Petrofin Research©

2nd part of Petrofin Research©:

2010 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.

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 date of up to 2011. This ensures a snapshot of today's fleet closer to reality, as many of the impressive number of newbuilding orders have delivery dates of 2012 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

We note that the Greek fleet has not stood still in the last year, when it had to face the biggest historical fall in vessel values and the deepest recession of the last few decades. Among the negative climate that prevailed, an opportunity also presented itself for the fleet to renew. The results are shown in our research below.

We count 108 less vessels in the fleet for 2010, down to 4655. These are vessels of all types, sizes, flags and ages. It is the first time (**Table 1**) since 2005 that the fleet as a whole showed a reduction.

Table 1

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

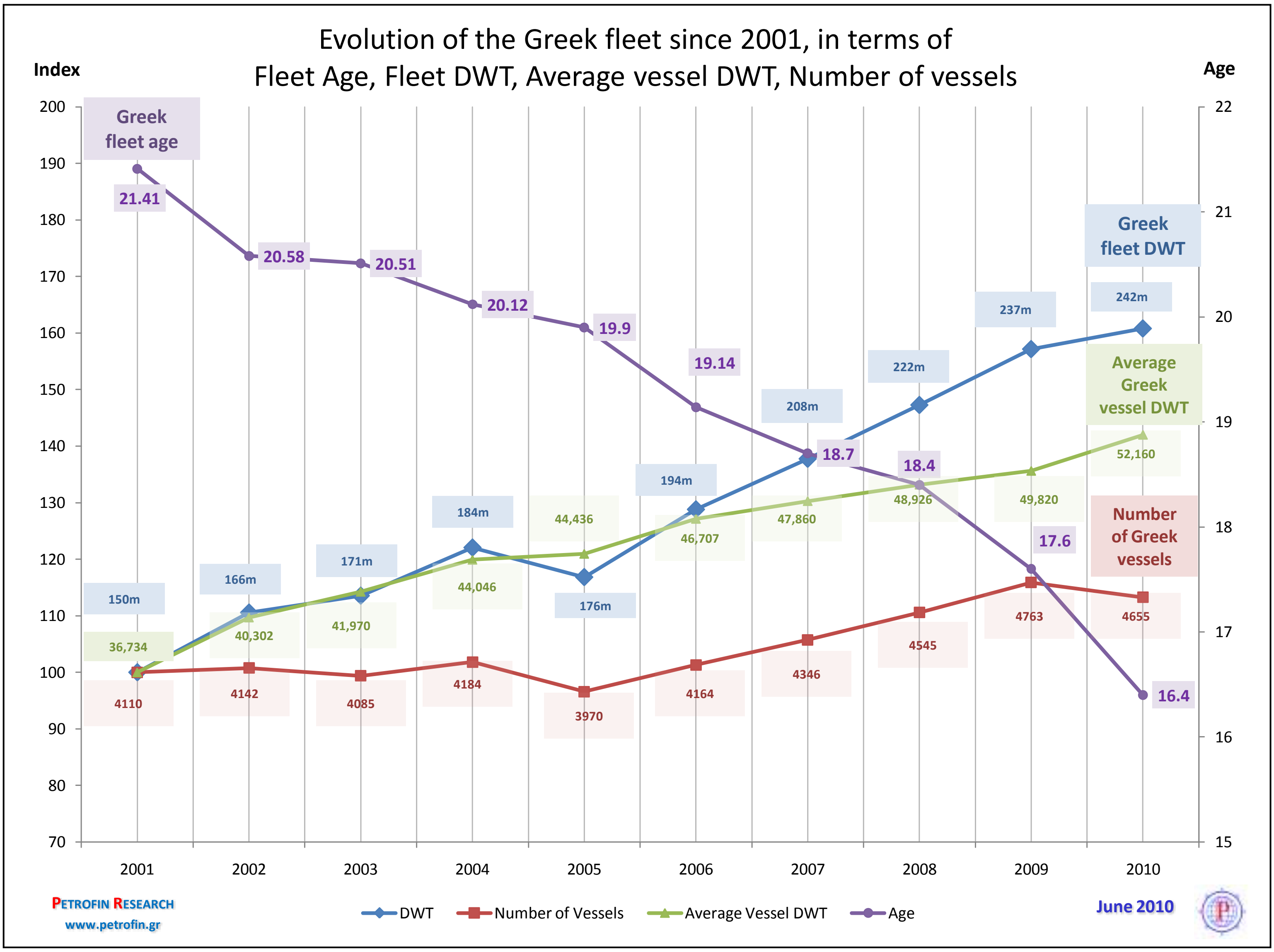
These vessels are managed by 758 shipping companies (1st Part of Petrofin research©), their average age has fallen to **16.64** years (**Table 2**, below). Last year it was 17.6 years old and the year before it was 18.4 years old. The average vessel DWT has gone up significantly to **52,159 DWT**, compared to 49,819 tons in 2009, and 48,926 tons in 2008. In 2007, there were 4346 vessels, managed by 725 companies, with an average age of 18.7 years and an average DWT 47,860 tons. Moreover, despite the fall in the numbers of the Greek fleet by **-2.3%**, the total deadweight increased from 237,288,216 DWT representing a **+2.3%** increase in carrying capacity.

Table 2

YEAR	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
DWT Tonnage	150,978,565	166,931,748	171,448,133	184,288,917	176,411,750	194,486,455	208,001,159	222,368,331	237,288,216	242,802,092
Average Fleet Age	21.41	20.58	20.51	20.12	19.9	19.14	18.7	18.4	17.6	16.4
Average Vessel DWT	36,734	40,302	41,970	44,046	44,436	46,707	47,860	48,926	49,820	52.160
Petrofin Research ©								June 2010		

We have summarised in Graph 1 all the above findings, over a 10-year period, to show their development.

