskantoor</td>
<td>The Netherlands</td>
</tr>
<tr>
<td>SRAB shipping</td>
<td>Sweden</td>
</tr>
</tbody>
</table>

| Financial statements for year 2010 of companies printed in red have not been included in the benchmark survey as the 2010 financial statements were not yet available at the time 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

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

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
Usah Bahl-Schneider
+49 30 2636 5425
usah.bahl-schneider@de.pwc.com

Africa Central
Vishal Agarwal
+254 20 2855 581
vishal.agarwal@ke.pwc.com

Australia
Peter le Huray
+61 3 8603 6192
peter.le.huray@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
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

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

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

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

Indonesia
Thomson Batubara
+62 21 527 9309
thomson.batubara@id.pwc.com

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

Japan
Yasuhiyo Furusawa
+813 6266 5733
Yasuhiyo.furusawa@jp.pwc.com

Luxembourg
Anne Murrah
+352 4940 481
a.murrah@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.gonzales@mx.pwc.com

The Netherlands
Jeroen Boonacker
+31 88 792 4341
jeroen.boonacker@nl.pwc.com

New Zealand
Grant Burns
+64 9 355 8034
grant.burns@nz.pwc.com

Norway
Rita Granlund
+47 9 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
Alexander Sinyavsky
+7 495 232 5469
alexander.sinyavsky@ru.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.
Singapore
Kok Leong Soh
+65 6236 3788
kok.leong.soh@sg.pwc.com

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

South and Central America
Luciano Sampaio
+55 11 3674 2451
luciano.sampaio@br.pwc.com

South Korea
Jae-Eun Lee
+82-27090470
jae-eun.lee@kr.pwc.com

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

Sweden
Claes Thimfors
+46 0 31 793131
claes.thimfors@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.ulu@tr.pwc.com

United Arab Emirates
Alistair Kett
+44 (0) +971501096608
alistair.kett@uk.pwc.com

United Kingdom
Clive Hinds
+44 0 1727 892379
clive.p.hinds@uk.pwc.com

United States of America
Kenneth Evans
+1 646 471 3058
kenneth.evans@us.pwc.com

Riding the storm - Global Shipping Benchmarking Analysis 2011