



Trend Analysis
Tankers and Dry-Bulk Carriers
1st Quarter 2017
Incorporating a comparison of the
current dry-bulk recession with
previous troughs

April 2017

Trend Analysis for Selected Tankers and Dry-bulk Carriers

1st Quarter 2017

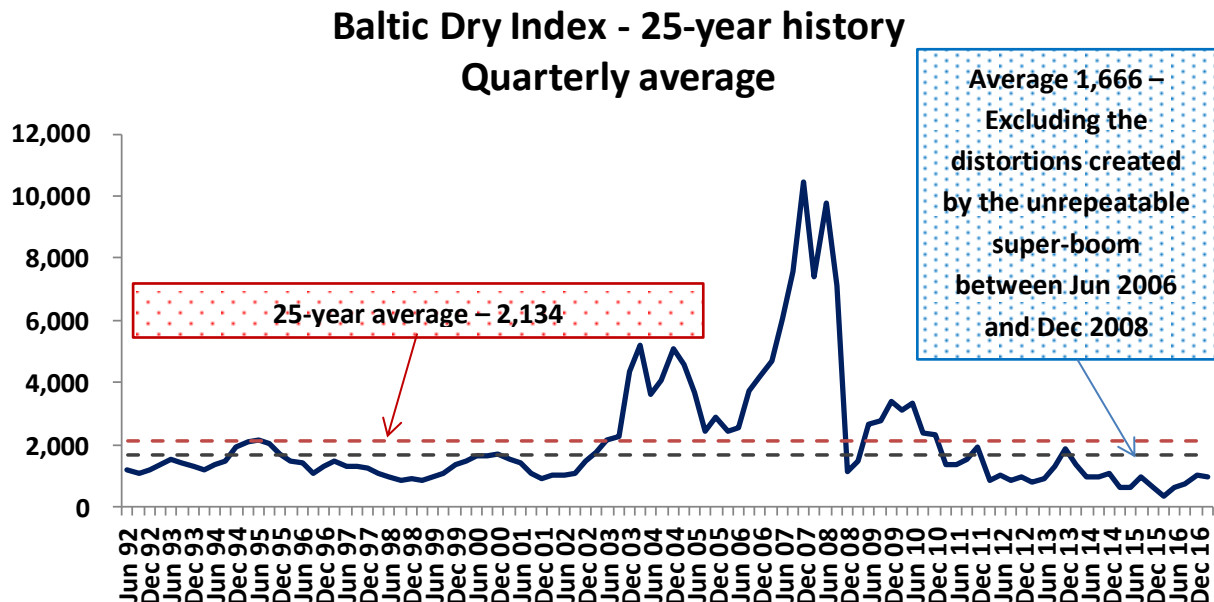
Summary

Charts for values, earnings and depreciation together with commentary are provided in Appendices 1 – 6 below.

There has been some discussion in recent weeks suggesting that the long-awaited recovery in the dry-bulk sector is now on the horizon. Factors that influence this opinion range from; the dearth of newbuildings contracted since the end of 2014, an improving ratio between the orderbook and the trading fleet (although in the Capesize sector it is still high by historical standards), better than anticipated data on world trade growth for 2017 and increasing iron ore and coal imports by China following the Government's latest economic package.

Certainly we can say that the sector has now awoken from its "Nightmare on Elm Street" that was the first quarter of 2016. It may be correct to describe the current market as just a bad dream from which we are still to awake.

But how bad has this market been in comparison to previous troughs. The following chart is one with which we are all familiar – the Baltic Dry Index for the last 25 years:



The quarterly average BDI over the period was 2,134. However the period between June 2006 and December 2008 was so extraordinary as to cause a significant distortion. If we exclude this period, the overall average BDI was 1,666 and we have taken this, perhaps arbitrarily, as a benchmark for a 'normal' market.

For comparison, we have looked at the periods:

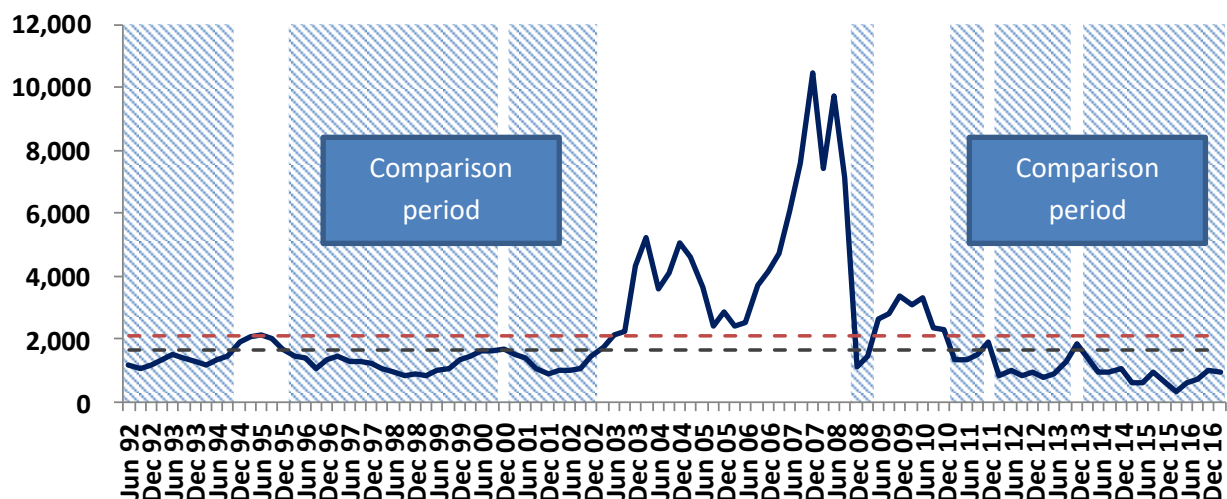
March 1996 – December 2002

March 2011 – to date

Apart from the occasional quarter, each of these periods reflected times when the BDI was below 1,666, i.e. lower than ‘a normal market’.

