Petrofin Research©

2nd part of Petrofin Research©:

2009 Greek fleet statistics

Petrofin Research © presents its results on the Greek fleet analysis for the 12th year running, i.e. since 1998.

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

1. Greek shipping companies (see 1st part of Petrofin Research©, already released), and
2. **Greek fleet statistics**

In this 2nd part of Petrofin research, the Greek Fleet Statistics, we examine the makeup of the Greek fleet, in terms of vessel size, vessel type and vessel 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 and type. It is of great interest to observe that as we write this, far reaching effects have impacted both the international shipping communities as a result of the global banking / financial, economic and investment crises.

Greek shipping, as a fundamental player in global transport, has been 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. This interest may well increase in the light of lower vessel values as well as lower share prices for Greek publicly listed companies.

Research Criteria

a. All Greek-owned / Greek-based vessels, of whichever flag are taken into account.

b. 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 2010. This ensures a snapshot of today's fleet closer to reality, as many of the impressive number of newbuilding orders have delivery dates of 2011 and beyond. In the current economic climate, a very substantial number of newbuilding orders may be susceptible to cancellations, postponements and re-sales, 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.

f. Under the "Tanker" term we have included only crude oil Tankers, ULCCs and VLCCs and not other types of tankers. Bulk carriers include bulkers only and not general cargo vessels. Container vessels are pure cellular vessels. Consequently, this 2nd part of our research does not produce data for other types, such as chemical tankers, product carriers, LNGs, OBOs, Container/bulkers, etc.

SECTION A: Vital Statistics of the Entire Greek Fleet

Size of the Greek-based, Greek-owned fleet

When the crisis hit in October 2008, Greek shipping was still in the process of expanding. Due to primarily the high rate of deliveries of newbuildings, the practically non-existent scrapping at that time, together with the vigorous S&P activity throughout most of 2008, the actual number of vessels of the Greek fleet has gone up to a record high **4763,** i.e. up by 218, vessels of all types and sizes or up by 4.8% in the last year (growth the previous year was 4.58%, i.e. 199 vessels). 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	2009
Number of vessels in the Greek-based, Greek-owned fleet	4110	4142	4085	4184	3970	4164	4346	4545	4763
Change from previous year		32	-57	99	-214	194	182	199	218

The number of vessels has continued to rise substantially for the 4th year running.

These vessels are managed by 773 shipping companies, their average age has fallen to 17.6 years of age as opposed to 18.4 years of age in 2008 and have an average DWT of 49,819mtons, as opposed to an average of 48,926mtons last year.

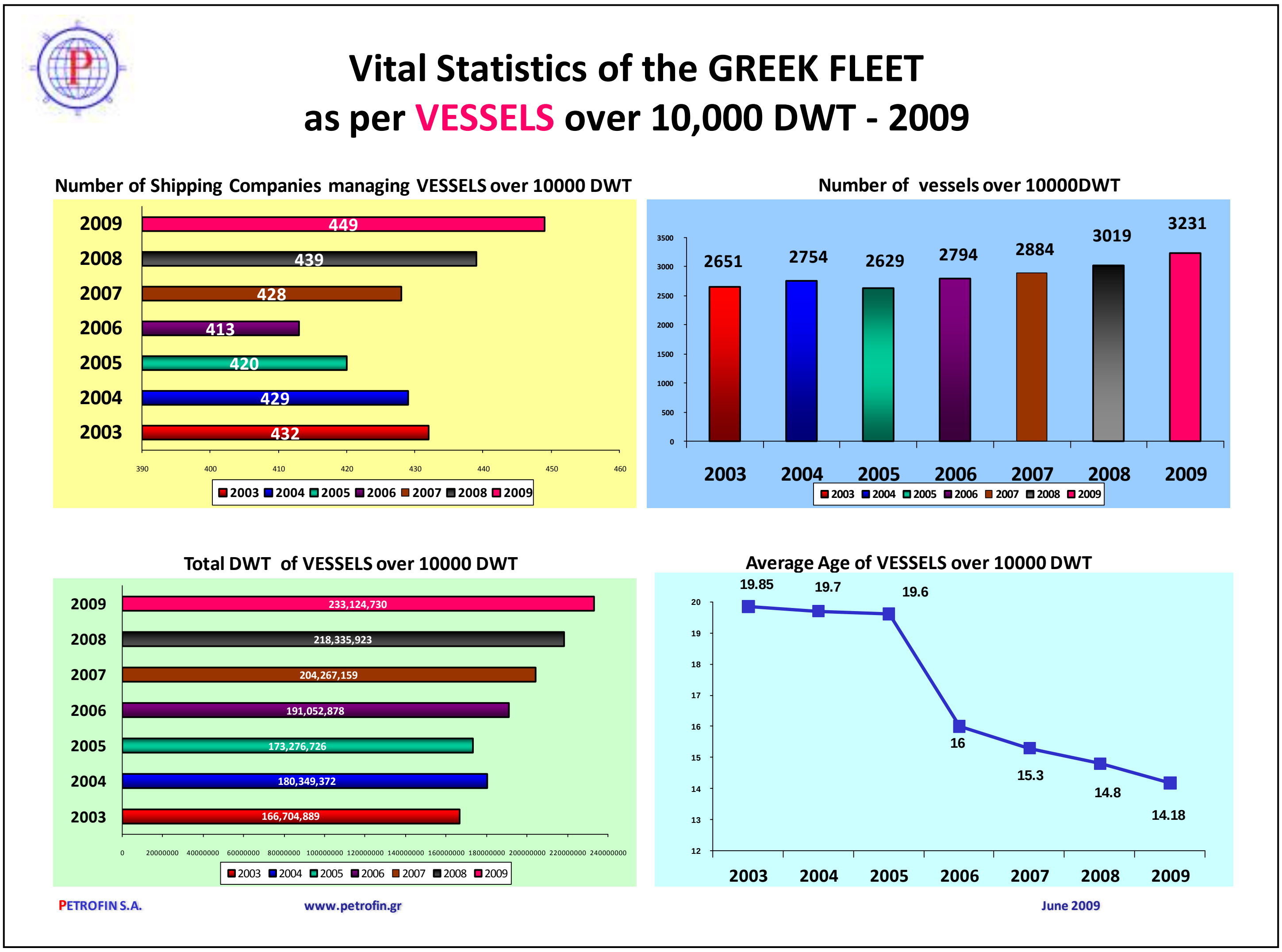
In 2007, there were 4346 vessels, managed by 725 companies, with an average age of 18.7 years and an average DWT 47,860mtons.

