



SHIP MANAGEMENT SURVEY

July – December 2016

INTRODUCTION

The ship management survey is conducted by the Statistics Department of the Central Bank of Cyprus and concentrates primarily on transactions between resident ship management companies and non-resident owners/shipping related entities. Please refer to the Appendix for more details.

1. SHIP MANAGEMENT REVENUES FROM NON-RESIDENTS

Cyprus's ship management revenues increased by 4% during the second half of 2016 (**Chart 1**), closing at €458 million. As turnover (not value added), it corresponds to 5% of Cyprus's GDP, which is 6% higher over the reference period compared with the first half of 2016.

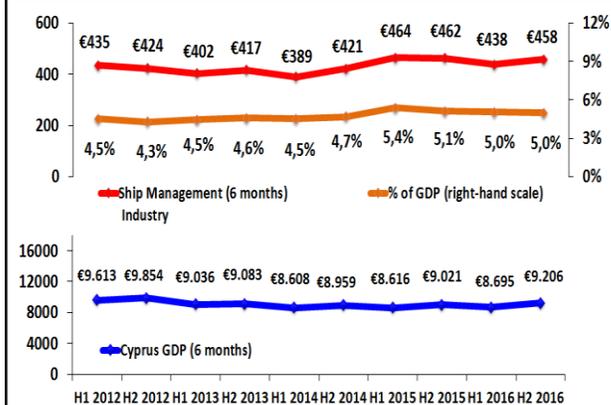
In **Chart 2**, revenues are decomposed by country of payment. Germany remains the main source of revenues for the industry, with a total share of 39%. Other notable contributions (albeit much smaller) include Switzerland, Singapore and Russia.

Despite the overcapacity and weak demand conditions that continue to characterise most shipping markets (e.g. container and bulk shipping),

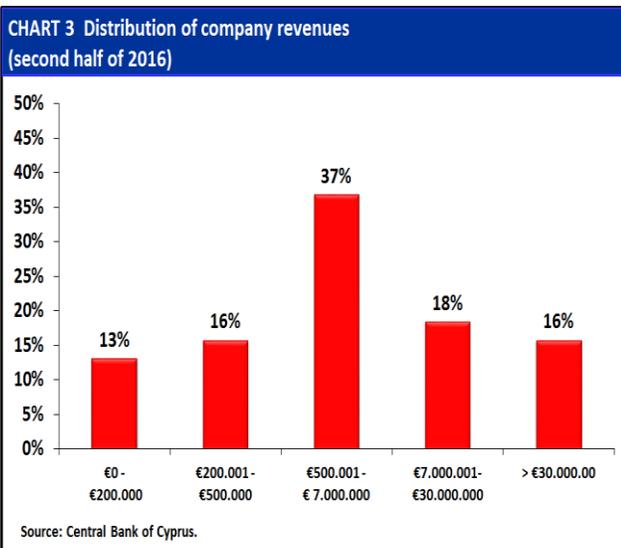
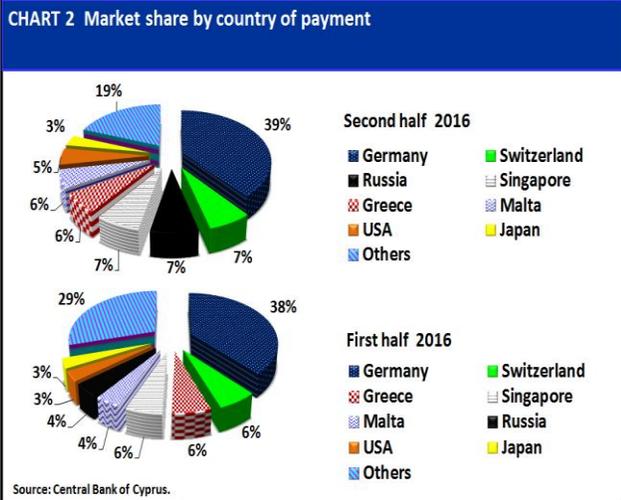
the ship management industry in Cyprus remains robust with a stable flow of revenues.

