



2015 – RESEARCH AND ANALYSIS: GREEK FLEET STATISTICS
2ND PART OF 2015 PETROFIN RESEARCH ©

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RESULTS AT A GLANCE

- I. The overall number of Greek vessels has gone up by 202 to 4909 from 4707.
- II. Tonnage is also up by 24,675,319. Overall tonnage: 328,254,495 tons DWT, an increase of 7.52%
- III. Age is also down again, to 12.73 from 13.26 in 2014 and 14.05 in 2013 and 14.7 in 2012.
- IV. Using a 20,000 DWT cut-off, the average age of the Greek fleet has fallen to 8.71 from 9.14 years in 2014 and 9.83 in 2013.
- V. The large Bulker fleet (over 20,000 tons DWT) has gained an impressive 163 vessels, its age is down to 8.6 years, its tonnage is up by 19.5m tons DWT and it has lost 6 companies.
- VI. The large Tanker fleet (vessels over 20,000 tons DWT) shows a small increase in tonnage 220,751 tons DWT and a very small increase in unit numbers by 1. Its companies are down by one but age wise there was a drop, which shows a fleet renewal effort.
- VII. The large Container fleet (vessels over 20,000 tons DWT) is a bit younger still, despite the fact that this is a sector that shows a slow rate of renewal. It has gained an impressive 2.9m tons DWT and it still is one of the very few sectors which show an increase in the companies that run them, up by 4.
- VIII. Regarding the LPG sector, large LPGs (over 20,000 tons DWT), the number has gone up by 3 units, the fleet DWT is slightly up by 128,813 tons DWT and their age is also up to 13.7.
- IX. The LNG fleet has expanded significantly with the addition of 24 vessels to last year's 50 strong fleet.
- X. The Greek fleet continues to expand in an ever more consolidated manner, as Greek companies are reducing (see 1st part of Petrofin Research©).



SECTION A: VITAL STATISTICS OF THE ENTIRE GREEK FLEET

ENTIRE GREEK FLEET

Freights remain low, vessel prices are falling and bank lending is restricted to the very few. The Greek fleet is, however, expanding, in terms of numbers, age and size. Confidence in shipping is still evident 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 continues to increase.

TABLE 1

| Year | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Number of vessels in the Greek-based, Greek-owned fleet | 4110 | 4142 | 4085 | 4184 | 3970 | 4164 | 4346 | 4545 | 4763 | 4655 | 4714 | 4577 | 4573 | 4707 | 4909 |
| Change from previous year | | 32 | -57 | 99 | -214 | 194 | 182 | 199 | 218 | -108 | 59 | -137 | -4 | 134 | 202 |

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The fleet's DWT continues to grow and is stands at 328,254,495 tons DWT.

These vessels are managed by 648 companies, down from 668 in 2014.
(1st Part of Petrofin Research ©).



In Table 2 we note the main developments.

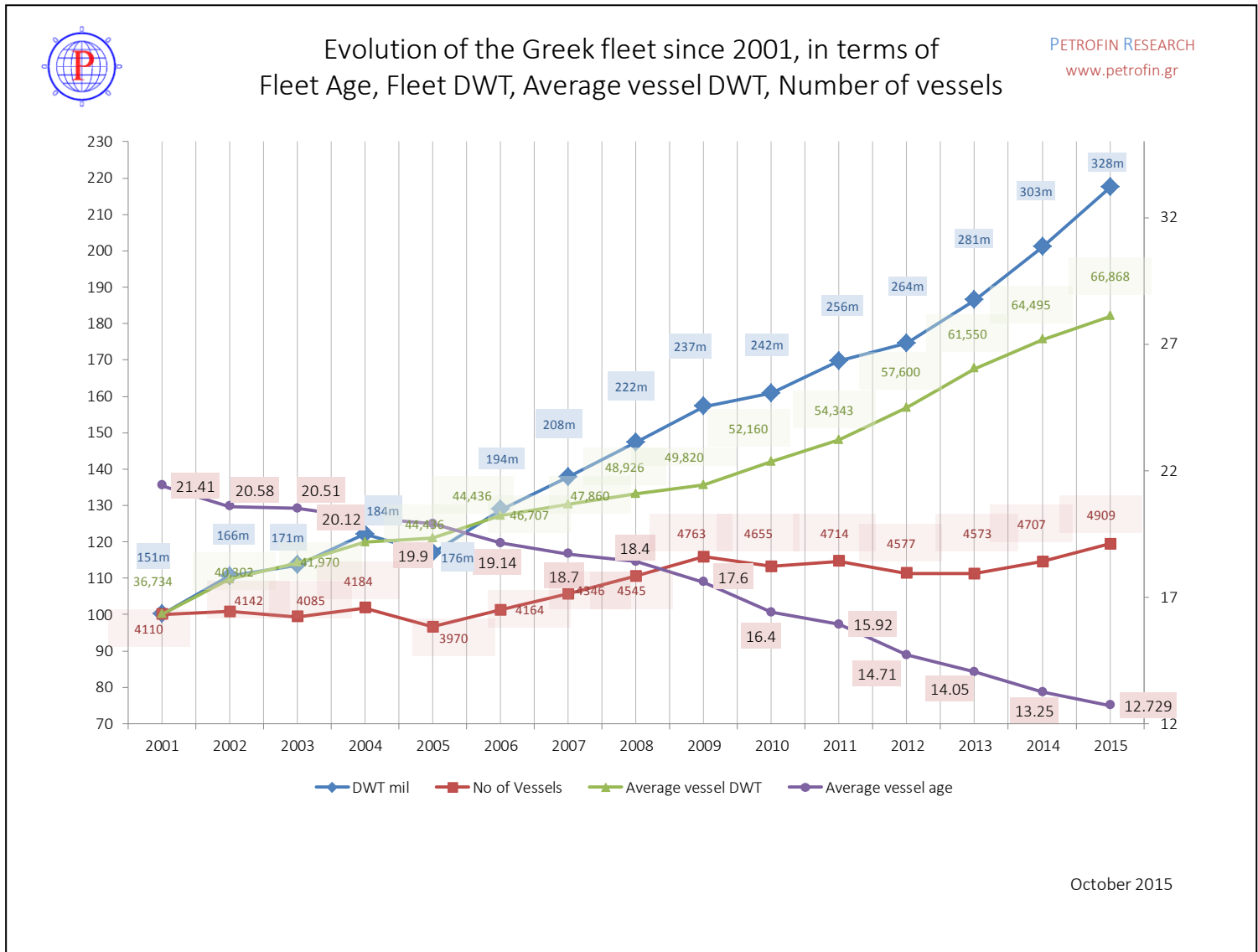
TABLE 2

| 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 |
| 2012 | 263,635,420 | 14.7 | 57,600 |
| 2013 | 281,467,983 | 14.055 | 61,550 |
| 2014 | 303,579,176 | 13.252 | 64,495 |
| 2015 | 328,254,495 | 12.729 | 66,868 |
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1. The average vessel DWT is now 66,868 from 64,495 in 2014, 61,550 tons DWT in 2013, 57,600 tons DWT in 2012, i.e. a rise of 3.7% in 2015 compared to 4.6% in 2014, 6.4% in 2013, and 4.2% in 2012. The new additions to the fleet are bigger and the smaller existing vessels are gradually coming out of the equation.
2. The increase in vessel size continues unhampered since 2001.
3. The average age has dropped significantly down to 12.7 years from 13.252 years in 2014, 14.055 in 2013, from 14.7 years in 2012 and down from 15.92 in 2011 (Table 2, above). It should be noted that this is the average age of the entire Greek fleet, covering all sizes, types and commercial activities. Some very old ships are included in this fleet, which makes the drop in years even more significant (please see additional research for all vessels over 10,000 DWT and 20,000 DWT)
4. We have summarised in Graph 1 all the above findings, over a 14 year period, to show the development of the Greek fleet.



