Petrofin Research©

2nd part of Petrofin Research©:

2011 Greek fleet statistics

In this 2nd part of Petrofin research, the Greek Fleet Statistics, we analyse the composition of the Greek fleet, in terms of vessel size, vessel type and vessel age.

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 scheduled delivery year of up to and inclusive of 2012. This results in a more accurate assessment of today's fleet closer to reality, as many of the impressive number of newbuilding orders have delivery dates of 2013 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

Entire Greek fleet

Despite the low freights, the stagnating S&P market and the lending restrictions, the Greek fleet showed an impressive mobility in terms of numbers, age and size. Confidence in shipping is still there and strategic movements are at work to render it ready when the market recovers. The data obtained from our research is indicative of a very active market, a positive outlook for the future and continuous emphasis towards larger and younger vessels.

The overall number of Greek vessels has gone up by 59 making up more than half of last year's fleet reduction. These are vessels of all types, sizes, flags and ages. Except for the 2010 reduction, the upward curve continues since 2005. (**Table 1**) Over the last 11 years, the fleet has grown by 14.7%. Moreover, the fleet's DWT has grown from 242,802,092 DWT in 2010 to 256,174,041 DWT in 2011, a 5.5.% yoy growth **(Table 2).** Over the last 11 years, the fleet's DWT has grown by 69.7%.

Table 1

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Number of vessels in the Greek-based, Greek-owned fleet	**4110**	**4142**	**4085**	**4184**	**3970**	**4164**	**4346**	**4545**	**4763**	**4655**	**4714**
Change from previous year		**32**	**-57**	**99**	**-214**	**194**	**182**	**199**	**218**	**-108**	**59**

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These vessels are managed by 762 companies, compared to 758 shipping companies in 2010 (1st Part of Petrofin research©).

Table 2

YEAR	DWT	AVERAGE AGE	AVERAGE VESSEL DWT
2001	150,978,565	**21.41**	**36,734**
2002	166,931,748	**20.58**	**40,302**
2003	171,448,133	**20.51**	**41,970**
2004	184,288,917	**20.12**	**44,046**
2005	176,411,750	**19.9**	**44,436**
2006	194,486,455	**19.14**	**46,707**
2007	208,001,159	**18.7**	**47,860**
2008	222,368,331	**18.4**	**48,926**
2009	237,288,216	**17.6**	**49,820**
2010	242,802,092	**16.4**	**52,160**
2011	256,174,041	**15.92**	**54,343**
	Petrofin Research ©		**July 2011**

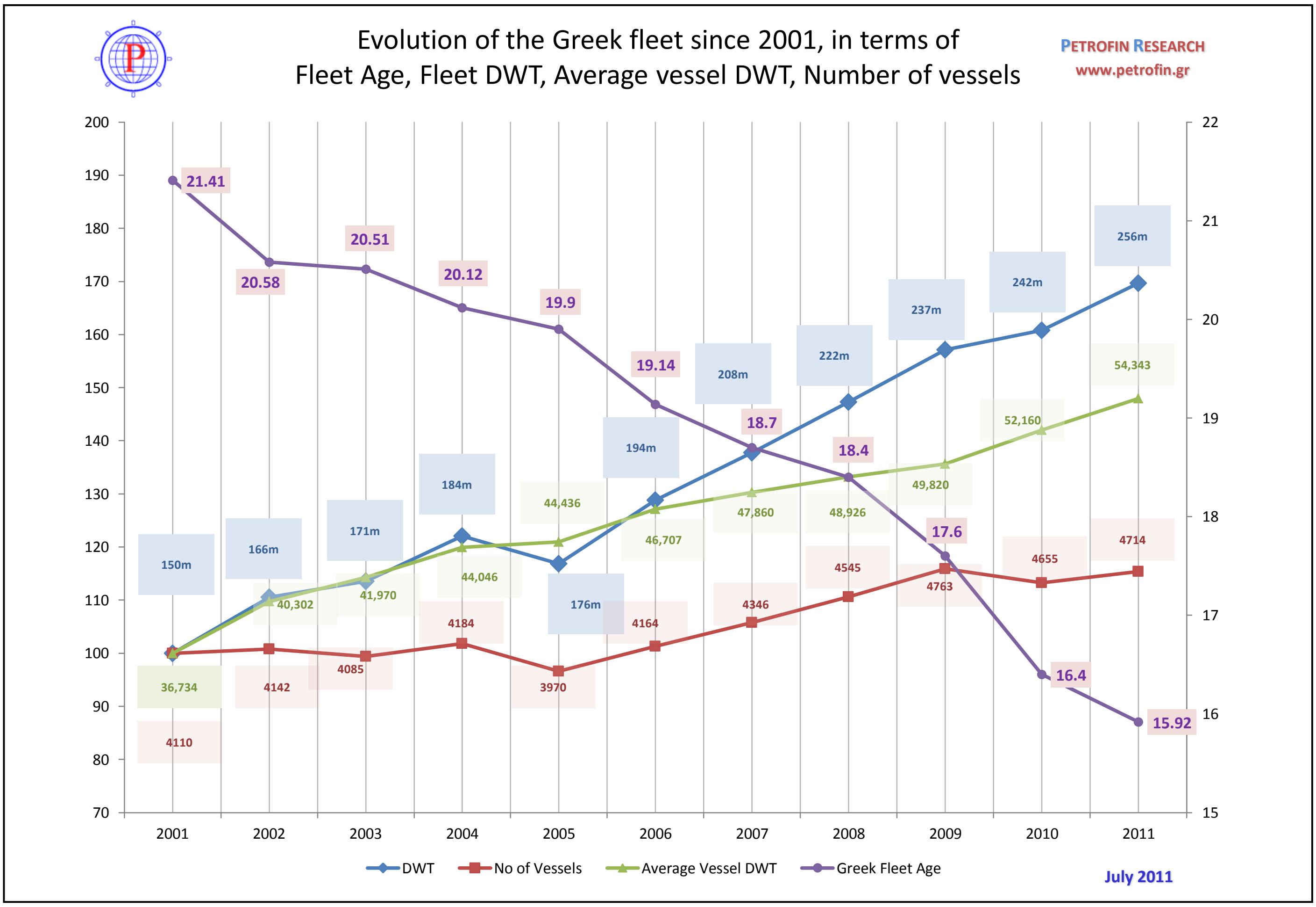
The average vessel DWT has gone up again this year to **54,343 DWT** from **52,159 DWT**, in 2010, 49,819 tons in 2009 and 48,926 tons in 2008.

