### Petrofin Research©

## 2<sup>nd</sup> part of Petrofin Research©:

### 2008 Greek fleet statistics

Petrofin Research © presents its results on the Greek fleet for the 11<sup>th</sup> year running.

In view of the extensive analysis of the Greek fleet data, our Research is published in two sections:

- 1. Greek shipping companies (see 1<sup>st</sup> part of Petrofin Research©), and
- 2. Greek fleet statistics

In this 2<sup>nd</sup> part of Petrofin research, the Greek Fleet Statistics, we examine the makeup of the Greek fleet, in terms of vessel size, vessel type, vessel age and overall fleet size and age.

Our results monitor closely the development of the Greek fleet, which shows remarkable progress over the last few years in terms of vessel size, age, type and fleet size and age. It is of great interest to observe that as we write this, far reaching effects of the global financial crisis, the rise of oil and commodity prices, as well as the purely banking crisis, have combined for the first time, to create a very volatile mix for the world shipping industry.

Greek shipping, as a fundamental sector of global transport, is making its impact on the big markets and stock exchanges. Hence our results are now of interest not only to the people within the shipping industry, but also to potential investors in the US, London, Greek markets, as well as the big institutional funds that have interests in the shipping industry.



## Research Criteria

- a. All Greek-owned / Greek-based vessels, of whichever flag are taken into account.
- The Greek-based / Greek-owned fleet is analysed and presented initially as a whole, in terms of Numbers of Vessels, Age of Vessels and DWT.
- c. Then a cut-off DWT is used of 10,000DWT to measure the number of companies that run vessels above this tonnage. This is done for the whole fleet, then for Bulkers, Tankers and Containers. This cut-off eliminates the vast number of very small and usually over aged vessels that unduly influence the Greek fleet analysis.
- d. A further cut-off DWT point of 20,000DWT is used for the whole fleet, the Bulkers, the Tankers and the Containers. This shows the effect that a higher cut-off has on the fleet and its main sectors.
- e. Newbuildings are only taken into account if they have a delivery date of up to 2009. This ensures a more accurate snapshot of today's fleet, as many of the impressive number of newbuilding orders have delivery dates of 2010 and beyond. Newbuilding orders may be susceptible to re-sales, conversions or cancellations and may thus distort the current picture of the size of Greek companies, the age of their fleets and of vessels actually trading or about to be delivered to Greek-based / Greek-owned companies.



### **SECTION A: Vital Statistics of the Entire Greek Fleet**

### **Size** of the Greek-based, Greek-owned fleet

Due to primarily the high rate of deliveries of newbuildings, the practically non-existent scrapping, together with the continuing S&P activity, the actual number of vessels of the Greek fleet has gone up to a record high **4545**, i.e. up by 199 vessels of all types and sizes or up by 4.58% in the last year. This figure represents vessels of any type, any tonnage and any flag under Greek ownership / management.

### Table 1

Year	2001	2002	2003	2004	2005	2006	2007	2008
Number of vessels in the Greek- based, Greek-owned fleet	4110	4142	4085	4184	3970	4164	4346	4545

The number of vessels has continued to rise substantially for the 3<sup>rd</sup> year running, as owners are keen to keep and build up on their fleets.

These vessels are managed by 758 shipping companies, have an average age of 18.4 years of age and an average DWT of 48,926mtons.

In 2007, there were 4346 vessels, managed by 725 companies, with an average age of 18.7 years and an average DWT 47,860mtons.

It is noteworthy that despite the dearth of scrapping thus aging the whole 2007 fleet by one year (sales and purchases aside), the average age of the fleet has in fact decreased by 0.3 years, due primarily to the influx of newbuildings.

Reversing recent previous trends, the total number of Greek managed fleets have risen from 725 to 758 in one year. This change shall be further analysed in depth in another research to be published shortly.

