



SHIP MANAGEMENT SURVEY

Jul – Dec 2019

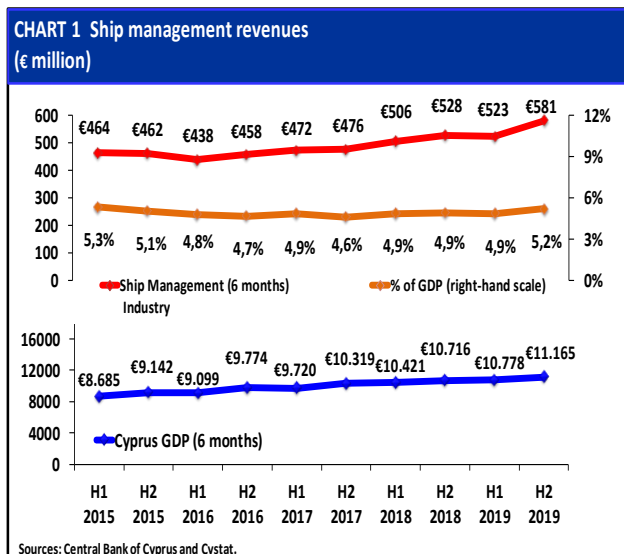
INTRODUCTION

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.

This edition of the survey report concentrates on the period between July and December 2019, which preceded the outbreak of the Coronavirus pandemic that started in 2020. Consequently, it does not contain any information concerning the impact of the pandemic Covid-19 on the ship management industry. We reserve this analysis for future editions of the report, as more information and data from the shipping markets become available.

1. SHIP MANAGEMENT REVENUES FROM NON-RESIDENTS

Cyprus's ship management revenues increased to €581 million during the second half of 2019 (2019H2), (Chart 1), which corresponded to 5,2% of Cyprus's GDP (as turnover). During the three previous periods, the revenues corresponded to merely 4,9% of the country's GDP. This is in line with the relatively good performance of the industry during the period 2018H1 – 2019H1, which on average exhibited higher revenues per period compared with 2016 and 2017.



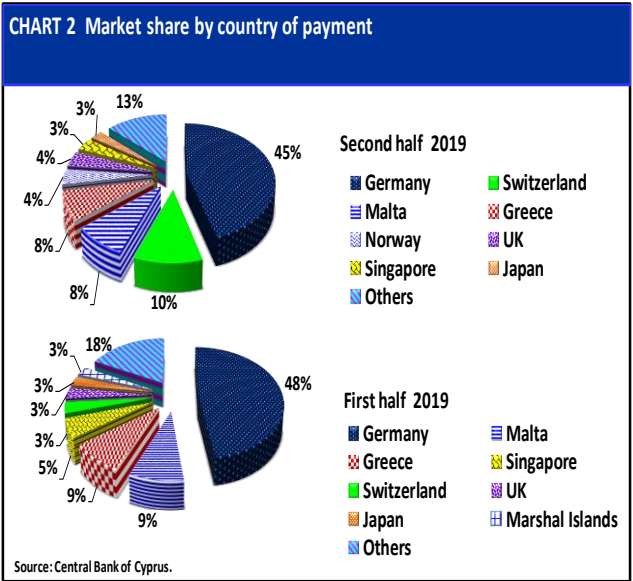
During the second half of 2019, the shipping sector globally continued to face several challenges that derived from changes in shipping environmental regulations. The most important of these changes concerned reductions in the use of fossil fuels, which are expected to influence several aspects of seaborne trade, like for example:

- A possible reduction in the total value of seaborne trade associated with oil and liquefied natural gas.
- A possible reduction in the values, profitability and fleet size associated with oil tankers.

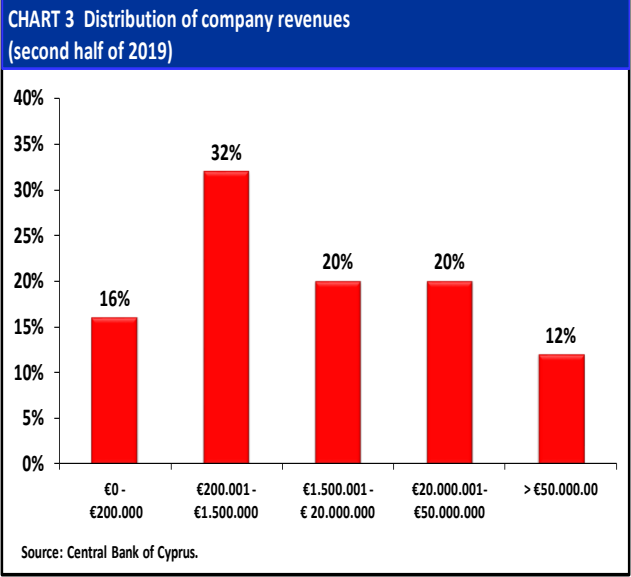
¹ Please refer to the Appendix for more details.