Graph 1



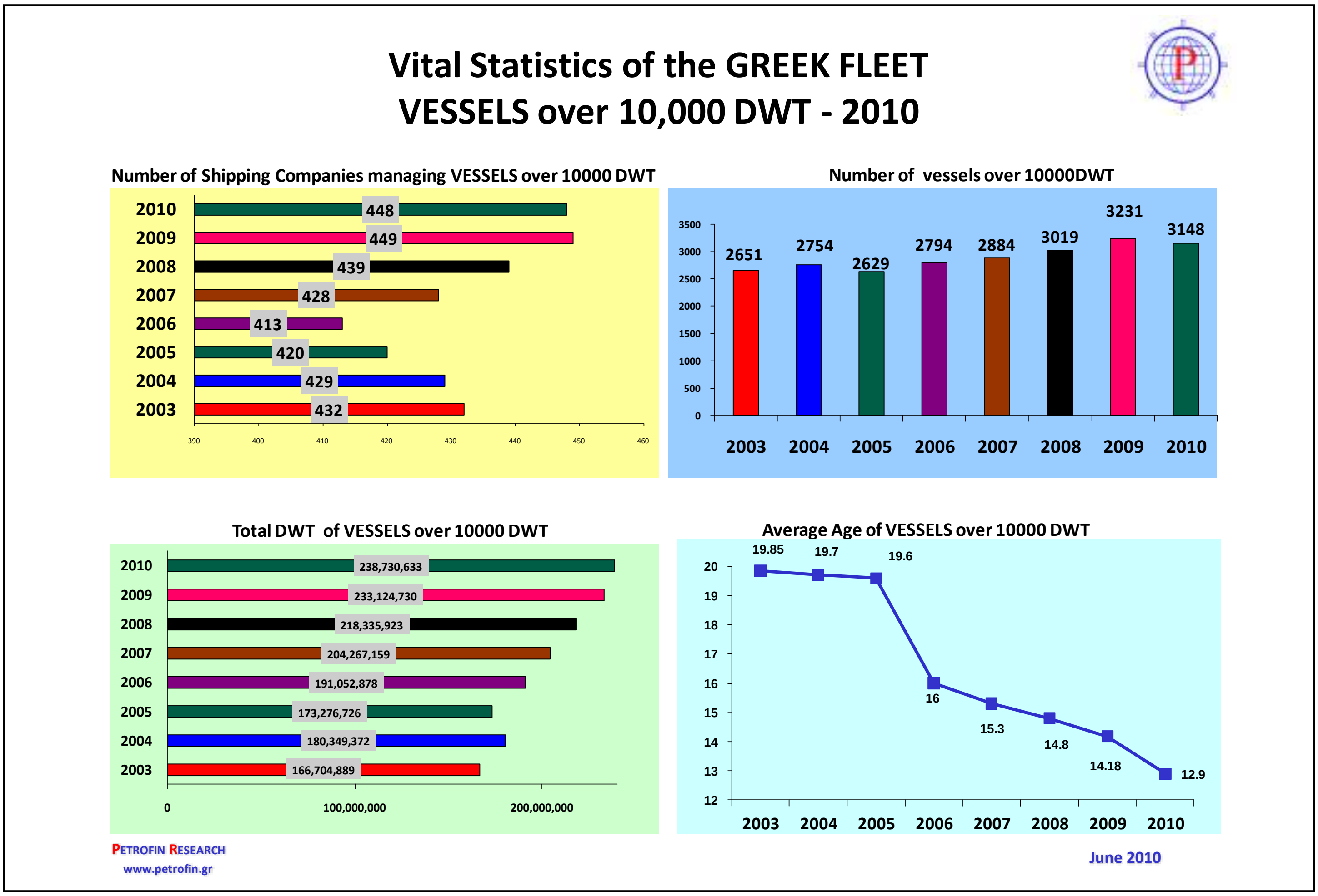
DWT, Average Vessel DWT, and Number of Greek vessels figures are shown on an index scale using year 2001 as 100. The actual figures are also recorded for each year.

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

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):