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 marked for each year.



SECTION B: FOCUSING ON THE LARGER VESSELS

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 impact, that operate mostly locally. Hence, we concentrate on the global aspect of the Greek fleet.

VESSELS OF OVER 10,000 DWT

COMPARISONS BETWEEN 2003 AND 2015

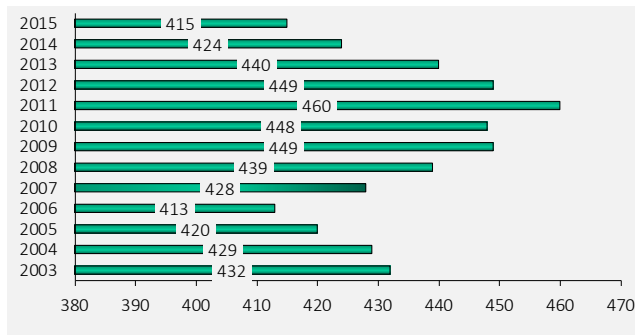
Graph 2 below shows the fluctuation in the number of companies that manage vessels over 10,000 DWT, the number of ALL these vessels, their age and their DWT. ('ALL vessels' means everything of commercial purpose that floats and is under Greek control):

GRAPH 2

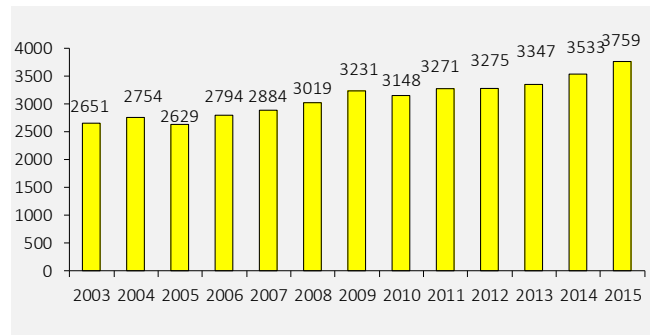
Vital Statistics of the GREEK FLEET VESSELS over 10,000 DWT – 2015



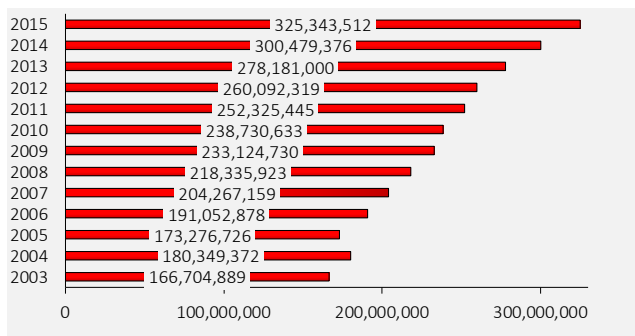
Number of Shipping Companies managing VESSELS over 10000 DWT



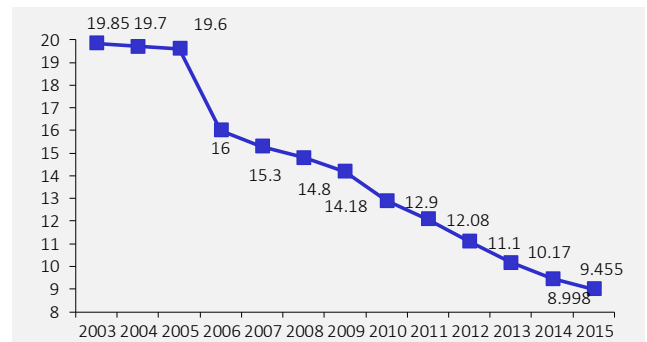
Number of vessels over 10000DWT



Total DWT of VESSELS over 10000 DWT



Average Age of VESSELS over 10000 DWT





- The companies that run these vessels are markedly reduced to 415 from 424. This year, the increase in vessels over 10,000 DWT is more significant in number of units (226 this year, compared to 186 last). The increase in DWT, however, is even more significant: 24.9m DWT were added bringing the total to 325,343,512 tons DWT, thus raising overwhelmingly the percentage they hold over the entire Greek fleet to 99.1% from 98.97% in 2014 and 98.83% in 2013.
- Vessels over 10,000 DWT are owned by 9 less companies than last year.
- The rise in tonnage continues its unimpeded climb since 2005.
- The average vessel DWT is now 86,551 compared to 85,049 tons DWT in 2014, 83,113 tons DWT in 2013, 79,417 tons DWT in 2012, 77,140 in 2011, 75,836 in 2010.
- The Greek fleet's age continues to improve impressively for this tonnage category. The influx of the newbuildings has brought the age fleet to just below 9 years from 9.45 in 2014, 10.17 in 2013, 11.1 years in 2012, 12.08 in 2011 and 12.9 years in 2010.