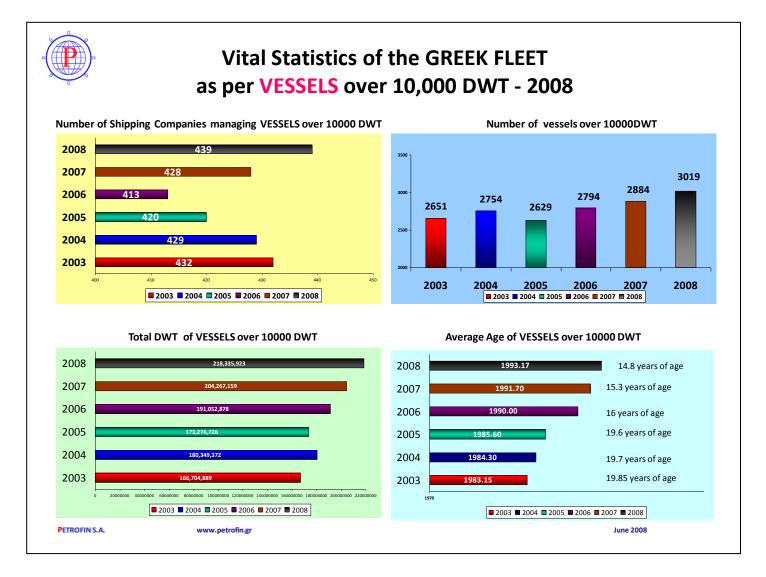
In order to concentrate on the real strength of Greek shipping, we use two cut-off DWT points, one of vessels over 10,000mtons DWT and the other of vessels over 20,000mtons DWT. This way, the Greek fleet is stripped of a large number of overage very small vessels that operate locally. Hence, we concentrate on the global impact of the Greek fleet.

The 2 Graphs below show the fluctuation of the number of companies, the number of ALL vessels and age of Greek fleet with cut-off individual vessel DWT thresholds of 10,000 and 20,000 ('ALL vessels' means everything that floats and is under Greek control):



### Vessels of over 10,000 DWT

Graph 1



- We note that vessels of over 10,000tons DWT represent a total tonnage of 218,335,923 representing 98.2% of the total Greek fleet in DWT terms.
  Last year's 204,267,159mtons DWT also represented 98% of the total Greek tonnage, confirming a steady trend towards bigger vessels. Companies running vessels of over 10,000 DWT have gone up substantially by 11, showing an increase of interest in shipping.
- In 2008, 14,068,764mtons DWT have been added in vessels over 10,000 DWT, as opposed to an increase of 13,214,281 tons DWT in 2007.
- The above tonnage represents 135 more vessels in 2008 as opposed to 90 more vessels in 2007. The average vessel DWT has gone up yet again to **72,321** in 2008, as opposed to 70,828 tons DWT per vessel in 2007, 68,380 in 2006, 65,904 in 2005, 65,486m tons in 2004.

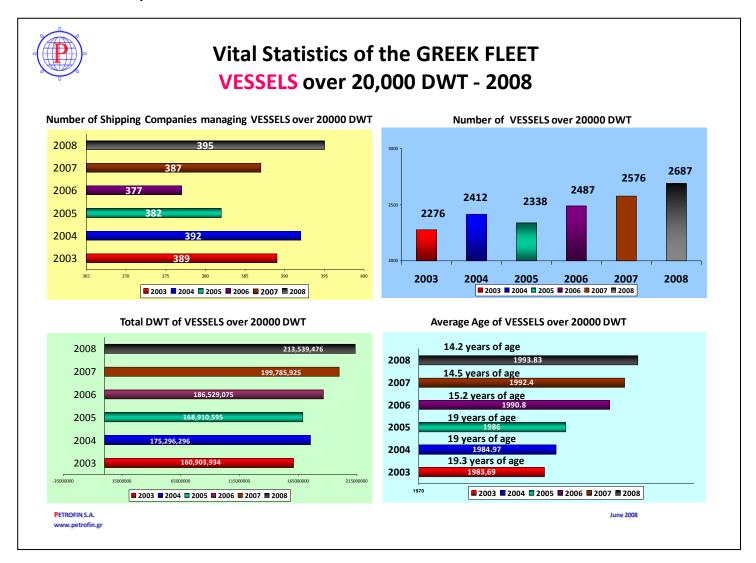


• Age continues to improve substantially for this favourite tonnage type. Average age is now 14.8 years as opposed to 15.3 years last year. Vessels are indeed getting much younger as well as much bigger, despite the dearth of scrapping.