Surprisingly perhaps as the current downturn feels as though it has lasted forever, the earlier period (Mar 96 – Dec 02) lasted longer – 27 quarters compared to the current (so far) 23 quarters. If as seems possible, if not probable, the average remains below 1,666 for another year, then the current downturn will have been as long as the late 1990’s-early 2000’s period of misery.

Baltic Dry Index - 25-year history Quarterly average



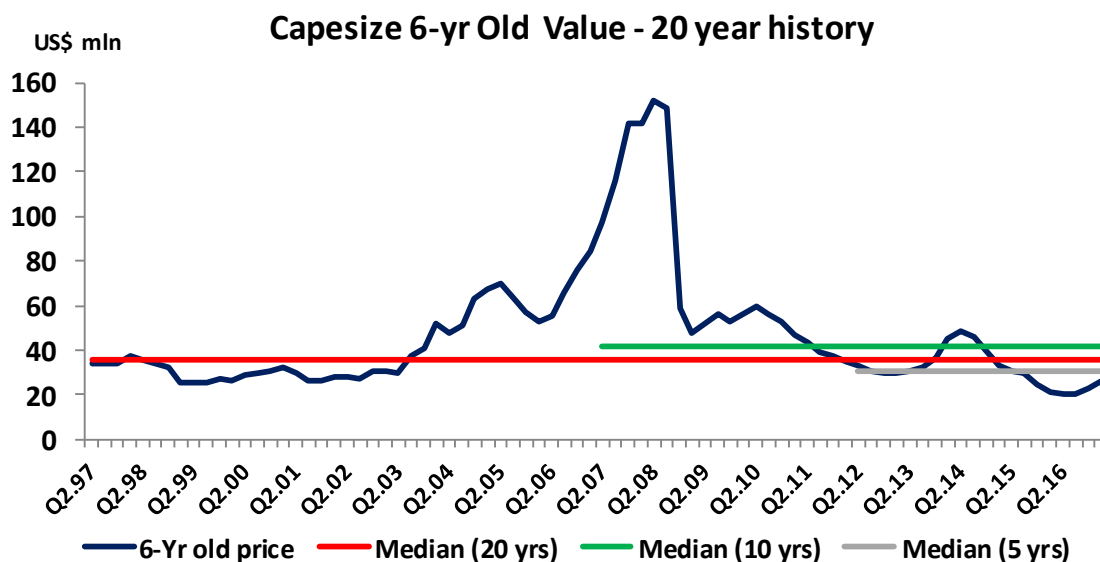
But that is not the full story. During the earlier period BDI averaged 1,238. In the current period, the average has been 947. In real terms, the average panamax period TC rate between Mar 96 and Dec 02 was \$8,735 per day. For the last 6 years the average has been \$9,165. Nominally higher, but nowhere near enough to reflect inflation in operating costs. We estimate that average Opex during the earlier period were \$4,265 per day. During the later period average Opex have been about \$2,000 per day more at \$6,265 per day.

So, without doubt, we have been living through, and are still in the worst market for the last 25 years.

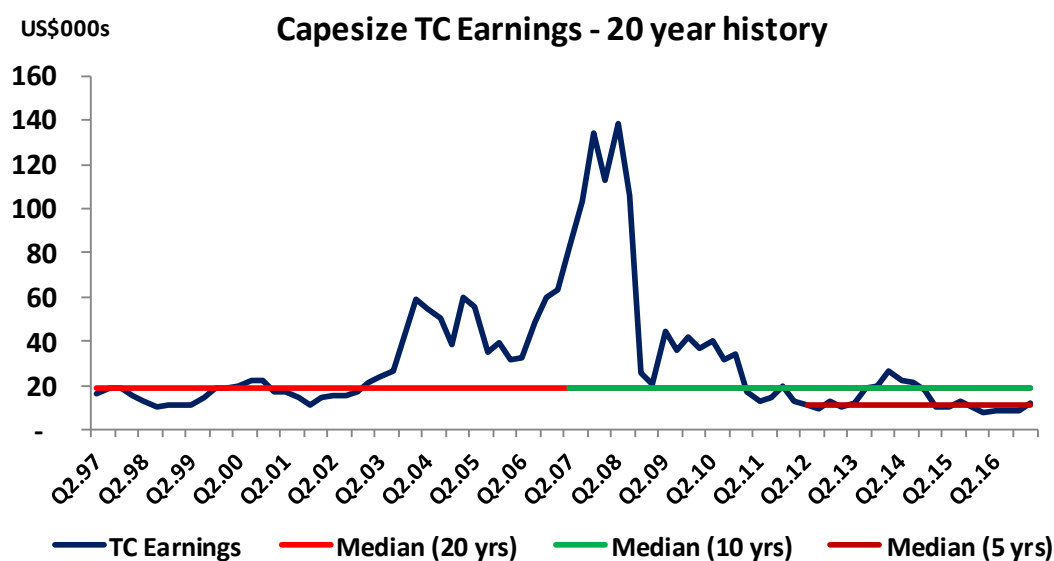
Is it worse than the mid 1980's? Between 1982 and 1987 (an inclusive 6 years – just like now) Panamax period TC rates averaged \$5,381 p.d. – even though many millions of DWT were in cold lay-up. Opex averaged about \$4,000 p.d. Costs of capital in the mid 1980's were much higher than now. So at first glance and in relative terms, the mid 1980's look to have been even worse than now, but as Zhou Enlai said when asked by President Nixon what he thought the effect of the French Revolution was – “It's too early to tell”.