This represents a rise by 4.18%. The increase in vessel size continues uninterrupted since 2001.

Average age is down to a very young **15.92** from **16.64** years (**Table 2**, above). It should be noted that this is the average age of the entire Greek fleet, covering all sizes, types and activities. Some very old ships are included in this fleet, which makes the drop in years even more significant.

We have summarised in Graph 1 all the above findings, over an 11-year period, to show their development.

Graph 1



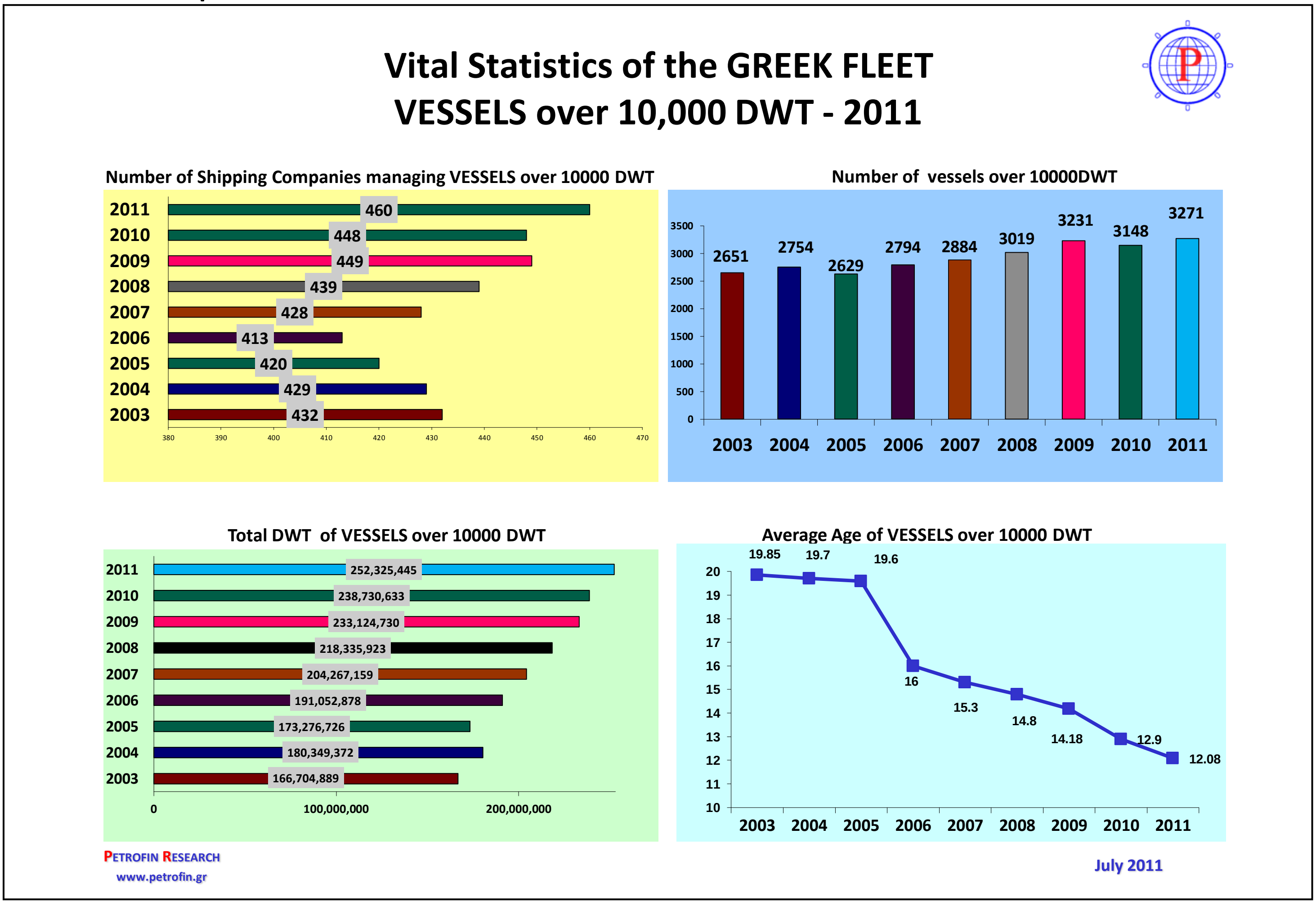
DWT, Average Vessel DWT, and Number of Greek vessels figures are shown on an index scale using year 2001 as 100. The actual figures are also recorded for each year.

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

Vessels of over 10,000 DWT

Graph 2 below shows the fluctuation in the number of companies that manage vessels over 10,000 DWT, the number of ALL these vessels, their age and their DWT. ('ALL vessels' means everything that floats and is under Greek control):

Graph 2



- This year, the vessels are more by 123, and, reflecting the delivery waves, they are again both younger and bigger.

- Vessels over 10,000 DWT are owned by 460 companies, 12 more than last year's 448 companies.

- 13,594,812 new tons were added, compared to 5,605,903 added to vessels over 10,000 DWT last year. The rise in tonnage continues its uninterrupted route since 2005.

