



SHIP MANAGEMENT SURVEY

July – December 2018

INTRODUCTION

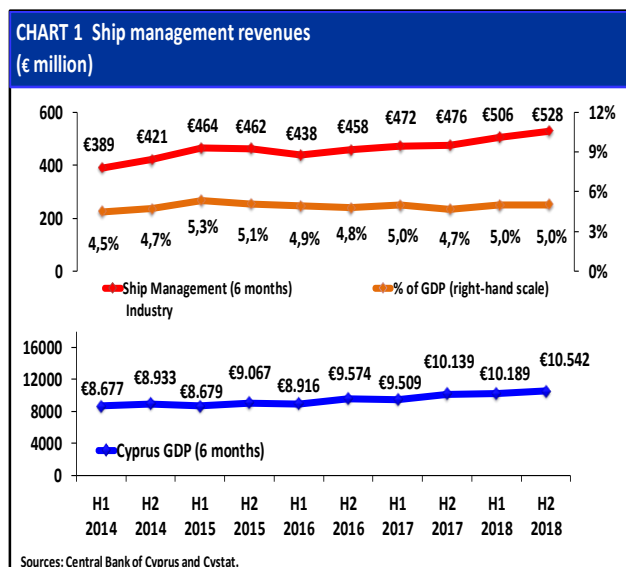
The *Ship Management Survey* (SMS) is conducted by the Statistics Department of the Central Bank of Cyprus and concentrates primarily on transactions between resident ship management companies and ship owning/shipping related entities¹.

1. SHIP MANAGEMENT REVENUES FROM NON-RESIDENTS

The ship management revenues claimed from ship owning/shipping related entities increased further during the second half of 2018 (2018H2), closing at €528 million or 5% of Cyprus’s GDP (**Chart 1**). This percentage is similar to the one recorded during 2018H1, since there was a simultaneous increase in the GDP of Cyprus during 2018H2.

The global shipping industry is currently in a transition state following a series of consolidations, corporate restructures and state funding schemes in key maritime markets. The container and dry bulk shipping markets in particular are currently going through a period of stagnation due to increasing fuel prices, a weakening of global trading conditions and the uncertainty surrounding the US-China trade negotiations. In contrast, conditions are improving in the ship building market due to the fact that new orders are being placed in key ship building industries

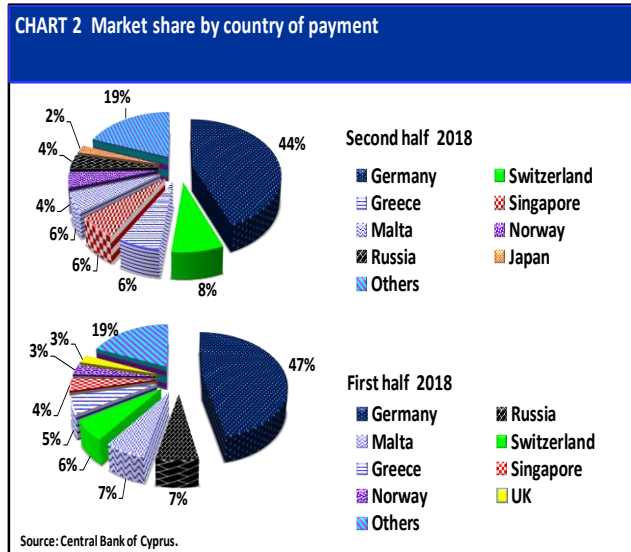
and the over-capacity observed during the previous years is gradually being reduced.



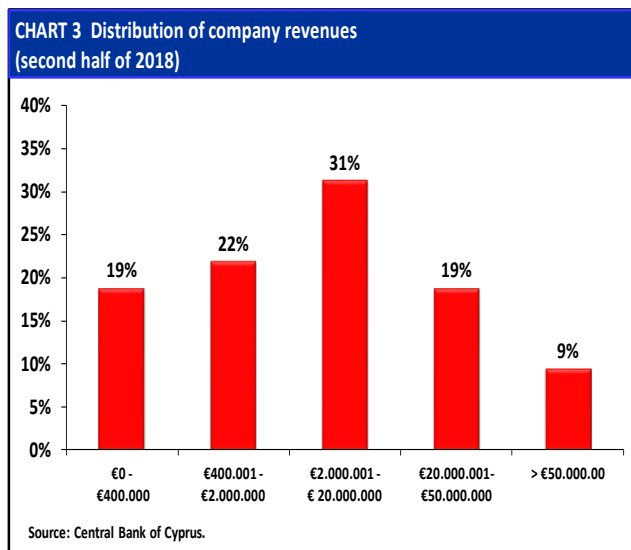
Furthermore, competition is expected to increase in the labour intensive ship building industry, particularly in light of the new environmental standards that will be enforced by the International Maritime Organization in 2020. These standards will concern fuel emissions and environmental pollution. Demand is expected to shift towards more energy-efficient and eco-friendly ships, which require superior technological capabilities on the part of the ship builders. It is, therefore, expected that the new regulations will benefit those ship building

¹ Please refer to the Appendix for more details.