In contrast, bulk carriers and container ships are more robust to these changes, since they can also be used for transferring substitute commodities.

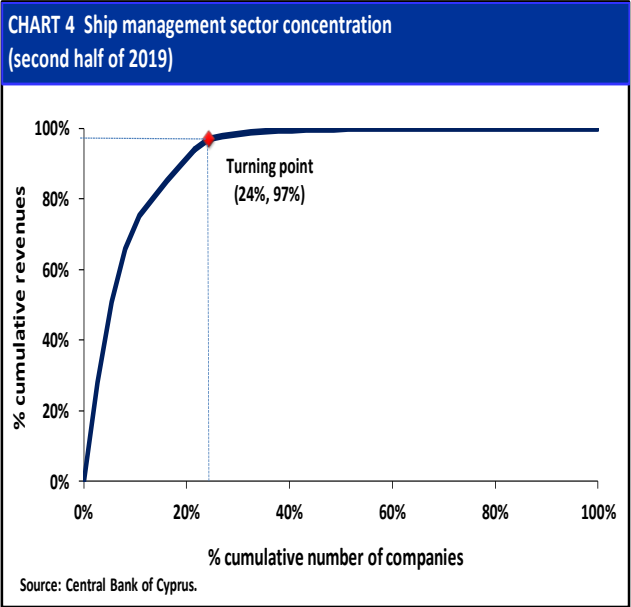
A key factor regarding the future development of seaborne trade and its affiliated industries, like ship management operations, concerns developments in the US economy. Historically, consumer spending and increasing demand in the US have exerted considerable influence on seaborne trade, especially during periods of trade liberalisation and lower tariffs. Possible negative developments in the US economy, like for example a slowing down of manufacturing growth and a continuation of the tariff war with China, should be expected to exert pressure on shipping markets.



In **Chart 2** the industry’s revenues are decomposed by country of payment. There was a decline in Germany’s contribution to the industry’s revenues, from 48% in 2019H1 to 45% in 2019H2. In addition, there was also a considerable increase in the revenue share from Switzerland, from 3% of the total revenues in 2019H1 to 10% in 2019H2.



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. It can be observed that 52% of the companies managed to generate revenues in the range of €0,2 - €20 million each, while only 12% of the companies managed to generate more than €50 million revenues.



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 24% of the companies accounted for 97% of the industry’s revenues during 2019H2, which suggests that concentration in the industry increased when compared with 2019H1 (the respective turning point during the previous period was at: 30%, 93%).

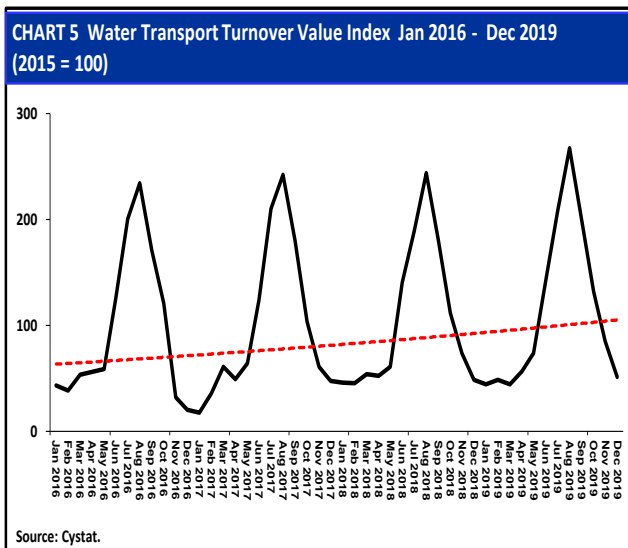
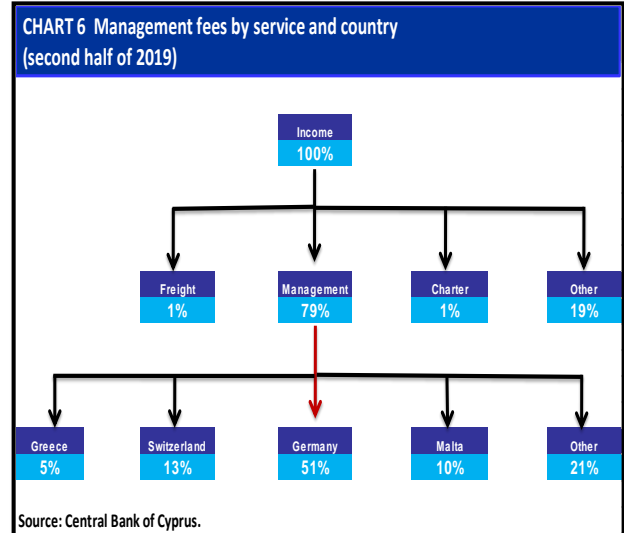