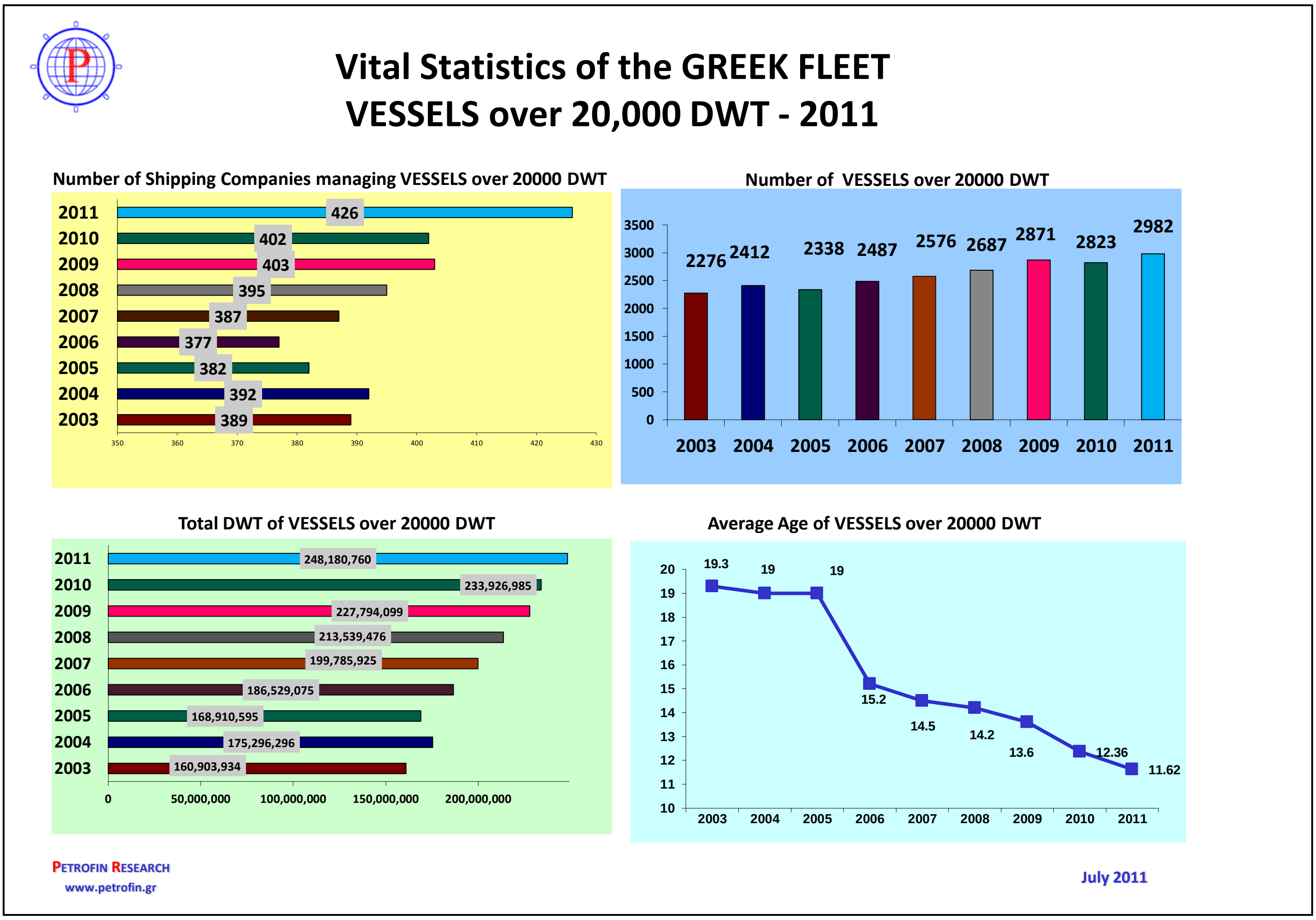
- The average vessel DWT is now 77,140, compared to 75,836 last year.

- The Greek fleet's age continues to improve for this tonnage category. It is now **12.08** years of age compared to **12.9** years in 2010.

Vessels of over 20,000 DWT

Graph 3 below shows the fluctuation in the number of companies that manage vessels over 20,000 DWT, the number of ALL these vessels, their age and their DWT. ('ALL vessels' means everything that floats and is under Greek control):

Graph 3



- Following closely the situation with the over 10,000 DWT vessels, companies that run over 20,000 tonners have gone up by 24, this year.

- Their vessels are up by 159 compared to last year's fall by 48 in 2010, but tonnage is up by 14,253,775 tons more than double last year's increase of 6,132,886. The over 20,000 DWT vessels represent 96.88% of the total fleet, compared to 96.34% in 2010.

- The average DWT of each vessel is up to 83,226, compared to 82,865 in 2010 and 79,343 in 2009, 79,471 DWT in 2008, 77,557 DWT in 2007 and 75,000 DWT in 2006.

- The average age has reduced again, significantly down to 11.62 years of age, reflecting the influx of newbuildings, down from 12.36 in 2010 and 13.6 years in 2009, 14.2 in 2008 and 14.5 in 2007.

Summary of results

In Table 3 below, we present the development over time 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 3

Analysis of the Greek fleet

	Total Fleet DWT	No. of vessels	Average DWT	Average Age	No. of Cos.
Ships over 20,000 DWT 2011	**248,180,760**	**2,982**	**83,226**	**11.62**	**426**
Ships over 20,000 DWT 2010	233,926,985	2,823	82,865	12.36	402
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 2011	**252,325,445**	**3,271**	**77,140**	**12.08**	**460**
Ships over 10,000 DWT 2010	238,730,633	3,148	75,836	12.9	448
Ships over 10,000 DWT 2009	233,124,730	3,231	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
	Petrofin Research ©			**July 2011**	

* Data available only for over 10,000 tons DWT vessels.