Graph 2



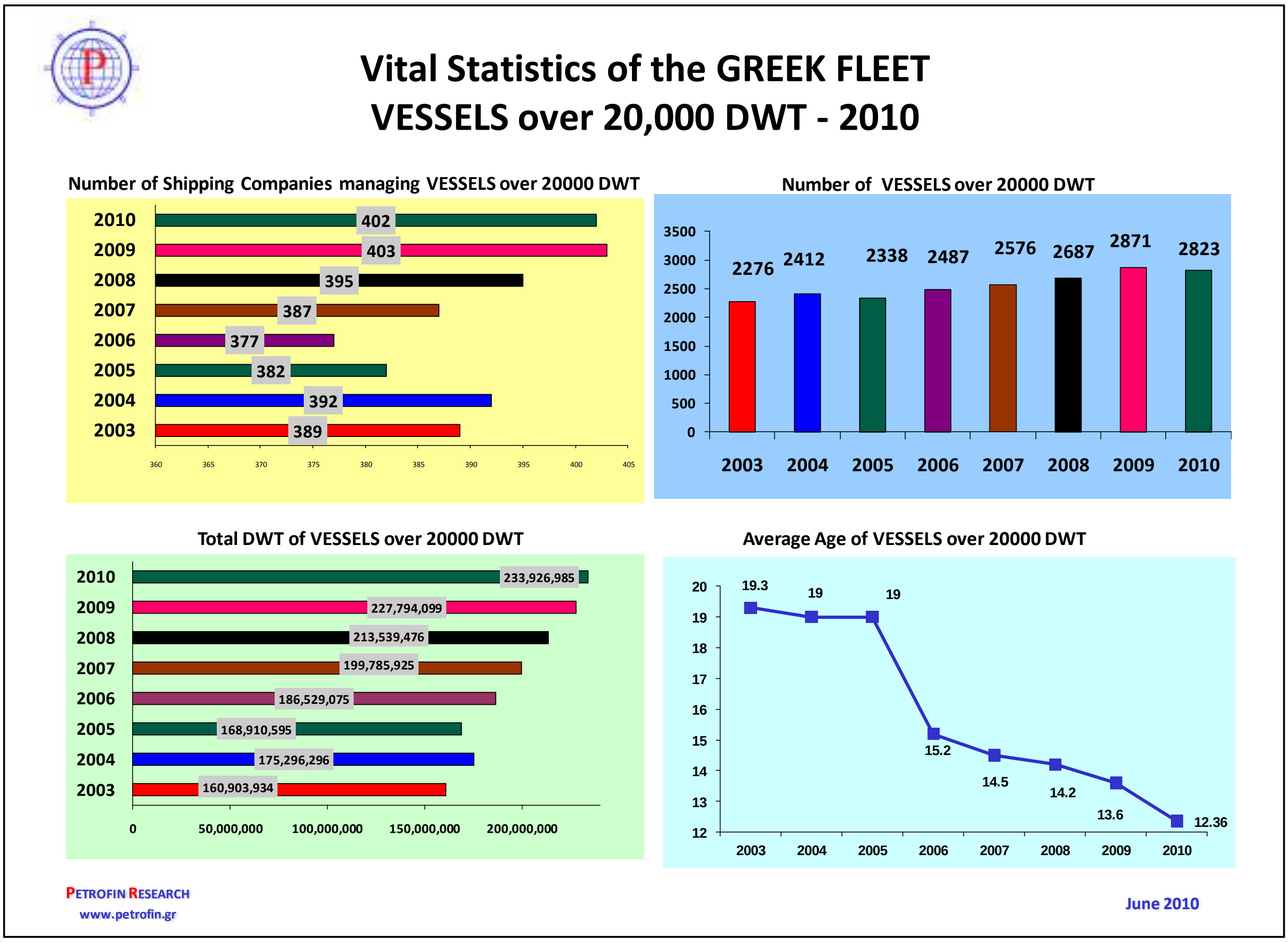
- This year, the vessels are less, they are younger and they are bigger.
- Vessels over 10,000 DWT are owned by 448 companies, one less than last year.
- 5,605,903 new tons were added to vessels over 10,000 DWT, although their number fell by -**83**. This internal reshuffle is significant at times when finance is scarce. It shows that older and smaller tonnage was sold to pay for newer and bigger. The rise in tonnage has been uninterrupted since 2005.

- The average vessel DWT is now 75,836. Last year there was a slight decrease from the year before (**72,152** tons in 2009 down from**72,321** in 2008). This was overturned during 2010.

- The Greek fleet's age continues to improve substantially for this tonnage category. It is now **12.9** years of age, compared to 14.18 last year and 14.8 in 2008.

Vessels of over 20,000 DWT

Graph 3



- Following closely the situation with the over 10,000 DWT vessels, companies that run over 20,000 tonners have also gone down by 1, this year.

- Their vessels are down by 48 to 2823, but tonnage is up by 6,132,886. The over 20,000 DWT vessels represent 96.34% of the total fleet – although with fewer vessels – and same as the 96% last year, which has remained unchanged since 2007.

- The average DWT of each vessel is up to 82,865, from 79,343 last year, 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 12.36, from 13.6 years in 2009, 14.2 in 2008 and 14.5 in 2007.

Summary of results

In Table 3 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 3

Analysis of the Greek fleet

	Total Fleet DWT	No. of vessels	Average DWT	Average Age	No. of Cos.
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 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 ©				**June 2010**	

- 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 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%**	
Petrofin Research ©				**June 2010**

The top 30 owners are back to owning just over 50% of the Greek fleet, a position they have held over the years, with the exception of a slight drop last year. The cumulative strength of Greek shipping is further demonstrated by the increasing importance of the top 50 and top 70 owners, the latter's share having risen to 72.42% of the entire fleet.