### Vessels of over 20,000 DWT

Graph 2



- Following closely the situation with the over 10,000 DWT vessels, companies that run over 20,000 tonners have also gone up this year, by 8.
- Typically and as with the over 10,000 DWT vessels, those over 20,000DWT collectively went up to 213,539,476 DWT in 2008, from 199,785,925 tons DWT in 2007, and 186,529,075 in 2006. The over 20,000 DWT vessels represent 96% of the total of the Greek fleet, same as last year.
- The total number of vessels over 20,000 DWT has also gone up to 2687, from 2576, i.e. 111 more vessels this year, as opposed to 89 more vessels in 2007. The average DWT of each vessel in this category has jumped to 79,471 DWT, from 77,557 DWT in 2007 and 75,000 DWT in 2006.
- Age is reduced again slightly, down to 14.2 from 14.5 years last year.



## **Summary of results**

In Table 2 below, we present over time the development of the Greek fleet using the DWT fleet thresholds of 10,000 DWT and 20,000 DWT in terms of 4 key criteria:

- a) Total fleet DWT
- b) Number of vessels
- c) Average DWT
- d) Average age of the fleet, and
- e) Number of shipping companies

Table 2

# **Analysis of the Greek fleet**

	Total Fleet DWT	No. of vessels	Average DWT	Average Age	No. of Cos.
Ships over 20,000 DWT 2008	213,539,476	2,687	79,471	14.2	395
Ships over 20,000 DWT 2007	199,785,925	2,576	77,557	14.5	387
Ships over 20,000 DWT 2006	186,529,075	2,487	75,002	15.2	377
Ships over 20,000 DWT 2005	168,910,595	2,338	72,246	19	382
Ships over 20,000 DWT 2004	175,296,296	2,412	72,677	19	392
Ships over 20,000 DWT 2003	160,903,934	2,276	70,696	19.3	389
Ships over 10,000 DWT 2008	218,335,923	3,019	72,321	14.8	439
Ships over 10,000 DWT 2007	204,267,159	2,884	70,828	15.3	428
Ships over 10,000 DWT 2006	191,052,878	2,794	68,380	16	413
Ships over 10,000 DWT 2005	173,276,726	2,629	65,910	19.4	420
Ships over 10,000 DWT 2004	180,349,372	2,754	65,486	19.6	429
Ships over 10,000 DWT 2003	166,704,889	2,651	62,884	19.85	432
Ships over 10,000 DWT 2002*	166,117,271	3,451	48,136	20.75	487
Ships over 10,000 DWT 2001*	152,092,312	3,491	43,567	21.13	505
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• Data available only for over 10,000 tons DWT vessels.



## **SECTION B: Analyses by type of vessel**

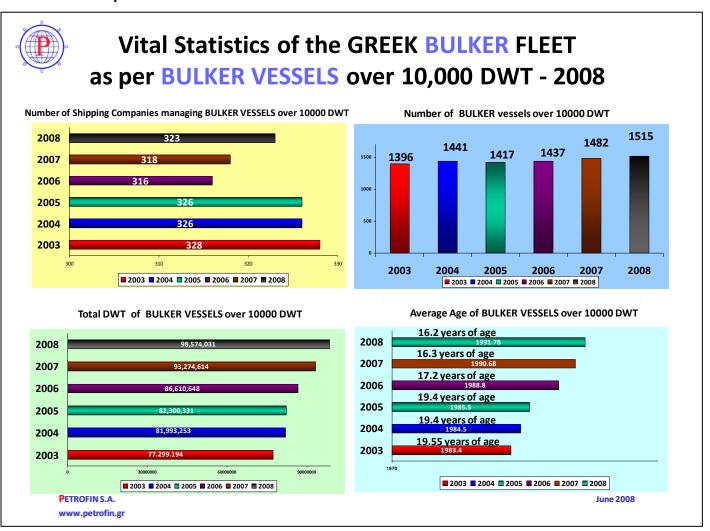
# The Greek bulker fleet as per bulker vessels over 10,000 dwt each