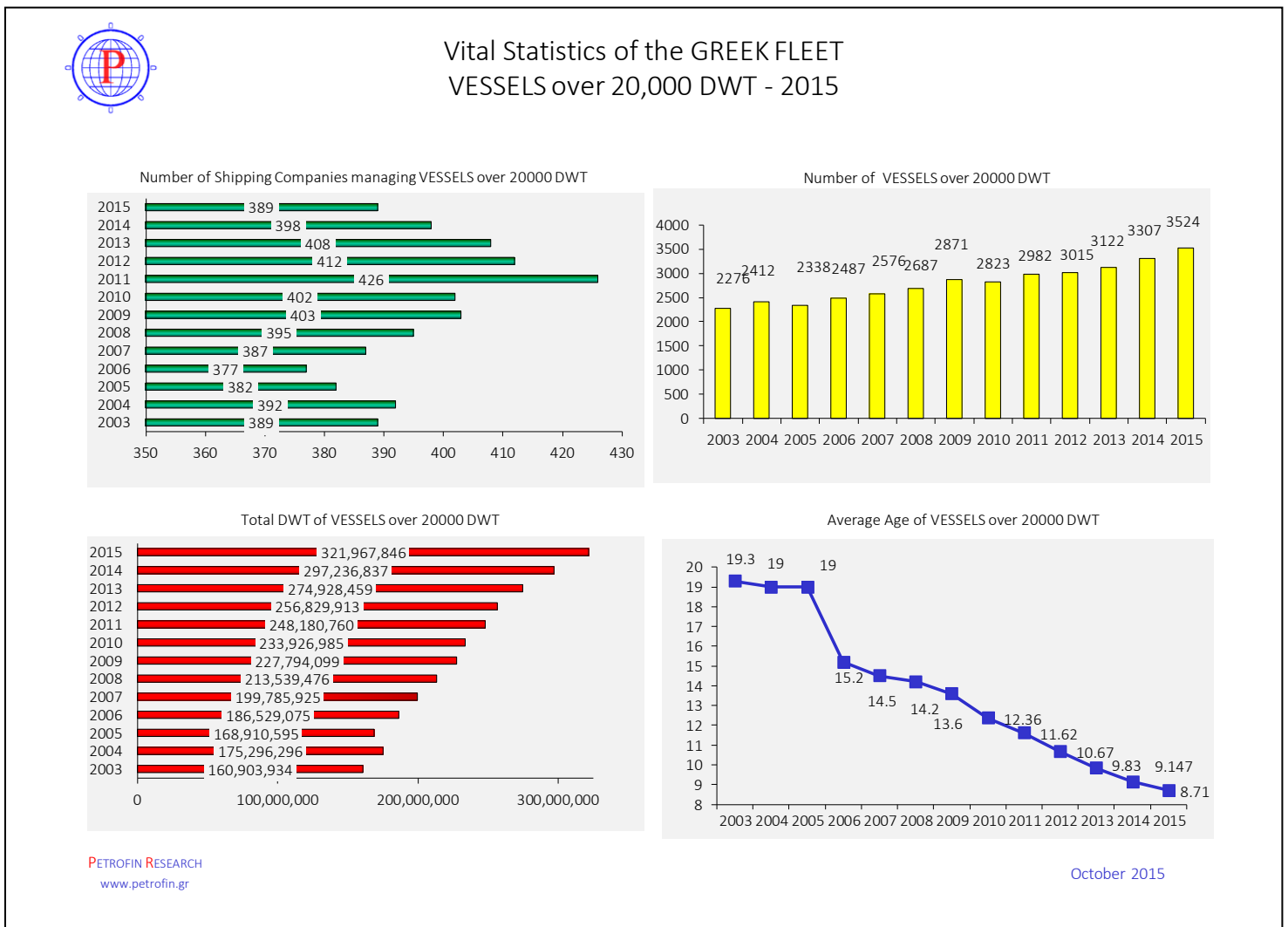


VESSELS OF OVER 20,000 DWT

COMPARISONS BETWEEN 2003 AND 2015

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 for commercial activities and is under Greek control):

GRAPH 3



- Similar results for the over 20,000 tons DWT. Following closely the situation with the over 10,000 DWT vessels, companies that run over 20,000 tonners have gone down by 9.
- Their vessels are up by 217 compared to a rise of 107 in 2014 and an increase of 24.7m tons DWT in tonnage.
- The average DWT of each vessel is 91,364 in 2015, compared to 89,881 in 2014.
- The average age has reduced again, significantly, to 8.7 in 2015.



SECTION C: ANALYSES BY TYPE OF VESSEL

THE GREEK BULKER FLEET OF VESSELS OVER 10,000 DWT EACH

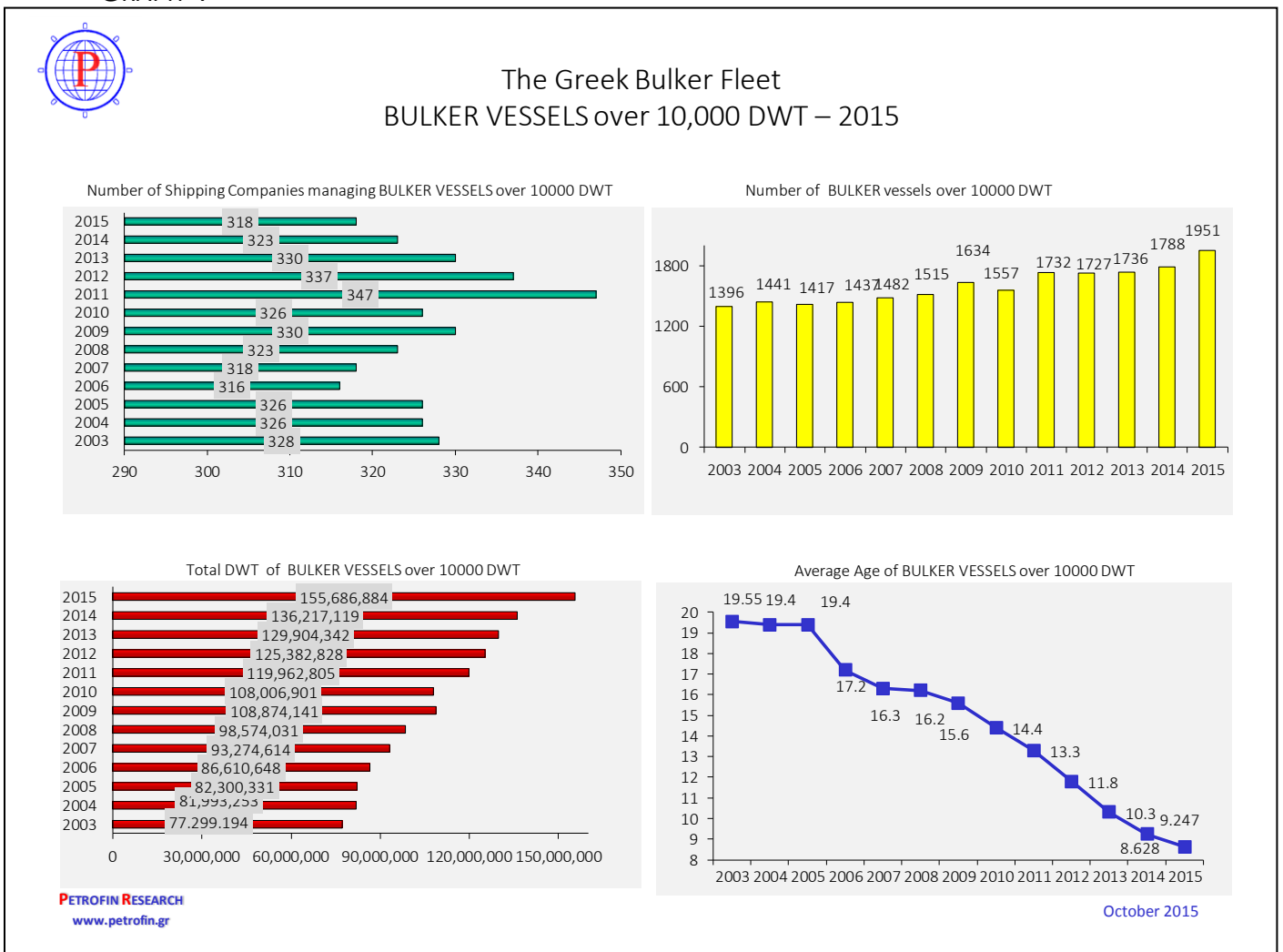
COMPARISONS BETWEEN 2003 AND 2015

The graph below shows that the number of companies has gone down, following the trend, thus far, by 5 companies, continuing last year's trend. Bulk carriers over 10,000DWT have gone up, however, by 163 vessels compared to an increase of 52 vessels last year and a marginal addition of 9 vessels the year before.

The age keeps falling, and it is now below the 9-year threshold, at 8.63 years from 9.25 in 2014, 10.3 in 2013, 11.8 in 2012, reflecting the peaking of deliveries of newbuildings and the now well established trend towards newer vessel.

Dry bulk shipping, traditionally the most popular sector in Greek shipping, occupies now 47.43% of the entire fleet tonnage, compared to 44.87% last year.

