



SHIP MANAGEMENT SURVEY

January – June 2017

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 ship owning/shipping related entities¹.

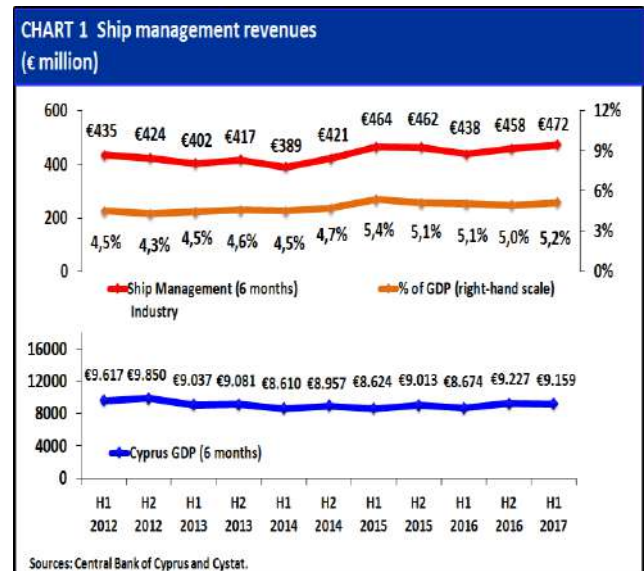
1. SHIP MANAGEMENT REVENUES FROM NON-RESIDENTS

Cyprus's ship management revenues increased by 3% during the first half of 2017 (2017H1), closing at €472 million (**Chart 1**). This is the highest level of revenues recorded since 2010. In terms of turnover it corresponds to 5,2% of Cyprus's GDP, which is 4% higher compared with the second half of 2016 (2016H2).

In **Chart 2**, revenues are decomposed by country of payment. The share of revenues originating from Switzerland and Japan declined, but increased in the case of Russia and the Marshall Islands. Germany remains the main source of revenues for the industry, with a stable share of 39%.

Despite the current subdued growth in trade and the oversupply of vessels, several new developments in the industry point to signs of recovery and stabilisation of the declining trend in freight rates. These include:

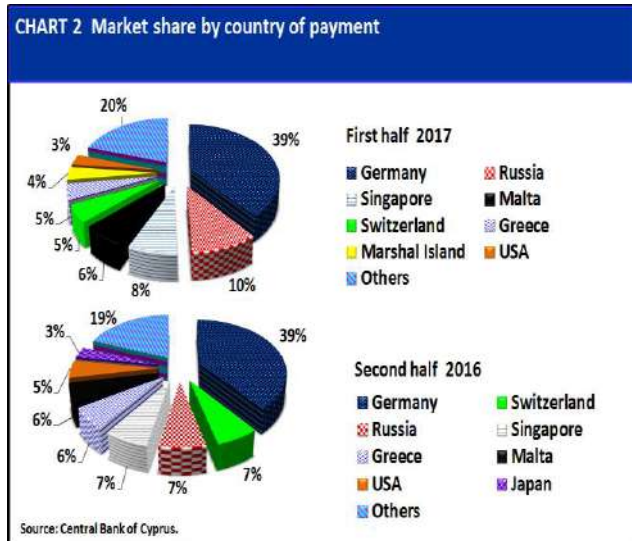
- (i) New sector alliances among the top performing lines in the market
- (ii) A recent rise in the levels of ship scrapping that is expected to reduce the magnitude of vessel oversupply in the market
- (iii) Higher growth rates in emerging markets
- (iv) A recent rise in capsized dry bulk carrier rates (for coal and iron ore), which historically tend to be followed with similar movements in very large crude carrier (VLCC) rates.