Table 4: Top fleets in DWT terms

Top owners and the percentage they hold of the total of Greek fleet in DWT ton 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%	
2010	123,195,698	157,247,298	175,831,037	242,802,092
	50.74%	64.76%	72.42%	
2011	133,219,034	164,584,202	185,644,178	256,174,041
	52.00%	64.25%	72.47%	
	Petrofin Research ©			July 2011

The top 30 owners now own 52% of the Greek fleet, strengthening their position even further. There is minimal change in the positions of the top 50 and top 70.

SECTION B: Analyses by type of vessel

The Greek fleet of bulker vessels over 10,000 dwt each

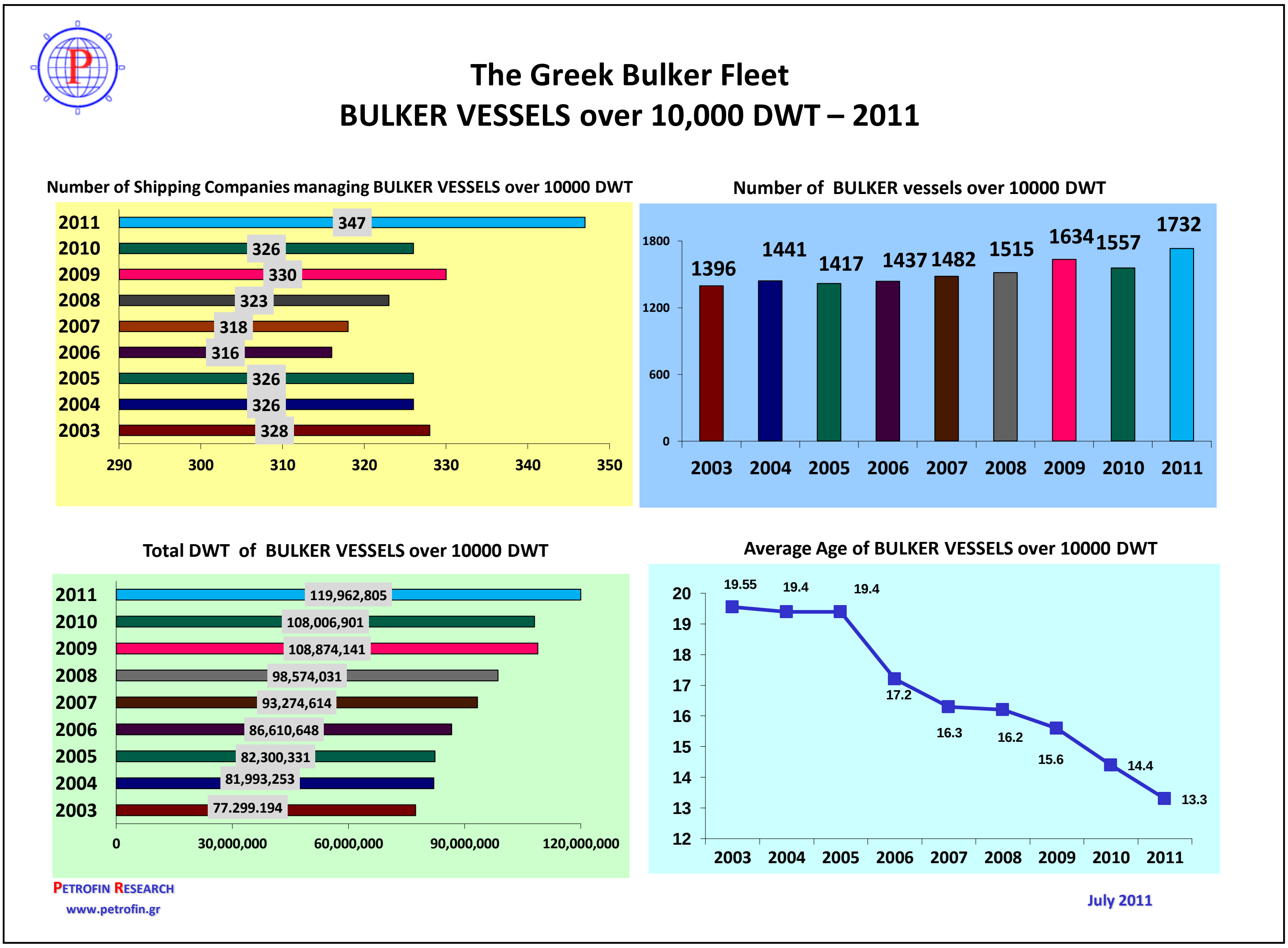
Comparisons between 2003 and 2011

The graph below shows that the number of companies has gone up by 21 to 347 in 2011, from 326 in 2010 and 330 in 2009, and that the bulk carriers over 10,000DWT have gone up to 1732 this year, reversing last year's drop to 1557.

The age has dropped even further to 13.3, reflecting the influx of newbuildings.

This is the most popular sector in Greek shipping, 46.82% of the whole fleet. This percentage has been rising steadily from 44.48% of the entire 2010 fleet, up from 34.31% in 2009. Greeks are committed to dry bulk shipping and their preference is focused on medium to large bulk carriers.