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 mostly locally. Hence, we concentrate on the global nature 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 233,124,730 representing 98.25% of the total Greek fleet in DWT terms.

  Companies running vessels of over 10,000 DWT have gone up by 10.

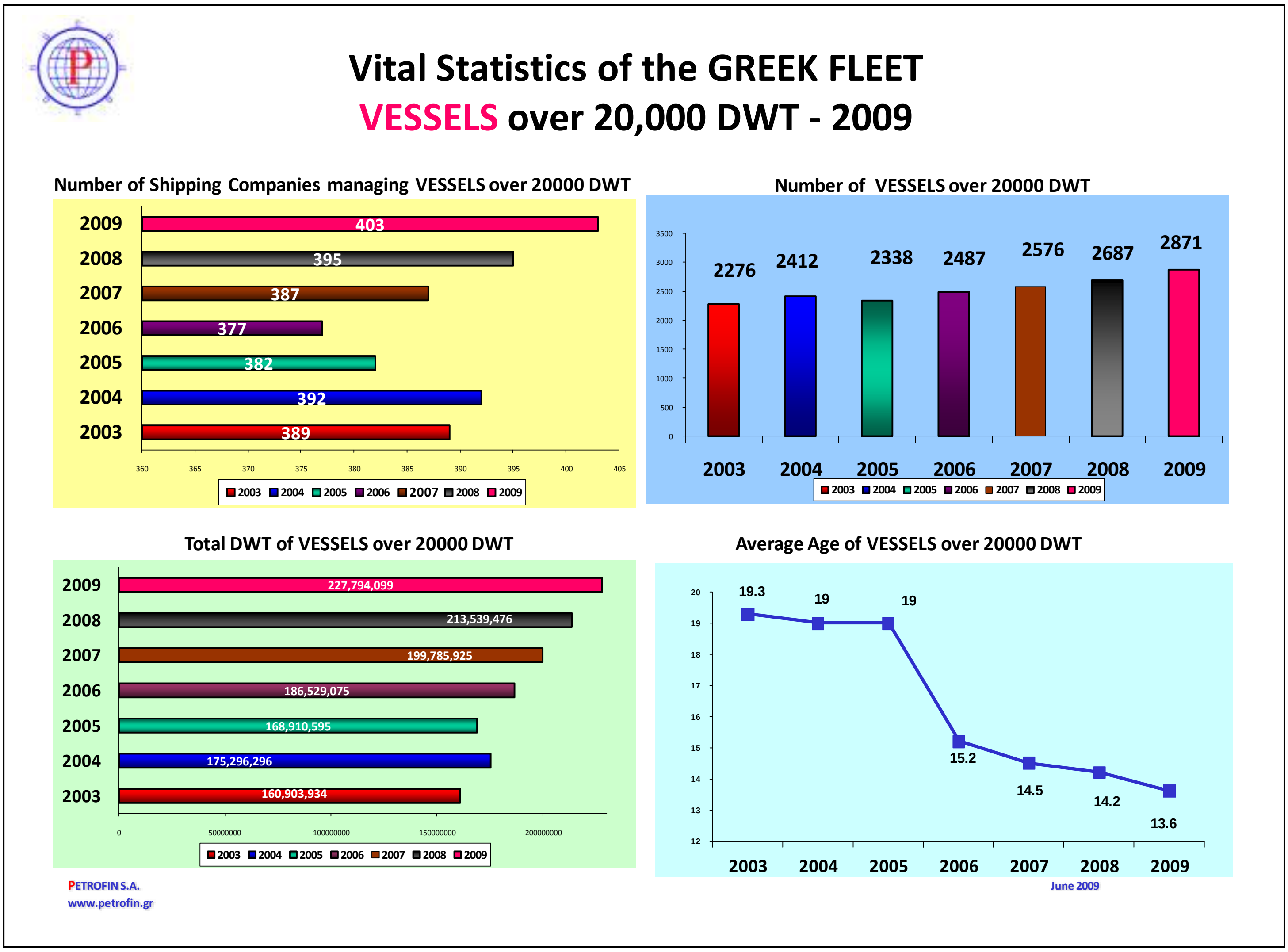
- 14,788,807mtons were added in vessels over 10,000, similar to last year's addition of 14,068,764mtons DWT showing that a steady rise momentum had been established right up to the global economic crisis.