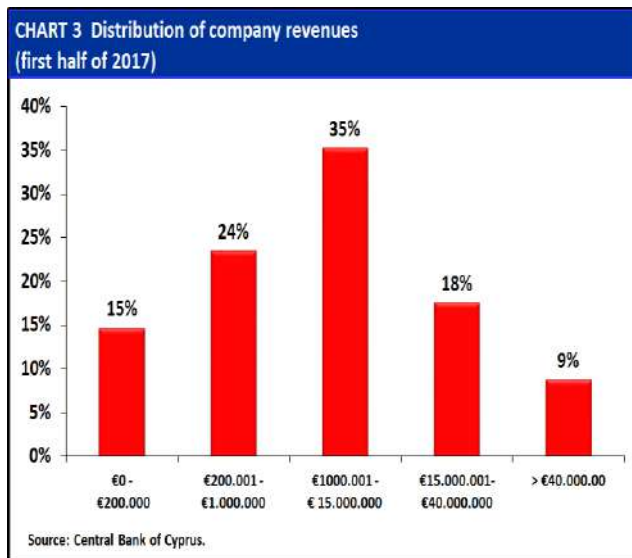
At the same time, it is worth noting that further uncertainty in shipping markets might result from the

¹ Please refer to the Appendix for more details

new pollution rules adopted by the International Maritime Organisation, to be enforced in 2020.

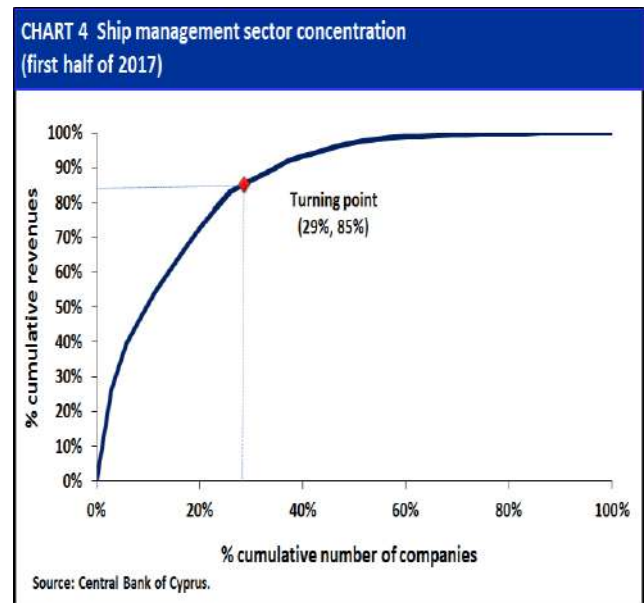


According to the new rules, vessels will be required to switch to more environmentally friendly fuels with a lower sulphur content, from 3,5% to 0,5%, which is expected to increase fuel prices and impose further financial burdens on the industry.



² 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

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. Nearly one third of the companies (35% of the total) generated revenues within the range of €1 - €15 million. At the same time, 39% of the companies generated revenues below the €1 million threshold and only 27% of the companies managed to exceed the €15 million threshold.



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 point² indicates the presence of a small number of large companies that dominate the

number of companies beyond the turning point provides less than a 1% increase in the cumulative revenues of the industry.

industry. Therefore, the top 29% of the companies accounted for 85% of the industry's revenues.