Graph 4

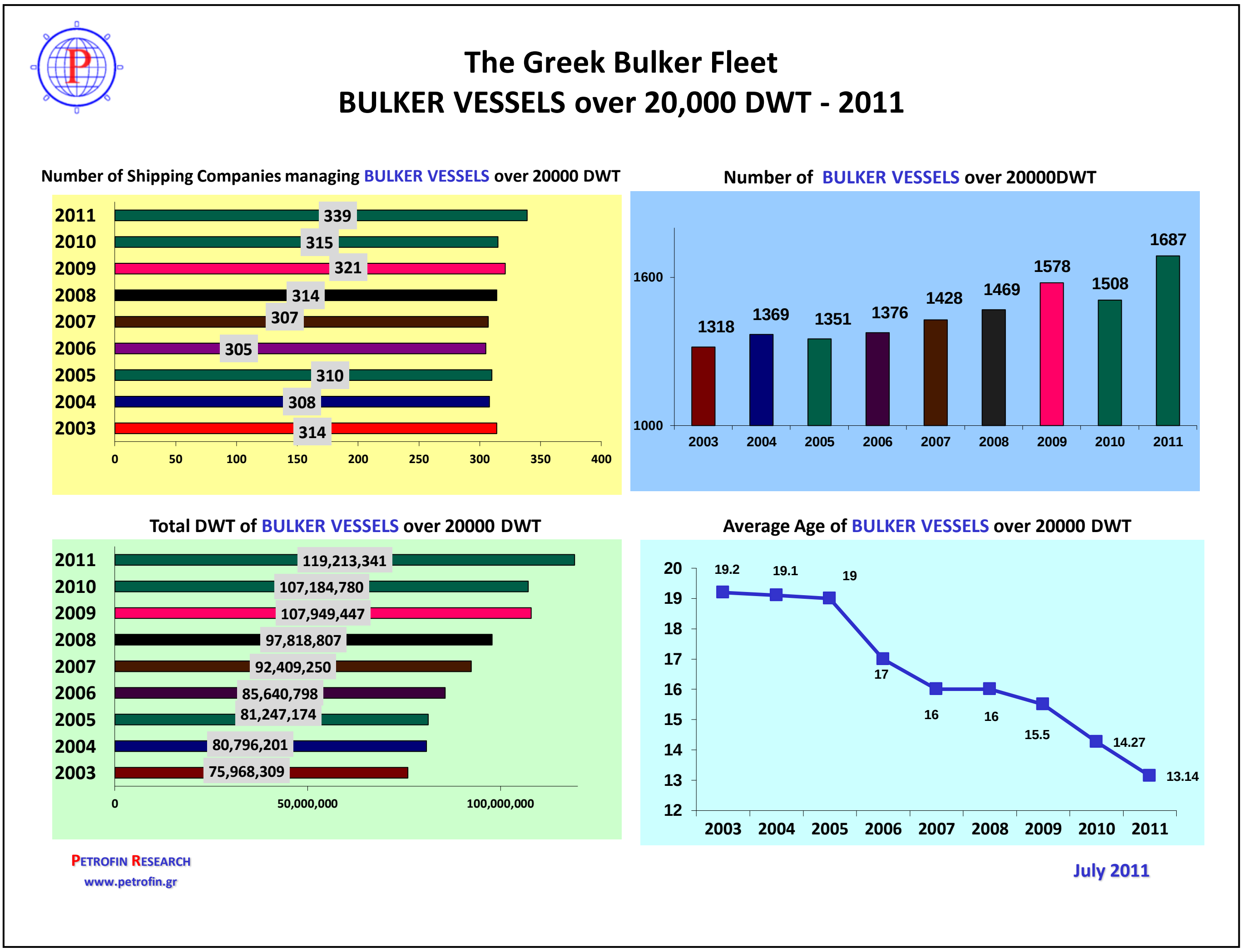


The Greek fleet of bulker vessels over 20,000 dwt each

Similar trends here also. After last year's drop, this year the bigger bulkers are up by 179. Here it should be noted that between bulkers of 10,000ton DWT and 20,000 ton DWT there exist only 45 vessels. So the bulk of the fleet is indeed bigger bulkers.

Accordingly, companies are up by 24, tonnage up by 12,028,561 and the age is down to 13.14 years.