- The above tonnage represents 212 more vessels in 2009, as opposed to 135 more vessels in 2008 as opposed to 90 more vessels in 2007. We have a slight decrease in the average vessel tonnage for the first time, by 168 tons, as this year it stands at **72,152**mtons, as opposed 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.

- The Greek fleet's age continues to improve substantially for this tonnage category. Average age is now 14.18 years as opposed to 14.8 last year and 15.3 years in 2007. Vessels are indeed getting much younger but size remains largely the same.

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 227,794,099 DWT, from 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 and as the year before.

- The total number of vessels over 20,000 DWT has also gone up to 2871 from 2687 in 2008, from 2576 in 2007, i.e. 184 more vessels, compared to 111 more vessels last year, as opposed to 89 more vessels in 2007. The average DWT of each vessel in this category again shows a very small decrease down to 79343 DWT, compared to last year's leap to 79,471 DWT from 77,557 DWT in 2007 and 75,000 DWT in 2006.

- The average age has reduced again, significantly down to 13.6 years, as opposed to 14.2 last year and 14.5 years the year before.

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 2009	**227,794,099**	**2,871**	**79,343**	**13.6**	**403**
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 2009	**233,124,730**	**3231**	**72,152**	**14.18**	**449**
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.

Top fleets

Top owners and the percentage they hold of the total of Greek fleet in DWT terms				
	Top 30 owners	**Top 50 owners**	**Top 70 owners**	**Total fleet DWT**
2007	**104,049,575**	**106,551,097**	**147,429,915**	**208,001,159**
	50.02%	**51.23%**	**70.88%**	
2008	**111,643,505**	**139,772,288**	**157,349,073**	**222,368,331**
	50.21%	**62.86%**	**70.76%**	
2009	**118,473,829**	**147,699,624**	**166,380,212**	**237,288,216**
	49.93%	**62.24%**	**70.12%**	

As the top owners increase their fleet DWT in leaps and bounds, so do the smaller ones. This explains the virtually unchanging percentage they hold in the total of DWT terms. We must always bear in mind that newbuildings are not included but only deliveries up to 1 year ahead which will or have already started.

SECTION B: Analyses by type of vessel

The Greek bulker fleet as per <u>bulker</u> vessels over <u>10,000 dwt</u> each

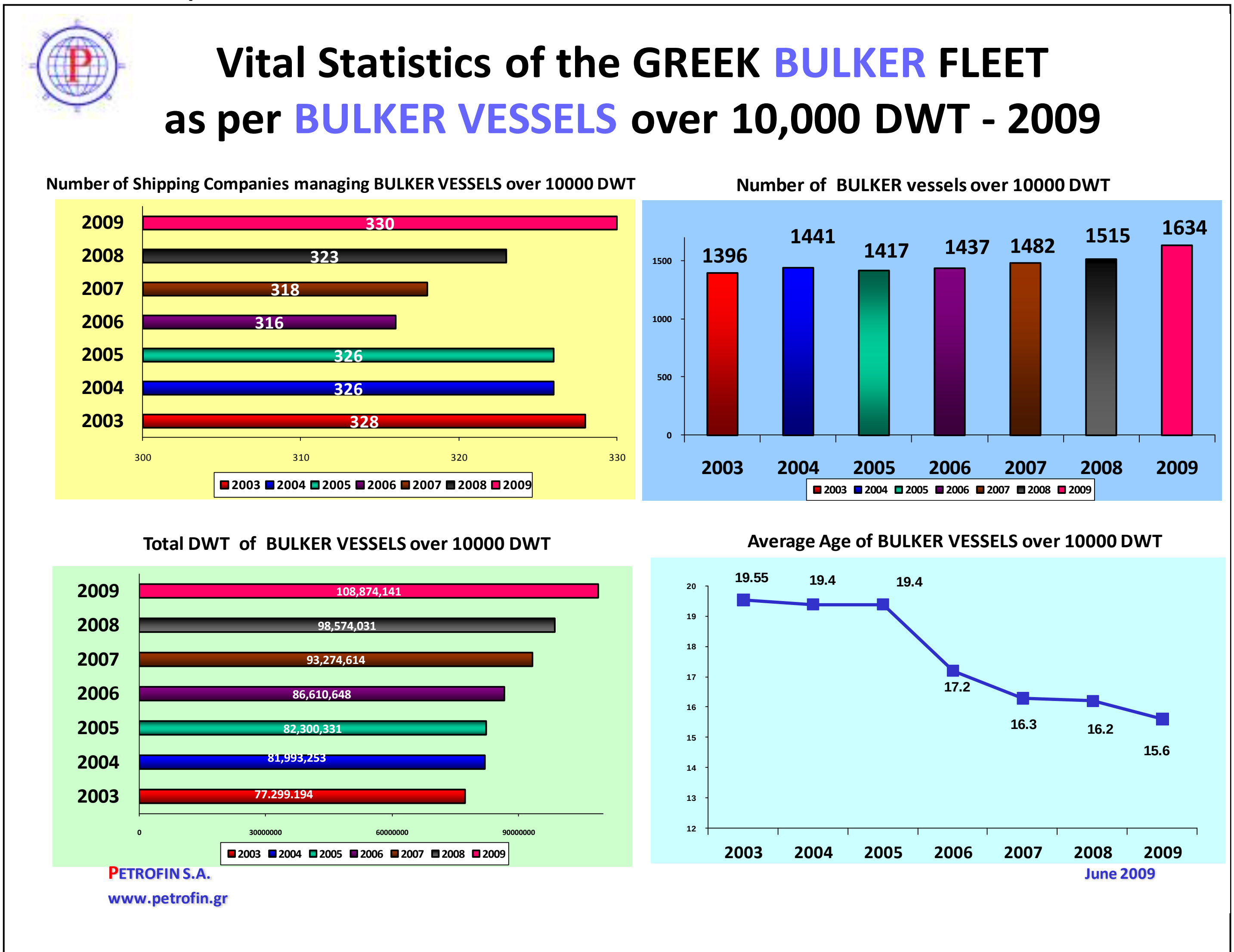
Comparisons between 2003, 2004, 2005, 2006, 2007, 2008, 2009