Chart 5 depicts Cyprus’s water transport turnover value index that is compiled using the NACE Rev. 2 classification system. The index covers the period January 2016 – December 2019 and, among other activities (e.g. towing or tag boats and cruises), it includes the transport of passengers or freight over water. The chart also includes a smoothing estimate (dashed line) generated using statistical methods that better reflects the underlying core trend in the

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

series². The index is characterised by a strong seasonality pattern and a slightly increasing trend, which suggests small gradual improvements in the annual values of the index.



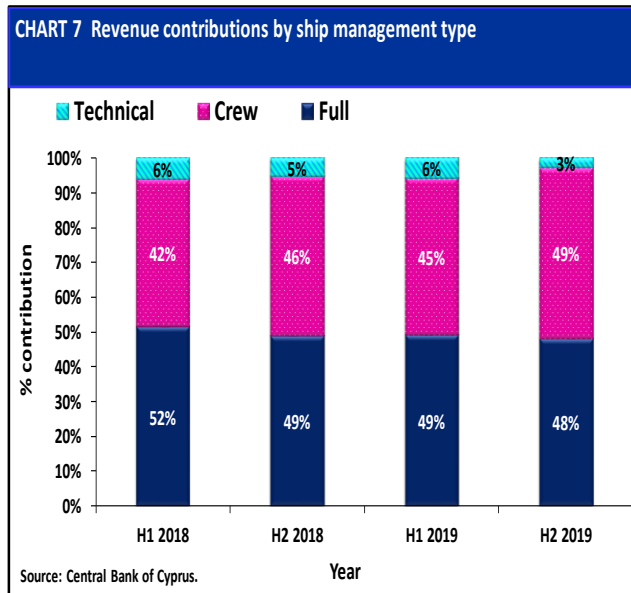
2. SHIP MANAGEMENT SERVICES

In **Chart 6** the industry’s revenues are decomposed using a tree diagram, which classifies revenues by type of ship management service and country of payment. Core ship management services (which encompass crew, technical and full management operations) accounted for 79% of the industry’s revenues during the period under review (during the previous period 2019H1 it was 83%). 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 in this segment, with a contribution of 51%, followed by Switzerland with 13%.

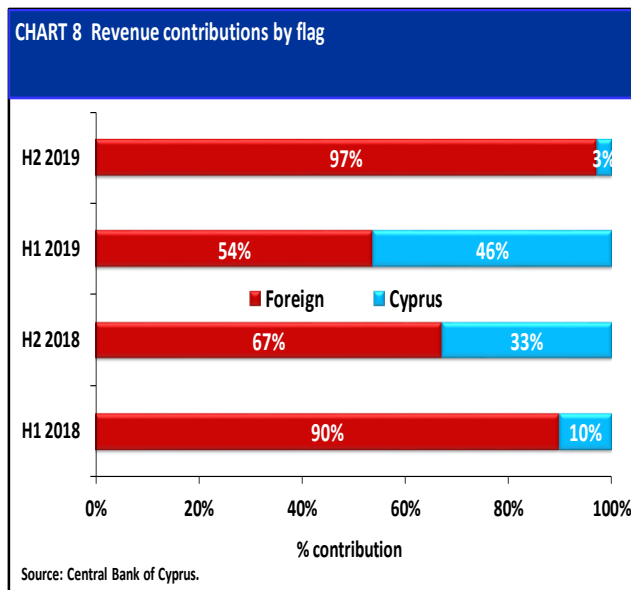
The three main types of ship management operations and their contributions are depicted in **Chart 7**. Crew management services increased slightly to 49% of the

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

total amount of ship management revenues in 2019H2, while full-management services declined marginally to 48%.