Graph 5

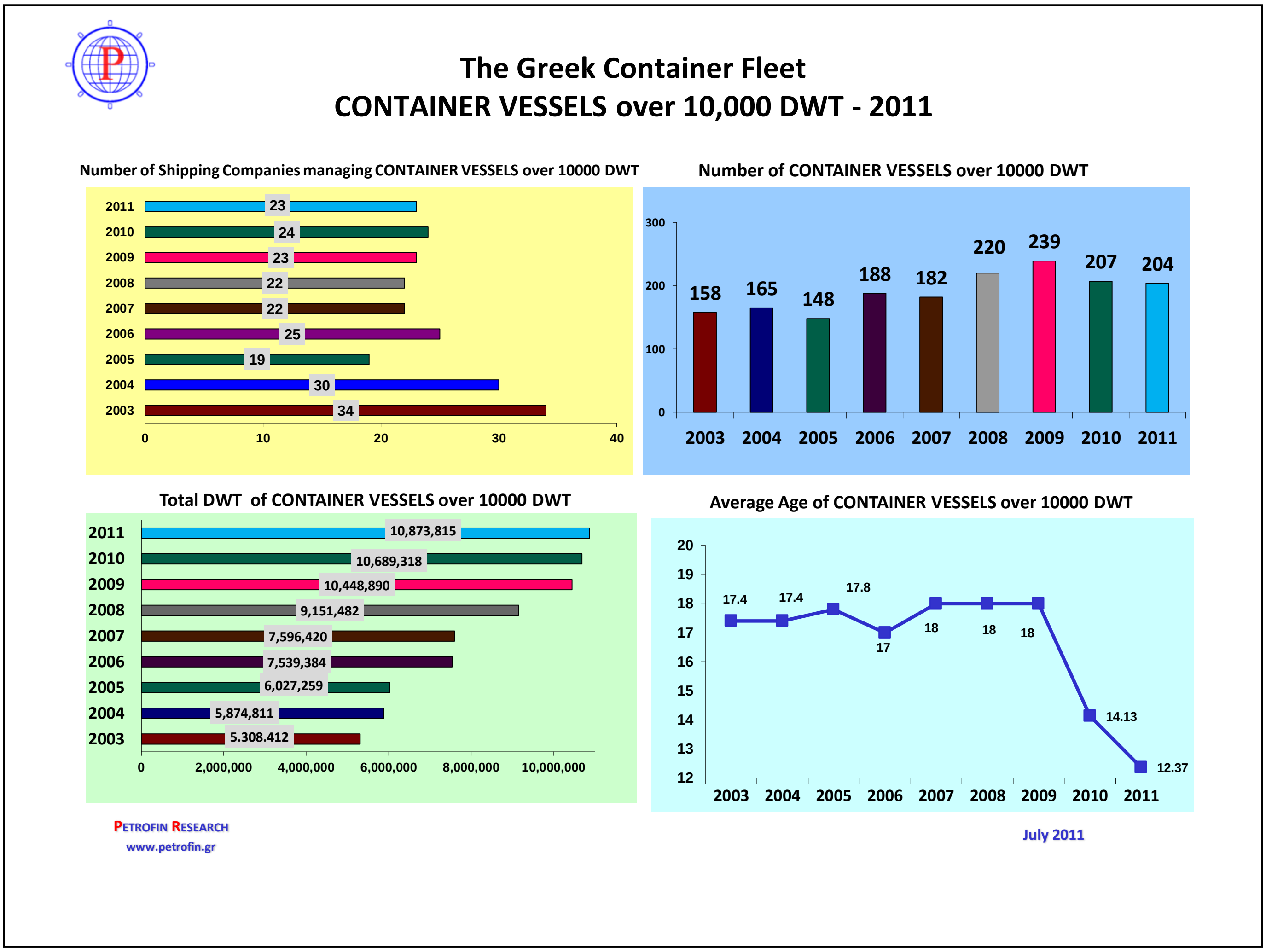


The Greek fleet of <u>container</u> vessels over <u>10,000</u> dwt each

Comparisons between 2003 and 2011

The container sector has always been a volatile market. After last year's drop, we note that this year, the heavy investment undergone by the industry is now beginning to show through the increase in the fleet's DWT and substantial drop in age, although vessels are numerically up by only 1. The fleet of 204 vessels is now bigger by 184,497 tons DWT and as young as 12.37 years.

Graph 6

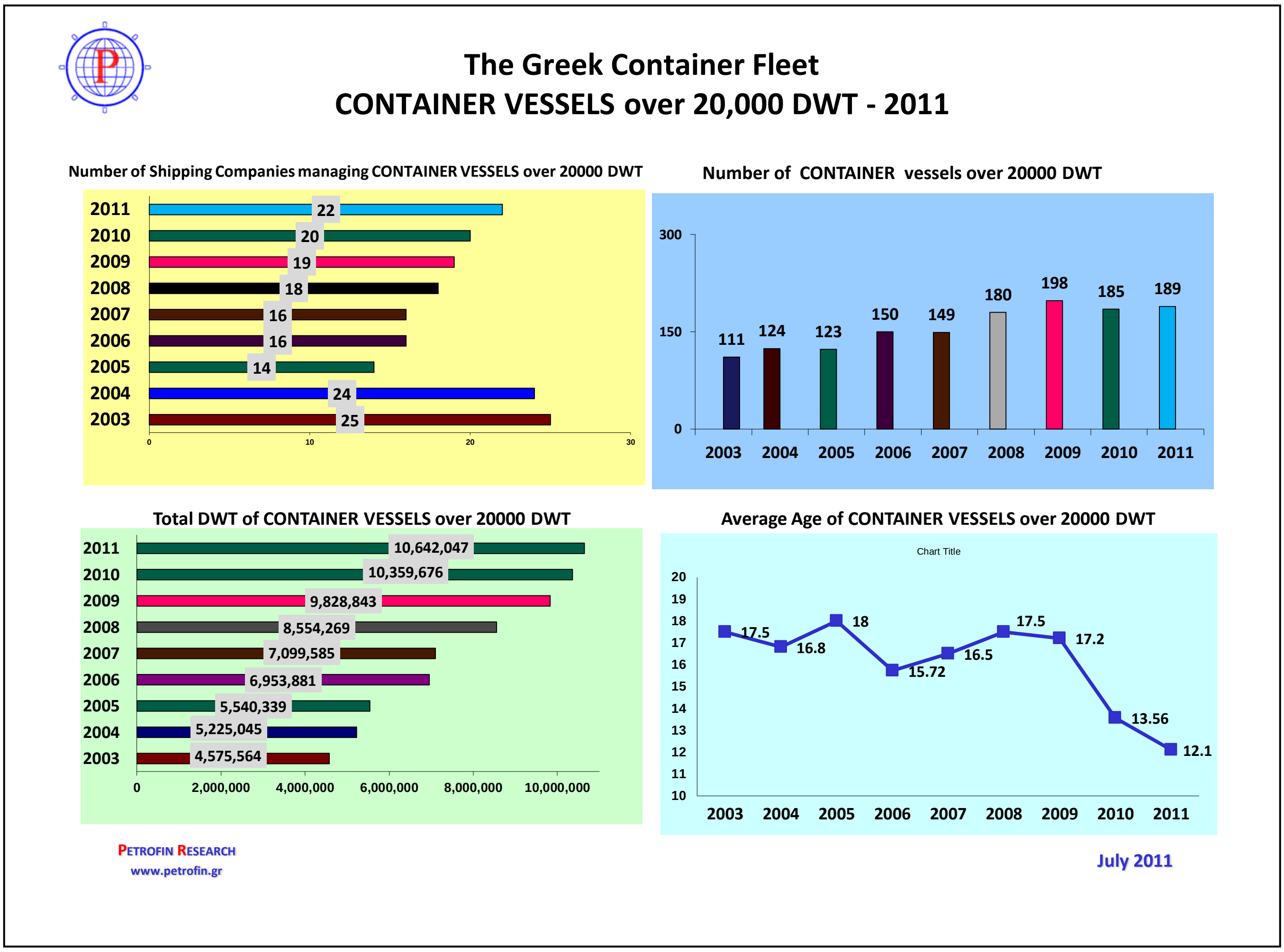


The Greek fleet of <u>container</u> vessels over <u>20,000</u> dwt each

Comparisons between 2003 and 2011

Similarly, the larger containers are younger, 12.1 years, they are more by 4, the companies that run them are more this year and they are bigger by 282,371 tons DWT.

