



17th Annual Report on the Greek Ferry Market 2018

The beginning of a new cycle with
"countermeasures"



July 2018



XRTC Business Consultants Ltd. has been active since its establishment (1999) in Shipping Finance and in the provision of advisory services to maritime companies. XRTC has been a commercial representative of international banking groups in the Greek Shipping Market, such as the French banking institutions Credit Lyonnais and Natixis, as well as a consultant to National and International Organizations and international shipping companies.

The Company has secured and organized with great success a large number of shipping loan agreements under various forms, through cooperation with International Banking Groups since its establishment.

Since 2009, XRTC cooperates with Chinese banking groups that are interested in investing in Greek Shipping Market. The company managed for the first time ever to secure the financing of a Greek interest Shipping Company, directly from the Chinese banking group China Development Bank.

XRTC's staff has knowledge and experience on a worldwide level, offering high quality services throughout the duration of a transaction. The Company's Research and Development Department based on its knowhow is able to analyze in depth all the matters of International Shipping. As a consultant in Ferry Markets the company has undertaken many projects in Greece and abroad for both ship financing and further market development. XRTC cooperates with the largest export credit agencies in the world.

XRTC has been honoured by International and Greek firms for its contribution to the development of Shipping and Ferry Market; such as Lloyds Greek Shipping Awards 2010 as the "Best Shipping Financier of the Year" and the award by Transport Finance as the "Best Deal of the Year for Export Credit".

Editorial Team of the Study			
Responsible by the Law	George Xiradakis	CEO	george.xiradakis@xrtc.gr
Responsible for Editing and Analysis	Katerina Fitsiou	Relationship Manager	katerina.fitsiou@xrtc.gr
Responsible for database elaboration	Eleni Moutsatsou	Head of Administration Office	eleni.moutsatsou@xrtc.gr
Contributor	Dr. Ioannis Lagoudis	Advisor	ioannis.lagoudis@xrtc.gr

NOTE TO THE RECIPIENTS

This study (the “Study”) has been exclusively prepared for presenting information related to the review and analysis of the Greek Ferry Sector by emphasizing on the 3 listed companies to the Athens Stock Exchange (ANEK LINES, ATTICA GROUP, MINOAN LINES) and HELLENIC SEAWAYS («Listed & HSW) also covering important aspects of the development and recording of general data of the other companies that make up the remaining 50% of the Greek coastal market regarding the fleet and traffic level (“Other Companies”).

The contained information in the Study are reportedly dated June 2018 (unless stated otherwise). The content of the information in the Study is derived from information published by the Ferry Companies through their Annual Reports, including information that came from public sources. The information relating to the Other Companies’ fleet and itineraries came from their websides and Association of Passenger Shipping Companies (SEEN). These companies do not release their financial or other results.

This Study contains a number of references to laws, agreements and documents. Accurate and complete descriptions of laws, agreements or documents to which the Study is reported to, are not mentioned. Nevertheless, these are reported predominantly throughout the text of laws, agreements or documents.

This Study was prepared and distributed by the company XRTC – Business Consultants.

The company XRTC - Business Consultants does not make or give any kind of representation, warranty or commitment (direct or indirect) nor assumes any responsibility as to the accuracy or correctness of the Study as far as the reasonableness of any estimates, projections, assumptions or opinions referred to therein. The Study does not constitute a recommendation of acceptance of funding from XRTC-Business Consultants company for any recipient of this information. This Study is not the only decision criterion for funding or investment in shipping companies. With the acceptance of this Study each recipient simultaneously accepts the necessity of further personal research and due diligence as judged necessary by the recipient.

The Study was published with a sole purpose of informing the recipient.

The Study and the information contained therein must be used by the recipient in a totally confidential basis and cannot be disclosed, reproduced, be used in part or in whole for any other purpose, nor be forwarded to another person without the written consent of XRTC-Business Consultants company. The recipient may disclose or display this information to executives or employees or consultants associated with the Study.

XRTC Business Consultants 1999-2018

CONTENTS

LIST OF TABLES.....	5
LIST OF FIGURES.....	5
EXECUTIVE SUMMARY	6
1. GREEK FERRY MARKET	8
2. PRESENTATION OF GREEK FERRY MARKET	11
2.1. MARKET OVERVIEW	11
2.2. OFFERING CAPACITY ANALYSIS OF LISTED COMPANIES AND HELLENIC SEAWAYS	12
2.3. SHAREHOLDING STRUCTURE OF THE SECTOR.....	14
3. FINANCIAL ANALYSIS OF THE MARKET	15
3.1. OPERATIONAL COST ANALYSIS	15
3.2. FUEL COST ANALYSIS	16
3.3. TURNOVER FROM OPERATIONS.....	16
3.4. EBITDA ANALYSIS.....	17
3.5. BANKS' DEBT	18
3.6. MARKET'S COMPARATIVE ANALYSIS.....	19
4. SWOT ANALYSIS.....	22
5. CONCLUSIONS – SUGGESTIONS	23

Sources:

- ANEK LINES (2017), Annual Financial Report
- ATTICA GROUP (2017), Annual Financial Report
- MINOAN LINES (2017), Annual Financial Report
- HELLENIC SEAWAYS (2017), Annual Financial Report
- ASSOCIATION OF PASSENGER SHIPPING COMPANIES (SEEN) (2017)
- XRTC LTD (2017), Greek Ferry Market Database
- XRTC – Greek Ferry Market Annual Reports 2001-2017

LIST OF TABLES

Table 1: GREEK FERRY MARKET PASSENGERS VOLUME PER ITINERARY(2015-2017).....	8
Table 2: Overview of Listed Companies and Hellenic Seaways (HSW)	10
Table 3: FLEET PER SHIPPING GROUP (LISTED COMPANIES & HSW)	13
Table 4: SWOT ANALYSIS	22

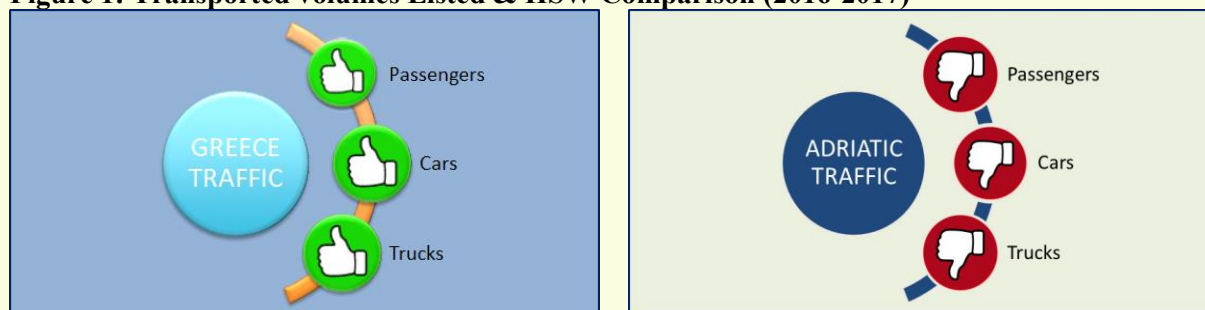
LIST OF FIGURES

Figure 1: Transported volumes Listed & HSW Comparison (2016-2017).....	6
Figure 2: Supply/Demand for Listed & HSW 2009-2016	6
Figure 3: Passengers and Vehicles Volume in Greece 2017.....	9
Figure 4: Comparison of Passengers volume transported by Listed & HSW with Passengers transported by Other Companies (2009-2017)	9
Figure 5: Passengers Traffic Development in Greece 2009-2016 (Listed Companies).....	11
Figure 6: Tourist Arrivals in Greece (1996-2017).....	12
Figure 7: Fleet Development of Listed Companies & HSW (2000-2017).....	12
Figure 8: Fleet Development per Vessel Type (2000 – 2017).....	13
Figure 9: Analysis of Voting Rights 2017	14
Figure 10: Cost of Sales distribution Listed & HSW (2017).....	15
Figure 11: Evolution of the Percentage Change of Fuel and Lubricants Cost as a part of Operating Costs (2009 - 2017)	16
Figure 12: Evolution of Turnover from Operations per Region 2009-2017	17
(Listed Companies & HSW).....	17
Figure 13: Listed Companies & HSW EBITDA (2009 - 2017).....	17
Figure 14: Banks' Debt of Listed Cos & HSW (2009 - 2017).....	19
Figure 15: Evolution of Key Market Indicators (2009 - 2017).....	20
Figure 16: Annual Evolution of Key Market Indicators (2009 - 2017)	20
Figure 17: Evolution of Financial Results (2009 - 2017)	21

EXECUTIVE SUMMARY

1. The significant developments in the industry for 2017 until July 2018 were:
 - i. The sale of 37,667,504 shares of Hellenic Seaways SA from Minoan Lines S.A. to ATTICA Holdings S.A., accounting for 48,53% of the shares, for the amount of €78,5 mil. ATTICA Group currently holds 98.83% of Hellenic Seaways shares.
 - ii. Approval by the Competition Commission for the acquisition of the sole control of Hellenic Seaways by the ATTICA Group.
 - iii. Entry of MINOAN LINES to the Piraeus-Chania itinerary, which has been under the exclusive control of the ANEK-ATTICA consortium.
2. According to SEEN data, the total fleet serving the Greek Coastal Ferry market numbers 91 vessels.
3. Upon the completion of the recent acquisition, ATTICA Group is the largest company in the Greek Ferry market offering 30% of the capacity, serving 33% of passenger demand.
4. In 2017, the Greek coastal market was characterized by intense competition on ticket prices with airline companies, with the latter significantly strengthening their presence in domestic itineraries.
5. Passenger volumes increased by 10% in the Greek Ferry market, according to data published by the Hellenic Statistical Authority (ELSTAT). Listed & HSW marginally benefited from this increase as shown in Figure 1. This increase is attributed mainly to the rest of the companies, whose presence is constantly increasing both in fleet and demand market share.