Appendix 1 – Capesize Bulk Carriers – 20 years to Q1.2017

Representative 176,500 DWT

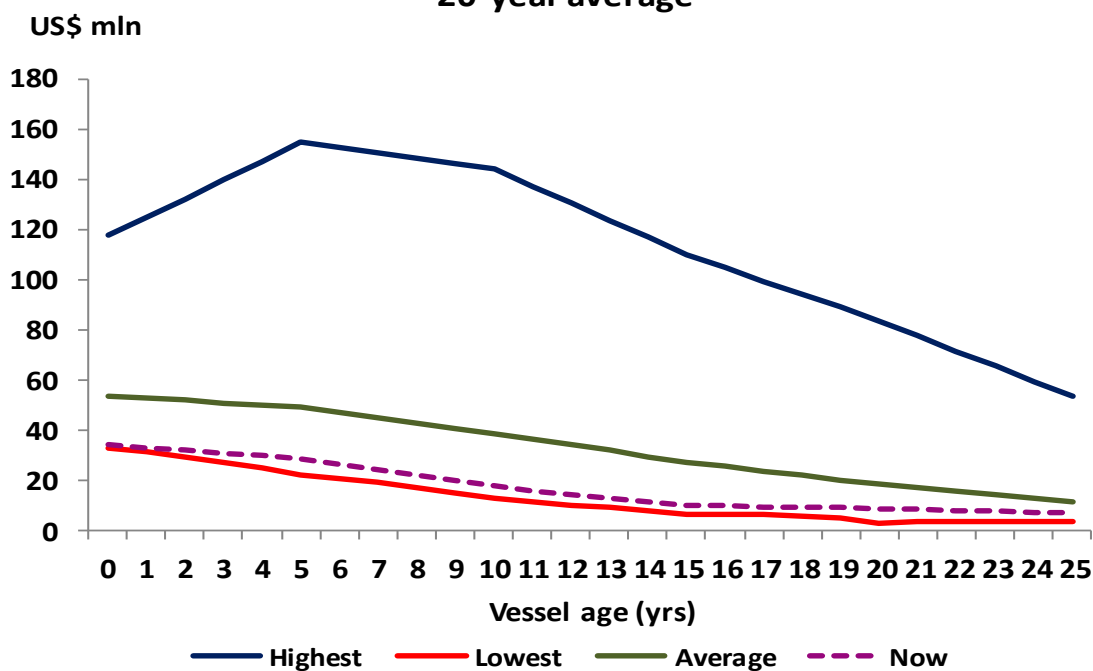


20, 10 and 5 year median values are in fairly close alignment strongly indicating that the distortions caused by the naughties super boom have perhaps now run their course. The upward trend in values identified during Q4.2016 has continued, and even accelerated during Q1.2017. The orderbook has reduced by another 4 million DWT but still relatively high with more than 15 million dwt due for delivery in 2017. Usually, when signs of a recovery emerge, however slight, scrapping grinds to a halt but Q1.17 has been encouragingly different. Although only 2.5 million dwt was reported as sold for scrap, this is double the volume observed in Q4.2016.



The upward trend is also reflected in the continued increase in period TC earnings. The chart, being a quarterly average, does not adequately highlight the change, as the most significant increase in average period fixtures occurred in the 2nd half of the quarter. In the first 45 days, average rates were \$11,805 p.d., (up by 29% from an average of \$9,141 p.d. in the whole of Q4.2016). However, average rates for the last 45 days were \$13,748 p.d. – this is an impressive 50% increase over Q4.2016. Perhaps of more interest is that the number of period fixtures recorded was 60, more than any quarterly period since the 2nd quarter of 2008. And many of those fixtures were to the big commodity traders who had previously been avoiding period markets. Is this a further sign that even the end users are trying to cover their intermediate transportation costs in anticipation of a sustained increase in rates?

176,500 Capesize BC Depreciation Schedule 20-year average

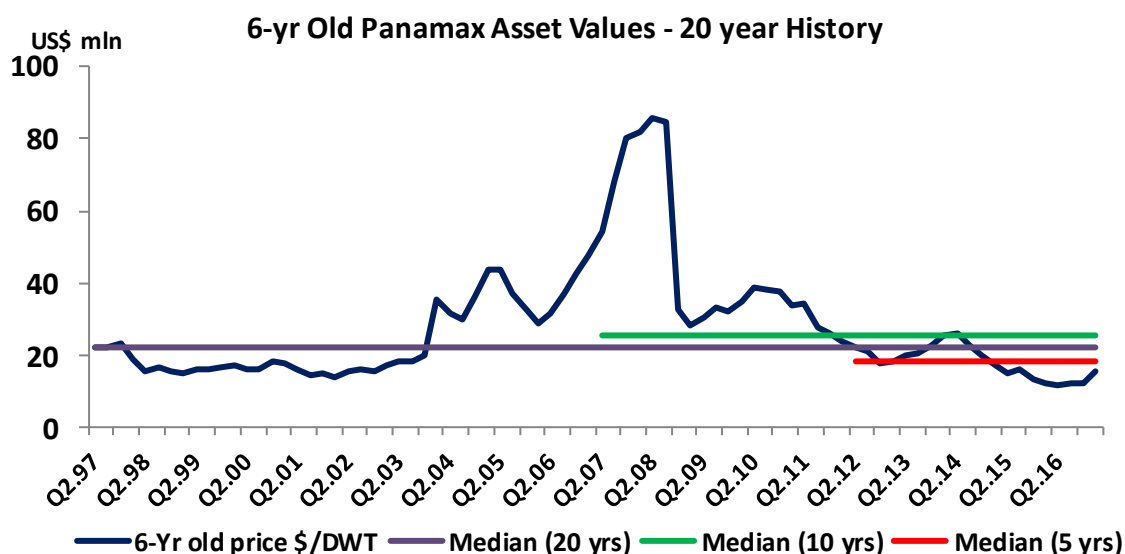


Even the 25 year depreciation schedule has edged upwards from the long term lows.