GRAPH 4





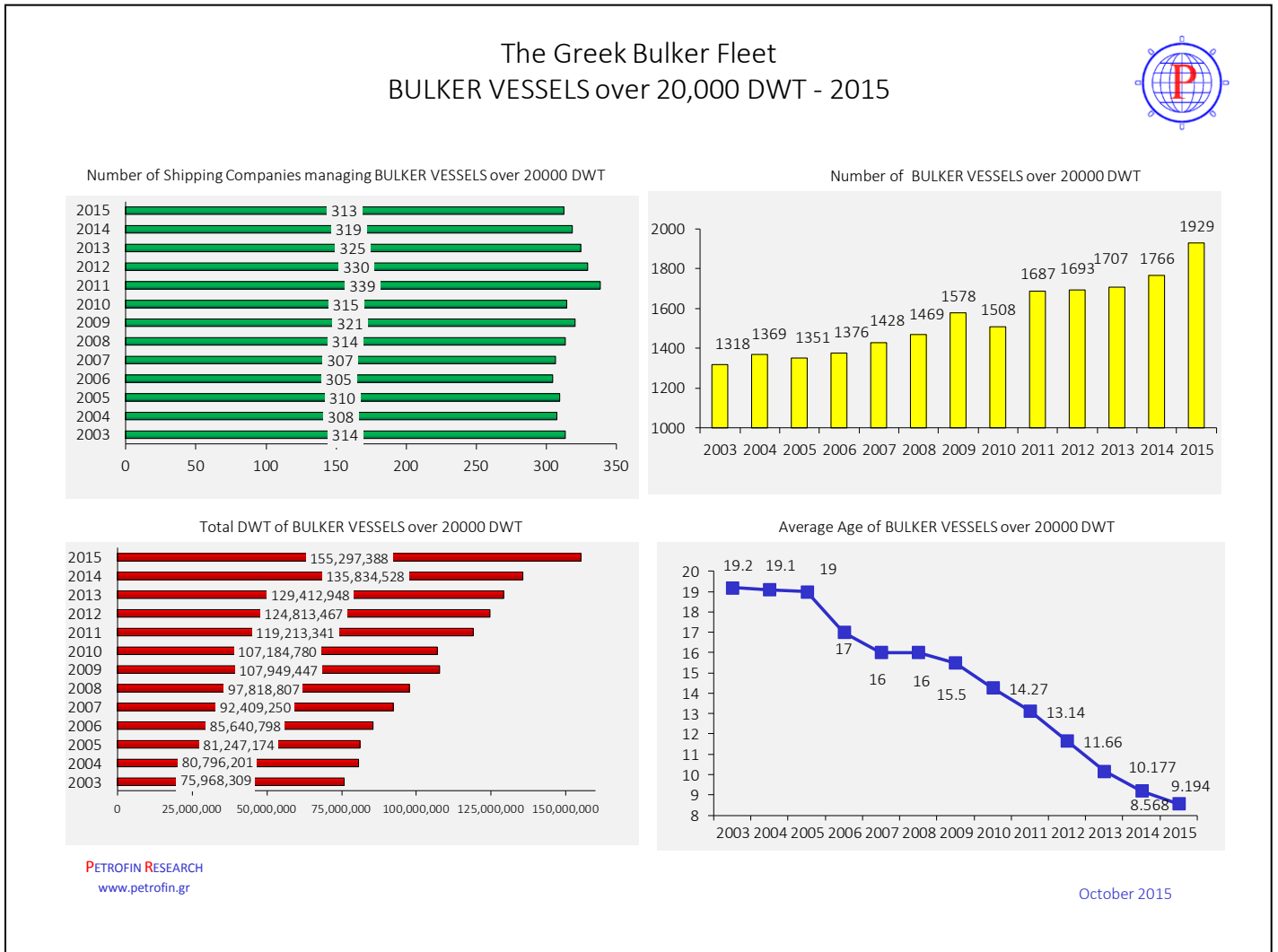
THE GREEK BULKER FLEET OF VESSELS OVER 20,000 DWT EACH

COMPARISONS BETWEEN 2003 AND 2015

Similar trends here also. We note a further drop in companies by 6 in the last year. The bigger bulkers continue to rise by 163 this year compared to 59 in 2014, a rise of 14 in 2013, 6 in 2012 and 179 units in 2011. The difference between 10,000 DWT bulkers and 20,000 DWT is down to only 22 vessels, compared to 22 vessels in 2014, 29 vessels in 2013, 34 vessels in 2012 and 45 in 2011. So the bulk of the fleet is indeed bigger bulkers. Average vessel size is 80,507 tons DWT.

Furthermore, tonnage is up by 19.46m tons DWT compared to 6.4m tons DWT in 2014, 4.6m tons DWT in 2013, whereas in 2012 the increase was 5.6m tons DWT, and in 2011 12m tons DWT. Age has dropped significantly to 8.57 years, compared to 9.2 in 2014, 10.2 in 2013, 11.66 years in 2012 and 13.14 years in 2011.

GRAPH 5





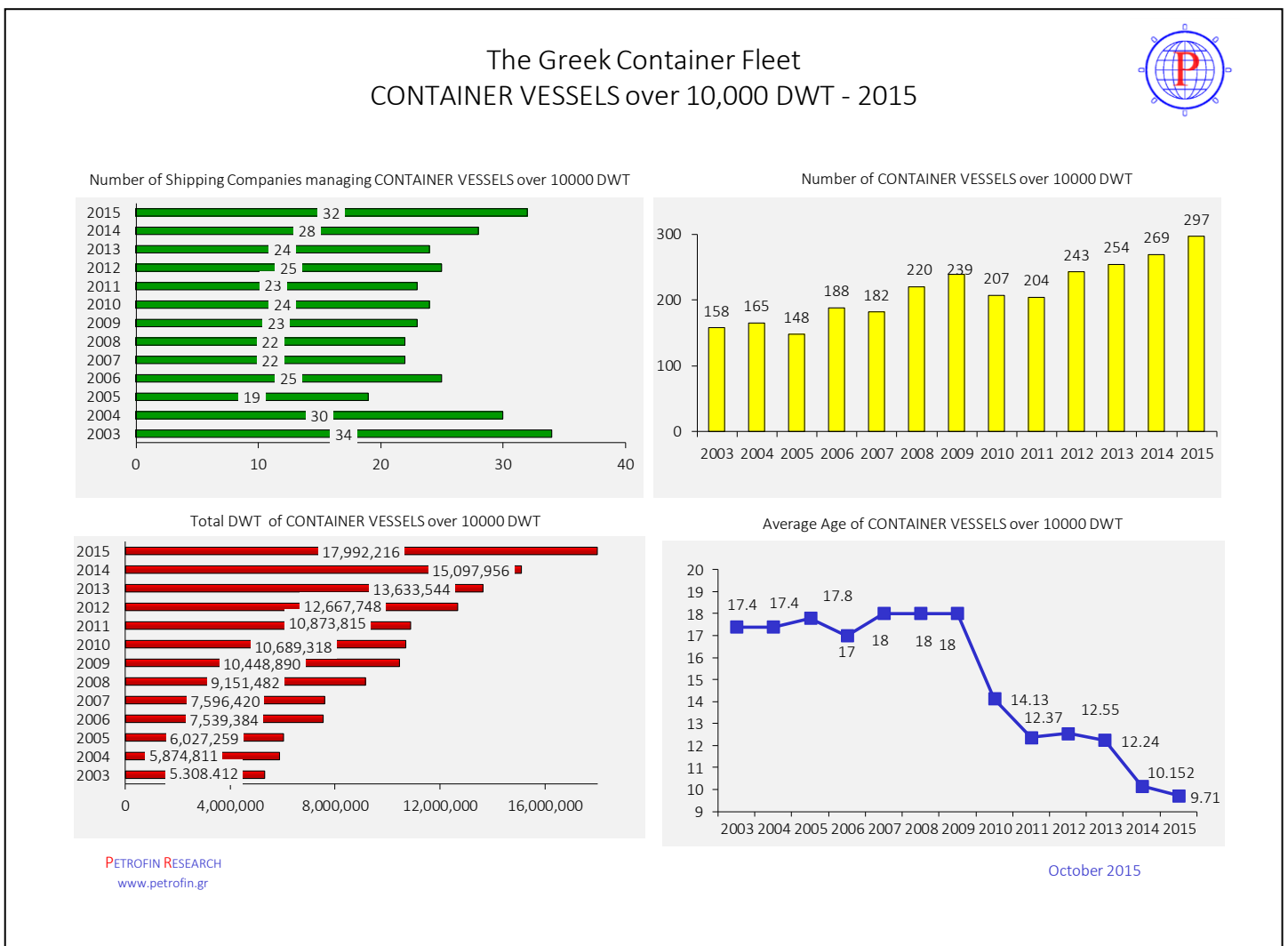
THE GREEK CONTAINER FLEET OF VESSELS OVER 10,000 DWT EACH

COMPARISONS BETWEEN 2003 AND 2015

The container sector has always been a volatile market. Although not always following the general fleet trends, this year they seem to move in parallel to the other sectors. Companies are up by 4, vessels are up by 28 and tonnage is up by almost 2.9m tons DWT.