The graph below shows that the number of companies has gone up by 7 to 330 in 2009, and that the bulk carriers over 10,000DWT went up to 1634 compared 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 **10,300,110 tons DWT,** compared to a rise of 5,299,417 tons last year, and 6,663,966 DWT in 2007. There is also the expected increase of average vessel size to 66,630 DWT, up again from 65,065 DWT in 2008 and from 62,938 DWT in 2007 and 60,272 DWT in 2006.

The age is down to 15.6 from 16.2 last year.

This is the most popular sector in Greek shipping, representing 34.31% of the total of Greek fleet.

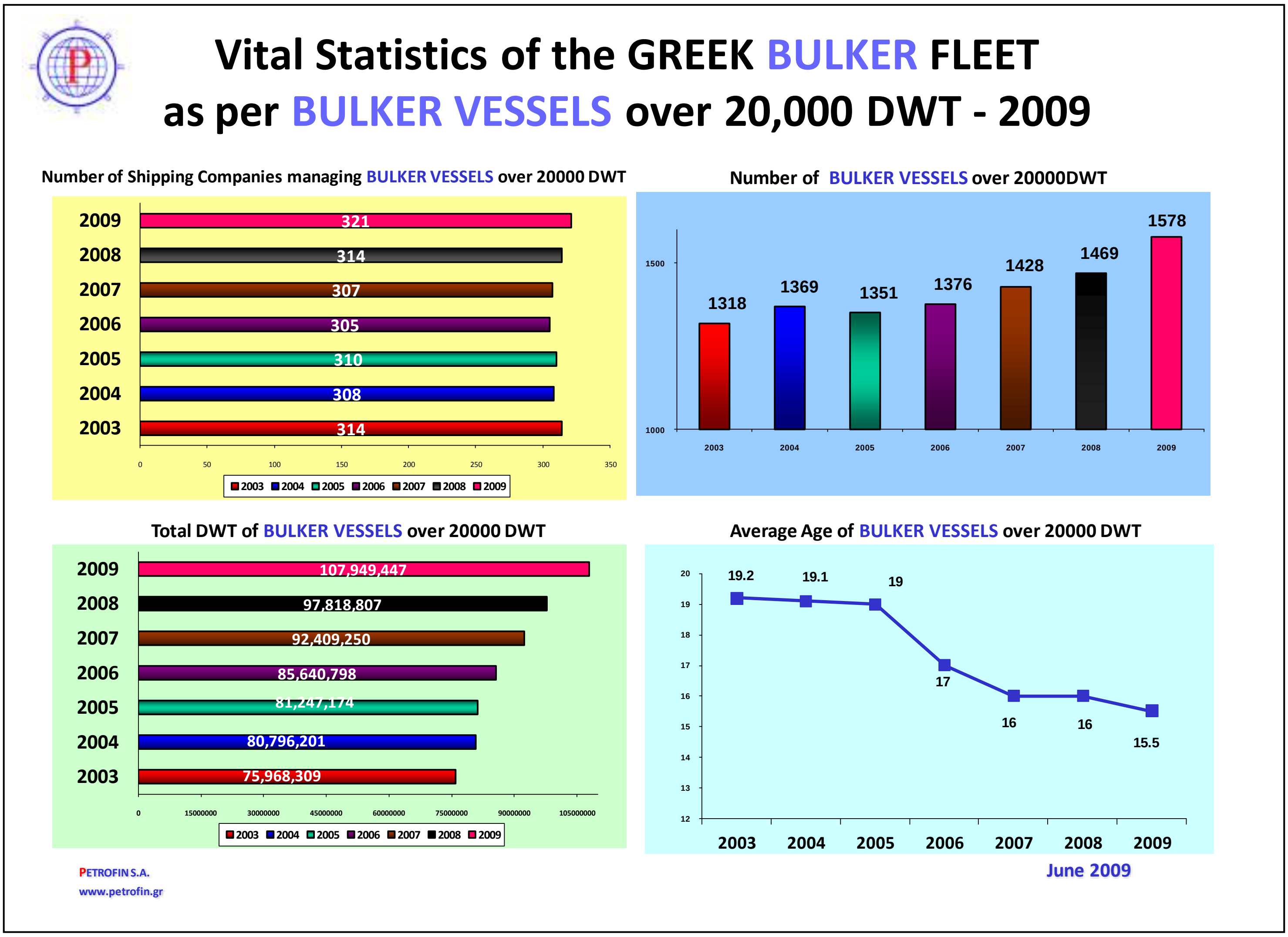
Graph 3



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