New data from global shipping markets indicate several important developments and structural changes in the maritime transport sector like: (i) consolidations, (ii) market exits, (iii) adjustments in freight rates and (iv) debt write-offs. These developments have initiated the painful process towards recovery, which is expected to benefit Cyprus's ship management industry in the future.

CHART 1 Ship management revenues (€ million)



Sources: Central Bank of Cyprus and Cystat.

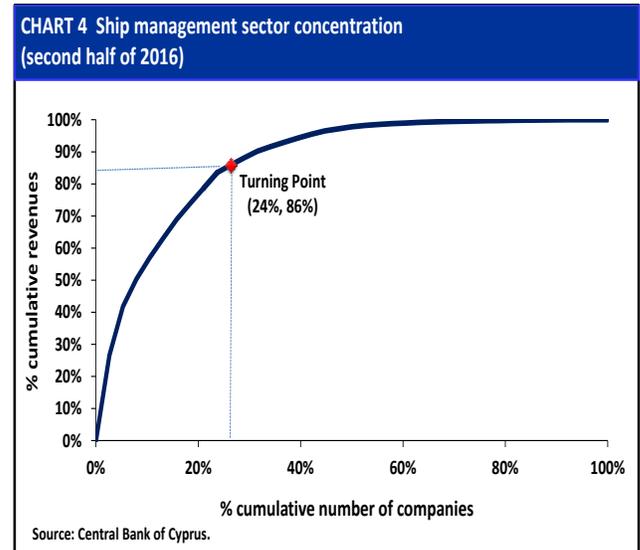


In **Chart 3**, the ship management companies are classified into non-overlapping revenue segments, as depicted by the size ranges on the horizontal axis. The respective vertical axis measures the percentage of companies belonging to each segment size.

- Over one third of the companies (37% of the total) generated revenues within the range of €0,5 - €7 million.

¹ The turning point indicates the level at which a decline in the marginal contribution of companies to the industry's revenues is observed. Specifically, a 1% increase in the number of companies beyond the turning point provides

- Only 34% of the companies managed to generate revenues in excess of €7 million.
- Company revenues have gradually fallen in recent years, in line with the sluggish shipping environment globally.



The level of concentration in the ship management industry is depicted in **Chart 4**.

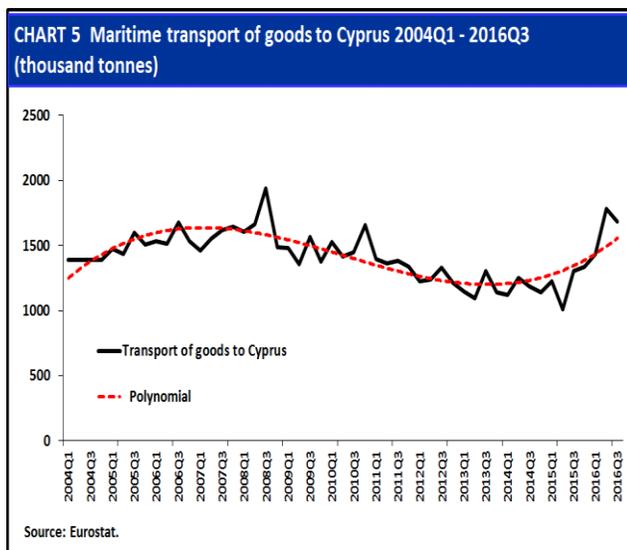
The companies were first ranked in terms of their revenues. The horizontal axis depicts, in percentage terms, the largest companies numerically, while the vertical axis measures the respective (cumulative) percentage revenue contribution of the companies.

The turning point¹ indicates the presence of a small number of large companies that dominate the industry. Therefore, the top 24% of the companies accounted for 86% of the industry's revenues. For an industry consisting of 38 companies, the top 9 companies in terms of revenues correspond to 24% on the horizontal axis. The vertical axis indicates that

less than a 1% increase in the cumulative revenues of the industry.

these 9 companies generated 86% of the industry’s revenues.