SECTION B: Analyses by type of vessel

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

Comparisons between 2003 and 2010

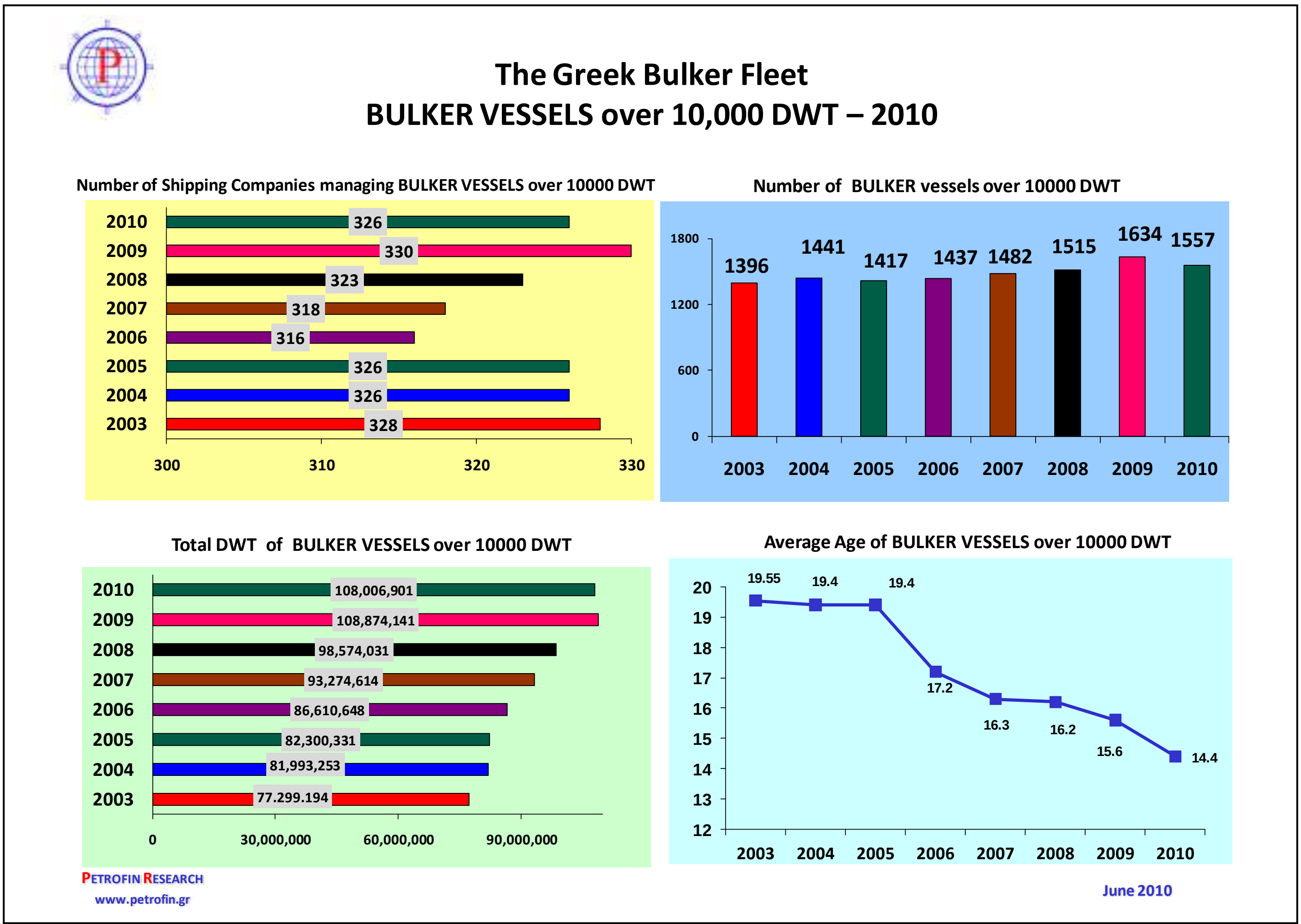
The graph below shows that the number of companies has gone down by 4 to 326 in 2010, from 330 in 2009, and that the bulk carriers over 10,000DWT have also gone down to 1557 in 2010, from 1634 in 2009.

The most significant development is that tonnage in Bulkers goes down for the first time since the beginning of this research in 2003. The drop is by 867,240, to **108,006,901** in 2010 from 108,874,141 in 2009. However, the average vessel DWT is now **69,368 DWT** compared to 66,630 DWT in 2009, 65,065 DWT in 2008, 62,938 DWT in 2007 and 60,272 DWT in 2006.

The age is down to 14.4 from 15.6 in 2009 and 16.2 in 2008.

This is the most popular sector in Greek shipping, representing 44.48% of the entire fleet, up from 34.31% last year. This underlines the growing importance and commitment by Greeks towards dry bulk shipping.