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.



There was a noticeable change in the composition of revenues by flag registration in 2019H2. The share of revenues collected from the provision of ship management services to ships carrying Cyprus’s flag, decreased sharply from 46% of the total revenues in 2019H1 to 3% of the total revenues in 2019H2. Even though there was a significant change in the structure of revenues during the period 2018H2 – 2019H1, the results for 2019H2 suggest a return to the flag contributions recorded 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 2019H2. The horizontal axis is segmented into four different size ranges (groups) in ascending order. Specifically, ship management companies that manage:

- (i) between 1 and 4 ships
- (ii) between 5 and 20 ships
- (iii) between 21 and 50 ships
- (iv) more than 50 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 4 ships accounted for 46% of ship management companies but generated only 1% of the industry’s revenues. The average company market share in this group was 0,1%. Companies managing between 5 and 20 ships accounted for 25% of ship management companies, generated 14% of the industry’s revenues and scored an average share of 2%.

The last two segments (21-50 and >50) correspond to companies with a higher number of managed ships per period. Specifically, 18% of these companies managed between 21 and 50 ships during 2019H2

and claimed 49% of the industry’s revenues. A large number of ships (in excess of 50) were managed by only 11% of the companies but accounted for 36% of the total revenues. The average market share in this group was 12%.

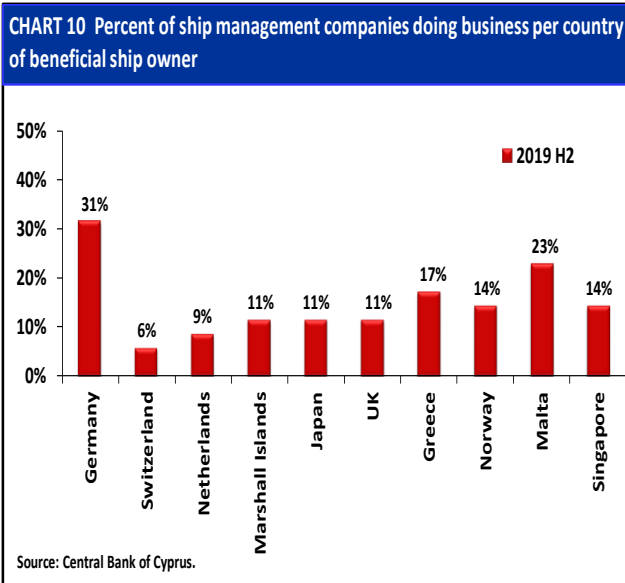
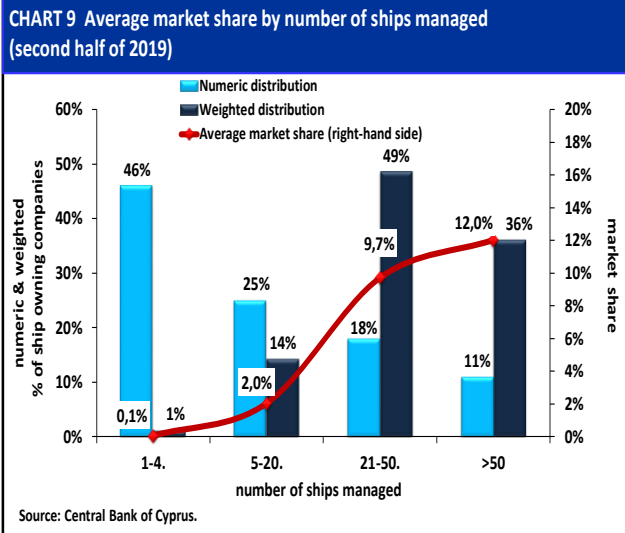