Similar trends here also. Vessels are up by 109 units to 1578, as opposed to a rise of 41 units last year, companies are up by 7, and tonnage is up by a very significant 10,130,640, compared to 5,409,557 DWT last year and against the 6,7m tons DWT in 2007. Age has gone down to 15.5, Average DWT here is 66,064, slightly down from 66,589 DWT in 2008, compared to 64,712 DWT in 2007 and 62,239 DWT in 2006.

Graph 4

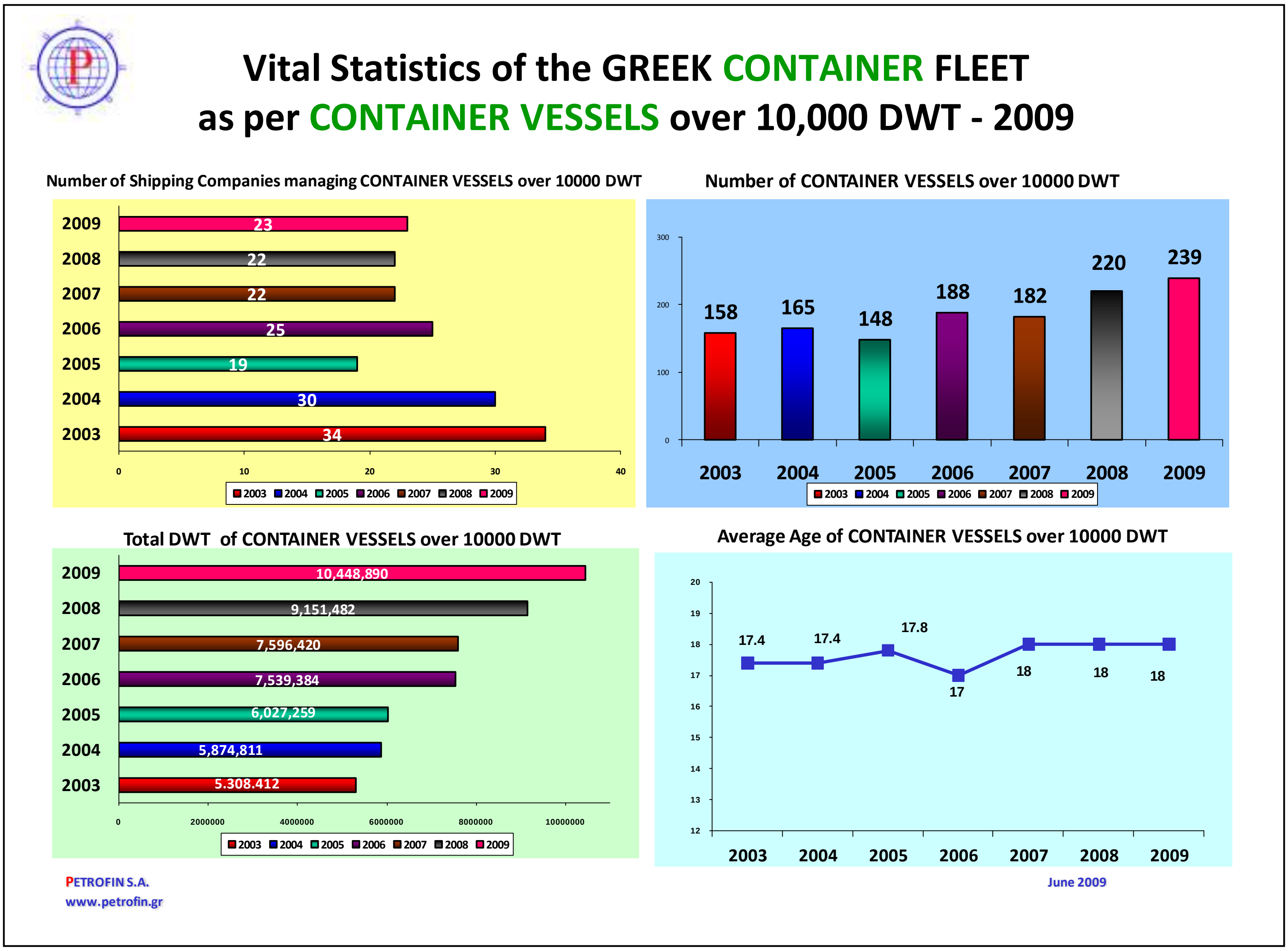


The Greek container fleet of <u>container</u> vessels over <u>10,000</u> dwt each

Comparisons between 2003, 2004, 2005, 2006, 2007 and 2008, 2009

This year the increase in tonnage was 1.297mDWT, compared to 1.5mDWT last year and a mere 57,000 tons DWT. The number of vessels has gone up by 19. Age has remained steady at 18 years.