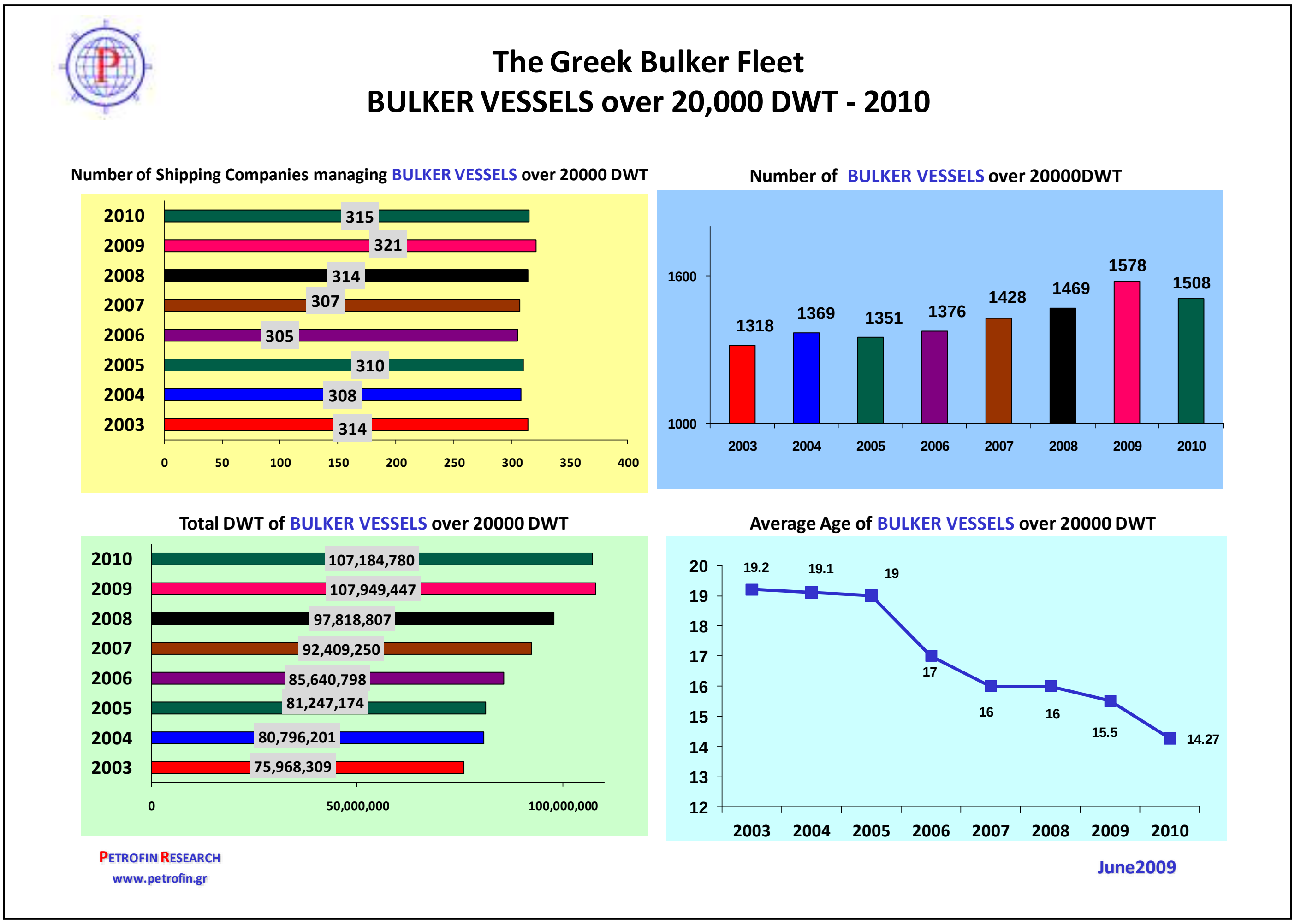
Graph 4



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

Similar trends here also. Vessels are down by 70 units to 1508 from 1578 in 2009, companies are down by 6, and tonnage is down by 746,667 tons to 107,184,780, from 107,949,447. However, again, significantly, the average vessel is larger and now stands at 71,077, compared to 66,064 in 2009, 66,589 DWT in 2008, 64,712 DWT in 2007 and 62,239 DWT in 2006. Age is also down to 14.27 in 2010, from 15.5 in 2009.

Graph 5



The bulker fleet, a traditional favourite in Greek shipping, is marking significant improvements in terms of age and average vessel size. These could not have taken place without the sale / scrapping of older units, together with a massive investment towards newbuildings.

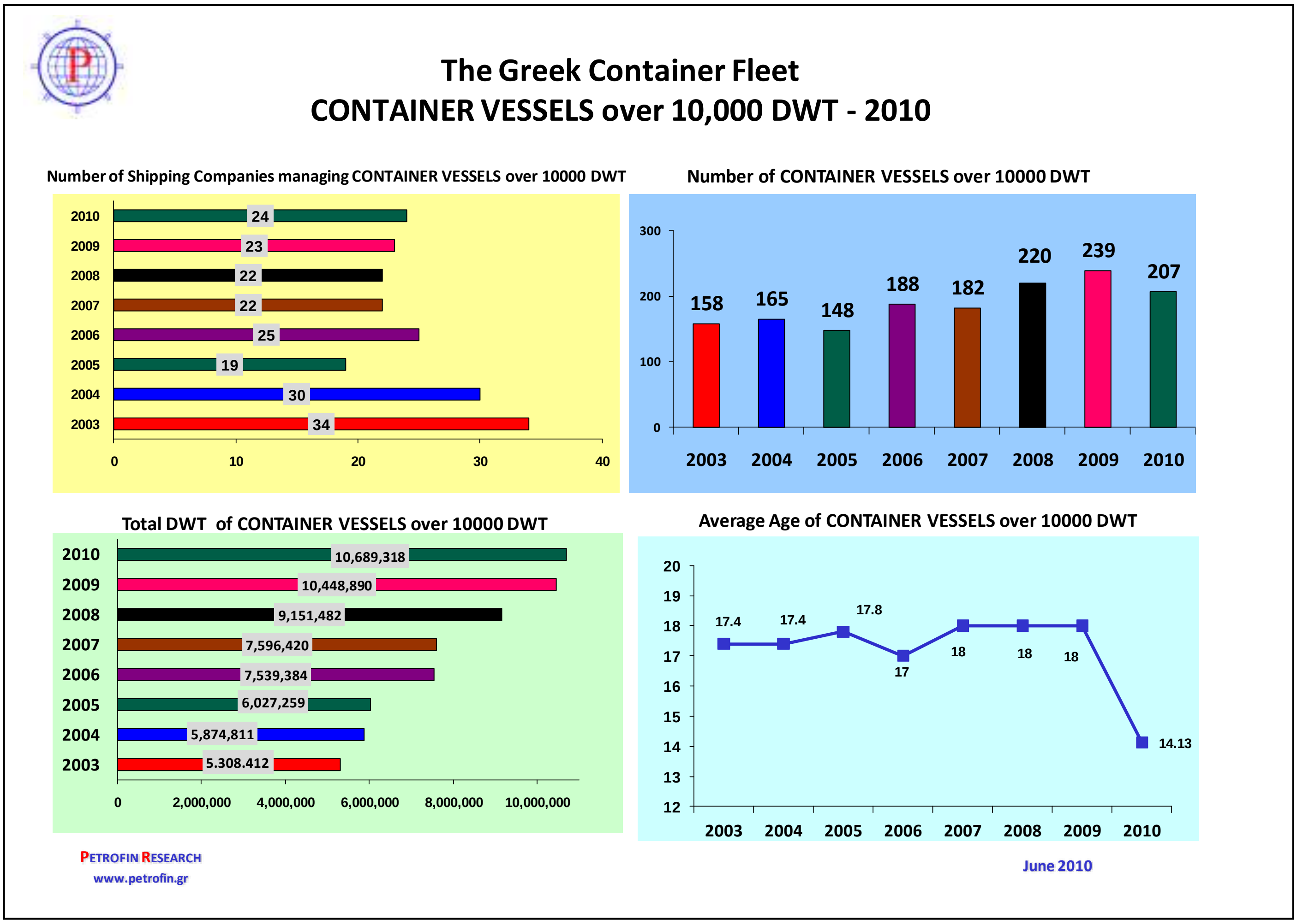
The Greek Container fleet of container vessels over 10,000 dwt each