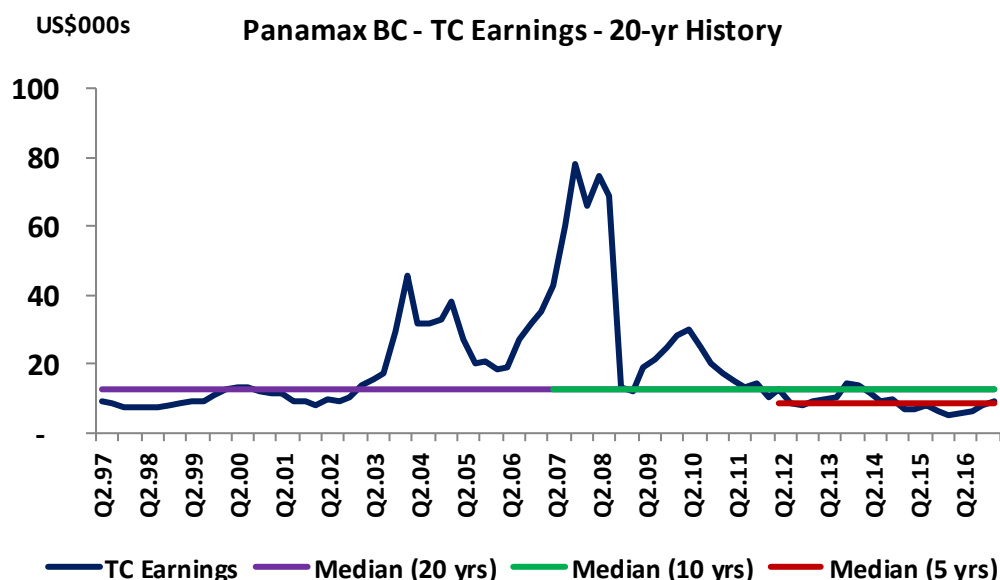
Age	Highest	Lowest	Average	Now	Age	Highest	Lowest	Average	Now
0	117.43	32.53	53.52	34.14	13	123.54	8.90	31.65	12.86
1	124.83	31.10	52.61	32.99	14	116.70	7.68	29.39	11.37
2	132.22	29.05	51.71	31.84	15	109.86	6.46	27.12	9.88
3	139.62	26.78	50.80	30.69	16	104.61	6.32	25.37	9.61
4	147.01	24.52	49.90	29.53	17	99.35	6.18	23.61	9.34
5	154.41	22.10	49.00	28.38	18	94.10	5.75	21.85	9.07
6	152.34	20.48	46.88	26.17	19	88.85	4.50	20.09	8.80
7	150.27	18.77	44.77	23.96	20	83.60	2.99	18.33	8.53
8	148.20	16.70	42.65	21.76	21	77.52	3.15	16.87	8.22
9	146.13	14.64	40.54	19.55	22	71.45	3.31	15.41	7.90
10	144.06	12.57	38.43	17.34	23	65.38	3.46	13.96	7.59
11	137.22	11.35	36.17	15.85	24	59.30	3.62	12.50	7.27
12	130.38	10.12	33.91	14.36	25	53.23	3.57	11.04	6.96

Appendix II – Panamax Bulk Carriers – 20 years to Q1.2017

Representative 75,000 DWT

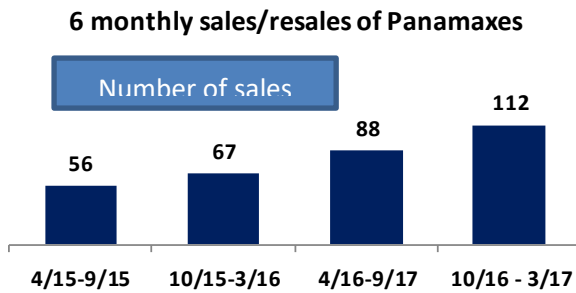


6-year old panamax average values are up even more sharply than for Capesizes. The Panamax orderbook has now declined to only 6.4% of the trading fleet and very much in line with long-run historical data. Scrapping has declined since Q4.2016, but this is not surprising as the return to fleet equilibrium is much more evident in this category.

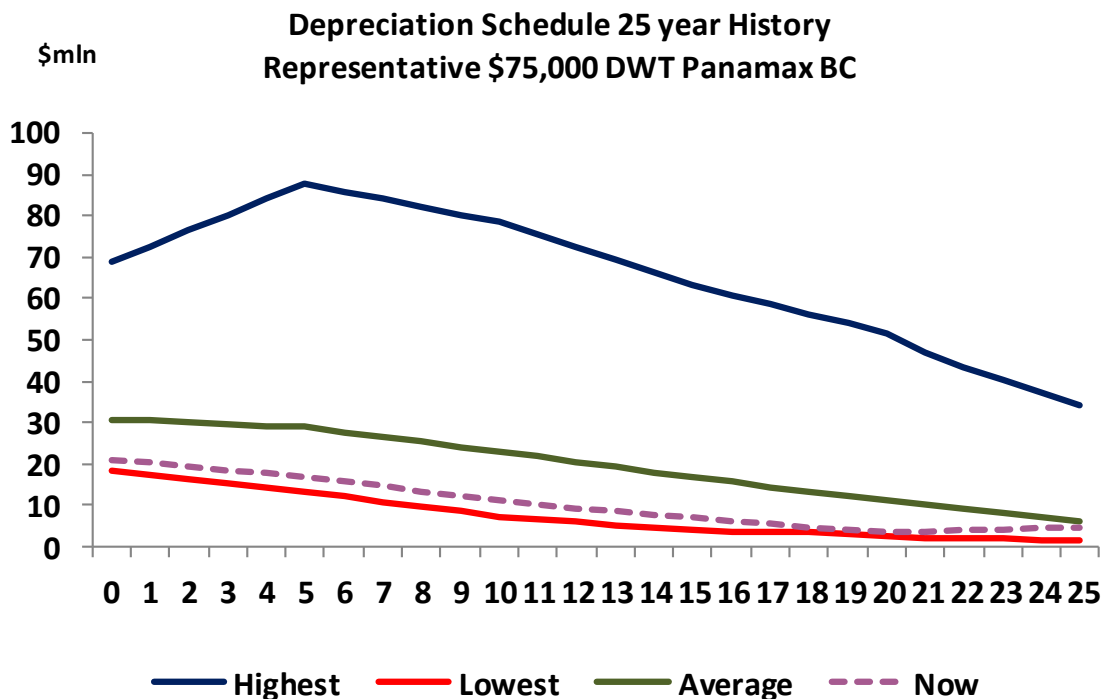


Period TC earnings also continue the recovery and the 20, 10 and 5 year median rates are now very closely aligned. The rate of increase, as for Capesizes, was much more evident in the 2nd half of the period. The increase in the first 45 days a very modest 2%, but the last 45 days were up by 30% over

the whole of Q4.2016. We recorded 95 period fixtures, a substantial increase on Q4s 63, and the highest since Q3.2010.