Chart 5 provides time series information regarding the total volume (in thousand tonnes) of maritime transport of goods to Cyprus. The series covers the period from 2004Q1 until 2016Q3 and is used as a proxy for the number of commercial ships approaching the ports of Cyprus. It provides an indication of the level of expected demand for services provided locally. The chart also includes a smoothing estimate (dashed line) that better reflects the underlying core trend in the series². There is a notable increase in volume during the last three periods, in contrast to the gradual decline recorded during the years 2008 – 2014.



2. SHIP MANAGEMENT SERVICES

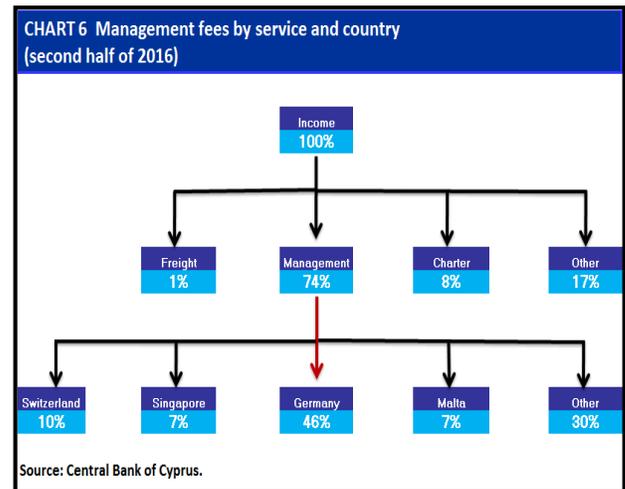
Chart 6 provides a tree diagram of the industry’s revenues with analysis by type of ship management service and country of payment.

Core ship management services encompass crew, technical and full management operations and

²For a discussion of trend estimation methods in shipping, see Michis, A.A. and Nason, G.P. "Case study: shipping trend estimation and prediction via multiscale variance

accounted for 74% of the industry’s revenues. The second level of the tree diagram splits the ship management revenues by source country.

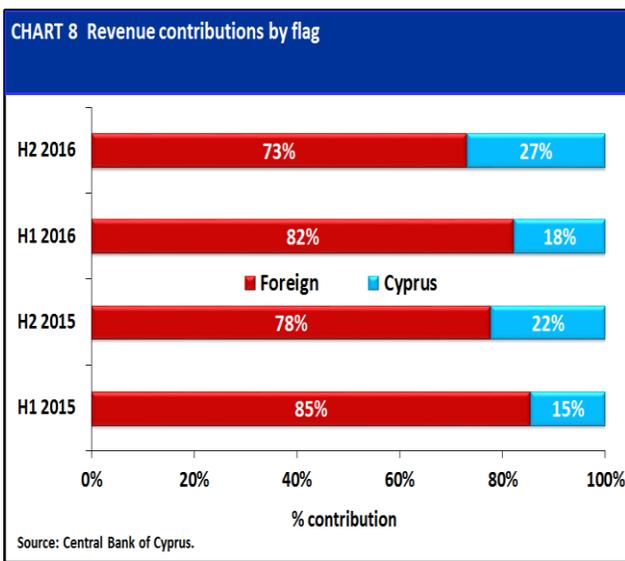
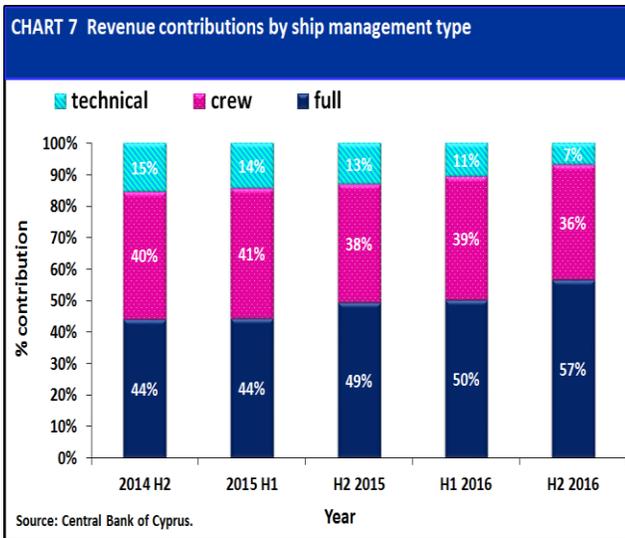
Germany remains the most important contributor in this category, accounting for 46% of the revenues.