Comparisons between 2003 and 2010

This sector is was one of the worst affected during last year's international slump. However, we note that the container fleet is showing a remarkable improvement in age, down from 18 to 14.13. Owners have responded to the crisis by selling / scrapping older tonnage, which in this sector was the norm, and invested in a younger, more competitive fleet.

The number of vessels has gone down by 32 but tonnage is up to 10, 689,318 DWT from 10.448.890 last year – an increase by 240,428 tons DWT. As this sector is particularly vulnerable to market fluctuations, the increases in tonnage have also been unpredictable. For example in 2009 it was a very significant 1.297m DWT, compared to 1.5m DWT in 2008 and a mere 57,000 tons DWT. The number of companies running containers of this size has gone up by 1 to 24.

Graph 6

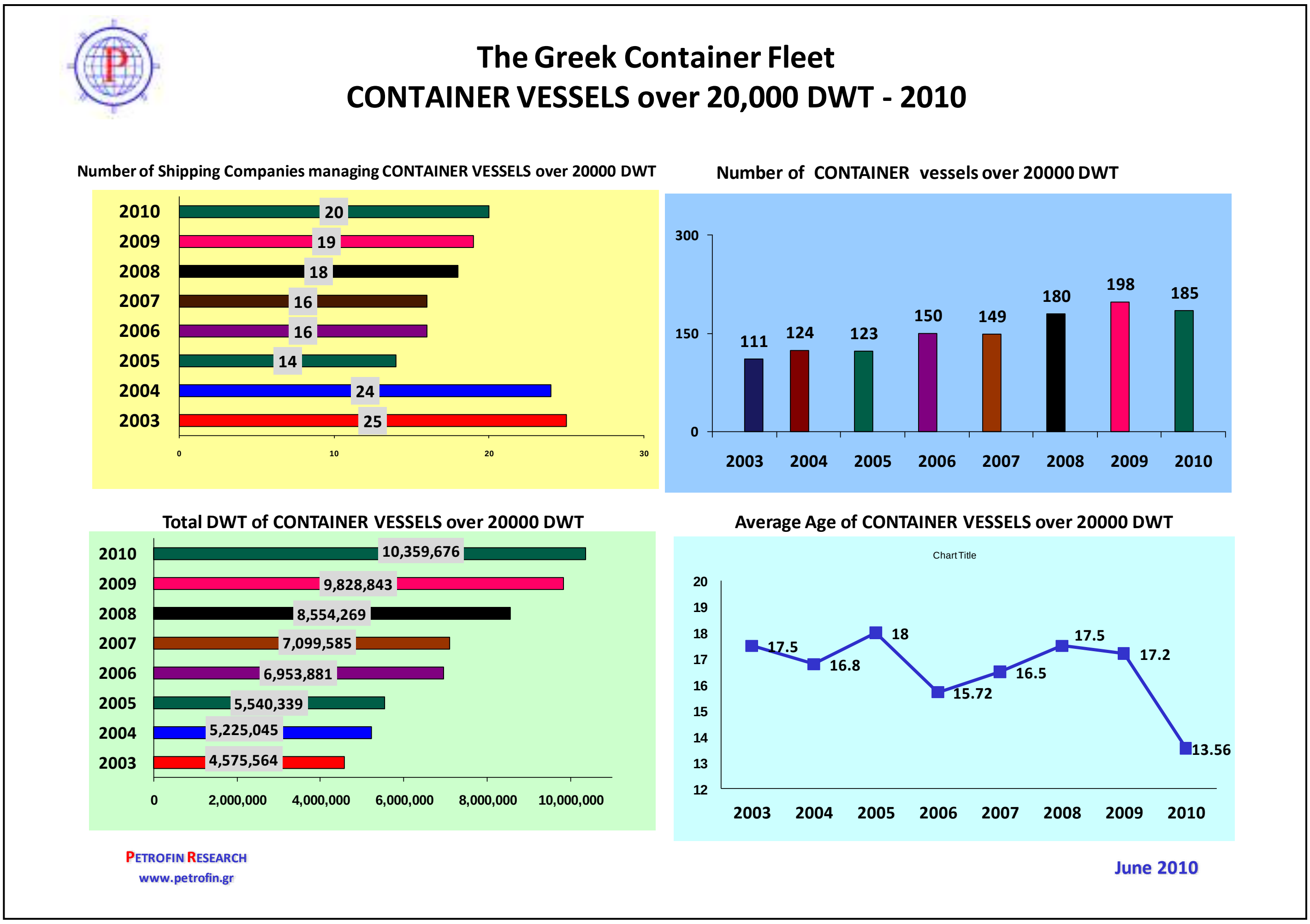


The Greek Container fleet of container vessels over 20,000 dwt each

Comparisons between 2003 and 2010

Here, the drop in the age of the average container fleet is down to 13.56 years compared to 17.2 last year. The industry has applied a serious fleet renovation effort that has resulted in less vessels by 13, down to 185, more tonnage by 530,833 tons to 10,359,676 and one more company, resulting in 20. The average vessel is now 55,998 tons, compared to 49,640 last year.