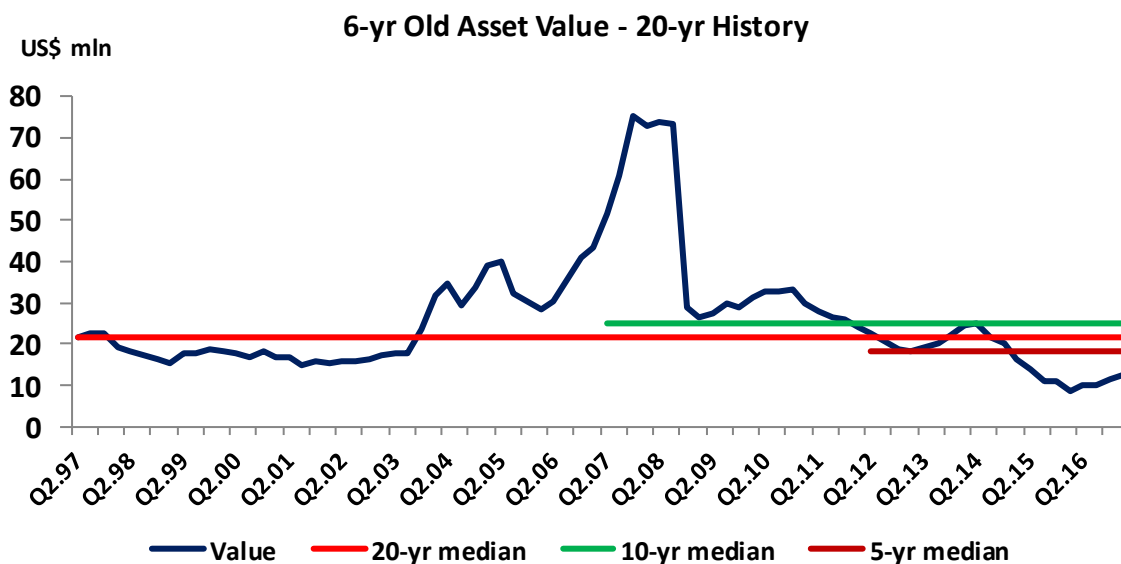
Investors may also be anticipating the upturn in the Panamax sector if activity in the resale and 2nd hand sales & purchase market can be considered as an indicator of optimism.



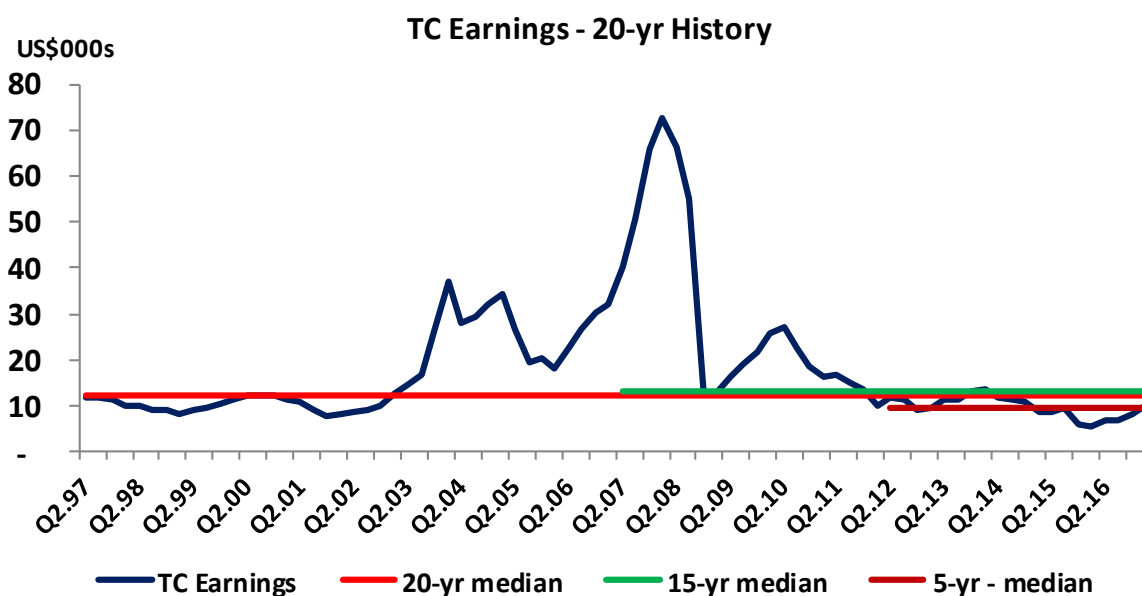
Age	Highest	Lowest	Average	Now	Age	Highest	Lowest	Average	Now
0	69.01	18.28	30.72	20.99	13	69.26	5.18	19.22	8.55
1	72.62	17.33	30.35	20.16	14	66.20	4.53	17.97	7.74
2	76.39	16.38	29.98	19.34	15	63.15	3.80	16.72	6.92
3	80.16	15.44	29.61	18.51	16	60.83	3.64	15.60	6.19
4	83.93	14.44	29.25	17.68	17	58.52	3.47	14.47	5.47
5	87.71	13.10	28.88	16.86	18	56.20	3.30	13.35	4.74
6	85.85	11.97	27.70	15.69	19	53.88	3.09	12.23	4.01
7	83.99	10.84	26.51	14.52	20	51.56	2.27	11.10	3.29
8	82.14	9.71	25.33	13.35	21	46.78	2.16	10.12	3.56
9	80.28	8.43	24.14	12.18	22	43.12	2.06	9.14	3.83
10	78.42	7.15	22.96	11.01	23	40.10	1.84	8.17	4.11
11	75.37	6.49	21.71	10.19	24	37.07	1.56	7.19	4.38
12	72.31	5.84	20.46	9.37	25	34.05	1.29	6.21	4.65