Graph 7



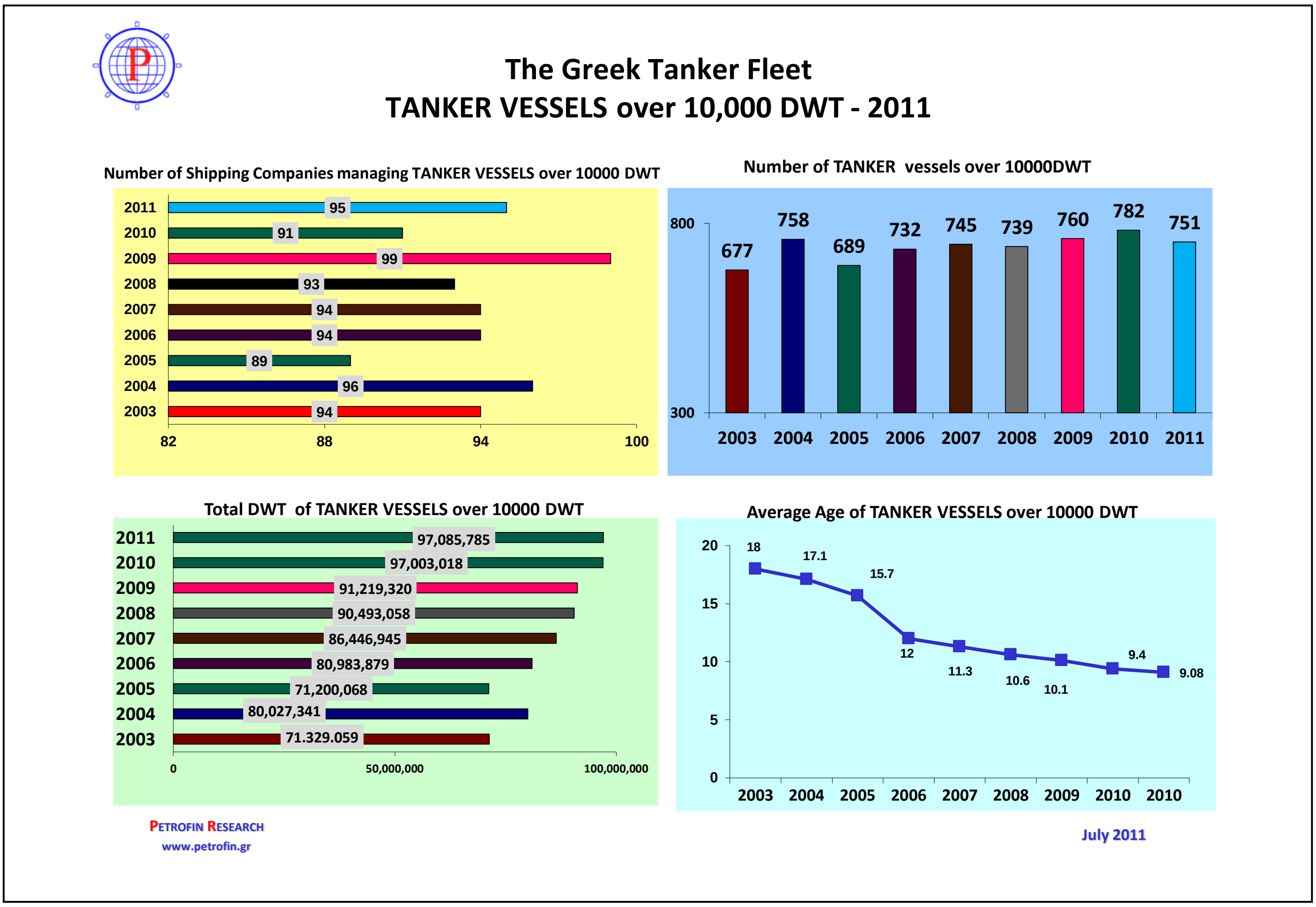
The Greek fleet of tanker vessels over 10,000 dwt each

Comparisons between 2003 and 2011

Tankers have a story of their own like they did last year, when the overall fleet shrank whilst they expanded. This year, the opposite occurred. Although the number of companies is up by 4, the total vessels are down by 31. This, of course does not mean that the fleet has contracted, since in terms of DWT, it is marginally up by 82,767 DWT. The age is down to 9.4 years, thus maintaining their position as the youngest vessels of the Greek fleet. Their age is down again, to 9.4 years of age average per tanker vessel. Average DWT is up to 129,275, compared to 124,293 in 2010, 120,025 in 2009, 122,453 in 2008 and 116,036 in 2007.

Tanker trade was not as badly hit by last year's crisis and this relative cash flow advantage (also secured by period charters) contributed to the augmentation and simultaneous renovation of the fleet.