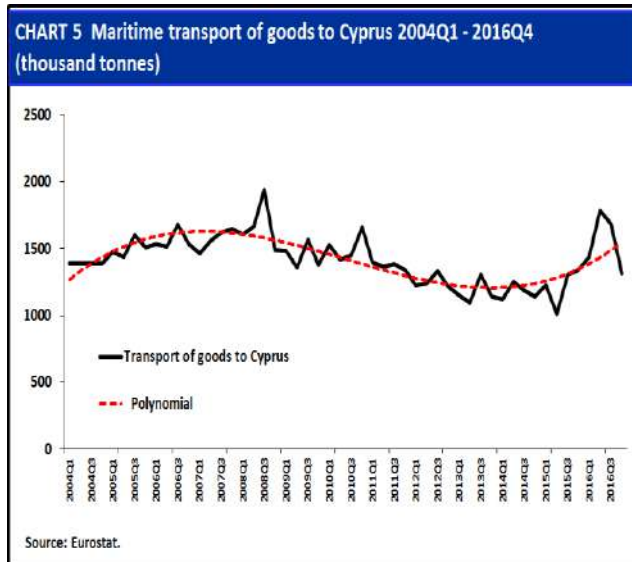
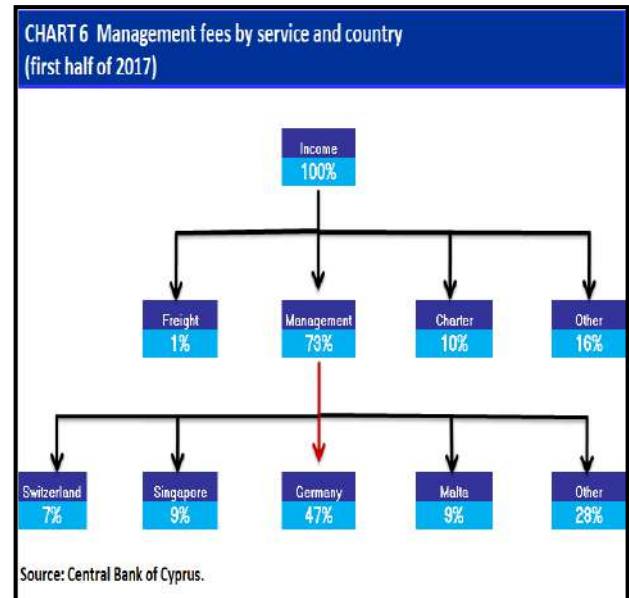


Chart 5 provides time series observations concerning the total volume of maritime transport of goods to Cyprus (in thousand tonnes). The series covers the period 2004Q1 - 2016Q4 and is used as a proxy for the number of commercial ships approaching the ports of Cyprus. It provides an indication of the level of expected demand for services provided locally. The chart also includes a smoothing estimate (dashed line) generated using statistical methods that better reflect the underlying core trend in the series³. There is a notable decrease in volume in the last period (2016Q4), which suggests a reversion to the core trend levels of the previous years.

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 accounted for 73% of the industry's revenues, which is very close to the share reported for the previous period. The second level of the tree diagram splits the ship management revenues by source country, with Germany leading the ranking with 47% of the revenues.



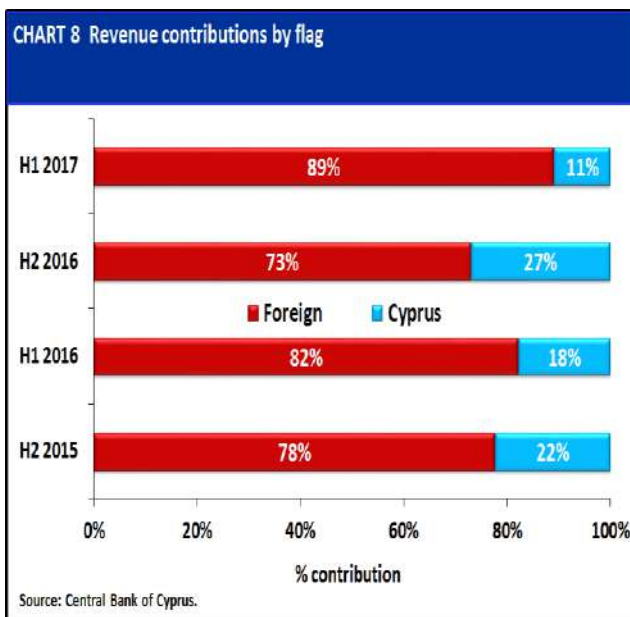
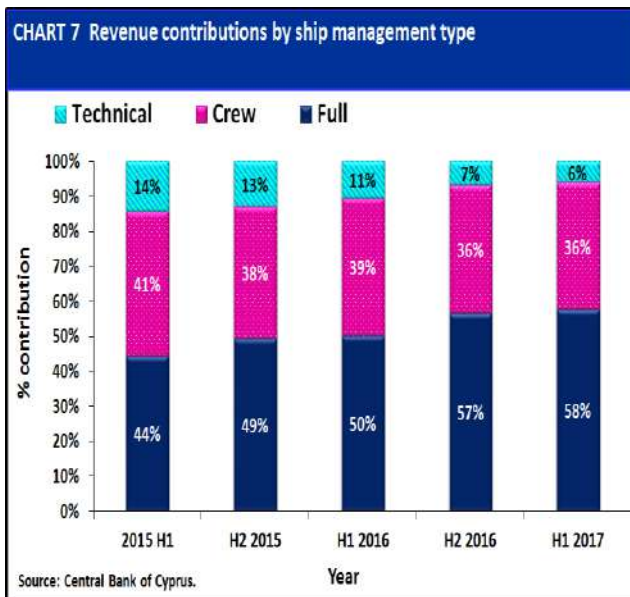
The revenue shares associated with the three main types of ship management operations are depicted in **Chart 7**. Even though the ranking of the three operations has remained stable since the beginning of 2016, some noticeable trends have formed between 2016H1 and 2017H1:

- Full management services (consisting of both technical and crew management contracts) increased steadily from 44% in 2016H1 to 58% in 2017H1.

³For 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>

- In contrast, there has been a decline in the share of technical and crew management services to 6% and 36%, respectively.



The industry's revenues based on flag registration 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 and safety) and exert

considerable influence on the cost of ship management operations.

The provision of services to ships carrying the Cyprus flag decreased to 11% of the total revenues during 2017H1, which is the lowest recorded since 2013.

3. COUNTRY PORTFOLIOS

Chart 9 examines graphically the relationship between number of ships managed and market share of ship management revenues during 2017H1. The horizontal axis is segmented into four different size ranges (groups) in ascending order. Specifically, ship management companies that managed:

- between 1 and 5 ships
- between 6 and 20 ships
- between 21 and 40 ships
- more than 40 ships.

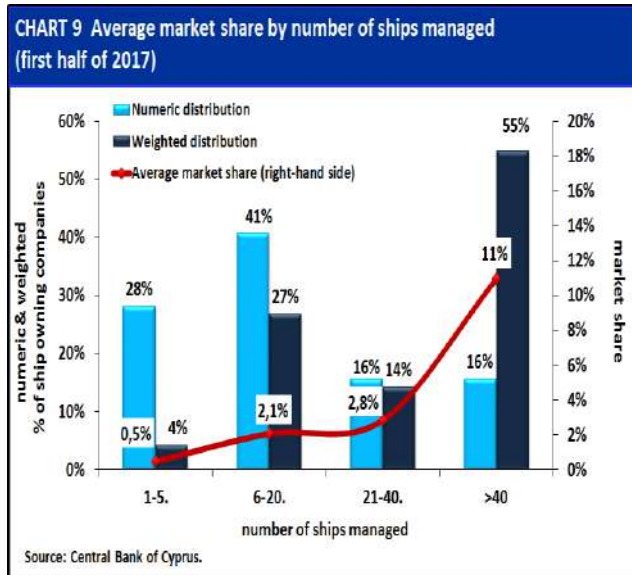
The vertical axis on the left-hand side of the chart, measures the numeric and weighted distribution of each group of companies. The right-hand vertical axis measures the average market share in each group.

Companies managing between 1 and 5 ships, accounted for 28% of ship management companies but generated only 4% of the industry's revenues. The average company market share in this group for the period under consideration was 0,5%.

Companies managing between 6 and 20 ships, accounted for 41% of ship management companies, generated 27% of the industry's revenues and scored an average share of 2,1%.