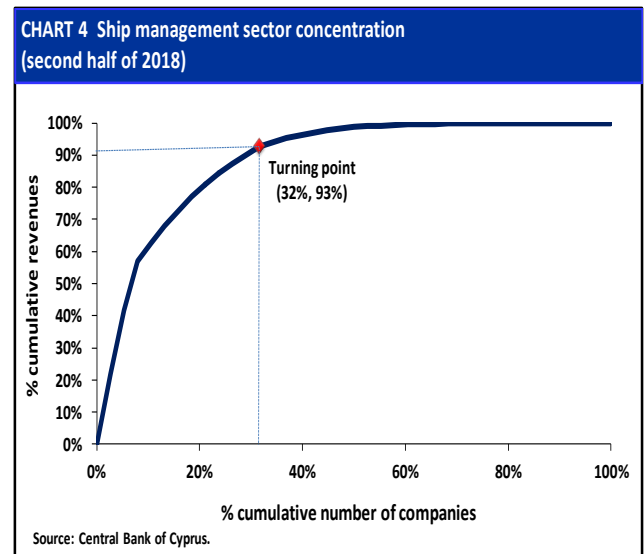
companies that are better prepared to deliver high-end, technologically advanced vessels. Similarly, ship management companies will need to adapt quickly to the upcoming changes.



In **Chart 2** the industry’s revenues are decomposed by country of payment. The share of revenues originating from Germany decreased from 47% in 2018H1 to 44% in 2018H2. However, at the same time an increase was recorded in the corresponding contributions from Switzerland and Singapore.



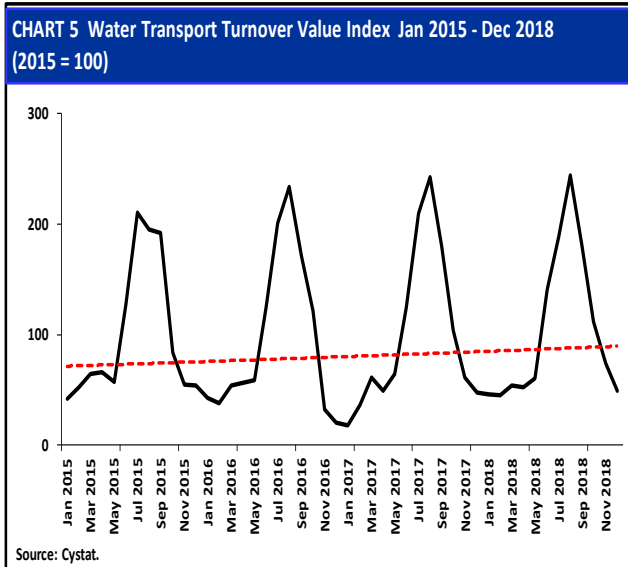
In **Chart 3**, the ship management companies are classified into non-overlapping revenue segments, as depicted on the horizontal axis. The vertical axis measures the percentage of companies belonging to each segment size. During the period under review, 31% of the companies managed to generate revenues in the range of €2 million - €20 million each, with an additional 28% of the companies exceeding the €20 million benchmark.



The level of concentration in the ship management industry is depicted in **Chart 4**, where the companies are ranked in terms of their revenue size. The horizontal axis depicts, in percentage terms, the largest companies while the vertical axis measures the respective (cumulative) percentage revenue contribution of the companies. The turning point indicates the presence of a small number of large companies that dominate the industry. Specifically, the top 32% of the companies accounted for 93% of the industry’s revenues.