The revenue shares associated with the three main types of ship management services are depicted in **Chart 7**. When compared with the first half of 2016, the respective shares of the three segments changed, despite the fact that their ranking remained the same. These changes are in line with the trend observed during the last two years, suggesting a specialisation of the industry in full management services:

- Full management services (consisting of both technical and crew management contracts) increased further to 57% of total revenues during the second half of 2016.
- In contrast, there were declines in the shares of crew and technical management services to 36% and 7% respectively.

stabilisation", *Journal of Applied Statistics* (forthcoming). <http://www.tandfonline.com/doi/full/10.1080/02664763.2016.1260096>



The industry's revenues based on the flag registration of the ships managed are decomposed in **Chart 8**. Flags associated with open registries provide ship owners with considerable advantages in terms of the legal and regulatory framework surrounding ship operations (e.g. crew recruitment, crew training, safety of the seafarers and environmental protection policies) and exert considerable influence on the cost of ship management operations.

Despite a reduction during the first half of 2016, the provision of services to ships carrying the Cyprus flag

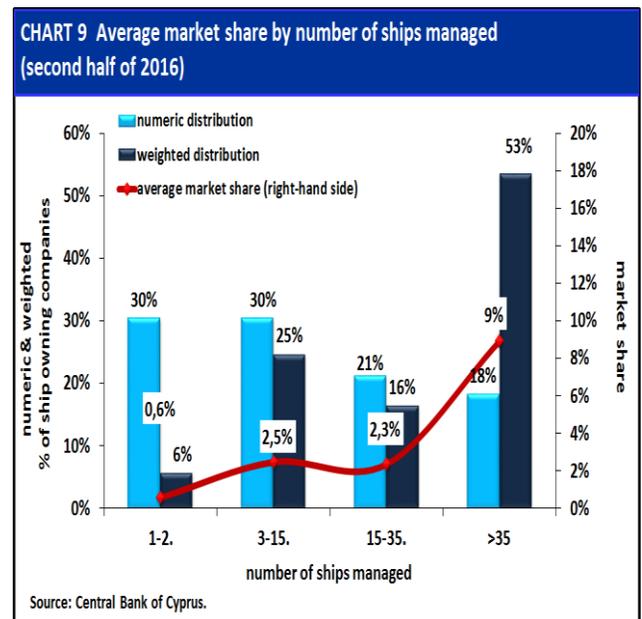
increased to 27% of the total revenues during the second half of 2016.

3. COUNTRY PORTFOLIOS

Chart 9 examines graphically the relationship between number of ships managed and market share (in ship management revenues), during the second half of 2016. The horizontal axis is segmented into four different size ranges (groups) in ascending order. Specifically, ship management companies that managed:

- (i) between 1 and 2 ships
- (ii) between 3 and 15 ships
- (iii) between 15 and 35 ships
- (iv) more than 35 ships.

The vertical axis on the left-hand side of the chart, measures the numeric and weighted distribution of each group of companies. The right-hand vertical axis measures the average market share in each group.



Companies managing between 1 and 2 ships, accounted for 30% of the total population of ship management companies but generated only 6% of the industry's revenues. The average company

market share in this group for the period under consideration was 0,6%.

Companies managing between 3 and 15 ships, accounted for 30% of the population of ship management companies, generated 25% of the industry’s revenues and scored an average share of 2,5%.

The last two segments (15-35 and >35) correspond to companies with a higher number of managed ships per period. Specifically, 21% of these companies managed between 15 and 35 ships during the second half of 2016 and claimed 16% of the industry’s revenues. The average market share in this group was 2,3%. A large number of ships (in excess of 35) were managed by only 18% of the companies but accounted for 53% of the total revenues.