Equally important is the sharp drop in the age of these vessels, for the third year in a row, from 10.152 to 9.71 years on average.

GRAPH 6





THE GREEK CONTAINER FLEET OF VESSELS OVER 20,000 DWT EACH

COMPARISONS BETWEEN 2003 AND 2015

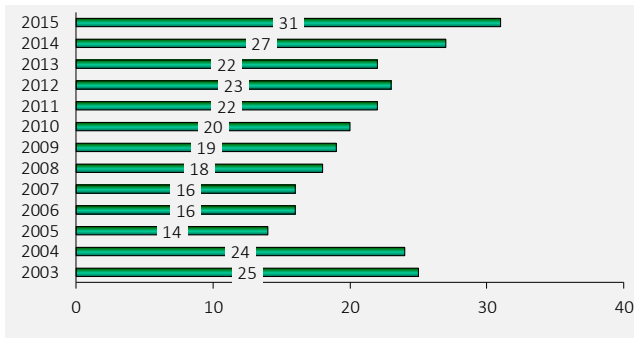
The number of vessels added is also 28. New tonnage added is just over 2.9m tons, showing that the fleet is consolidating into the over 20,000 DWT category as there is only one company that runs strictly over 10,000 tons DWT container units. The age of the large container vessels is down to 9.38. Average vessel size is now 64,435 tons DWT from 60,351tons DWT in 2014 and 56,796 DWT in 2013.

GRAPH 7

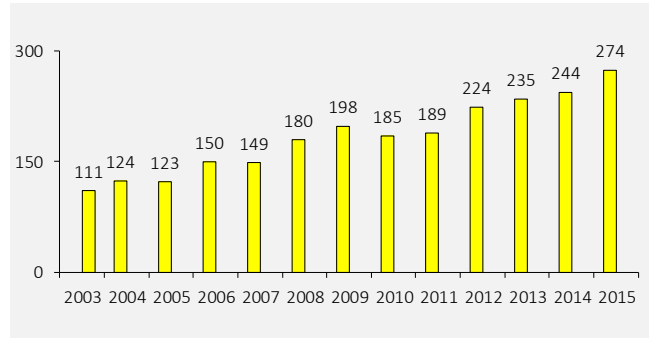
The Greek Container Fleet CONTAINER VESSELS over 20,000 DWT - 2015



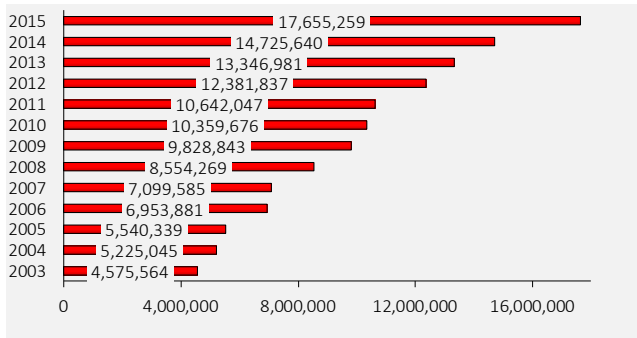
Number of Shipping Companies managing CONTAINER VESSELS over 20000 DWT



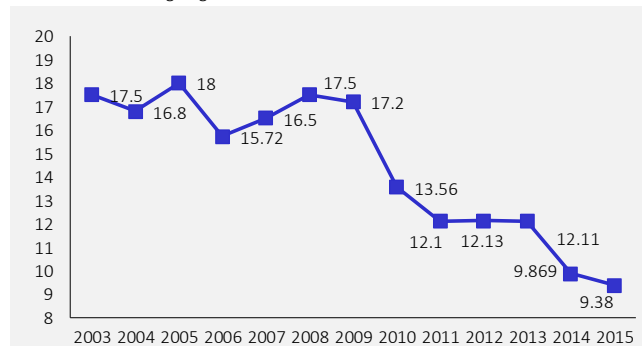
Number of CONTAINER vessels over 20000 DWT