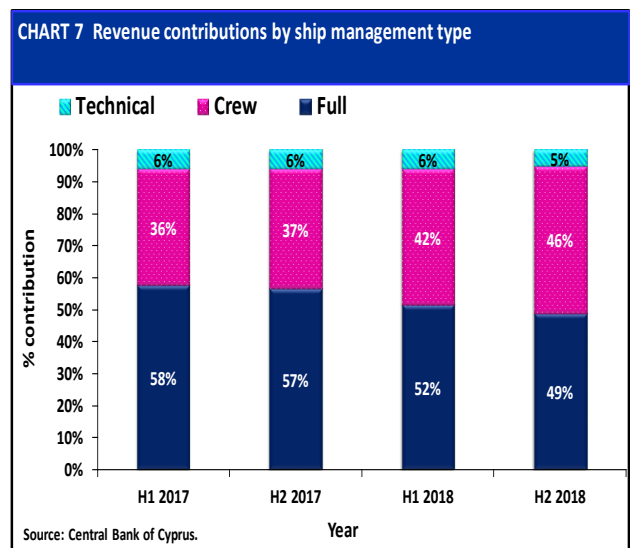
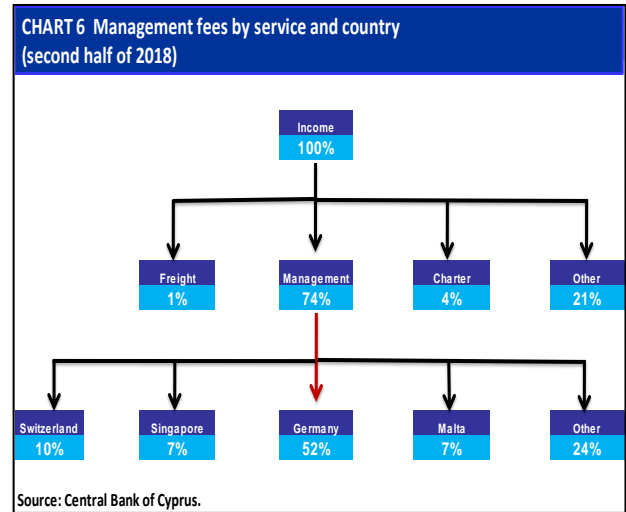
Chart 5 depicts Cyprus’s water transport turnover value index that is compiled based on the NACE Rev. 2 classification system. The index covers the period Jan 2015 – Dec 2018 and, among other activities (e.g. towing or pushing boats and cruises), it includes the

transport of passengers or freight over water. The chart also includes a smoothing estimate (dashed line) generated using statistical methods that better reflect the underlying core trend in the series². The index is characterised by strong seasonality and a relatively stable trend, which highlights the need for new growth opportunities and investments in the industry.



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. Ship management services encompass crew, technical and full management operations, and accounted for 74% of the industry’s revenues during the period under review. The main source countries associated with these ship management revenues are provided in the second level of the tree diagram. Germany remains the most important source with 52% contribution, followed by Switzerland with 10%.



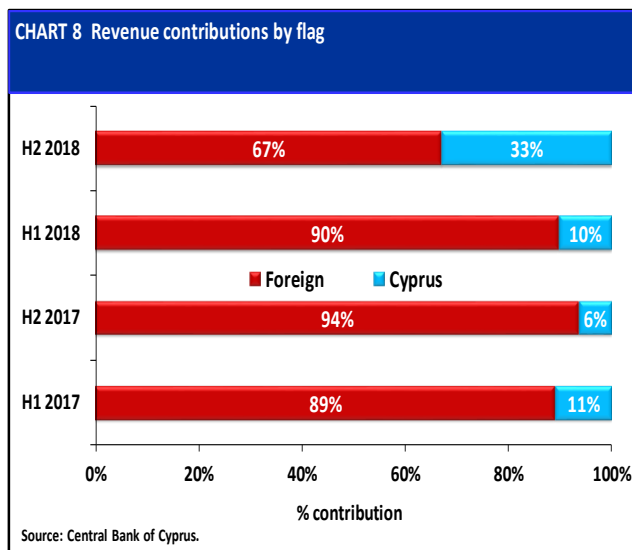
The three main types of ship management operations and their contributions are depicted in **Chart 7**. Crew management services increased further to 46% of the total amount of ship management revenues in 2018H2. During the same period, the revenues collected from full-management contracts accounted for 49% of the ship management revenues,

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

stabilisation", *Journal of Applied Statistics* 44 (15): 2672-2684, 2017. <http://www.tandfonline.com/doi/full/10.1080/02664763.2016.1260096>

highlighting a decreasing trend for this segment since 2017H1.

In **Chart 8** the industry’s revenues are decomposed by flag registration. The choice of flag is a strategic decision in ship owning operations, particularly in the case of open registries that provide ship owners with considerable advantages in terms of the legal and regulatory framework surrounding ship operations. The share of revenues collected from the provision of ship management services to ships carrying Cyprus’s flag, increased considerably to 33% of the total revenues during 2018H2. It was only 10% in 2018H1.