Figure 1: Transported volumes Listed & HSW Comparison (2016-2017)



6. Listed & HSW demand volumes in Greece increased (albeit marginally) while the corresponding Adriatic volumes declined due to the continuous removal of ships from the market.
7. The reduction in Listed & HSW demand volumes has reached -46% between 2009 and 2016, while capacity supply in vessel terms has fallen by -44% over the same period.

Figure 2: Supply/Demand for Listed & HSW 2009-2016



8. The combination of Figures 1 and 2 results are a strong indicator that the non-traditional companies

composed of new entrants and smaller players have seized the opportunity to enter the market. Listed & HSW facing the burden of high investments and high debt, had to proceed to deleveraging strategies. In order to avoid bankruptcy, they shrunk their fleet, while rationalizing the itineraries they operated.

9. New players decided to invest in the Greek Coastal market by increasing the offered capacity (which was reduced by the traditional players as shown in Figure 2) entering itineraries where Listed & HSW were forced to abandon. The non-traditional Companies are now sharing an equal market share of the Greek Ferry market with the Listed & HSW.
10. Over the past few years, we have seen the Listed & HSW struggle to cope with competition by creating partnerships or via the sale and purchase of equity packages. After many years the new investments, as well as the new investment schemes, come mainly from the none traditional companies.
11. There is a need to create new business models, which will assist in the creation of a new competitive advantage.
12. Based on the decisions of the International Maritime Organization's Committee on Coast Guard (IMO), cabotage vessels are required to use low-sulfur marine fuel of 0.5% sulfur content, as of 1 January 2020. The introduction of low sulfur regulation requires that the Greek ferry fleet should adapt to new fuel standards. Compliance of existing fleet with low sulfur regulation may involve investments (application of scrubbers technology), or alternatively, the consumption exclusively of low-sulfur marine fuel.
13. Coastal shipping has been a leader in the effort to reduce sulfur emissions in recent years. The sulfur content of IFO fuel oil has been reduced twice. The last reduction of 2% was in 2012 (i.e. from 3.5% to 1.5%).
14. A study from the Foundation for Economic and Industrial Research (IOBE) estimates that demand for coastal ferry services contributes around € 2.3 billion to the country's GDP.
15. The coastal market is not highly correlated to the increase of international tourism demand since the main users are Greek citizens.
16. The largest competitor of the Coastal ferry market is aviation and especially low-cost airlines.
17. The need to develop port infrastructure remains high and may create potential investment opportunities in the sector.
18. The ticket price / service ratio remains high for the average Greek consumer compared to air travel.
19. As of 1 July 2018, the “transportation countermeasure” policy is implemented. The policy favors the fare subsidization for 49 islands initially, which will be expanded to the entire archipelago as of 1 January 2019. The aim of the regulation is to assist islanders in their mobility needs.
20. The state is trying to assist the lower income class via a balanced development between the hinterland with the islands This, indirectly strengthens the investment opportunities for the market.

1. GREEK FERRY MARKET

Greece has the highest passenger volumes in Europe. The fact Greece controls 18% of the European ferry passenger demand, while representing just 2.2% of EU's population, implies that passenger demand in Greece has unique characteristics which distinct it from the rest European countries. It is equally important to highlight the issues of uneven competition from vessels managed by companies based in European countries which subsidize the ferry sector via National Funds (i.e. subsidies for employers' contributions, strengthening the liquidity of companies with tax relief and similar programs such as the MARE BONUS program, etc.)

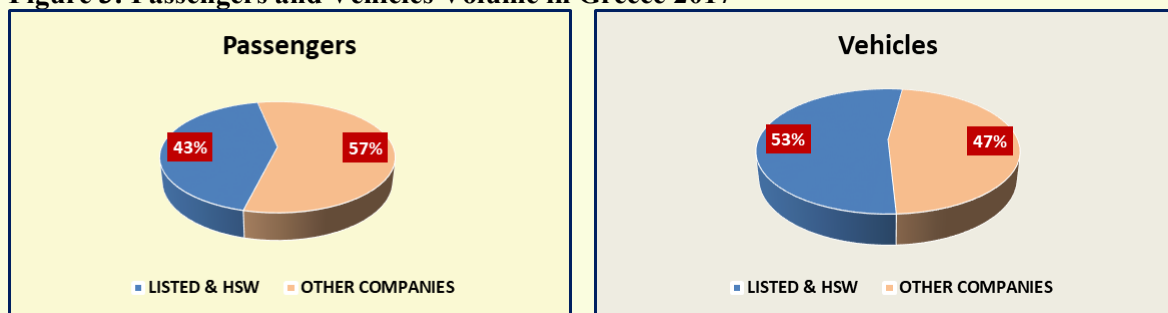
According to statistical data published by the Hellenic Statistical Authority (ELSTAT), passenger demand has increased by 10% in 2017 compared to 2016. This increase is significant for the sector, given the ongoing economic crisis the country has been experiencing over the recent years, but its continuity remains to be seen.

TABLE 1: GREEK FERRY MARKET PASSENGERS VOLUME PER ITINERARY(2015-2017)

ITINERARIES	2015	2016	Δ%	2017	Δ%
Piraeus-Peloponissos	50,952	47,040	-8%	9,770	-79%
Piraeus-Chios-Mytilini	1,340,125	923,181	-31%	584,604	-37%
Patras - Ionian Islands	375,760	426,964	14%	378,991	-11%
Piraeus-Crete-Dodekanise	80,069	146,249	83%	132,784	-9%
Volos-Sporades-Kymi	714,708	795,819	11%	833,641	5%
Piraeus-Dodecanise	834,773	698,533	-16%	733,056	5%
Piraeus-Crete	1,707,260	1,716,639	1%	1,815,637	6%
Argosaronikos	1,994,473	2,037,749	2%	2,308,707	13%
Piraeus-West Cyclades	465,117	595,743	28%	675,567	13%
Rafina-Evia-Andros-Tinos	1,947,869	2,023,459	4%	2,299,888	14%
Others	2,013,550	2,158,261	7%	2,485,899	15%
Piraeus-East Cyclades	2,052,309	2,113,427	3%	2,515,229	19%
Piraeus-Mykonos-Tinos-Samos	746,067	859,119	15%	1,164,654	36%
TOTAL	14,323,032	14,542,183	2%	15,938,427	10%

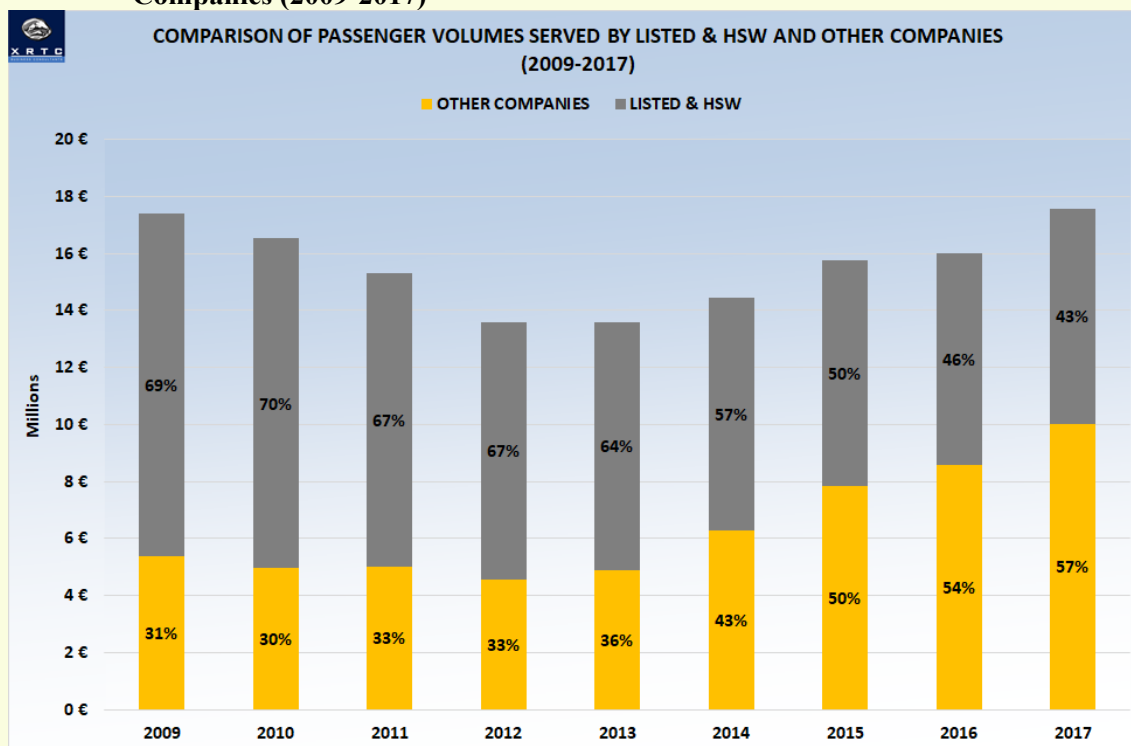
Source: ELSTAT

As presented in Figure 3, Listed Companies and HSW have just 43% market share in terms of passenger volumes, while the remaining 57% belongs to the rest companies. For vehicles (cars and trucks), the percentages are different, with Listed and HSW accounting for 53% of vehicle demand, while 47% belongs to the rest of the players. It should be clarified here, that the total demand for passengers and vehicles is based on ELSTAT reported numbers, while the respective numbers for Listed and HSW are based on the companies' Annual Reports. Thus the results presented in Figure 3 is the outcome from the combination of these two sources. Unfortunately, we cannot portray the situation separately for cars and trucks since ELSTAT has not published such figures.

Figure 3: Passengers and Vehicles Volume in Greece 2017


Source: ELSTAT/Listed & HSW

In 2013, Listed Companies and HSW appear to possess the biggest market share in passenger demand reaching 64%. Since 2014 though their market share is constantly shrinking reaching 43% by 2017. The rest of the Companies no longer have negligible presence, since they have more vessels in total compared to the Listed Companies & HSW and they appear to be gradually increasing their market share.