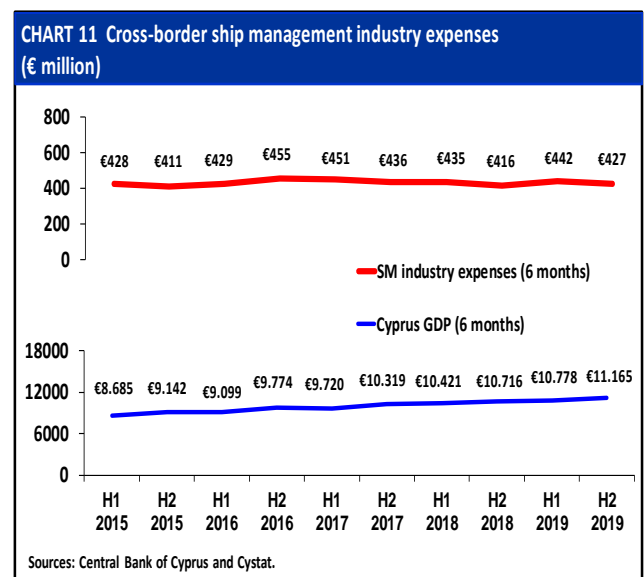
Chart 10 illustrates the geographic coverage of the services provided by the local industry. It includes information concerning the number of ship management companies that provide services in countries with competitive shipping registries and a previous record of cooperation with the local ship

management industry. Each country bar in the chart designates the percentage of Cyprus registered ship management companies providing services in that specific country.

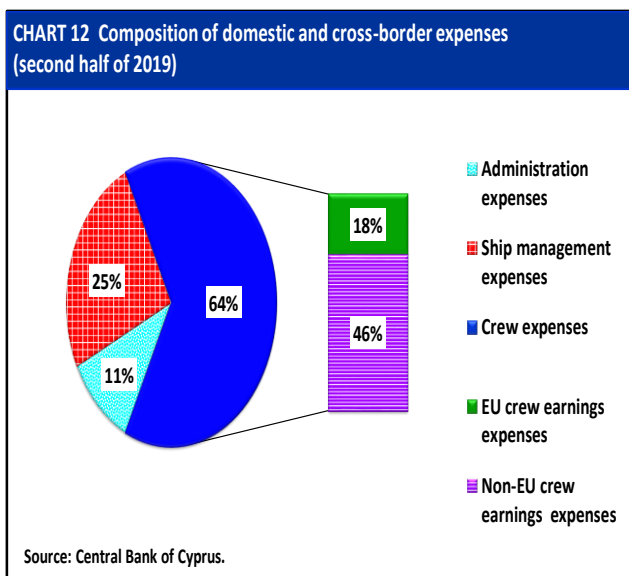
Similarly with previous periods, a large number of companies maintain business links with ship owners in Germany (31%), despite a reduction when compared with 2019H1 (37%). With the exception of Malta (26%) and Greece (17%) the level of participation in all other countries remains below the 15% threshold. Strategically, the industry should aim to increase its network of operations to more countries that are traditionally linked with a sizeable maritime transport industry, like for example Singapore, Switzerland, Denmark and Russia.

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 decreased to €427 million in 2019H2. When combined with the increase in revenues depicted in **Chart 1**, this development suggests a potential increase in the profitability of the industry during the period under consideration.



The main categories of expenses incurred in the industry are depicted in **Chart 12**. Historically, the industry exhibits a relatively stable structure of expenses. The majority of these concern crew expenses, which accounted for 64% of the total amount in 2019H2, as was the case in 2019H1. Most of these payments were directed to non-EU seafarers (46%). Administration expenses accounted for 11% and ship management expenses (e.g. spare parts, lubricants, dry-docking, etc.) for 25% of the total amount.



A change in the structure and level of revenues can result from vessel fleet changes, caused by the introduction of the new emissions regulations. Many industry experts expect that the new regulations will force ship owning companies to scrap several of their older vessels and gradually replace them with new, state of the art vessels that are designed to comply with the new standards.

Possible additional changes associated with vessel operations and expenses concern the installation of exhaust scrubbers and the switch to low-sulphur fuels that should be expected to increase the cost of fuels to ship owners significantly. These

developments can also introduce significant volatility in chartering rates, particularly for oil tankers.

Another source for increasing ship management costs could be the extensive use of “slow-steaming” by ship owners. Slow-steaming is implemented by ocean going vessels, like tankers and bulk carriers, with the purpose of cutting emissions and therefore, reducing the greenhouse gases associated with the shipping sector.

This is an interim solution implemented by ship owners but tends to be associated with two important side effects:

1. Vessels have to stay longer at sea, thus increasing their operational expenses.
2. It reduced vessels carrying capacity, which most commonly results into longer transportation periods and higher transportation costs for goods.

The proposed short-term measures for the reduction of GHG emissions from ships, currently being discussed at the International Maritime Organization (IMO), may also increase the ship management cost.

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.