Comparisons between 2003, 2004, 2005, 2006, 2007, 2008

The graph below shows that the number of companies has gone up by 5 to 323 in 2008, compared to 318 in 2007 and that the bulk carriers over 10,000DWT went up to 1515 in 2008, from 1,482 in 2007 and 1,437 units in 2006, i.e. up by 33 units. Tonnage again went up by **5,299,417 tons**, not as an impressive a rise as the 6,663,966 DWT increase in 2007, beating by over 2m tons the previous year's rise of 4,310,317 DWT. There is also the expected increase of average vessel size to 65,065 DWT in 2008 from 62,938 DWT in 2007 and 60,272 DWT in 2006.

The age is slightly down to 16.2, compared to 16.3 years in 2007, reflecting the trend of keeping older bulkers (rather than scrapping) to cover the demand, balanced, however, by the influx of newbuildings and the purchase of modern second-hand vessels has kept the average age from rising.

Graph 3

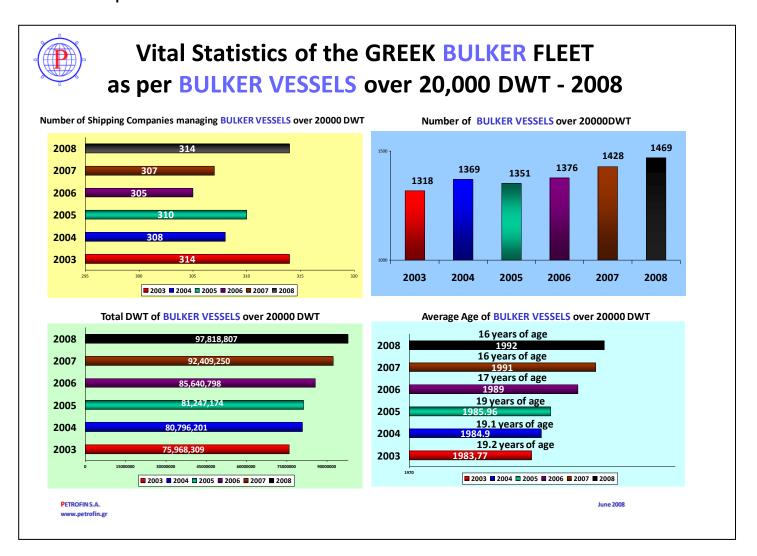




# The Greek bulker fleet as per bulker vessels over 20,000 dwt each

Similar trends here also. Vessels are up by 41 units as opposed to a rise of 52 units last year, companies are up by 7, compared to 2 in 2007, and tonnage is up by 5,409,557 DWT against the 6,7m tons DWT in 2007. Age has remained the same, reflecting owners' wish to keep older tonnage purchases that make financial sense in a market where charter rates are so high. Average DWT here is 66,589 DWT in 2008, compared to 64,712 DWT in 2007 and 62,239 DWT in 2006.