Figure 4: Comparison of Passenger volumes served by Listed & HSW and Other Companies (2009-2017)


Source: ELSTAT/Listed & HSW

Between 2009 and 2014, the Greek Coastal market faced a serious economic crisis as a result of the steady decline in demand and the over-doubling of fuel prices. Despite the improved corporate performance and rising demand, in the past two years, cumulative losses for the 2009-2017 period exceed € 1 billion.

In 2017, Listed Companies and HSW, were faced with increased fuel prices, which are currently at the highest levels since the end of 2014, driven by the OPEC program, as well as by investors' expectations of imposing new sanctions against Iran. Fuel prices are settled in Euros, but indirectly are affected by the € / \$ exchange rate since USD is the currency of transactions. It should be noted that the contribution of marine fuels and lubricants to the total cost of sales is the highest for ferry companies. Although Greek ferry companies are engaged in hedging contracts for petroleum products covering a certain percentage of their estimated business needs, they are still directly exposed. A 10% change in fuel prices -ceteris paribus- in 2017, affected the companies' financial results between €4.34 mil. (ANEK) and €8.3 mil. (ATTICA), considering the effect of the hedging strategies used based on derivative products.

According to SEEN, fuel prices, which account 40% of the ship's operating costs, have risen by 28% and it is estimated that the burden on the financial results for the companies over the years 2017 and 2018 will exceed €90 million. The mandatory consumption of more environmentally friendly fuels starting 1/1/2020 is expected to result an additional cost increase of 30%.

Apart from the exogenous factors that affect the financial results, we will note an interesting ratio. The "Cost of Sales / Turnover" ratio of the three companies (ATTICA, ANEK, HSW) is 0.8 and of Minoan is 0.7. We can understand that the companies' Expense / Revenue ratio is almost identical, regardless the fleet size of each company. This implies that they follow a similar business model which needs to be rebranded.

It is worth pointing out that the Greek Ferry market operates mainly on private sector investments which over the last 20 years have exceeded \$1.4 billion, while 95% of the itineraries operate without any government subsidies.

The importance of Coastal shipping for Greece has been emphasized on many occasions. Most of us are aware that only 27 out of 100 islands, which are served by ferry companies in Greece, have airports, while the rest 73 islands are served by sea only with intercommunication being achieved by ferries. The contribution of the Ferry market to tourism and country's economy, as well as to the protection of our national interests, especially in today's times, is decisive.

As this point we would like to stress that the two main threats for the industry stem from the variability of fuel prices and the prevailing local economic conditions which are also affected by external factors. Coastal shipping is in severe competition with the airline industry and in addition faces financing challenges such as access to capital.

The prospects of the Greek Ferry market for 2018 will be significantly depended on:

- The direction of the Greek economy and the implementation of the fiscal measures required to complete the 4th evaluation
- The level of uncertainty in international markets and international economic developments.
- The effects on tourism from socio-political and geopolitical developments at national and international level, such as hostilities in the Eastern Mediterranean states, refugee crisis, social unrest, etc.
- The international fuel price variability. Any further increase in fuel prices is expected to have a material adverse effect on the financial results, cash flows and financial position of the companies
- The level of competition which is expected to be intense due to increasing activity of the new entrants and smaller companies.
- The State's willingness to regulate the industry through an intact regulatory system.
- The rate of new investments that appear to recover

The overview of the Companies analyzed in this Study is presented below:

TABLE 2: OVERVIEW OF LISTED COMPANIES AND HELLENIC SEAWAYS (HSW)

COMPANIES	Turnover	EBITDA	Net Profit before taxes	Net Profit after taxes	Loans	Fleet Net Book Value
Attica Group	271,541,000 €	50,360,000 €	1,554,000 €	1,247,000 €	238,733,000 €	525,156,000 €
Minoan Lines	79,459,000 €	20,132,000 €	4,339,000 €	4,159,000 €	139,039,000 €	286,601,000 €
ANEK	164,749,000 €	12,800,000 €	8,716,000 €	8,144,000 €	260,218,000 €	251,000,000 €
Hellenic Seaways	128,946,000 €	19,500,000 €	9,171,000 €	9,132,000 €	139,525,000 €	230,707,000 €
Total	644,695,000 €	102,792,000 €	23,780,000 €	22,682,000 €	777,515,000 €	1,293,464,000 €

COMPANIES	Number of Employees	Number of Vessels	Pax Transported	Cars Transported	Trucks Transported
Attica Group	1,020	12	3,359,154	465,808	285,277
Minoan Lines	318	2	684,000	101,000	57,000
ANEK	900	10	1,042,180	204,920	138,320
Hellenic Seaways	587	18	3,088,862	261,173	66,628
Total	2,825	42	8,174,196	1,032,901	547,225

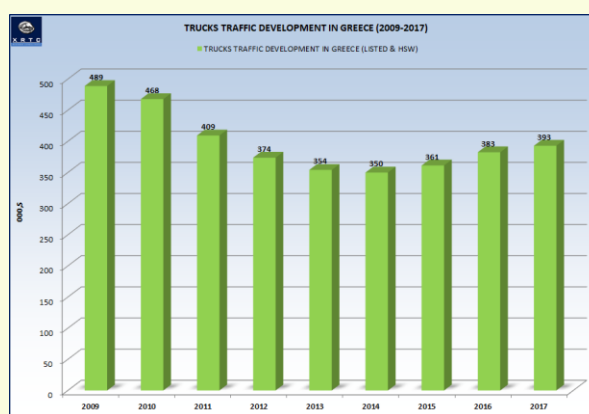
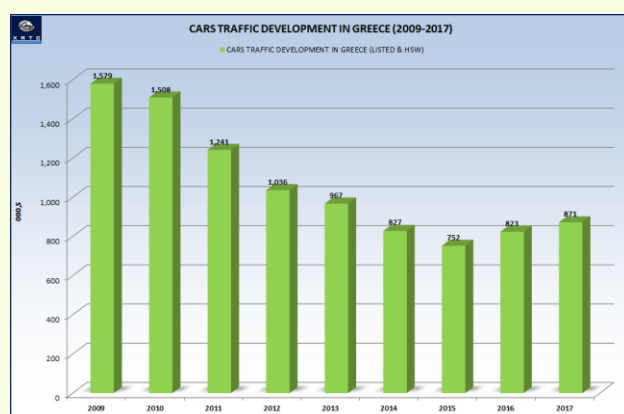
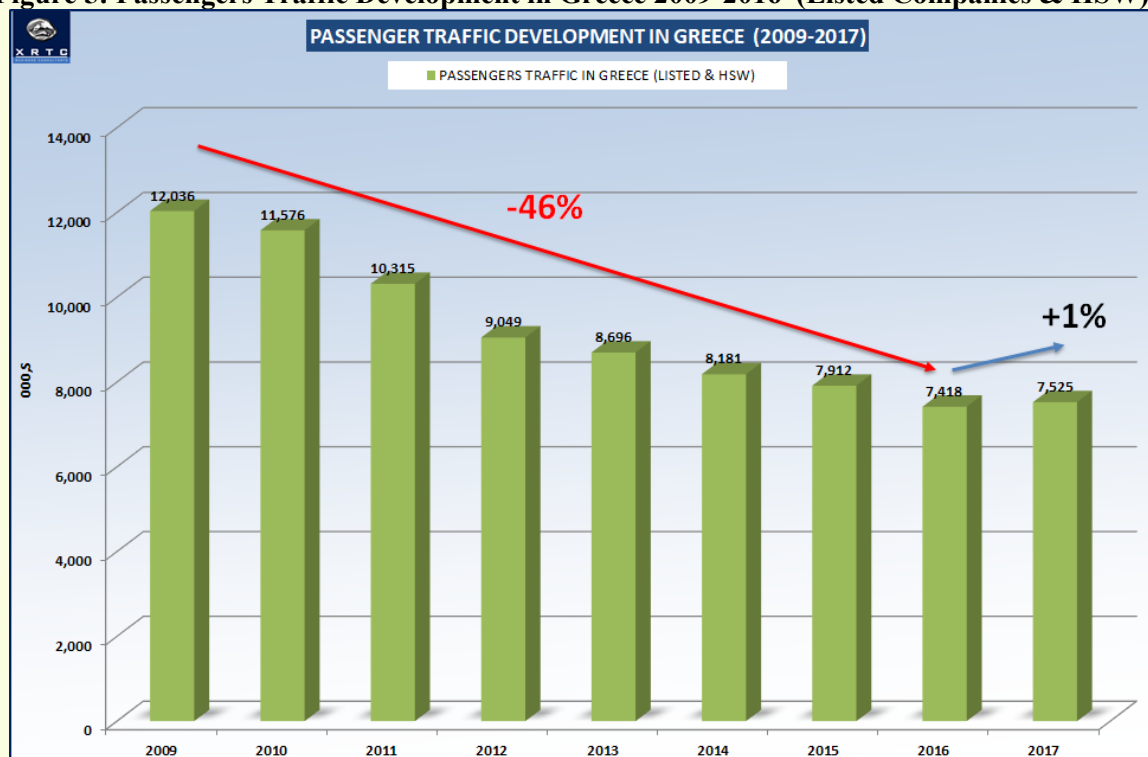
Source: XRTC

2. PRESENTATION OF GREEK FERRY MARKET

2.1. Market Overview

In this analysis 2009 is used as the base year, since this is the first time when shipping companies recorded losses on their EBITDA results. Following 7 consecutive years of declining passenger volumes, in 2017 volumes show stability for passengers and marginal increase for Car and Trucks (Figure 5).

Figure 5: Passengers Traffic Development in Greece 2009-2016 (Listed Companies & HSW)



Sources: XRTC Database, Hellenic Statistical Authority

Tourists arrivals in Greece increased by 9.7% last year, reaching 27.2 million travelers, compared to 24.8 million (Figure 6) travelers in 2016. However, the increase of the average spending per journey was anemic, as it stood at 1.4%. And while the above-mentioned figures for the whole year, certify the new historical records of Greek tourists' arrivals, passenger demand for the ferry industry remains low since 65% of the tourists arrive in Greece by air and 30% by road.