Graph 5

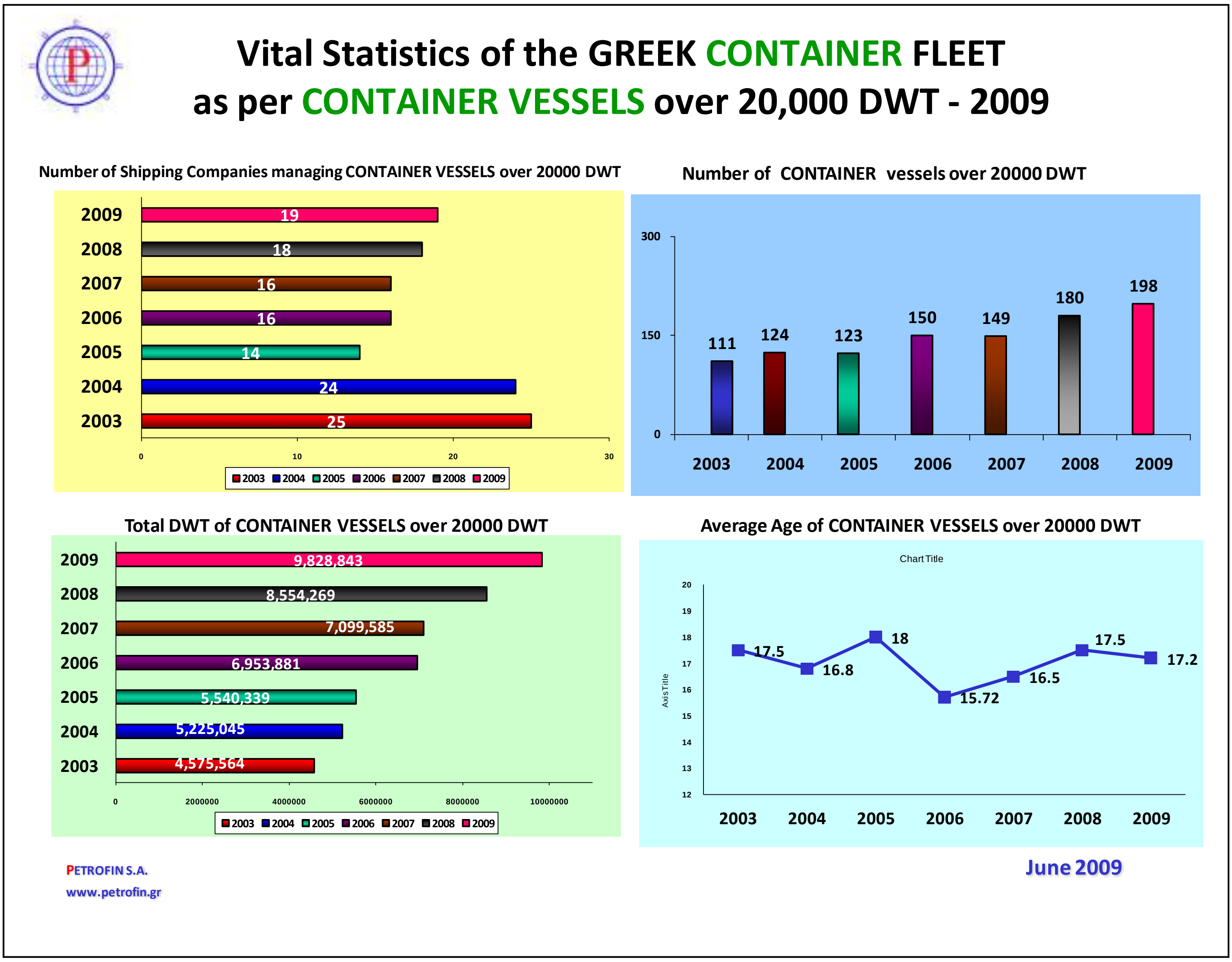


The Greek container fleet of <u>container</u> vessels over <u>20,000</u> dwt each

Comparisons between 2003, 2004, 2005, 2006, 2007 and 2008, 2009

Here, the tonnage increase by 1.27mDWT, as opposed to 1.45m DWT which makes it an impressive rise of the last two years, especially compared to 2007's mere 145,700DWT rise. The number of companies has gone up by 1 and the number of units is up by 18. The age has not shown significant difference, as this sector is very slow to change. As it is doubtful if all the newbuildings are going to be delivered, possibly the age profile will take years to change. Average vessel DWT is 49,640, compared to 47,524, showing an increase in size.