Graph 4



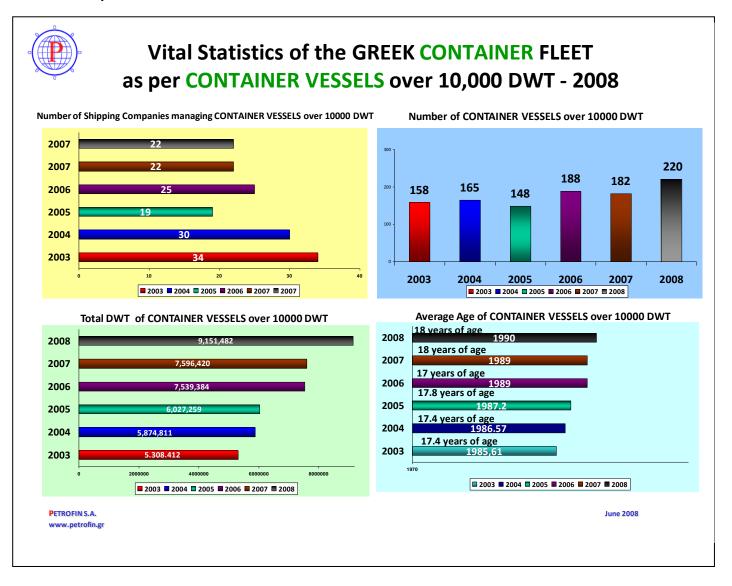


## The Greek container fleet of container vessels over 10,000 dwt each

## Comparisons between 2003, 2004, 2005, 2006, 2007 and 2008

After last year's minimal increase of the total DWT by 57,000 tons DWT, Containers have, this year, increased in tonnage by a leap of approx. 1.5m tons DWT. The number of companies running such container vessels is the same. The number of vessels has gone up by 38, after last year's decrease by 6 units. Age has remained steady at 18 years. Interest in containers has definitely picked up in 2008.

Graph 5



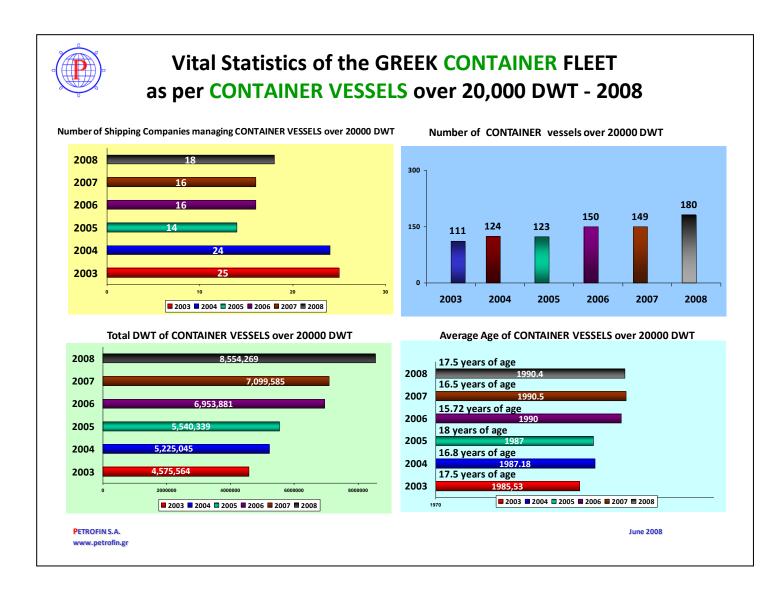


# The Greek container fleet of container vessels over 20,000 dwt each

## Comparisons between 2003, 2004, 2005, 2006, 2007 and 2008

Here, the tonnage increase by 1.45m DWT is again impressive compared to last year's mere 145,700. The number of companies has gone up by 2 and the number of units is up by 31. The age has also gone up here, by one year for the second year running, a trend not followed by the other sectors and reflecting the need for acquiring new tonnage. An explanation for the higher age reflects the purchase of large but older container vessels on period charter back.