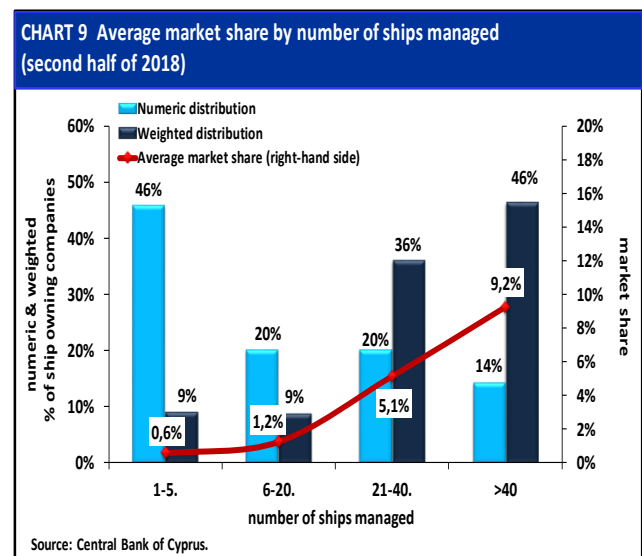
3. COUNTRY PORTFOLIOS

Chart 9 examines the relationship between the number of ships managed and the market share of ship management revenues during 2018H2. The horizontal axis is segmented into four different size ranges (groups) in ascending order. Specifically, ship management companies that manage:

- (i) between 1 and 5 ships
- (ii) between 6 and 20 ships
- (iii) between 21 and 40 ships
- (iv) more than 40 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 5 ships accounted for 46% of ship management companies but generated only 9% of the industry’s revenues. The average company market share in this group was 0,6%. Companies managing between 6 and 20 ships accounted for 20% of ship management companies, generated 9% of the industry’s revenues and scored an average share of 1,2%.

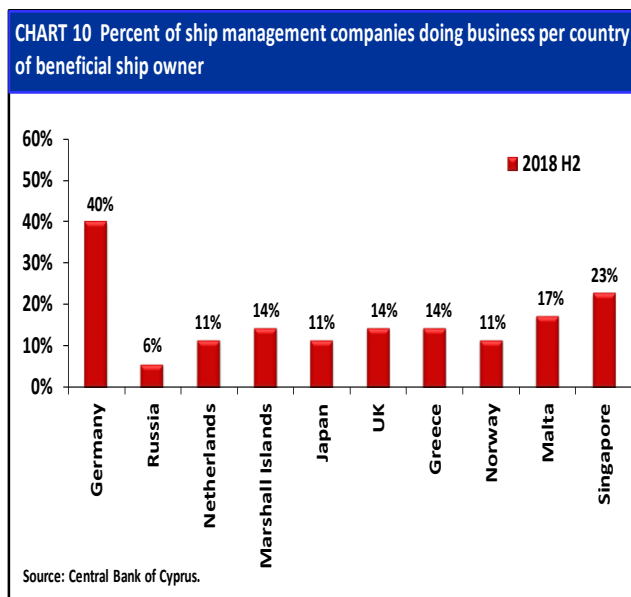


The last two segments (21-40 and >40) correspond to companies with a higher number of managed ships per period. Specifically, 20% of these companies managed between 21 and 40 ships during 2018H2 and claimed 36% of the industry’s revenues. A large number of ships (in excess of 40) were managed by only 14% of the companies but accounted for 46% of the total revenues. The average market share in this group was 9,2%.

Chart 10 illustrates the geographic coverage of the services provided by the local 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.