Graph 6



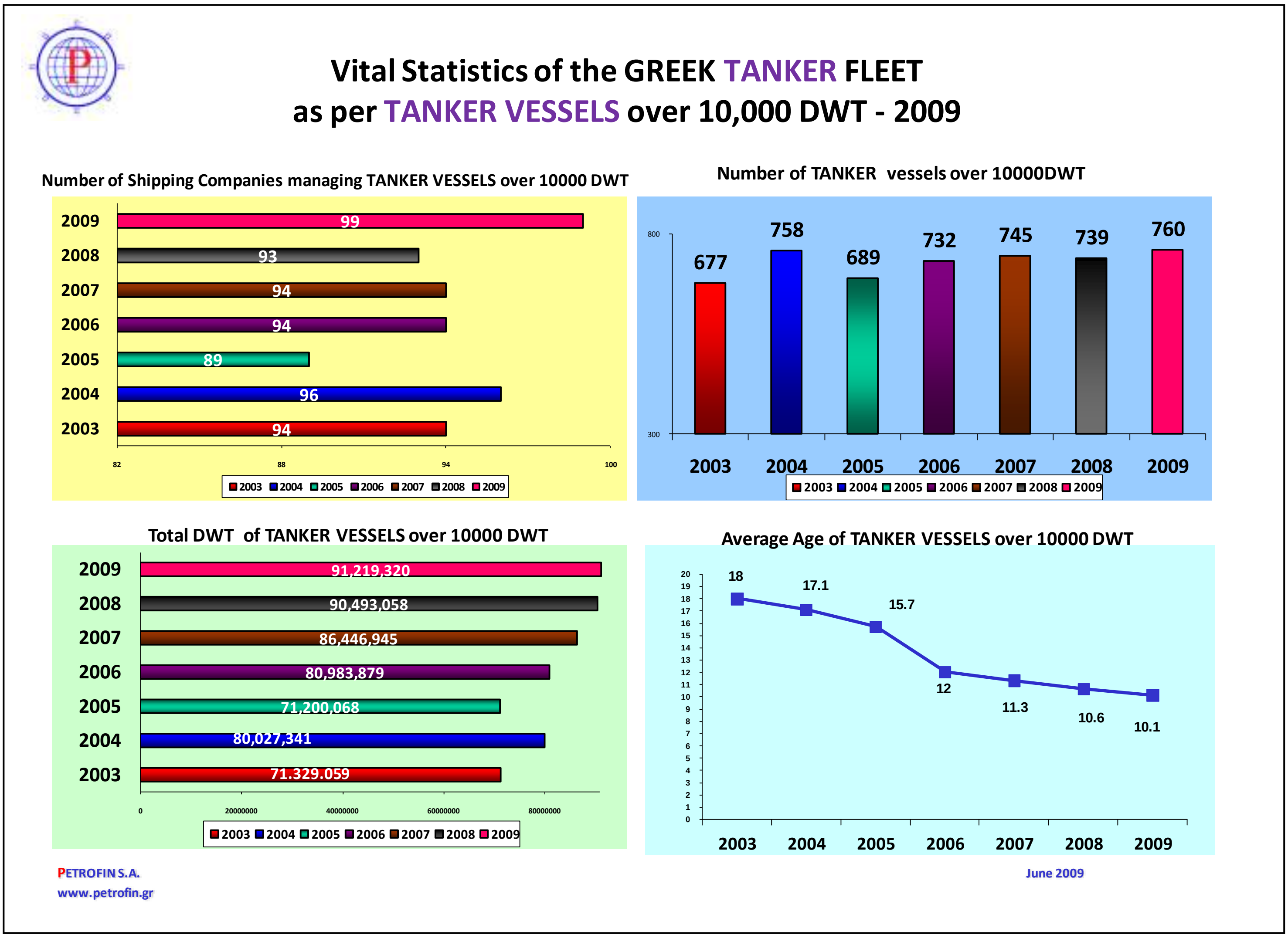
The Greek tanker fleet of <u>tanker</u> vessels over <u>10,000 dwt</u> each

Comparisons between 2003, 2004, 2005, 2006, 2007 and 2008, 2009

Here we observe that the number of tanker units has gone up again by a very significant 21, the companies that run them have gone up by 6, and tonnage has gone up only by 627,107 compared to last year's leap by 4m DWT last year. Age has gone down again to 10.1 years. The average tanker size is 120,025, as opposed to 122,453DWT last year and 116,036 DWT the year before.

The trend toward younger vessels is reflected by a fall in the average fleet age from 10.6 to 10.1 years.