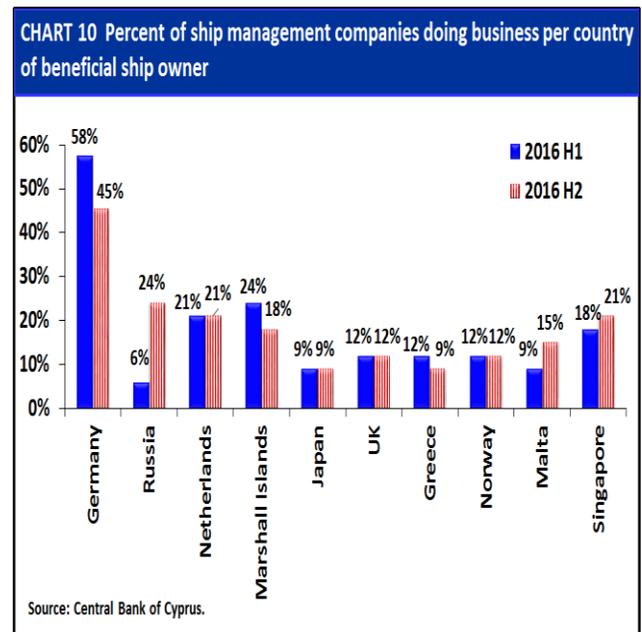
It is worth noting that economic conditions in shipping vary by market segment, with different exogenous and endogenous factors influencing the level of demand in each segment. As a result, not all segments exhibit strong correlation with the phase of the business cycle:

- Reductions in prices and freight rates have been most prominent in the dry-bulk (e.g. iron-ore and coal) and container shipping segments, both of which are proxies for global trade growth. This is in line with the “slow trade” phenomenon.
- In the tanker market, rates have remained at comparatively higher levels, despite the uncertainty associated with the changes in the price of crude oil.

Accordingly, ship management revenues should be expected to vary with the type of vessel (containers, bulk curries, tankers) under management.

Chart 10 illustrates the geographic expansion of the industry. It includes information concerning the

number of ship management companies that provide services in countries with competitive shipping registries and a previous record of cooperation with the local ship management industry. Each country bar in the chart designates the percentage of Cyprus registered ship management companies providing services in that specific country. For comparison purposes, the results of the last two periods are included in the chart.



The percentage of companies offering services to German ship owners dropped to 45%. Other noticeable countries include Russia (24%), the Netherlands (21%) and Singapore (21%). Few companies provided services in the other countries. International expansion to more countries will increase revenues but also help diversify the portfolio of projects in the industry.

4. SHIP MANAGEMENT EXPENSES

Chart 11 provides information regarding the level of cross-border expenses associated with the operations of the ship management industry. Cumulative industry expenses increased further to €455 million during the second half of 2016, which is

in line with the increase in revenues reported in **Chart 1**. It is also one of the highest levels recorded in recent years. The increase was mostly in the form of administrative expenses as well as expenses related to technical operations.

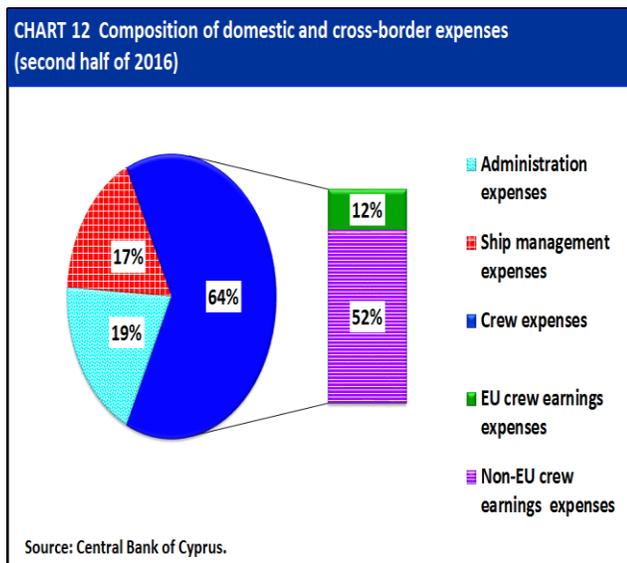
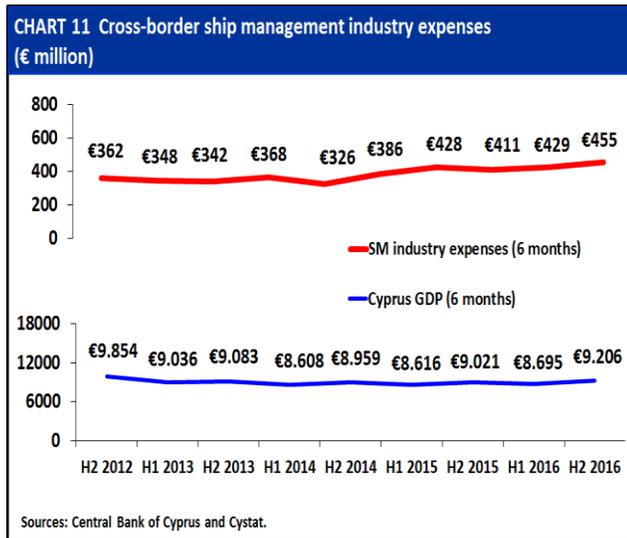