Appendix III – Handy/Supramax Bulk Carriers – 20 years to Q1.2017

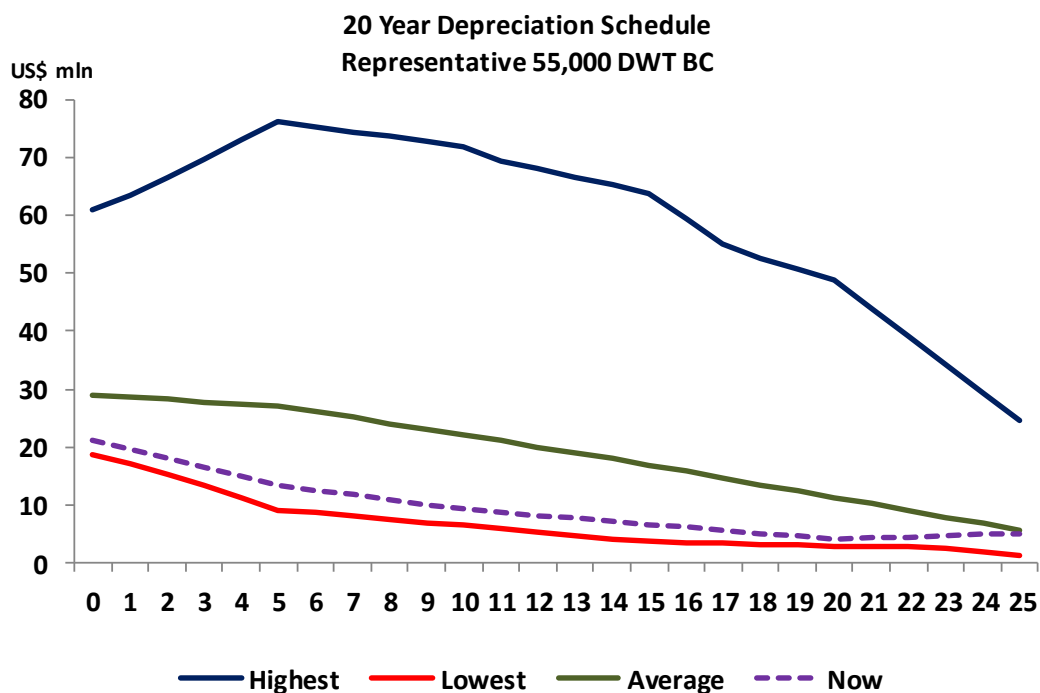
Representative 55,000 DWT



Handy and Supramax values exhibit the same positive trends as for Capesizes and Panamaxs. The orderbook is edging closer to equilibrium, and has declined to slightly more than 8% of the trading fleet.



Period fixture rates have now risen over 4 consecutive quarters, although the increase in Q7.2017 was not so marked as for the Capesize and Panamax sectors. Rates in Q1.2017 are 18% higher than Q4.2016. It is salutary to note that period TC rates are now 80% higher than 1 year ago. This is not so much evidence of a good market, just a reflection of how bad it really was.

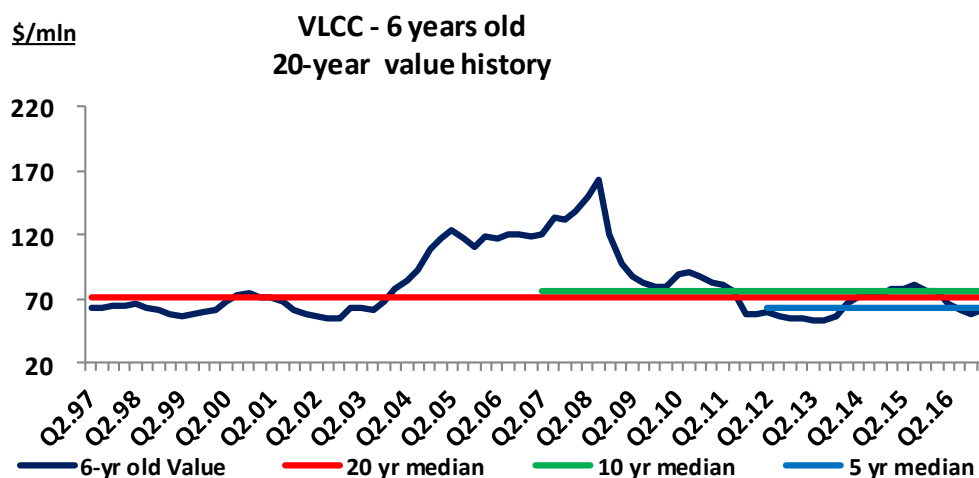


Age	Highest	Lowest	Average	Now	Age	Highest	Lowest	Average	Now
0	60.99	18.70	29.07	21.09	13	66.60	4.74	18.98	7.67
1	63.57	17.05	28.65	19.54	14	65.18	4.17	17.91	7.13
2	66.58	15.39	28.24	17.99	15	63.76	3.61	16.83	6.59
3	69.74	13.53	27.82	16.44	16	59.34	3.48	15.73	6.10
4	72.91	11.34	27.41	14.89	17	54.92	3.36	14.62	5.60
5	76.08	9.15	26.99	13.35	18	52.67	3.23	13.52	5.11
6	75.24	8.60	26.03	12.53	19	50.77	3.10	12.41	4.62
7	74.41	8.06	25.07	11.72	20	48.86	2.98	11.31	4.12
8	73.58	7.52	24.11	10.91	21	43.98	2.85	10.17	4.32
9	72.75	6.98	23.16	10.10	22	39.09	2.73	9.03	4.53
10	71.93	6.44	22.20	9.29	23	34.21	2.42	7.89	4.73
11	69.44	5.87	21.13	8.75	24	29.32	1.93	6.76	4.93
12	68.02	5.31	20.05	8.21	25	24.56	1.41	5.62	5.13