Graph 7



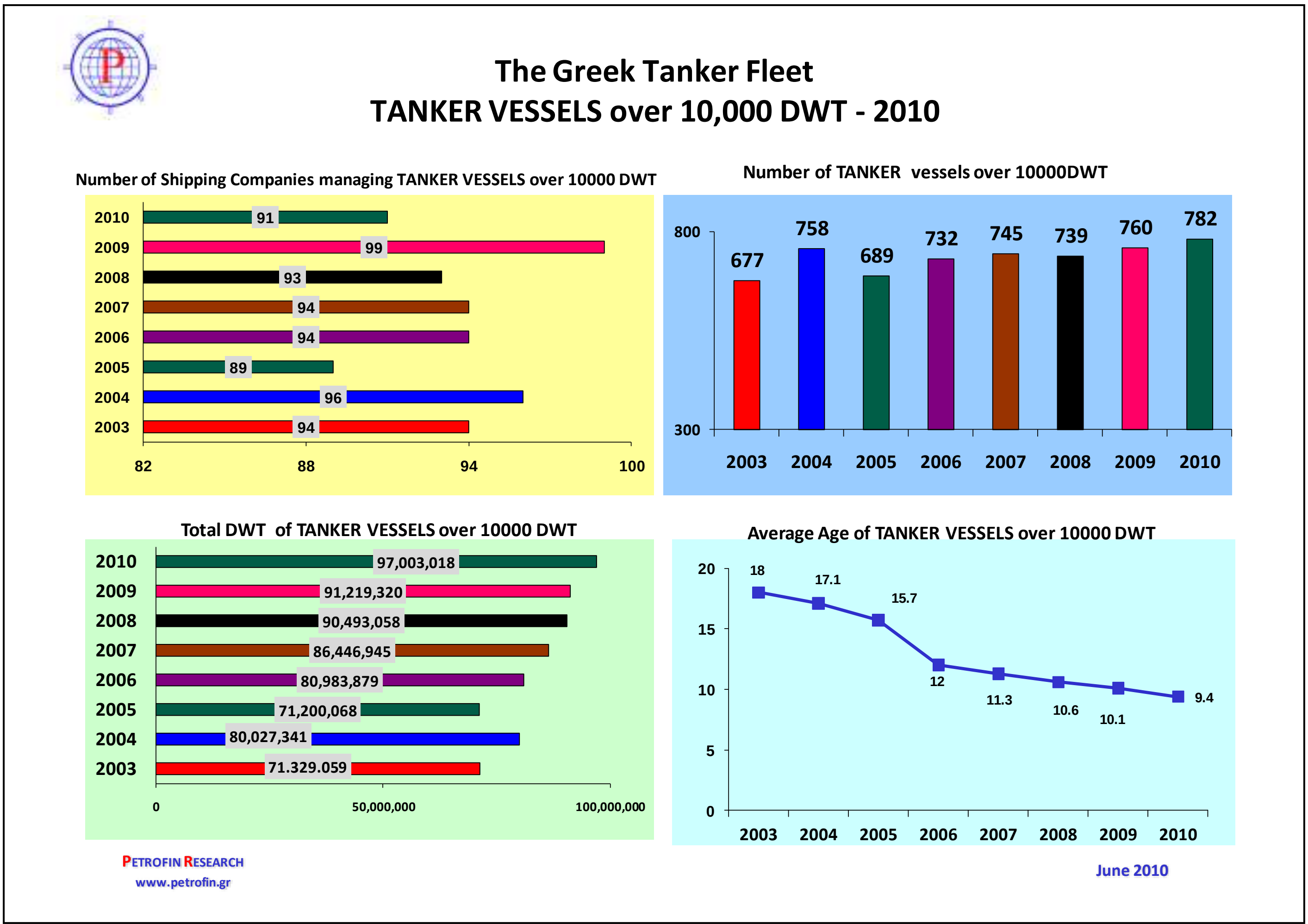
The Greek Tanker fleet of tanker vessels over 10,000 dwt each

Comparisons between 2003 and 2010

Tankers have a story of their own. The companies that run them are down to 91 from 99, but everything else is an improvement. Vessels are up by 22, so far the only sector that has shown an increase in vessel numbers. Overall tonnage is also significantly up to 97,003,018 from 91,219,320, a 5.78m DWT increase. Their age is down again, to 9.4 years of age average per tanker vessel. Average DWT is also up to 124,293 from 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