The last two segments (21-40 and >40) correspond to companies with a higher number of managed ships per period. Specifically, 16% of these companies managed between 21 and 40 ships during 2017H1 and claimed 14% of the industry's revenues. The average market share in this group was 2,8%. A large number of ships (in excess of 40) were managed by

only 16% of the companies but accounted for 55% of the total revenues.

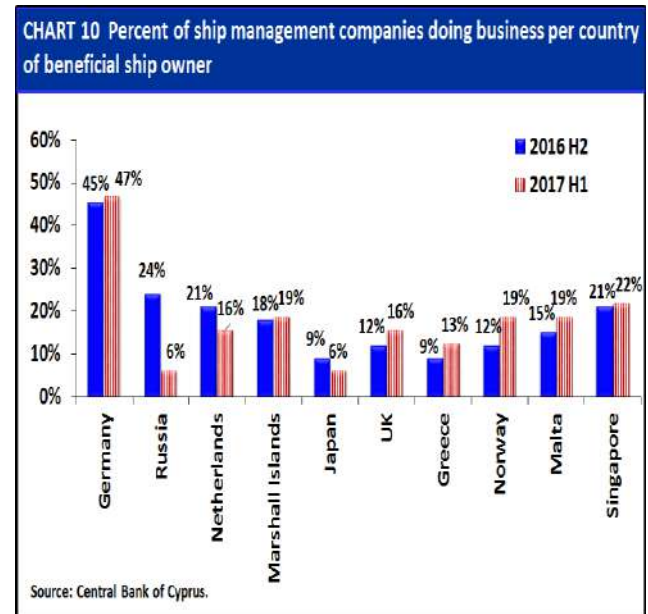


When compared with the previous period, the client portfolios during 2017H1 suggest an improved position and an increase in the provision of services as exhibited in **Chart 1**. While this is in line with some initial positive signs in the international shipping markets, it is worth mentioning that globally the financial position of the shipping sector remains under scrutiny due to several factors. These are:

- A reduction in the volume of maritime loans provided by major German banks (following a series of bad loans).
- The excessive reliance of shipping companies on short-term debt that tends to be associated with a higher cost of capital and capital structure imbalances.
- A reduction in the core capital ratios of banks with shipping loan portfolios, which limits their ability for further financing of the shipping sector.

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.

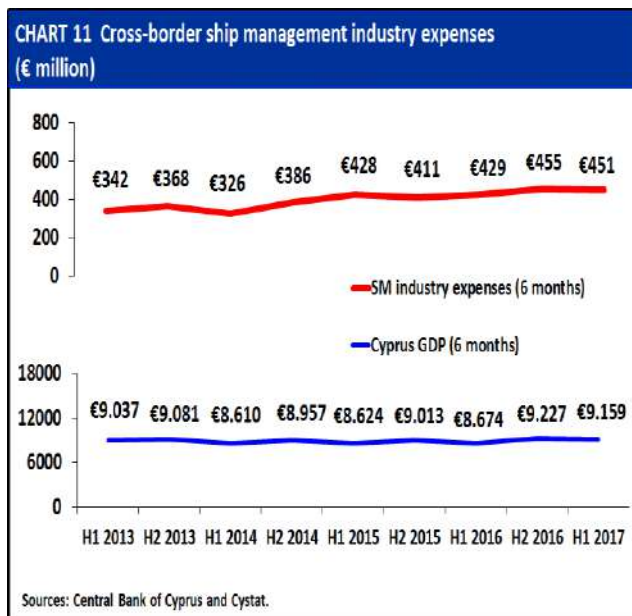


The percentage of companies offering services to German ship owners increased to 47% during the period under review. Other noticeable countries include Singapore, Malta and the Marshall Islands. International expansion to more countries will increase revenues but also help diversify the portfolio of projects of the companies operating 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 dropped to €451 million during 2017H1. Nevertheless, it is still one of the highest levels recorded in recent years. The decrease was mostly accounted for by ship

management expenses and expenses related to crew wages provided to seafarers from non-EU countries.