Graph 8

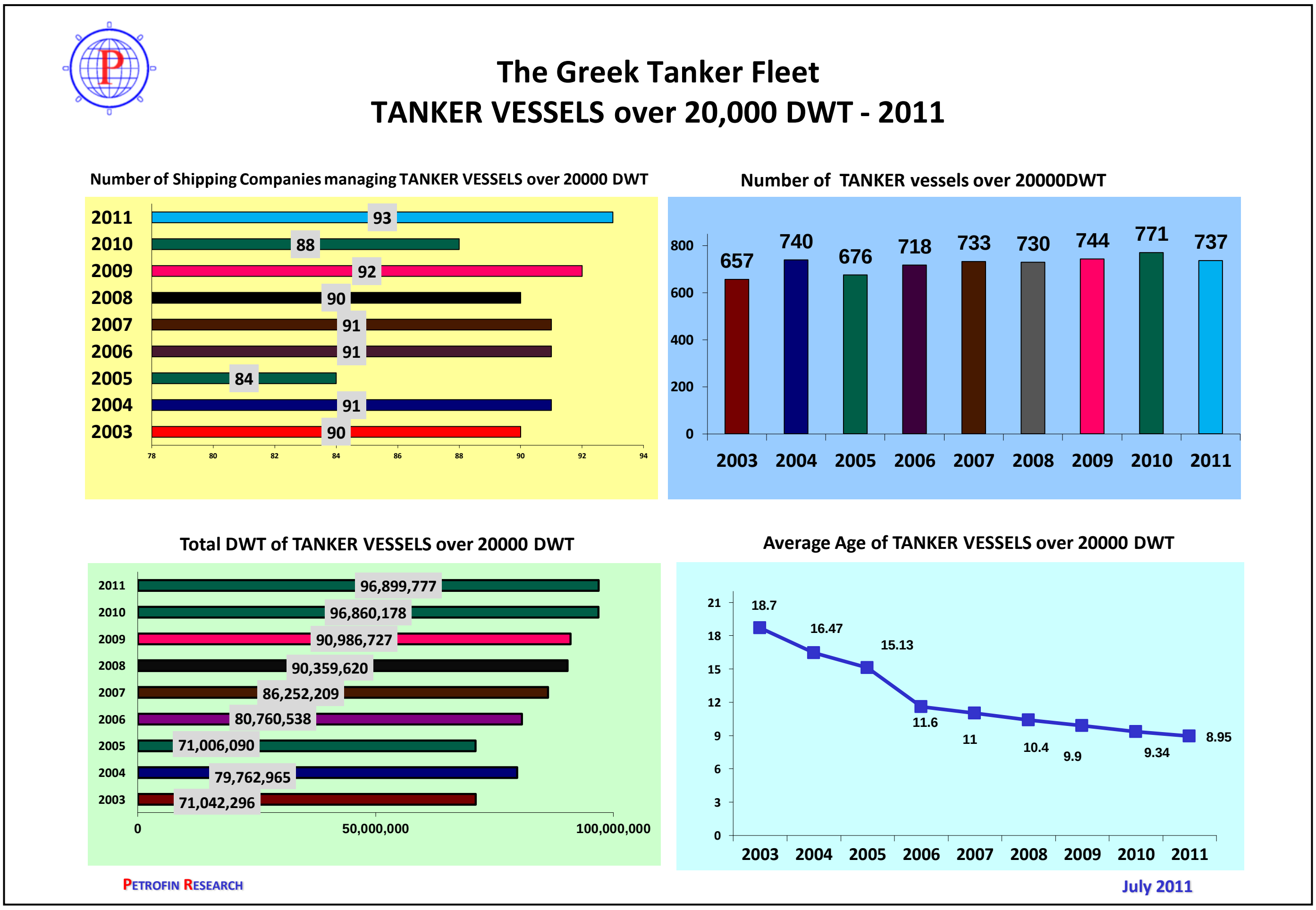


The Greek fleet of tanker vessels over 20,000 dwt each

Similar trends apply in the over 20,000 DWT tankers. The vessels here are down by 34, the companies up by 5, DWT slightly up by 39,599 ton DWT but age is down to 8.95 years

The average unit now measures 131,478 tons DWT, substantial increase from 125,629 DWT in 2010 and 122,293 in 2009.

Graph 9



The sector occupies 37.82% of the total of Greek fleet, a decrease from 39.9% last year. It is still, however, the second favourite among Greek owners, as is shown by the fact that it is the sector that is continuously being enlarged and renovated.

Commentary

The overall number of Greek vessels is affected by three main forces:

1) the rate of newbuilding deliveries
2) the rate of vessel scrapping and
3) the sale and purchase of second-hand vessels.

The number of Greek vessels peaked in 2009 at 4763, as a consequence of a booming shipping market in which all 3 of the above forces played their contributory part. The decline in 2010 to 4655 represents the shock effects of the banking and shipping crises. However, as shipping recovered in 2009/2010, the above forces turned positive once again, resulting in the recovery shown in 2011 at 4714.

Currently, conditions in shipping are quite poor across all sectors and the volumes of s&p activity have reduced, scrapping has increased and the rate of newbuilding deliveries, although still very positive, is waning. Consequently, it is to be expected that these difficult market conditions shall have their effect in 2012/2013 in terms of the number of Greek vessels. There can be little doubt, however, on the ever rising Greek fleet's DWT, which shall continue to grow as Greeks favour larger vessels. Turning to the age profile, we anticipate a quickening of the pace in which the fleet's age is declining. The growth of scrapping will have a profound effect on the average age of the fleet, which is expected to decline to well under 15 years by 2012.

Given the presence of some very old coastal/port vessels, the average age of the Greek fleet for vessels over 10,000 DWT in 2011 was only 12.08 years, run by 460 companies. The figures change but only a little for vessels over 20,000 DWT, whereby their average age is 11.62 years, run by 426 companies.

The top 30 owners in 2011 accounted for 52% of the Greek fleet, up from 50.74% the year before.

The most popular sector for Greeks is that of dry bulk, where 347 owners run 1732 vessels, over 10,000 DWT totaling 119.96m DWT and an average age of 13.3 years. The corresponding figures for tankers are 751 vessels, over 10,000 DWT totaling 97.08m DWT run by 95 owners and an average age of 9.08 years. In comparison, the Container fleet of over 10,000 DWT vessels is rather small at 189 vessels, totaling 10.64m DWT and run by 22 owners with an average age of 12.1 years.

The development of the Greek fleet despite the uncertain financial and shipping environment has been remarkable. Greeks have continued to provide enormous sums as capital for the building of new vessels and for the modernization of their fleets. It is clear that the Greek strategy involves bigger and younger vessels, designed to meet the requirements of charterers, banks and to provide satisfactory economic returns.

The new challenges facing Greek shipping are linked to the huge order book, the lack of finance and adverse effects of the shipping market on vessel values and cashflows. Such trying conditions are usually exploited by Greek owners to expand. Market conditions are especially favourable for large owners to grow even larger and we anticipate that the percentage of the Greek fleet held by the top Greek names shall increase further.