Total DWT of CONTAINER VESSELS over 20000 DWT



Average Age of CONTAINER VESSELS over 20000 DWT



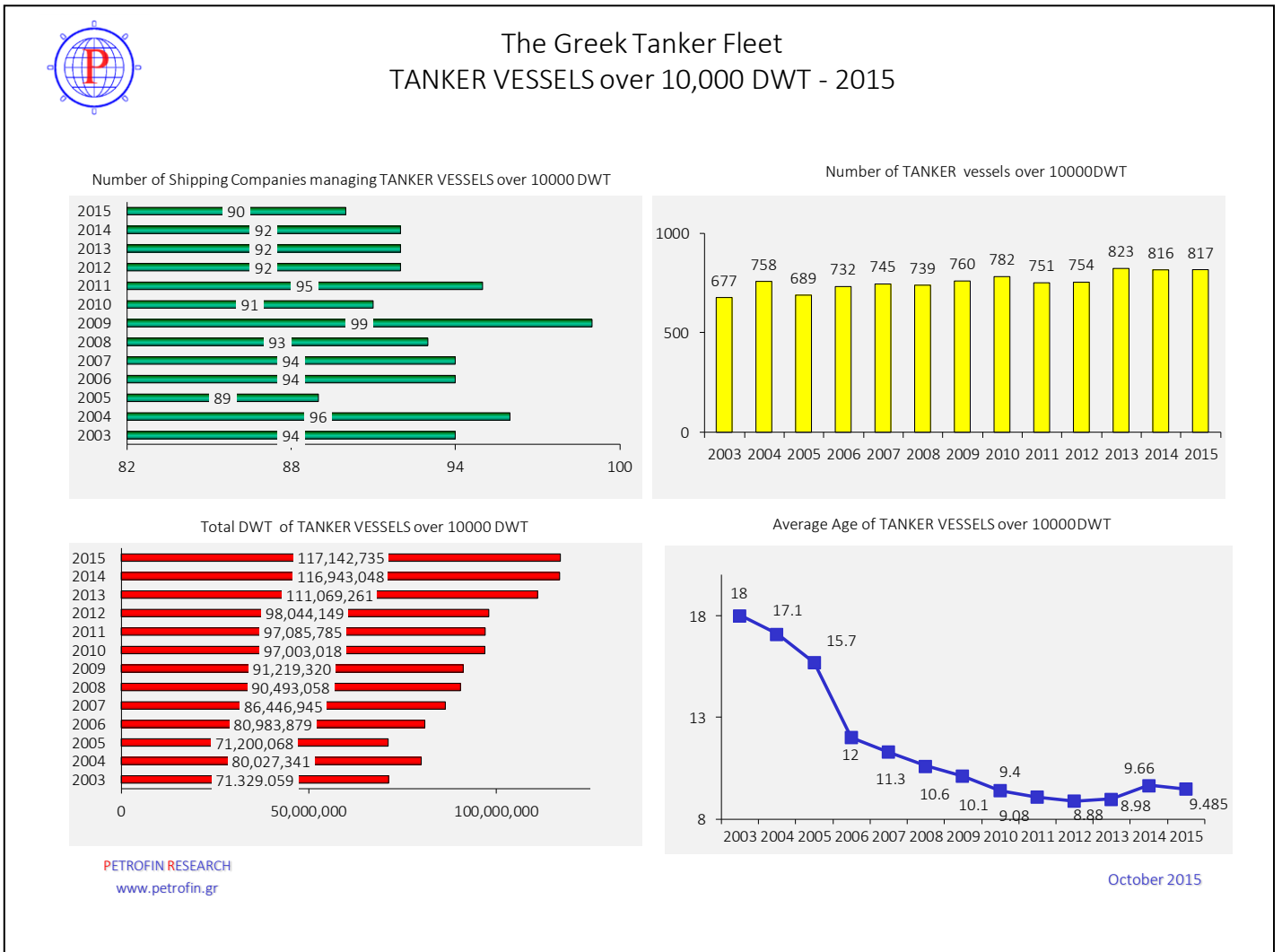


THE GREEK TANKER FLEET OF VESSELS OVER 10,000 DWT EACH

COMPARISONS BETWEEN 2003 AND 2015

The number of tanker companies has remained almost the same in the last 3 years. Tonnage is up again but only by 199,687 tons DWT and tankers represent 35.7% of the Greek fleet. Age is slightly down to 9.485 and the average unit has remained almost the same as last year, at 143,382 tons DWT. It should be noted here, that there is a marked tendency to specify the type of tanker (product, chemical, etc.) in the databases used, so the general category of tanker may not be quite sufficient to show the evolution of the sector. This is something we will take into consideration in future research.

GRAPH 8





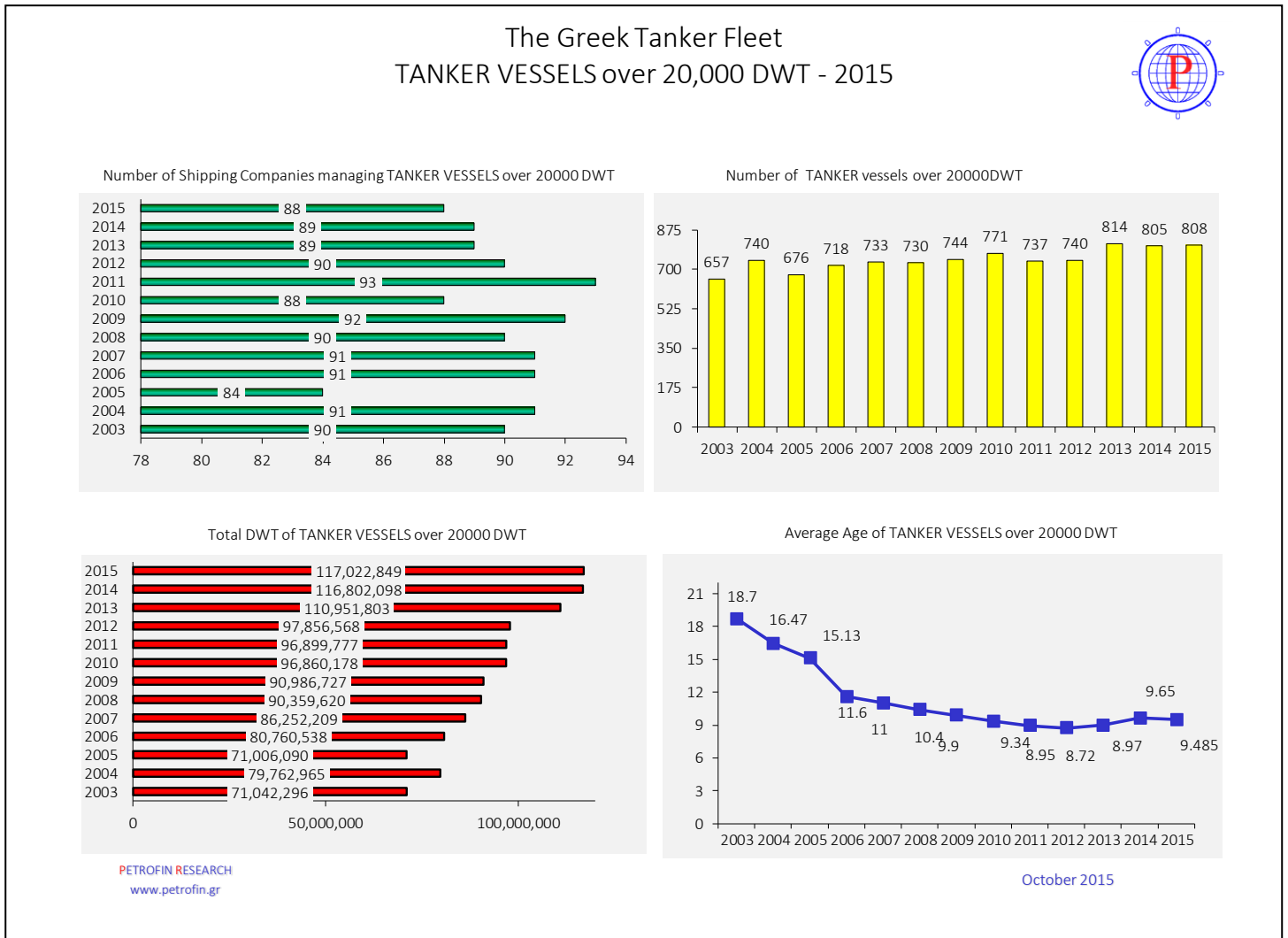
THE GREEK FLEET OF TANKER VESSELS OVER 20,000 DWT EACH

COMPARISONS BETWEEN 2003 AND 2015

Units in this category have gone by 3. The companies that run them are minus one since last year. Tonnage is only up by 220,751 tons DWT.

The sector occupies now 35.65% of the Greek fleet compared to last year's 39.4%, 37.12% in 2012, 37.82% in 2011 and 39.9% in 2010. The same observation, that tankers are increasingly being reported according to their specific type, applies to this sector too.