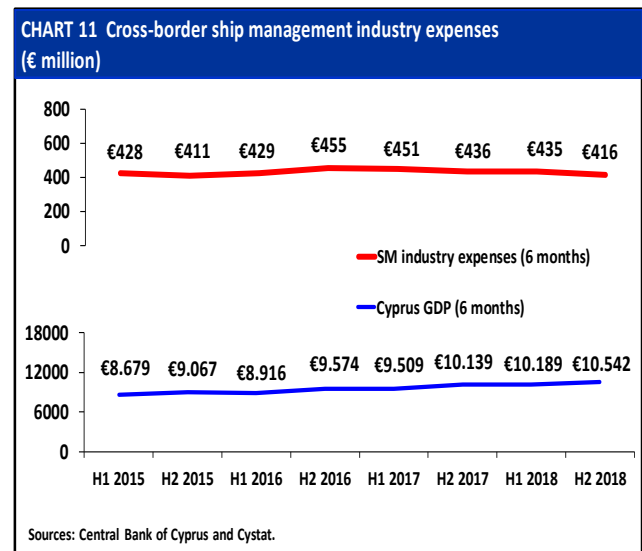
A large number of companies maintain business links with ship owners in Germany (40%). With the exception of Singapore (23%), the level of participation in all other countries remains below the 20% threshold. Strategically, the industry should aim to increase its network of operations to more countries that are traditionally linked with a sizeable maritime transport 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 in Cyprus. Industry expenses dropped to €416 million in 2018H2, which, combined with the increase in revenues in **Chart 1**, suggests an improvement in net income from operations. In addition to the risks facing the maritime sector, as outlined in Section 1, it

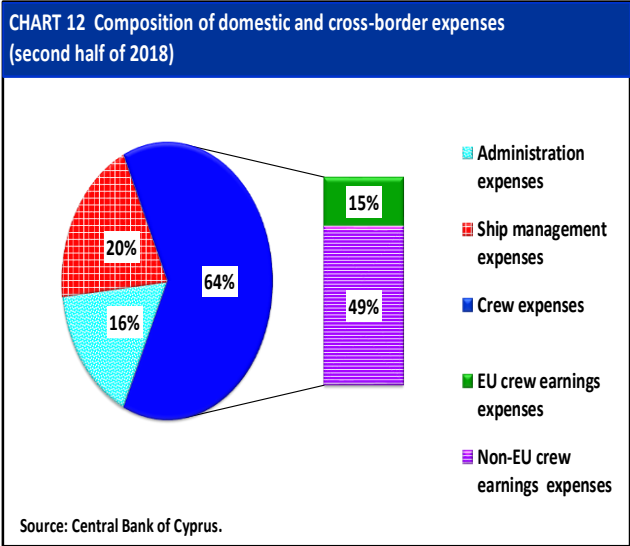
is also important to acknowledge and prepare for some additional potential risks that might affect the industry in the future. This could include, for example, increased volatility in exchange rates and changes in the competitive balance of the industry, due to the forthcoming changes in fuel emission standards and environmental regulations.



The main categories of expenses incurred in the industry are depicted in **Chart 12**. The majority of these concern crew expenses, which accounted for 64% of the total amount in 2018H2. Most of these payments were directed to non-EU seafarers (49%). Administration expenses accounted for 16% and ship management expenses (e.g. spare parts, lubricants, dry-docking, etc.) for 20% of the total amount.

In January 2020, the International Maritime Organization will introduce a new regulation according to which all vessels will be required to reduce the sulphur content of their fuels from 3,5% to 0,5%. Currently the shipping industry is among the biggest polluters in global trade, since it contributes around 3% of the world’s fuel emissions. This is due to the use of bunker fuel (a crude oil residue) which is dirtier than petrol and diesel. Alternative, fuel-saving technologies include liquefied natural gas and

the installation of “scrubber” technology to clean the bunker fuel on-board.



Currently, there are also research efforts underway to investigate innovative technologies that can be used in vessel propulsion, like for example: the use of hydrogen in fuel cells, biofuels, nuclear power, the use of propulsion batteries or even hybrid technologies. The transition to new technologies in the future is expected to raise costs, primarily for ship owners but also for ship managers. It is something that needs to be planned well in advance, bearing in mind that the average life of most vessels ranges between 20 and 25 years. Finally, even more regulations are anticipated in the long-term concerning carbon-dioxide emissions, beginning with a 30% reduction by 2030 and a 70% reduction by 2050.

APPENDIX: SHIP MANAGEMENT SURVEY

The *Ship Management Survey* (SMS), which was launched in March 2009, is conducted biannually by the External, Economic and Government Finance Section of the CBC's Statistics Department and is addressed to resident ship management companies who provide relevant services to ship owning companies, both resident and non-resident.

Through the SMS, the CBC collects data from a representative sample of financial transactions, which, *inter alia*, include:

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.

Moreover, the SMS includes additional variables, which enable the carrying out of economic analysis as regards the following:

- Size of the ship management industry as a percentage of Cyprus GDP (not in value added terms but as turnover).

- Level of concentration in the industry.
- The size of client portfolios of ship management companies.
- Percentage of resident ship management companies which operate in different countries (analytically by country).
- Magnitude of total expenses in the industry.