Graph 7

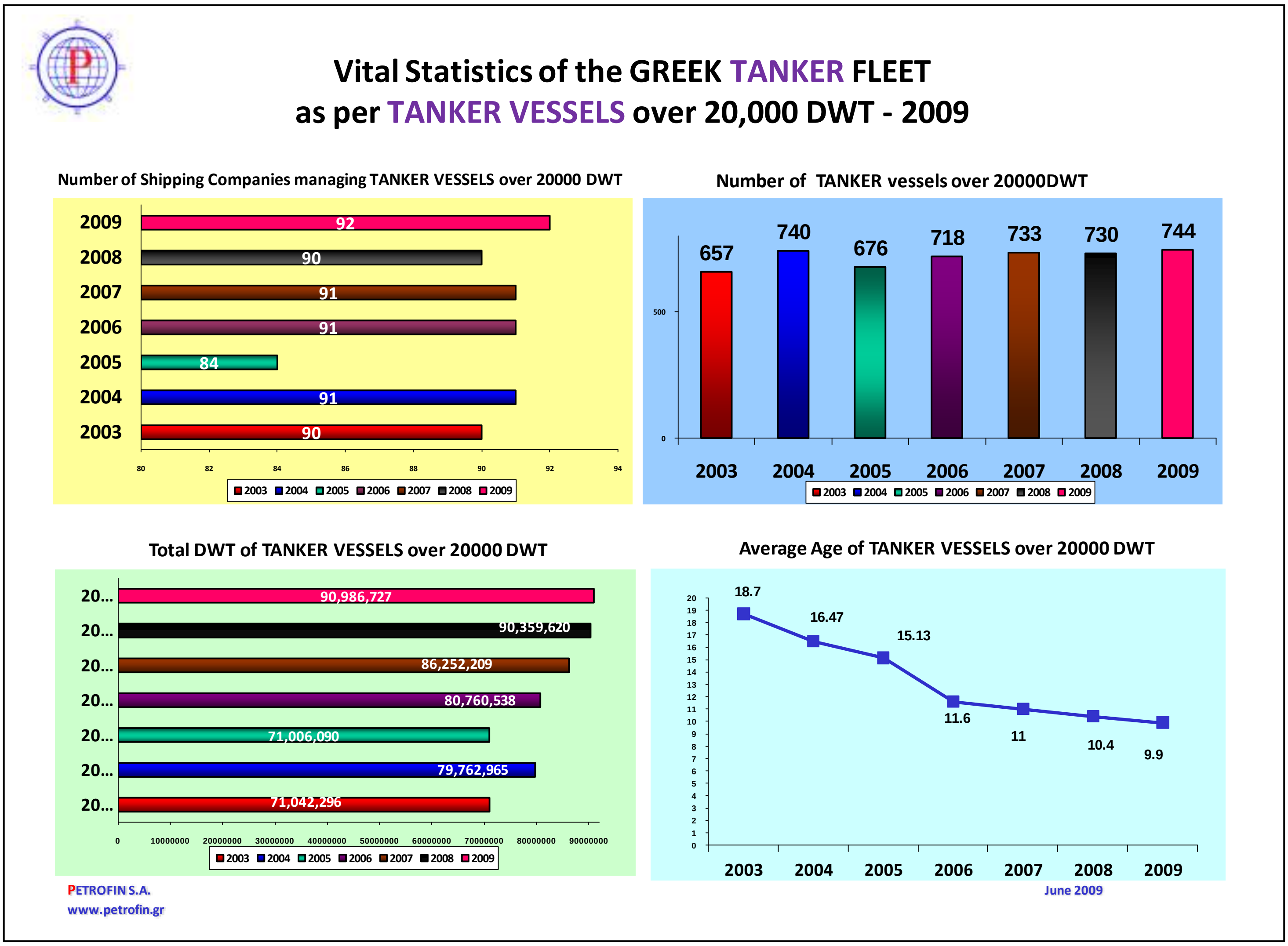


The Greek tanker fleet of tanker vessels over 20,000 dwt each

Comparisons between 2003, 2004, 2005, 2006, 2007 and 2008, 2009

Similar trends apply in the over 20,000 DWT tankers. Companies in this sector have gone down by 2 but the number of vessels is up by 14. Tonnage has gone up only by 627,107DWT, but age has been brought down to 9.9 years from 10.4. Considering that 14 vessels were added to that sector, and taking into account that the average unit size has gone down to 122,293 from 123,780 DWT in 2008. It is self evident that some smaller sized vessels were added to the fleet.

Graph 8



Commentary

The 2009 Greek fleet analysis reflects robust growth based on decisions that were taken in 2008 in the middle of a very buoyant shipping market. The development of Greek shipping continued unabated for vessels of all sizes and types, as well as ages, including newbuildings with an emphasis towards younger and bigger vessels.

Consequently, the Greek fleet continued to increase its size and so did the number of companies involved in Greek shipping. The very robust shipping market across all vessel types over the last 4 years has resulted in a reversal of the downward trend in the number of shipping companies which had taken place until 2006. In good times, the opportunity to invest and share in the golden Greek shipping story proved too hard to refuse.

It is tankers that continue to record the best age improvement, followed by bulkers. Containers have shown no improvement. In DWT terms, it is bulkers that show the greater increase, followed by tankers and containers last.

Although the current shipping crisis will undoubtedly impact future results, it is not expected that the trend towards bigger and more modern vessels shall slowdown. Despite newbuildings cancellations and delays, the newbuilding projections remain historically high. In addition, the higher scrapping will assist to maintain the youth of the Greek fleet.

Thus far, forced sales have been extremely limited for Greek owners with most looking for opportunities to acquire relatively inexpensive but young tonnage. Should the shipping crisis, though, persist for a long time, no doubt some consolidation in the number of owners and amongst primarily the smaller owners with overage fleets is expected.

On the other hand, despite the cancellations and delays, the Greek order book remains large and it is primarily the lack of finance that is holding back some owners from continuing to perform under existing newbuilding contracts. The same lack of finance hinders the acquisition of new tonnage by willing buyers.

Greek shipping will face increasing competition from Chinese owners who are assisted during such difficult times by the still buoyant Chinese economy and the influx of new Far East financing banks.

The longer the crisis the more likely it shall be that Greek shipping may not be able to maintain its number 1 position ahead of China. This, however, shall not mean that Greek shipping will cease to expand and modernise and to remain the biggest shipping nation by far in Europe.