Chart 12 depicts the main categories of expenses alongside their percentage contributions. The largest category, crew expenses, accounted for 64% of the total amount, administration expenses for 19% and ship management expenses (e.g. spare parts, lubricants, dry-docking, etc.) for 17%. Crew expenses

consisted mostly of payments to seafarers from countries outside the European Union (52%) such as the Philippines, Ukraine and Russia.

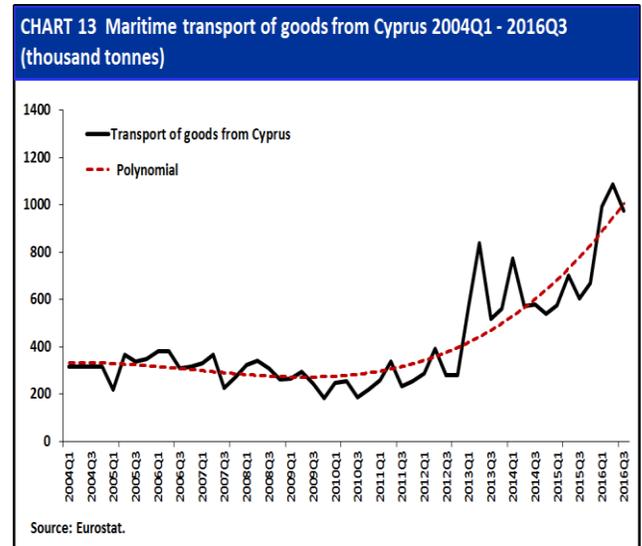


Chart 13 supplements the analysis provided in **Chart 5**, with time series information concerning the maritime transport of goods departing from Cyprus. It can be used as a proxy for the number of ships departing from Cyprus’s ports and their associated ship management expenses. There is still a noticeable increase in the general trend of the series, which began in 2013. It suggests an increase in the provision of merchanting and transport related services, which are correlated with the provision of ship management services.

APPENDIX: SHIP MANAGEMENT SURVEY

The Ship Management Survey is conducted biannually by the External & General Economic Statistics Section of the CBC's Statistics Department. The survey was launched in March 2009 and covers residents of Cyprus who provide ship management services to ship owning companies registered both in Cyprus and abroad.

The survey collects data from a representative sample of financial transactions (revenues and expenses) carried out between resident ship management companies and non-residents of Cyprus. In particular, the survey requires, among other things, the submission of:

1. Revenues by type of service provided to non-resident ship owning companies.
2. Revenues received from non-resident ship owning companies, by country from where the revenue is derived.
3. Revenues by country of flag registration of the ships whose ship management is performed by the resident ship management companies.
4. Revenues by country of residence of the ship owner, whose ships are managed by the resident ship management companies.
5. Payments made by resident ship management companies, by country of residence of the recipient.

The results of the survey include additional economic analysis, such as:

- Size of the ship management industry as a percentage of the Cyprus GDP (not in value added terms but as turnover).
- Level of concentration in the industry.
- The size of client portfolios of the ship management companies.
- Percentage of resident ship management companies which operate in different countries (analytically by country).
- Magnitude of total expenses in the industry.