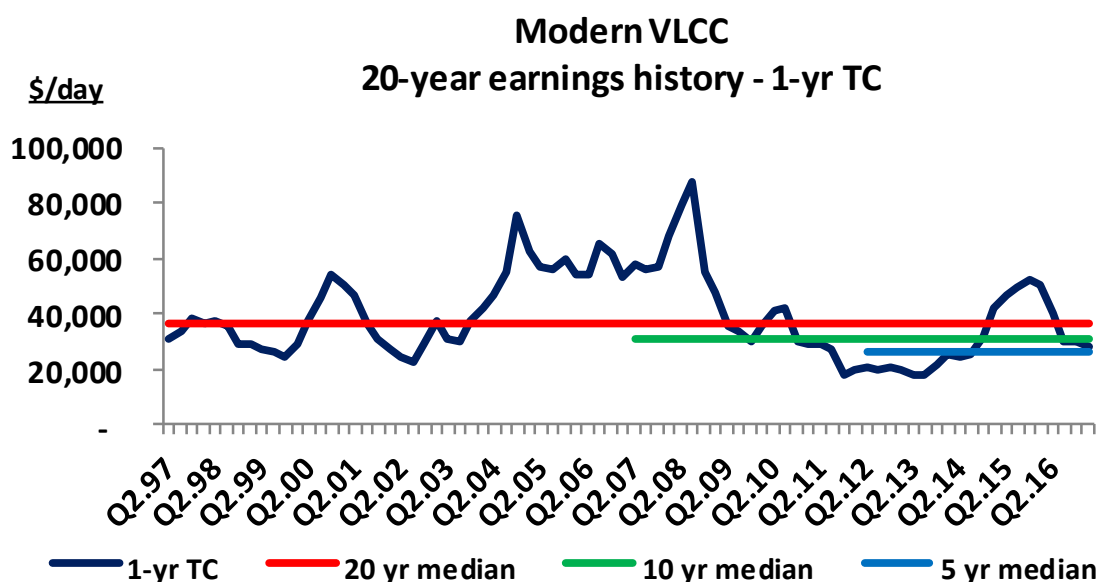
Overall the dry-bulk sector has clearly corrected from the nightmare of February 2016, when the BDI just about managed an average of 300, but in an uncertain world and – for Capesizes at least – a significant overhang of deliveries this year, it is still be too early to put the champagne on ice. We still need to see how Chinese GDP growth will develop during 2017 and if the economic stimulation package and the infrastructure investments arising from ‘One Belt, One Road’ will create the demand for raw materials needed to absorb an increasing fleet size.

Appendix IV –VLCC – 20 years to Q1.2017

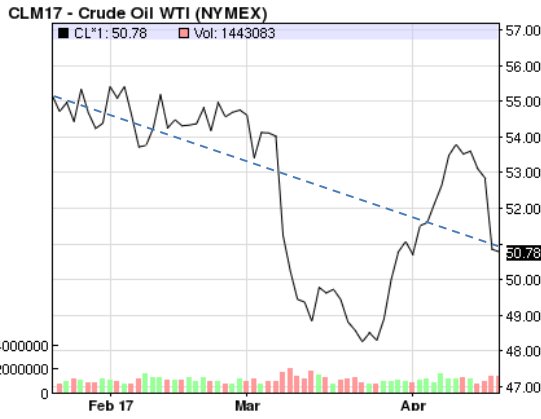
Representative 300,000 DWT



6-year old values showed a slight upturn in Q1.2017. However, this is an aberration and influenced entirely by the DHT Holdings acquisition of the BW Group VLCC fleet at prices, which if analysts' opinions are correct represent a premium to other representative sales during the quarter. In view of DHT's successful thwarting of a hostile takeover bid from Frontline, and the economies of scale that the enlarged fleet will achieve, it is considered that a small premium over the raw market statistics is less relevant than the more important economic principal of long term corporate growth and stability.



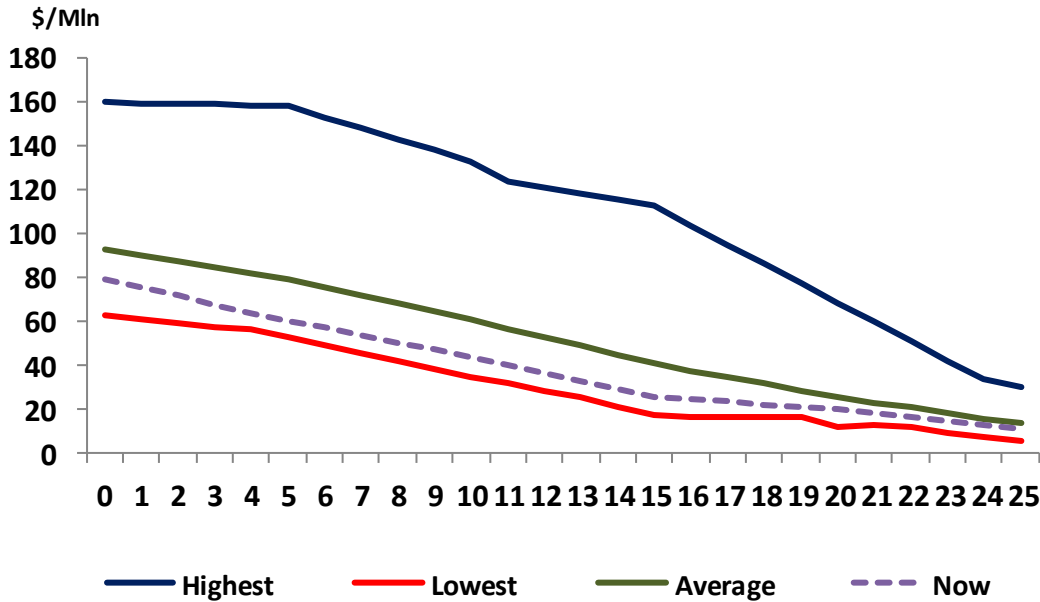
1 year TC earnings declined slightly during the quarter, as would have values were it not for the DHT/BW transaction described above. However, with a trend towards lower oil prices continuing into April 2017, the laws of supply and demand may well suggest an upturn during Q2.