The level of shipping expenses should be closely monitored in the years to come. As mentioned in Section 1, the new pollution rules adopted by the International Maritime Organisation, to be enforced in 2020, are expected to increase the cost of fuels used in the shipping sector. At the time of writing, three solutions are being considered by the shipping industry in response to this change in regulations:

- (i) Switching to higher quality but more expensive fuels
- (ii) Installing emission-cleaning systems or
- (iii) Switching to alternative fuels such as LNG.

All three options involve a substantial increase in costs and are likely to influence the level of freight rates in the future.

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 21% and ship management expenses (e.g. spare parts, lubricants,

dry-docking, etc.) 15%. Crew expenses consisted mostly of payments to seafarers from countries outside the European Union (51%).

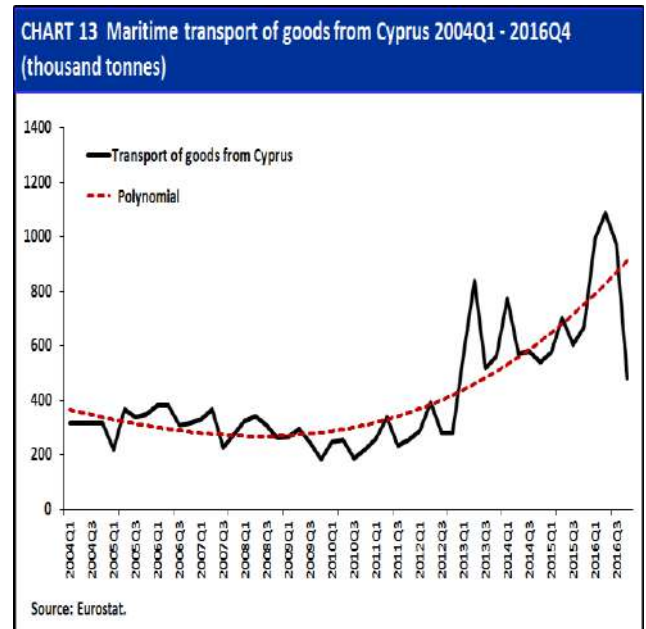
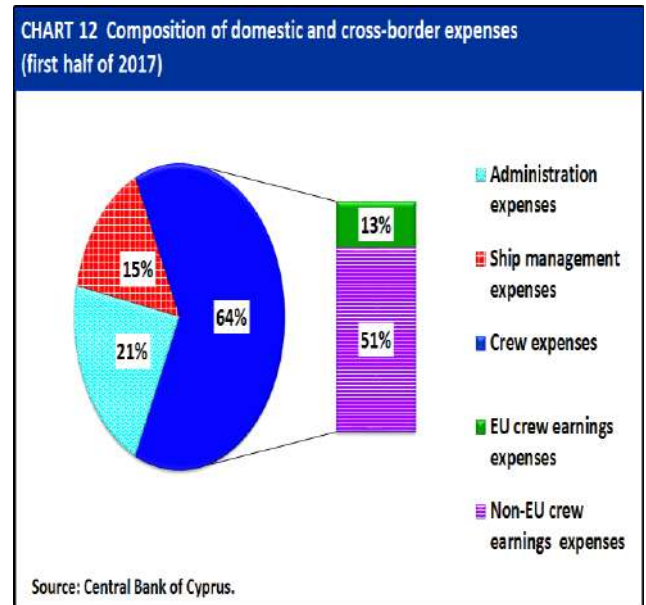


Chart 13 supplements the analysis provided in **Chart 5**, with time series observations concerning the maritime transport of goods departing from Cyprus. It can be used as a proxy for the number of ships departing from Cyprus's ports and their associated

ship management expenses. There is a noticeable decrease in the last reported period (2016Q4), in line with the decline observed in **Chart 5**.

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 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.