GRAPH 9

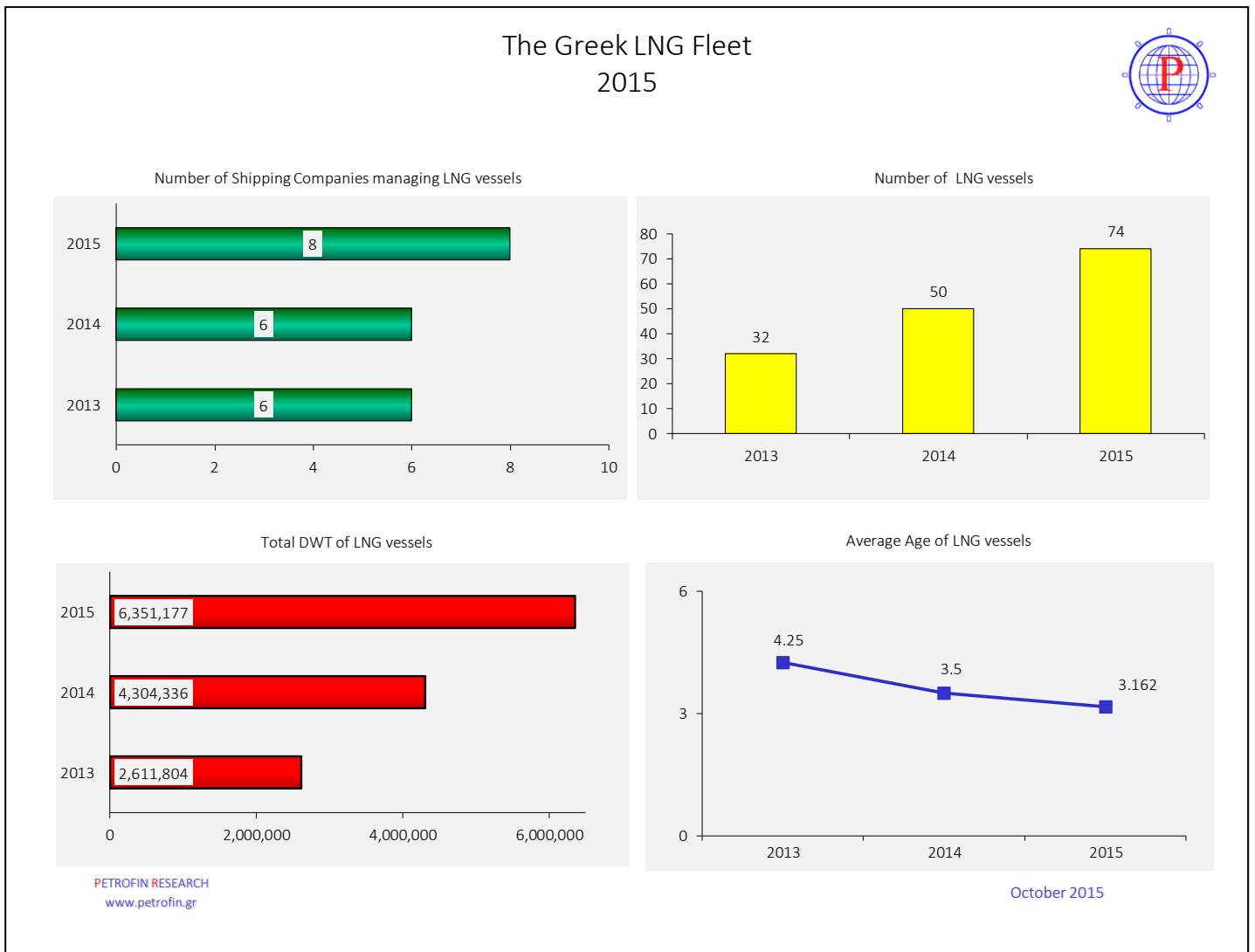




THE GREEK LNG FLEET

The LNG market is showing signs of strength with a rise in the number of Greek owners and an increase of almost 50% in vessels since last year, together with a similar increase in tonnage and a further fall in age down to 3.16 years on average.

GRAPH 10

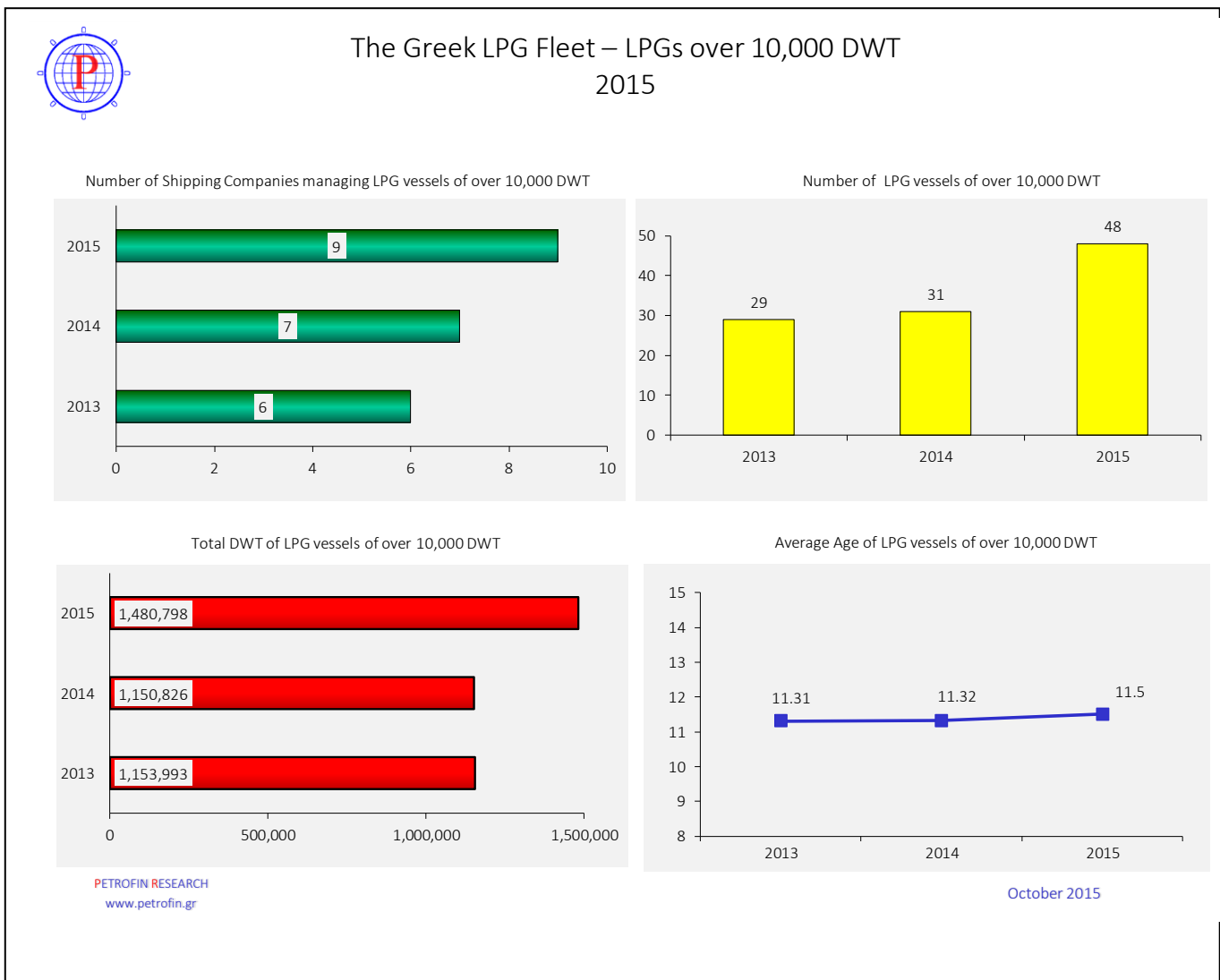




THE GREEK LPG FLEET OF VESSELS OVER 10,000 DWT EACH

LPGs show a growth in numbers, up by 17 to 48 units and the companies that run them have increased by 2. Tonnage has increased to 1.48m tons DWT from 1.15m tons DWT in 2014 – a rise of 28.7%. Also, the age has gone slightly up, showing an acquisition strategy to buy second hand vessels in order to respond instantly to the current market's needs.