Figure 6: Tourist Arrivals in Greece (1996-2017)

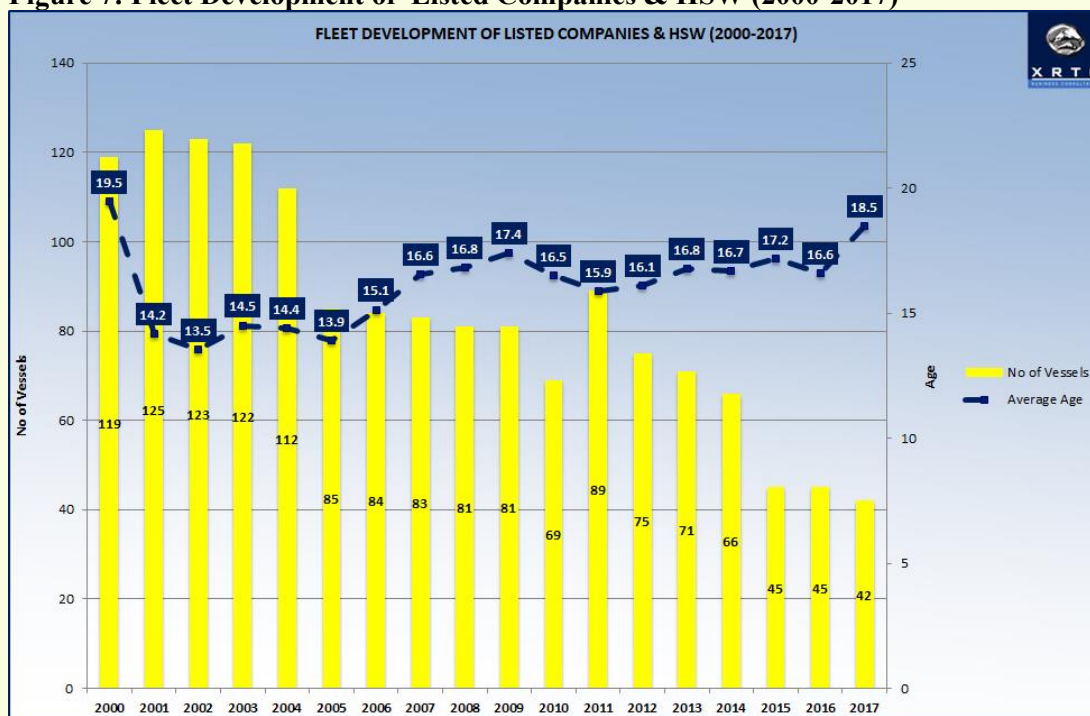


Source: XRTC database, ELSTAT

2.2. Offering Capacity Analysis of Listed Companies and Hellenic Seaways

The Listed and HSW fleet is constantly shrinking. As seen in Figure 7, out of 89 ships in 2011 we have reached 42 in 2017. The ships of the non-traditional Companies operating in the coastal market are not included in this graph but they reach 49 vessels, increasing the total Greek ferry fleet to 91.

Figure 7: Fleet Development of Listed Companies & HSW (2000-2017)



Source: XRTC database

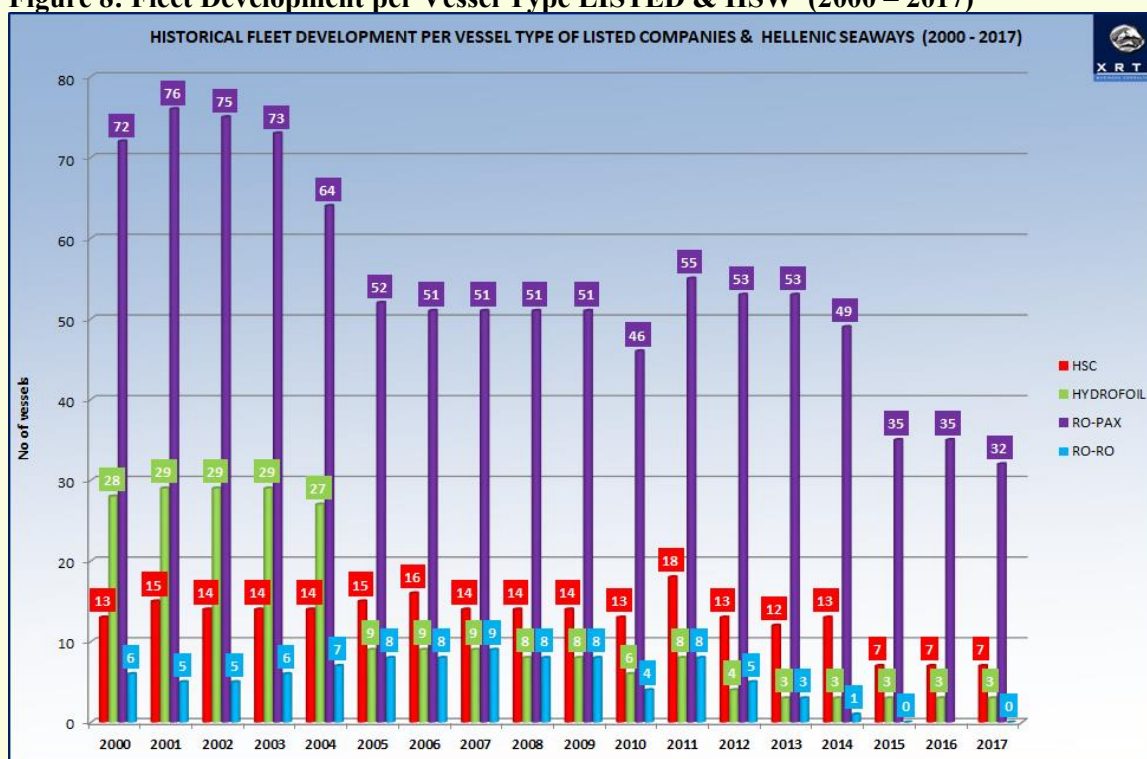
The evolution of the Listed Companies & HSW fleet continues its downward trend. Companies are withdrawing ships from the market as demand is steadily declining. In 2017 the Grimaldi group withdrew two Minoan ships from the Adriatic. These ships continue to work in the Adriatic under the Italian flag and thus do not count towards the strength of Greek ferry market.

TABLE 3: FLEET PER SHIPPING GROUP (LISTED COMPANIES & HSW)

Listed Companies' & HSW Fleet							
Company	2011	2012	2013	2014	2015	2016	2017
ANEK	14	13	14	14	7	9	10
ATTICA	13	14	13	13	12	12	12
MINOAN	7	7	7	7	5	4	2
HELLENIC SEAWAYS	33	29	25	20	21	20	18
NEL	22	18	16	12	-	-	-
TOTAL	89	81	75	66	45	45	42

Source: XRTC database

Figure 8: Fleet Development per Vessel Type LISTED & HSW (2000 – 2017)

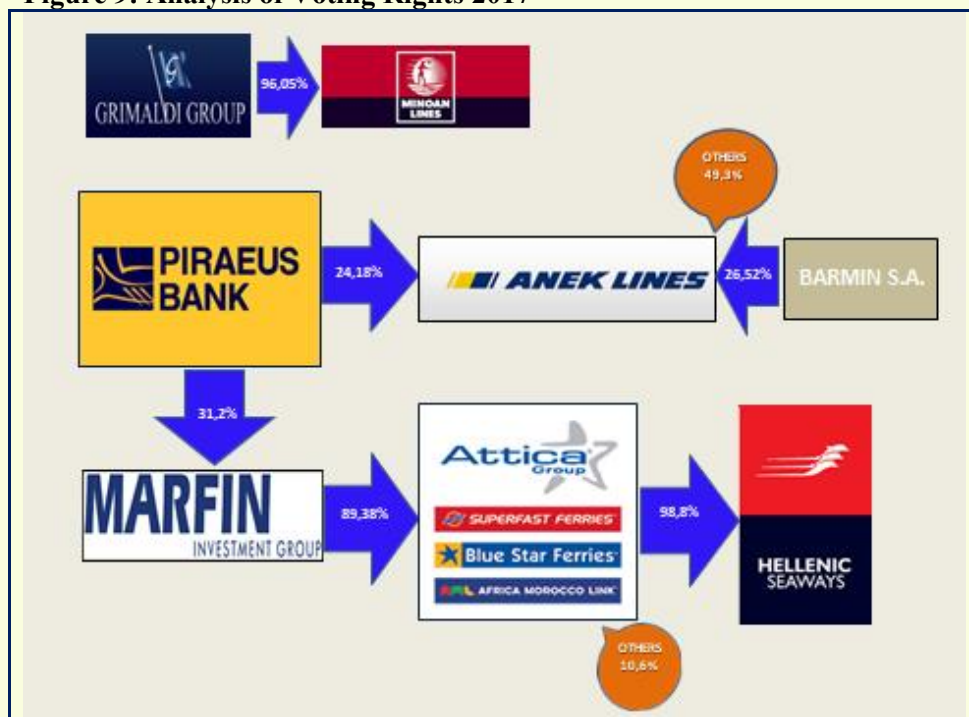


Source: XRTC Database

Listed companies & HSW fleets are constantly shrinking. These companies, having to face high operating expenses and loans, as well as high competition, they have reduced their fleet. However, the completion of their restructuring and the new conditions of competition with the non-traditional companies may be an incentive for institutional investors to invest in Listed companies and HSW. The involvement of the banks is a prerequisite, since the lack of bank financing is an obstacle for any investment initiative.

2.3. Shareholding Structure of the Sector

Figure 9: Analysis of Voting Rights 2017



Source: XRTC Database

On 26.10.2017 ATTICA Group announced that it has agreed with MINOAN LINES for:

- the acquisition of 37,667,504 shares of HSW by Attica Group, representing 48.53% of the shares of HSW, for a cash consideration of Euro 78.5 million;
- the sale of SUPERFAST XII vessel to a member company of the Grimaldi Group for a cash consideration of Euro 74.5 million;
- the sale of HIGHSPEED 7 vessel to Minoan Lines for a cash consideration of Euro 25 million,

Following the completion of the acquisition Attica Group holds in aggregate an equity stake of 98.83% in HSW.