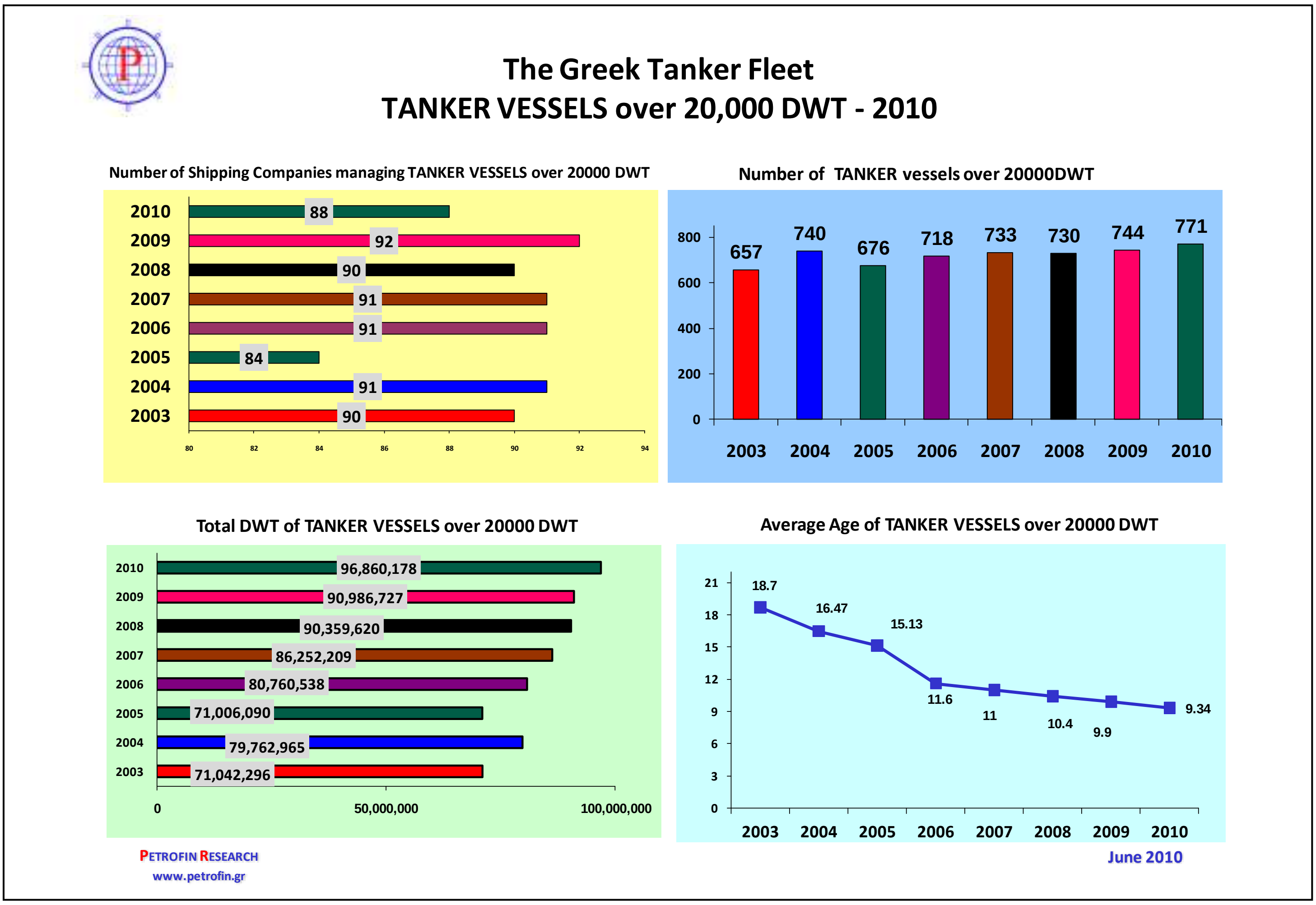
The Greek Tanker fleet of tanker vessels over 20,000 dwt each

Comparisons between 2003 and 2010

Similar trends apply in the over 20,000 DWT tankers. Companies in this sector have gone down by 4 but the number of vessels is up by 27 to 771 from 744 in 2009. Tonnage has gone up only by a significant 5.87m, compared to the slight increase of 627,107 DWT in 2009. The age continues to improve and stands now at 9.34 years, compared to 9.9 last year.

The average unit now measure 125,629 DWT compared to last year's 122,293.

Graph 9



The sector occupies 39.9% of the total of Greek fleet. It is the second favourite among Greek owners, but it is the sector that is continuously being enlarged and renovated.

All tankers in the Greek fleet amount to 1020 units, run by 143 companies, totalling 97,646,513 tons DWT, with an average age of 13.23. It is not difficult to see that the 238 very small (below 10,000 DWT) and older tankers remaining in the fleet are not significant in altering the general picture of this vital sector of Greek shipping.

Commentary

The Greek fleet is continuing to adapt to external challenges and opportunities as well as evolve.

This is evidenced by the 2.3% fall in the number of vessels, through scrapping and disposal of older vessels and their replacement by new or younger vessels. The improvement in age has continued, underlining the commitment of Greeks towards ownership of younger vessels. It is significant that the age of the Greek fleet with over 20,000 DWT vessels has fallen from 19.3 years in 2003 to only 12.36 years in 2010, with the tanker fleet leading the way with an age of only 9.9 years.

The trend towards larger vessels has also continued and this has resulted in an ever rising fleet of 242, 802, 092 DWT.

The Greek fleet continues to be concentrated into relatively few companies with the top 30 maintaining over 50% of the fleet. However, there is also a growing middle tier of owners underlying the strength in depth of Greek shipping.

Thus far, Greek shipping has withstood the negative market effects and has repositioned itself to meet the new challenges. These relate to the huge order book that threatens to overwhelm a promising shipping recovery, as well as the dearth of ship finance.

Although not directly affected by the Greek economic crisis, Greek shipping is indirectly affected by a negative economic environment in Greece, where most of its offices are located, as well as on the effect the crisis has had on Greek banks' ability to continue financing Greek owners' requirements.

Seeing the increased importance of the Far East region, Greek owners have developed strategies to exploit such opportunities in chartering, ownership, finance, as well as shipyards.

The continuous growth and evolution of the Greek fleet shall continue to depend on the state of the shipping markets and the willingness of banks to finance its requirements. What is undoubted, though, is the commitment, liquidity and flexibility of Greek owners, that has kept Greek shipping at the top of shipping nations in the world.