GRAPH 11

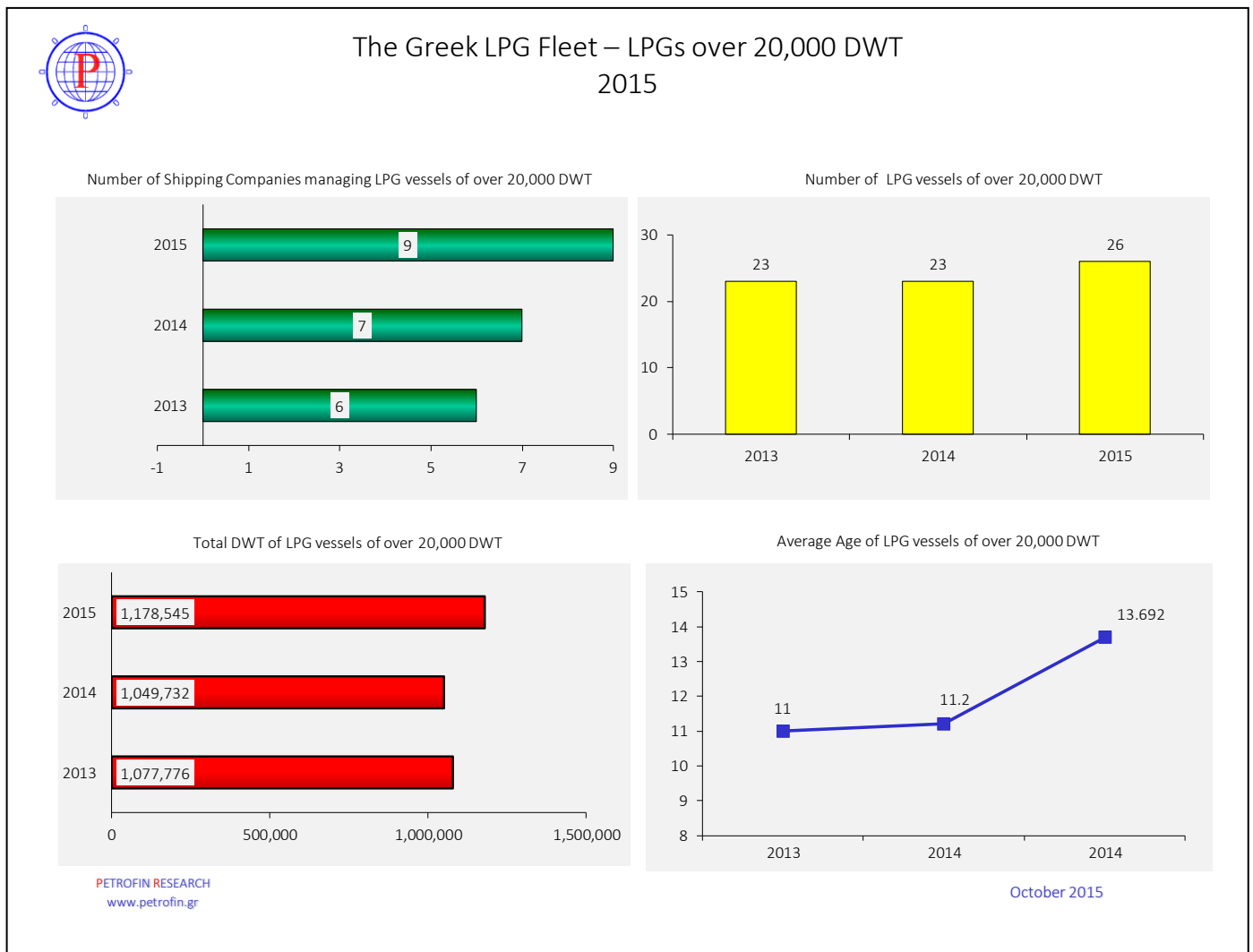




THE GREEK LPG FLEET OF VESSELS OVER 20,000 DWT EACH

For the over 20,000 LPGs, there are 3 more vessels and tonnage is only up by 12.3%, showing that the majority of vessels added in the sector are between 10,000 and 19,000 tons DWT. Here, however, age has jumped up to 13.7 years, as the larger LPGs acquired were older.

GRAPH 12





COMMENTARY

With a growth of 4.3% in vessel numbers to 4,909 vessels and of 7.52% in DWT terms to 328,254,495 DWT, Greek shipping continued its growth during the last year.

This growth is even more remarkable if we take into account the challenging prevailing market conditions in most sectors and dry bulk in particular, as well as the poor associated cashflows and the selective financing policy by banks.

Some explanations can be found in the following:

- 1) A number of Greek owners are committed to building up their eco fleets, as the vessels of the future and in the expectation that they will reap rewards in time, when conventional tonnage shall either be scrapped or shunned by charterers,
- 2) public companies in particular, need to grow, as part of their 'public' profile strategy and in order to 'sell' their story to the market and shareholders, and
- 3) other Greek owners are consummating Joint Ventures with private equity funds and are following previous newbuilding ordering decisions. Admittedly, there have been many delivery extensions and some order conversions into tankers but, on the whole, Greek owners remain committed to following through with their orders and outliving the difficult markets.

Unsurprisingly, the average age of the whole Greek fleet (in DWT terms over 20,000 tons) has continued to fall to 8.7 years (counting vessels in the water and those being delivered within one year), although the rate of decline in the average fleet age is slowing down.

Specifically, the number of dry bulk companies of fleets of over 20,000 DWT has remained static over the last 12 years, at about 313, whereas the number of vessels has risen from 1,318 to 1,929 and the total DWT has risen from 76m to 155.3m over the 12 year period. This demonstrates the emphasis on larger fleets per company and of larger DWT capacities.

The age fall over the 12 year period has been remarkable from 19.2 years to 8.6 years, which shows that Greek owners are committed towards modern fleets. The age improvement has been consistent up to now.

A similar picture is shown in the container fleet of over 10,000tons DWT, with the same number of players, but with rising vessel numbers from 158 to 297 over the 12-year period and a remarkable increase from 5.3m to 18m in DWT terms over the period, whilst the average fleet's age has fallen from 17.4 to 9.7 years. The trend has continued unabated last year, underlying the quality and quantity improvement.

Tankers of over 20,000tons DWT are displaying similar but somewhat different trends. Whereas the overall number of companies has remained pretty static at approximately 90 companies, the number of vessels has grown from 657 to 808 over the 12 year period, which is a less impressive growth. The picture is similar in DWT terms from 71m to 117m, which implies growth but not as pronounced as the other two sectors. The improvement in age is equally pronounced from 18.7 to 9.5 years for the 20,000 DWT fleets. Here, though, the improvements may also reflect the requirements for lower ages by the oil majors and tanker charterers too, where 'vetting' has become systematised and a condition precedent for employment for tankers.



The Greek LNG sector is advancing and so is the global LNG fleet. The global outlook is unclear with most of the newbuilding orders hitting 2017 and the sector showing a 38.6% newbuilding orderbook (Clarkson's Shipping Intelligence Weekly). It is anticipated, however, that long term contracts cover a large number of the newbuilding orders.

The Greek LPG sector has shown a somewhat mixed trend. Whereas the number of participants has grown (with more incomers after the cut-off date of our research), the number of vessels has remained pretty static, whilst the capacity has grown, but less impressively compared to the 3 main sectors. Interestingly, the average age of the LPG vessels has risen reflecting the effect of second hand purchases and fewer newbuildings for this sector.

Overall, Greek owners have continued to commit huge sums, not only to preserve their fleets, but to grow them and modernise them. Behind their brave faces there is worry as to the slowdown of global growth, in particular that of China, and how quickly shipping would return to vessel incomes that would provide a positive return to their committed capital. The Global tanker sector, aided by the fall in the price of oil and some structural and geographical shifts, appears more promising, but once again tanker orders have increased to 17.2% of the current fleet and year on year deliveries are expected at approximately 3% for 2015, as opposed to 1.5% last year (Clarkson's Shipping Intelligence Weekly). Vessel prices are not fully reflecting the rises in vessel incomes with product tankers' incomes having given up the rises achieved earlier this year, whilst crude markets continue to show significant gains that appear more sustainable. This implies that the market needs reassurance over the longer term prospects for tankers, in general, although some sub segments offer better prospects.

In the light of the Greek political and economic crisis that continues and the huge uncertainty surrounding the future of Greek shipping operated out of Greece, due to the expected increase in taxation, the growth in vessels' capacity and improvement in age comes as a surprise. Greek owners are renowned for their ability to pick up the right time to invest and disinvest. Time will show if they got it right once again in these unprecedentedly challenging times.



METHODOLOGY – SOURCES - RESEARCH CRITERIA

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.

Our sources are the Greek Shipping Directory (2015), printed and on-line database, Newsfront Greek Shipping Intelligence, as well as Clarkson's World Fleet Register, Clarkson's Shipping Intelligence Weekly and numerous market sources.

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, LNGs and LPGs. 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 2016. 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 2017 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, OBOs, Container/bulkers, etc.