The Hellenic Competition Commission, with its decision on 25.04.2018, approved the acquisition by Attica Group of the sole control over HSW.

The three key stakeholders that gather interest with their direct or indirect participation in the Greek Ferry Market are Piraeus Bank, MIG and Fortress.

Piraeus Bank and MIG

- Piraeus Bank has completed the restructuring of the long-term debt of ANEK amounting to €264.5 million by issuing a Bond syndicated loan of €219,9 million (of which, €22,0 million is convertible under conditions) and a Bilateral loan of €44,6 million. This makes Piraeus Bank a stakeholder in ANEK with a stake of 24.8% with a possibility of this stake to be increased.
- Piraeus Bank has a 31.2% stake in MIG, which controls ATTICA Group and HSW.
- Piraeus Bank, like all Greek banks, has signed a three-year agreement with the European Commission's Directorate-General for Competition, where it is obliged within a three-year period to sell all non-banking related activities such as equity holdings, real estate, insurance, hotels, etc. All transactions must be completed by the end of 2018.
- Based on this agreement Piraeus sold its stake in HSW, with ATTICA Group and ANEK still pending.

Fortress Investment Group

- In 2014, the US private equity fund Fortress Investment Group LLC entered into a strategic agreement with ATTICA Holdings to refinance the bank debt of the shipping group, amounting to €75 million. Fortress fully covered the convertible bond issued by Blue Star Ferries, which is ATTICA's subsidiary.
- At the end of 2016, Fortress, in the context of an international tender, acquired a MIG bond with a total outstanding amount of €150 million owned by Eurobank. The bond was issued in the past by the Greek Postal Savings Bank, guaranteed by shares of MIG companies, including ATTICA Holdings, Ygeia and Vivartia.
- Specifically, shareholdings concern 50.59% of ATTICA Holdings, 39.84% of Ygeia and 52.12% of Vivartia. In all three companies, the voting rights remain with MIG's parent company, provided that the conditions and repayment of the bond are not violated. In this case, the pledged shares will be controlled by the US fund.

3. FINANCIAL ANALYSIS OF THE MARKET

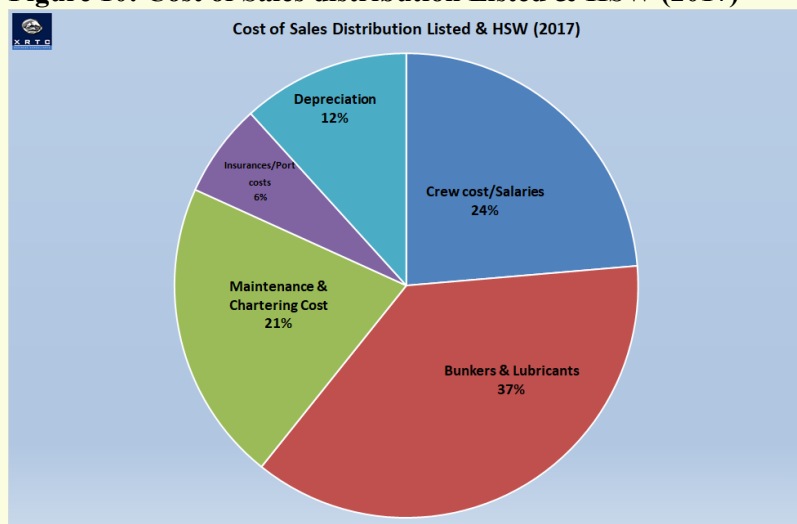
The financial analysis of the Greek ferry market includes the listed companies (ANEK LINES, ATTICA GROUP, MINOAN LINES) and HELLENIC SEAWAYS which consists one of the major market players.

3.1. Operational Cost Analysis

In the operating expenses analysis, there are no significant deviations compared to 2016, in terms of their breakdown. The cost of fuel oil and lubricants is the most significant operating cost for ferry market companies' operating expenses. Fuel accounts for 37% of operating costs. Crew costs account for 24%, while both items together account for 61% of the operating expenses.

Maintenance cost follows, accounting for 21% of operating expenses for listed companies and HSW in 2017. The lack of fleet renewal is expected to be the main cause of increasing maintenance costs in years to come since older vessels require more repairs.

Figure 10: Cost of Sales distribution Listed & HSW (2017)



Source: XRTC Database

Fuel costs have increased compared to 2016 but at a smaller pace compared to past years due to the reduction in the number of ships. The fuel's participation in the total cost for Listed and HSW's has marginally increased by 2% (from 35% in 2016 to 37% in 2017).

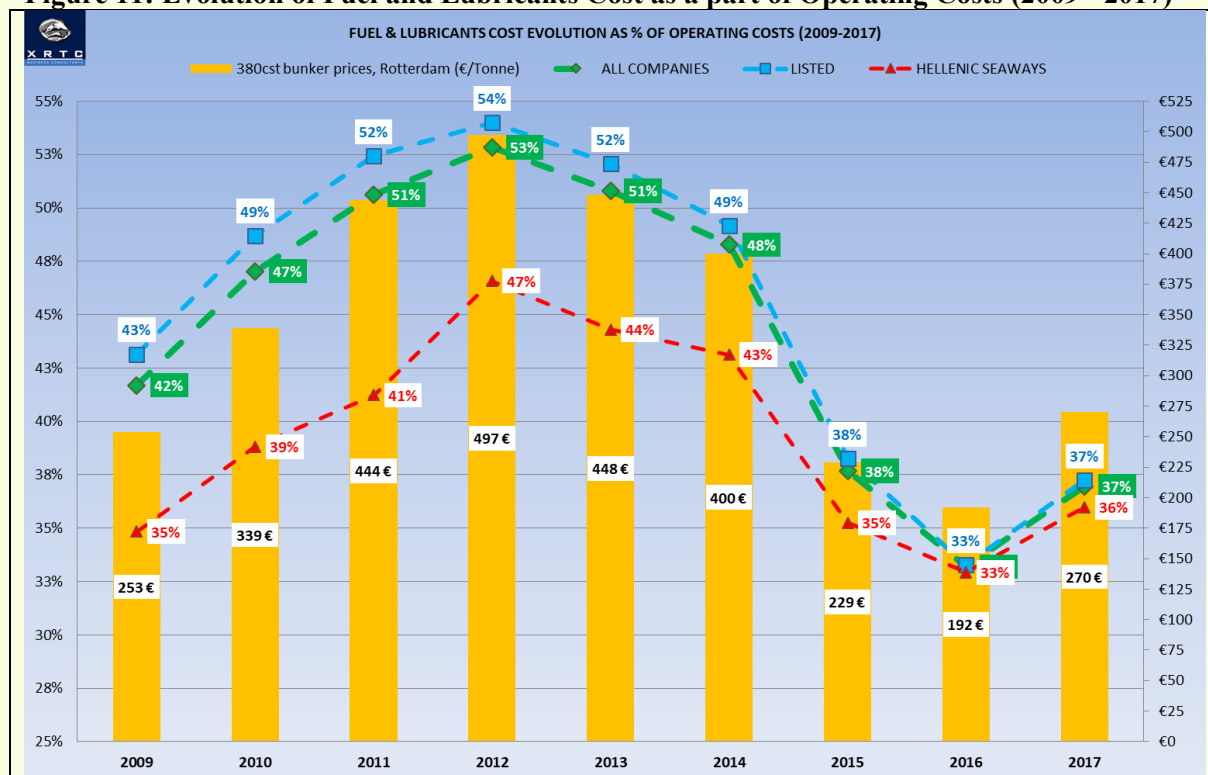
Crew cost (€119.6 million) is at the same level as in 2016 (€120.2 million) despite the fact that the Listed and HSW reported an increase in the number of employees (from 2,608 in 2016 to 2,825 in 2017).

3.2. Fuel Cost Analysis

The increase in operating costs is evident in the fuel price 380CST presented in Figure 11. The figure clearly illustrates the effect of the increased fuel and lubricant prices, which reached 38%.

The fall in the price of oil since the mid-2014 was the main reason for the positive economic results of the Listed and HSW in recent years. Any increase in oil prices significantly impedes the financial results of the Listed and HSW.

Figure 11: Evolution of Fuel and Lubricants Cost as a part of Operating Costs (2009 - 2017)



Source: XRTC Database

Greek ferry companies have only 18 months until January 1, 2020 to comply with the IMO's new regulations concerning the ballast water treatment and low sulfur fuel.