Graph 6



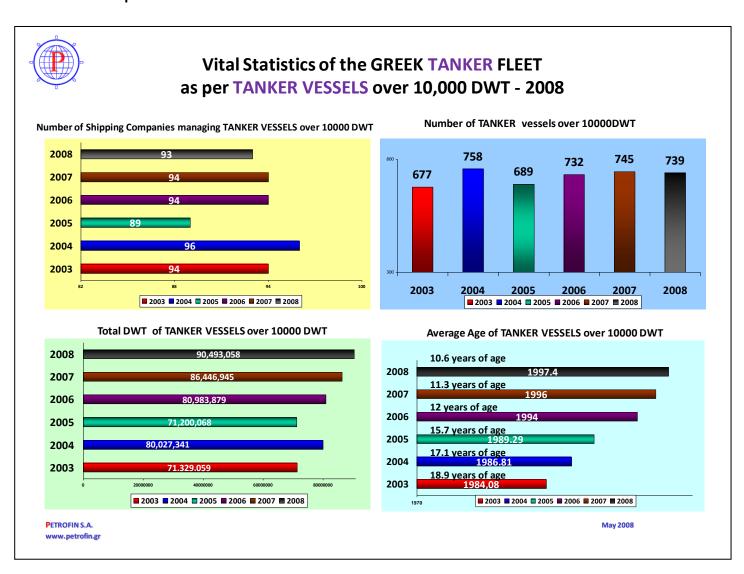


# The Greek tanker fleet of tanker vessels over 10,000 dwt each

## Comparisons between 2003, 2004, 2005, 2006, 2007 and 2008

Here we observe that the number of tanker units has gone down by 6, the companies that run them have gone down by 1, but tonnage has jumped up by 4m DWT and the age has gone down by nearly a year from the already young 11.3 years to the much younger 10.3 years of age. All this is the confirmation of tankers being the sector with the fastest renewal and growth process. The average tanker size is 122,453DWT, as opposed to last year's 116,036 DWT. The withdrawal of single-hull tankers and the acquisition of modern double-hull tankers has resulted in a rapid fleet age reduction.

Graph 7



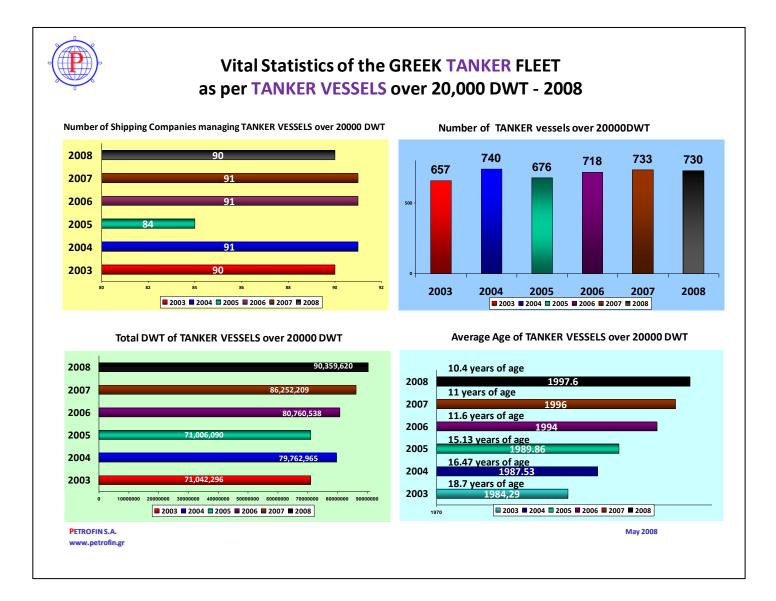


# The Greek tanker fleet of tanker vessels over 20,000 dwt each

Comparisons between 2003, 2004, 2005, 2006, 2007 and 2008

Similar trends apply in the over 20,000 DWT tankers. Companies in this sector have also gone down by 1 and the number of vessels by 3. Tonnage has gone up by 4.1m DWT and the age is down from 11 to 10.4 years of age. The average unit's size is 123,780 DWT in 2008 against 117,670 DWT last year.

**Graph 8** 





### Commentary

The Greek fleet is continuing its steady rise and modernisation. The fleet continues to get bigger, younger and even where it is not younger (containers), it is definitely bigger.

The market is still holding, as we write this, despite the influx of newbuildings, and purchases of older tonnage also continue. Scrapping is still non-existent. Demand appears to still outstrip supply which has resulted in record vessel prices and charter rates.

There is a problem that might upset the above trend in the future. Purchases happen at extremely high prices, totally unprecedented and, one could say, quite shocking. This, coupled with the current global oil / financial crisis may bring about a recession which may decrease demand at the time of increased newbuilding deliveries and result in charter rates dropping and vessel prices plummeting.

Current liquidity, however, allows for such risks to be taken, and they are taken, as owners have widely divergent view over the market's prospects.