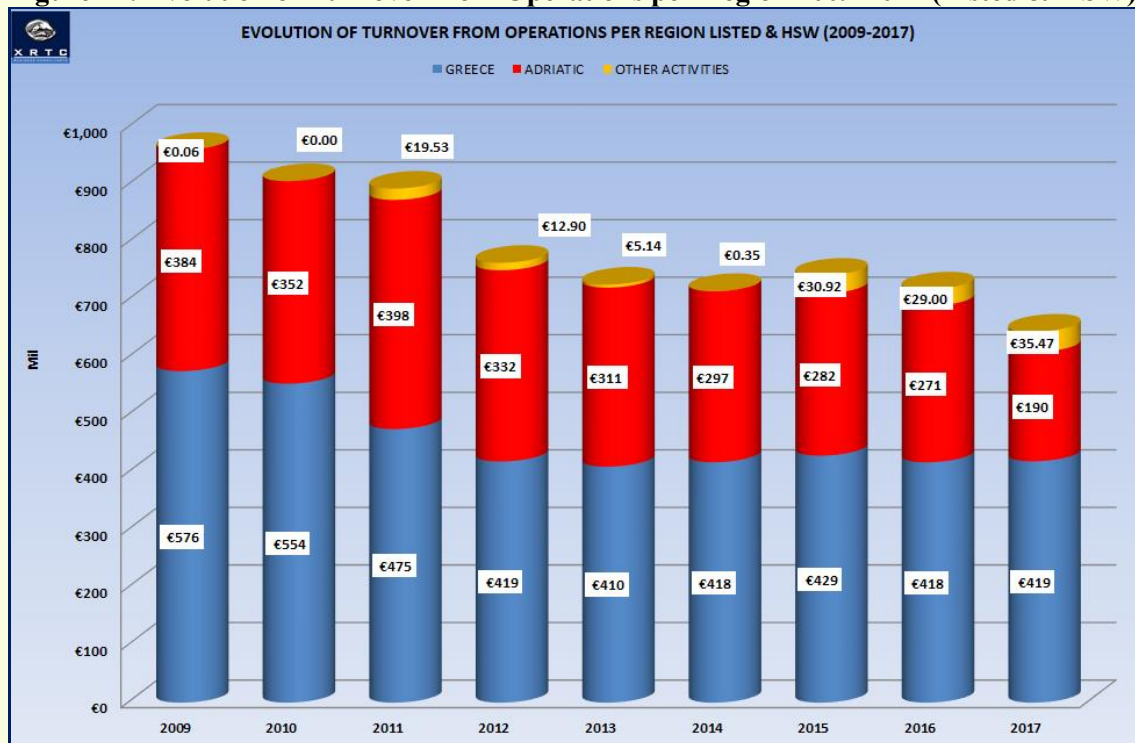
As has already been pointed out by ferry operators, the implementation of the decision on the use of this fuel does not exclude the possibility of increases in ferry tickets due to shipbuilding changes and the use of low sulfur fuel of 0.5%, which is more expensive compared to those used today. The cost per passenger is estimated to reach €5.4 (from € 2.2 today), while the average ticket is expected to increase by 27%.

3.3. Turnover from Operations

The continued shrinking of the Listed and HSW fleet has resulted in respective shrinking of the Total Turnover reaching €644 million. (Figure 12).

The shrinking in passenger demand in recent years by Listed and HSW continues in both Adriatic and the Greek Market, while in the car and truck categories the picture is mixed with marginal fluctuations per region. The strategic choices for the companies continue to be similar to those we highlight in recent years, including the operation in regions outside Greece, while taking into account the geopolitical risks and the conditions of the global economy related to risks of default and weakness of payments by charterers.

Figure 12: Evolution of Turnover from Operations per Region 2009-2017 (Listed & HSW)

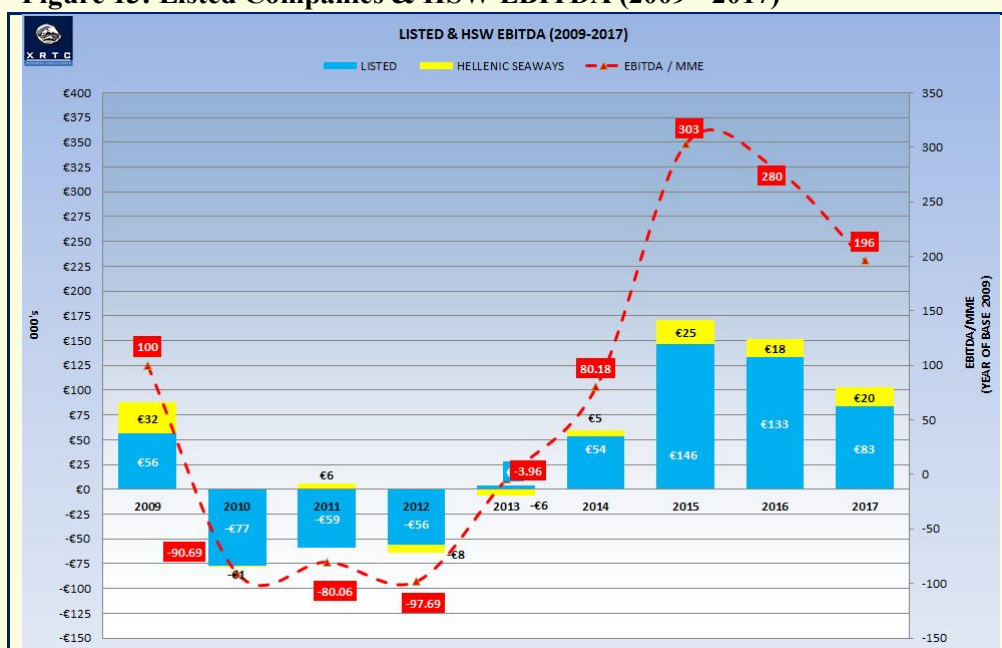


Source: XRTC Database

3.4. EBITDA Analysis

Earnings before Interest, Tax, Depreciation and Amortization (EBITDA) are significantly lower compared to 2016, reaching -60%, (from €152 million down to €103 million) due to the increase in the price of fuel. Figure 13 clearly shows the EBITDA per Transaction Unit dropped from 280 points to 196.

Figure 13: Listed Companies & HSW EBITDA (2009 - 2017)



Source: XRTC Database

3.5. Banks' Debt

The Greek Ferry market is in need of the banking sector. In particular, Greek Banks despite the challenges they face within the current economic environment, should keep supporting the Greek ferry market in order in its turn continue its contribution to the development of the Greek Economy.

The steady exit of banks from the market lies on internal and external factors such as:

- The Greek ferry market is directly correlated with all risks stemming from the Greek Economy's Performance (Greek Risk).
- Domestic demand presents a decline which is totally in line with the declining GDP.
- Foreign banking institutions which provided support to the sector in the past are reluctant in providing any type of lending which is related to the Greek economy.

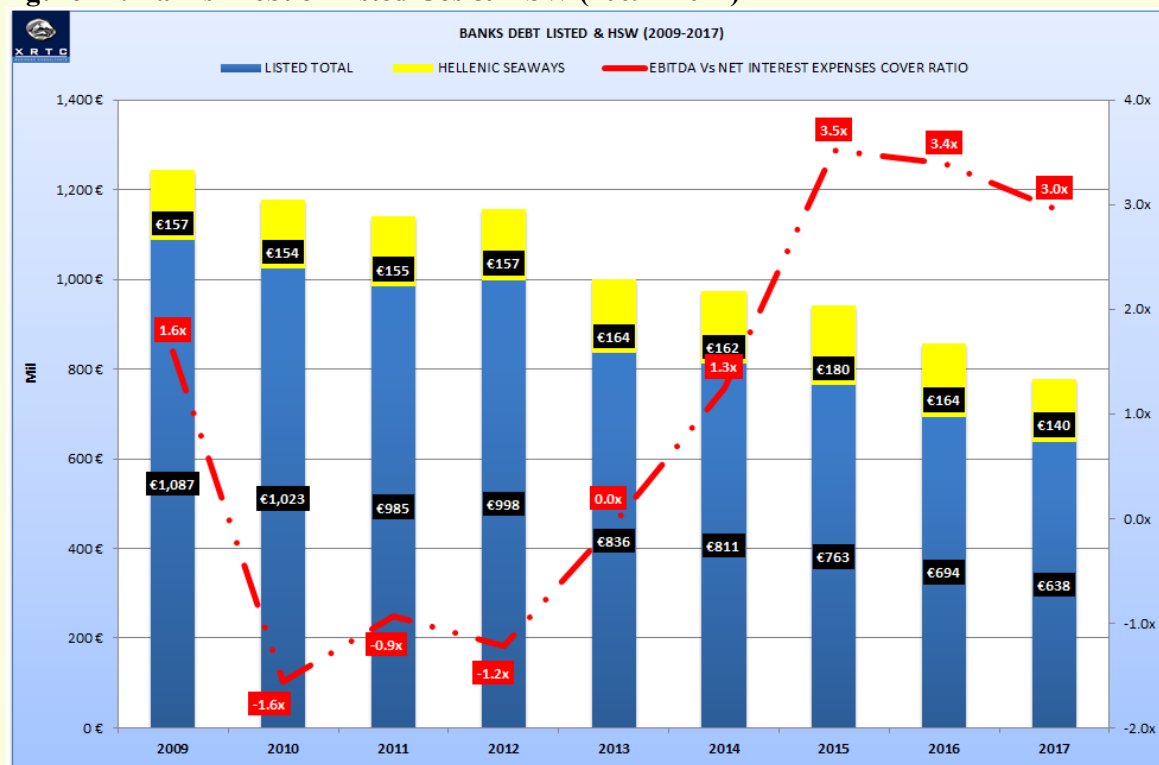
Loan liabilities decreased by -10% compared to 2016 (Figure 14). By examining each company separately, HSW presented the largest drop in its total debt liabilities (-18%) with ANEK LINES and MINOAN LINES following with -10% decline and ATTICA GROUP with -7% (Figure 14c).

Analytically each company's bank debt has developed as follows:

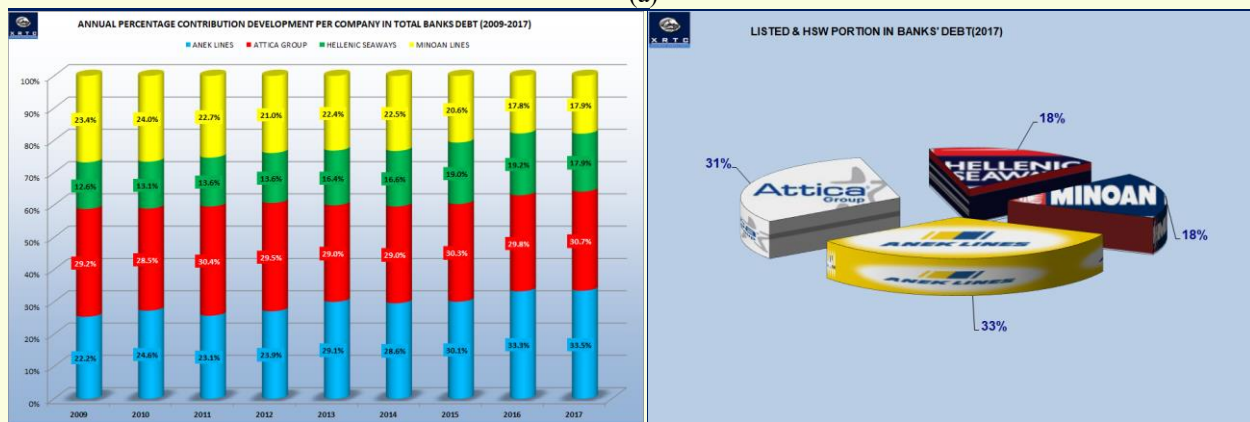
- HSW continues to serve its bank lending in accordance with the loan refinancing program concluded in 2015. The company has further reduced its debt through prepayment due to ship sales (€19.0 mil. from the sale of "Highspeed 6"). The loan payments of €24.9 mil. in 2017 have further reduced future interest payments releasing future liquidity.
- Attica S.A. has issued a Convertible Bond Loan («ATTMO»), which following its initial coverage, was boughtback in its entirety by Attica versus a consideration equal to the total nominal value of the bonds, to facilitate that these bonds convertible into new ordinary shares of Attica, are available for exchange with BSAO bonds (Blue Star Ferries issued a Fungible Bond Loan «BSAO»). BSAO and ATTMO operate in a complementary manner, since bondholders can either select to hold the bonds and receive cash from the Group (through BSF) at maturity, or convert them (through exchanging BSAO with ATTMO) into shares of Attica.
- Piraeus Bank with a banks' consortium completed the restructuring of the long-term debt of ANEK amounting to € 264.5 million issuing a Bond syndicated loan of € 219, 9 million (part of which amounting to € 22, 0 million is convertible under conditions) and a Bilateral loan of € 44, 6 million. Therefore Piraeus Bank is a stakeholder of 24.8% of ANEK while this percentage can be increased. Through this restructuring, an amount of capitalized interest of €15, 5 million was written-off for ANEK.
- Minoan Lines concluded the sale of the vessel M/V Cruise Bonaria to Grimaldi Euromed S.p.A., to which the vessel had been chartered since January 2018. The net proceeds for the sale amounted to € 70 million. The total proceeds is intended to be used to repay a corresponding portion of the Group's bond loan.
- Minoan Lines announced to the investing public that on June 29, 2018, proceeded to prepay its total bank debt. In particular, the company repaid the balance of the bond loan of € 48m, in which 4 Greek and 5 foreign banks participated.

Figure 14b is of high interest as it presents the market share of bank lending among key players of the Greek ferry market with ATTICA GROUP and ANEK LINES presenting the largest exposure in bank lending.

Figure 14: Banks' Debt of Listed Cos & HSW (2009 - 2017)



(a)



(b)

(c)

Source: XRTC Database

3.6. Market's Comparative Analysis

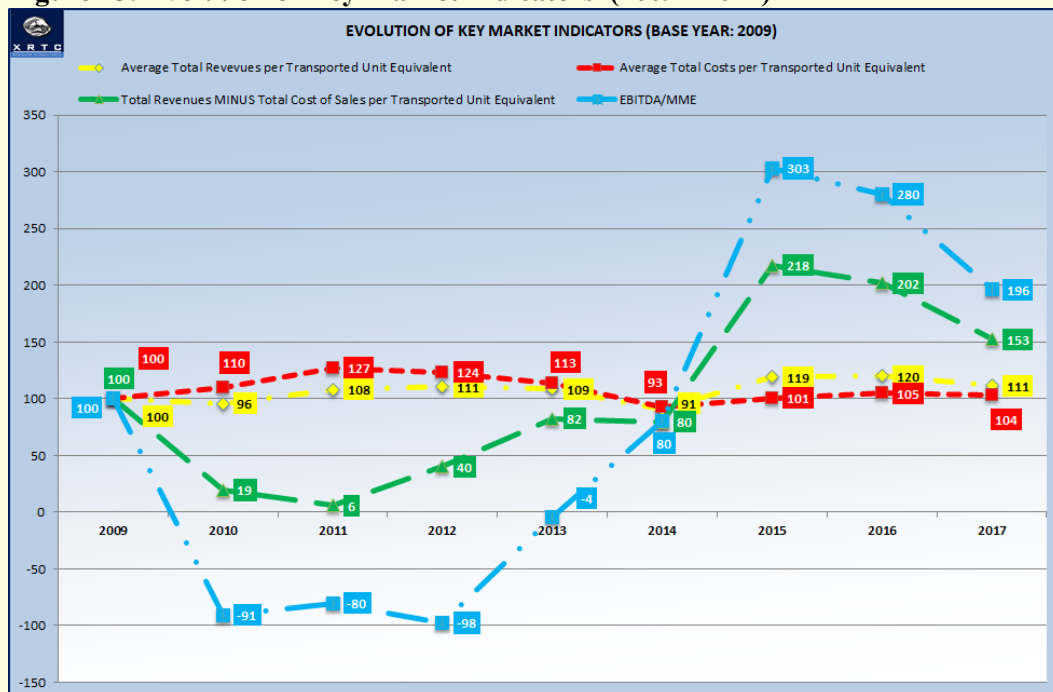
In Figure 15 the Transported Unit in relation to basic economic fundamentals such as operating cost, fuel cost, revenues and EBITDA is presented. A **Transported Unit** is defined as: "The total number -in absolute terms- of passengers, trucks and cars carried per year".

Analytically the Ratios:

- **Average Revenue/Transported Unit:** is reduced compared to 2017 (111) compared to 2016 (119)
- **Operating Cost/Transported Unit:** presents a marginal decrease for 2017 (104) compared to 2016 (105)
- **EBITDA/MME:** presents a significant decrease for 2017 (196) compared to 2016 (280)
- **Total Revenues minus Total Cost of Sales per Transported Unit Equivalent:** presents a significant decrease for 2017 (153) compared to 2016 (202)

The reduction of the Transported Unit Equivalent of the Listed companies and HSW as well as the fuel cost increase are the cause of the ratios decrease.

Figure 15: Evolution of Key Market Indicators (2009 - 2017)

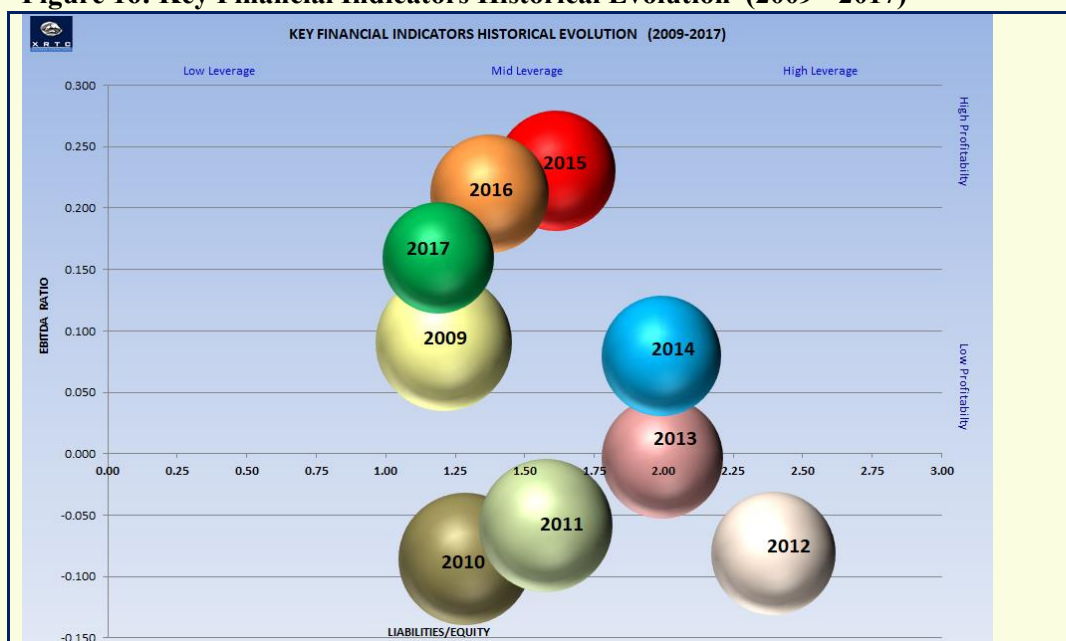


Source: XRTC Database

As seen in Figure 16, the Liabilities/Shareholders Equity ratio continues to improve in 2017, since total liabilities cover shareholders equity by 1.2 times. It is worth pointing out that the same ratio in 2012 reached 2.4 times.

It is certain that in order for the market to enter a new investment period, EBITDA margin must reach levels of at least 25%. Despite the fact that in 2016 it reached at 22%, a very pleasing development for the sector since for the second consecutive year EBITDA margin is close to 25% in 2017 it fell down to 16%.

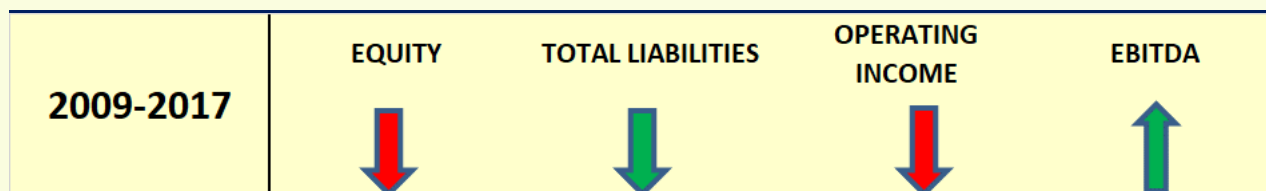
Figure 16: Key Financial Indicators Historical Evolution (2009 - 2017)



Source: XRTC Database

The financial results evolution of the Listed Companies and HSW is presented in Figure 17.

Figure 17: Evolution of Financial Results (2009 - 2017)



Source: XRTC Database

Figure 17 depicts in a clear way the almost ten-year effort of the traditional companies in the industry to sail in the stormy waters, which has been quite successful. This success is due to two key elements. The first is the significant reduction in liabilities, which despite being accompanied by a reduction in capitalization, is a guarantee for the viability of the companies since debt has returned to manageable levels.

The second element relates to the EBITDA margin, which is in fact an indication of better management of operating costs. The improvement of this indicator is a factor of optimism for the future as it appears at acceptable levels despite the shrinking in operating income.

4. SWOT ANALYSIS

The Greek ferry market is entering an era of different trends in reference to the dynamics and risks it is confronted with. Below is a brief analysis of the market.

TABLE 4: SWOT ANALYSIS

Strengths	Weaknesses
<ul style="list-style-type: none"> • Young and competitive fleet • Biggest ferry market in EU • Companies capable in crisis management • Smooth relationships with Banks • Satisfactory Industry Representations • Ability in operating in foreign markets • Rational fleet deployment and itinerary design • Rational routes planning • New investments' field • Involvement of Investment Funds 	<ul style="list-style-type: none"> • Low cash flow despite profitability improvement • Lack of funds • Increased operating expenses due to legislative framework • Difficulty in capturing market share from tourist seasonal demand • Low market capitalization • High fare prices • Incomplete sector statistical coverage • Lack of financial data from half of the ferry operators
Opportunities	Threats
<ul style="list-style-type: none"> • Increasing trend in tourist demand • Port privatizations • Efforts in increasing seasonal tourist demand • Acquisitions of equity packages • Low cost in Newbuilding projects • Change of fuel type and need of fleet modernization • Digital Business Solutions • Implementation of vertical integration strategies • Improved user psychology due to the stabilization of the Greek economy • Gradual relaxation of capital movement control • The sale of stakes of Piraeus Bank at ANEK and MIG 	<ul style="list-style-type: none"> • Reduced possibilities for improvement of the Greek economy • Solid annual decrease in passenger and car volumes • Trend of increasing competition from airline companies • Geopolitical developments in East Med • IMO regulations on ballast water treatment and low sulphur fuel • Lack of public infrastructure investments • Ongoing imposed capital controls • Sector's transformation to an oligopolistic market • Low subsidy levels • Low market capitalization • Uncertainty on future fuel prices

Source: XRTC Database

5. CONCLUSIONS – SUGGESTIONS

General remarks

XRTC Ltd. Business Consultants is active in the Greek Ferry Sector since the year 2000. During the 17 years of publishing this annual report the sector has shown a great level of resiliency being able to adapt to the conditions that prevail the local and international markets. During the last two years, the growth of the tourist movement, the decline in international oil prices and the increased migratory flows, have given a significant boost to the Greek ferry companies financials. Even though the industry is still under pressure, it shows great level of resiliency so as to adapt to the conditions that prevail the local and international markets for another financial year.

This year's report presents strong signs of a new cycle for the Greek coastal market following a decade of losses and stagnation. Despite this trend, Greek ferry companies seem to have limited efficiency in capitalizing on increased demand from tourism activity from abroad. Their revenue mainly comes from freight as well as domestic tourism. It is worth pointing out that the smaller market players appear to have taken most advantage of the upward trend of passenger demand compared to the four traditional companies analyzed extensively in the Study (Figure 3).

Market Structure

The acquisition of HSW by ATTICA Group stands out in the fiscal year 2017 along with the gradual establishment of new entrants in the coastal market. This acquisition, on one hand, has been an essential step towards the simplification of the investment schemes operating in the sector, but, on the other hand, creates potential competition concerns, as the Competition Commission's report shows. The complexity of this problem is also indicated in the conditions that HSW has to fulfill in order to be able to operate in specific areas and itineraries.

The deleveraging strategies of the traditional four players which take place since 2009 seem to be maturing leaving little room for improvement. This deleveraging on one hand has assisted them considerably to improve their financial condition but, on the other hand, has led to a significant shrinking of their market share. This reduction is reflected in both the reduction of the fleet they manage and in the ticket sales. It is worth mentioning that the fleet under management has fallen by more than 65% compared to 2001 while the market share has been decreased from 70% in 2001 to just 42% in 2017. A typical example of restructuring and implementation of a new business model is the case of MINOAN LINES which being part of the Grimaldi Group can make use of the extended fleet introducing additional ships when needed in itineraries where opportunities loom. A characteristic example is the recent introduction of "Mykonos Palace" in the Piraeus-Chania itinerary.

The reduction in the overall activity of the four traditional companies has been assessed as a prime opportunity for the introduction of new, smaller and more flexible structures to the industry, which appear to have identified the gaps that have emerged, investing in itineraries with future potential growth. Their so far presence in the industry is a proof of good managerial skills and abilities to cope with the challenges of the market since they present financial robustness and consistency in their work. Indicative examples of this trend are the investments of Stephanou brothers at Golden Star Ferries, Marios Iliopoulos of Seajets and Panagiotakis brothers of Fast Ferries.

Financial Performance

We start by emphasizing that the financial results of the four traditional companies, which we follow closely every year, after significant effort have begun to pay off. Bank debt has been reduced by 2/3 compared to 2001, due to loan interest and capital write-offs, resulting in the significant shrinking of fleet size. This significant improvement coupled with the operating expenses reduction contributed to achieving satisfactory EBITDA results. But the most important thing in our view is the resilience these companies have in dealing with external

factors such as oil price and exchange rate variability as well as with increased taxation. Another indication of these companies improved performance is the continuous improvement of the Altman index, indicating a decrease in the probability of bankruptcy over the next 3 years.

Threats

The fluctuation of oil prices and the Euro / US dollar exchange rate continue to be the main risks for the sector. In 2017, the threat of increased oil prices re-emerged, resulting in a significant reduction of the profit margin of the four traditional players. Since we do not have any financial information from the rest of the players, we assume that the same threats apply to the new players of the industry. The risks related to the Greek economy, appear to have been removed since consumer confidence has been significantly restored.

A new challenge the sector is faced with, relates to the IMO regulations on ballast water treatment and low sulfur fuels, which will be in effect as of January 1st, 2020. The options for the Ferry companies are either the placement of special catalysts (scrubbers), or the use of low sulfur fuel (0.5% m/m), which is of higher price compared to high Sulphur fuel oil. In the former case, investments amounting between €7 and €11 million are required, while in the latter, companies are exposed to the higher prices of low-sulfur fuels. Ferry companies continuously express their concern from the implementation of such measures, claiming that these will have a negative impact on ticket prices.

The biggest challenge the four traditional companies will face by 2020 is that 32 out of the 45 vessels operating today will be above 20 years of age, which implies that it may not be financially viable for these vessels to upgrade their ballast water and emissions treatment systems. Taking into account the cost of those modifications ranges between €7 and €11 million per vessel, many vessels may be forced to exit the Greek market.

Legislative Framework

The modernization of the legislative framework which will act as an enabler for competitiveness is imperative. We believe that this framework should not be unilaterally approached by the Ministry of Shipping and Aegean but in cooperation with the Ministries of Transport and Infrastructure, so as to provide a comprehensive solution for the benefit of the citizens. The recent effort of “countermeasures”, although is considered to be a good idea by the State, it might have far limited results than expected. In any case, it is evident that the issue of sustainability of the Greek coastal market has been positively addressed by both the State and the companies involved, despite any delays.

Strategic Options

Considering the new cycle in which the Greek coastal market is about to enter, the question that arises is how ferry companies can strategically seize the opportunities that lie ahead.

In essence, there are two categories of ferry companies with different reflexes and reactions: (a) those that follow corporate structures (Listed companies and HSW); and (b) those that follow private structures (new-incoming and small companies). Regarding the first category, with the exception of MINOAN LINES which, as mentioned, belong to the Grimaldi Group which provides them with relative flexibility in decision-making regarding fleet deployment strategies (i.e. "Mykonos Palace" in Chania), the rest of the companies exhibit higher levels of dyskinesia as they have limited their strategies in takeovers and mergers. This dyskinesia is due to their limited ability to raise funds for new vessels and the implementation of vertically integrated strategies through port investments and logistics services. If we also consider the desire of some existing investors to withdraw from the market, which is difficult due to the failure to attract investors at the requested evaluations, the situation becomes more complicated. The latter category of privately owned ferry structures consists of players characterized by elements of freshness and aggression with the intention of either increasing their activity in new itineraries or increasing their share in existing ones. Although so far, they have shown

evidence of resilience to competition, it is very likely that in the near future they will become active in merger and acquisition initiatives.

Undoubtedly, financing needs for new vessels is high. We expect, however, that the future performance of the Greek ferry market to improve further, as demand is expected to increase due to the improvement of the country's economic indicators and the steady flow of visitors from abroad.

The privatization of infrastructure related to logistics activities including ports / roads / logistics parks is a first-class investment opportunity. Such a combination will attract private equity that will be supported by investment banks that are currently absent.

Finally, we emphasize that, in order for investment opportunities to be implemented for the benefit of all stakeholders, bureaucratic procedures should be simplified and under a redesigned framework for licensing procedures. We are at the beginning of a new investment cycle for the Greek coastal shipping where both companies and the State have a role to play and responsibility.

This new cycle is a unique opportunity to create investment models that are characterized by innovation at both management level and the design of services. We point out that the country has entered the era of intermodal transportation. Intermodal transportation needs a coastal shipping map that ensures the rational and safe operation of a maritime transportation network and the proper operation of ports. The implementation of this project requires investors with vision, appetite and certainly with faith in the final goal. The forthcoming mandatory divestment of banks from ferry companies which we expect to take place in the coming 12 months can be a pole of attraction for new investments. The establishment of an independent Ferry Authority and a knowledgeable Competition Commission are essential preconditions for attracting new investment schemes which will bet on the growth of the Greek economy.

*** **



**XRTC Business Consultants, Ακτή Μιαούλη 95, 18538 Πειραιάς GR,
T: +30 210 4291226 F: +30 210 4291230 M: mail@xrtc.gr , W: <http://www.xrtc.gr/>**