As oil prices decline, consumption increases and as a natural consequence, the demand for tankers strengthens.

A recent report by Forbes (February 2017) highlights a surge in US crude oil exports to record levels, adding tonne miles to seaborne oil trade, as destinations include China and S.E. Asia.

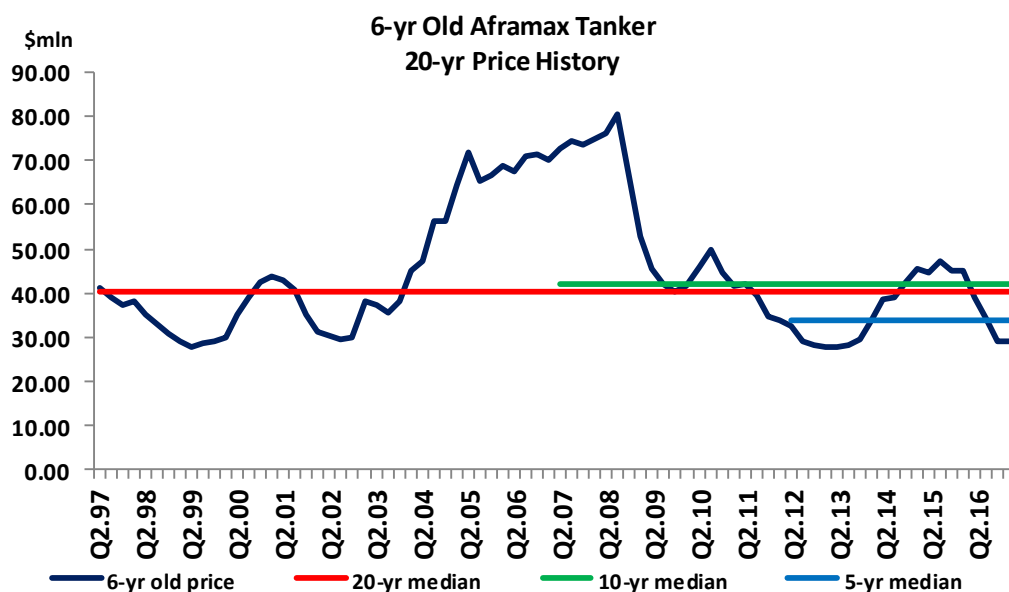
Depreciation Schedule 20 year History - VLCC



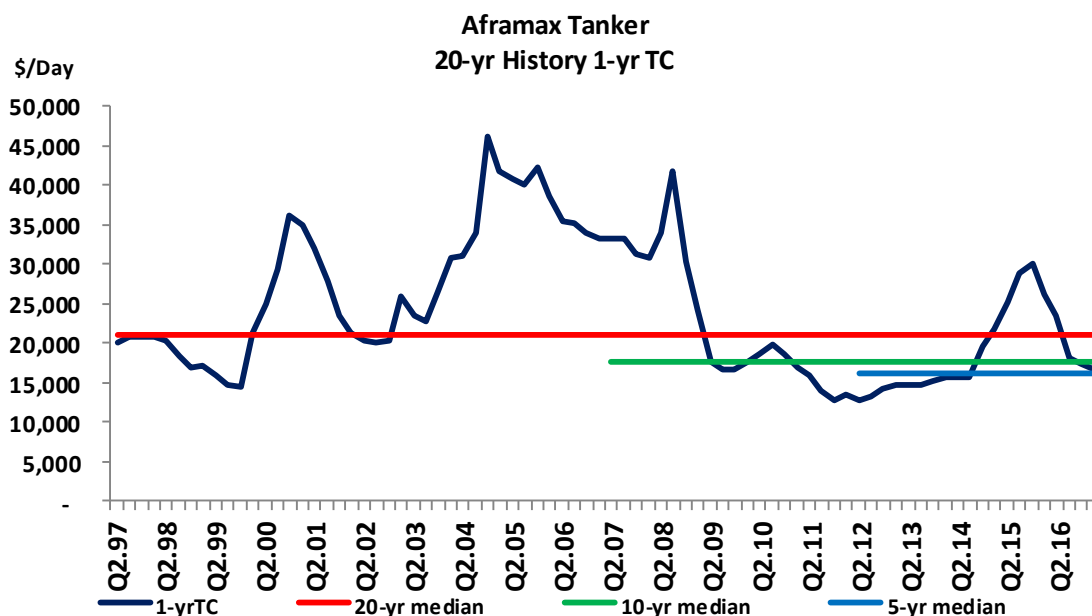
Age	Highest	Lowest	Average	Now	Age	Highest	Lowest	Average	Now
0	160.04	62.43	93.02	78.98	13	118.30	25.15	48.70	32.80
1	159.66	60.87	90.26	75.24	14	115.43	21.01	44.70	29.09
2	159.29	59.31	87.50	71.50	15	112.56	16.88	40.70	25.38
3	158.91	57.75	84.73	67.76	16	103.74	16.65	37.63	24.29
4	158.54	56.18	81.97	64.02	17	94.93	16.41	34.57	23.20
5	158.17	52.70	79.20	60.28	18	86.11	16.17	31.51	22.10
6	153.20	49.07	75.50	57.01	19	77.30	15.94	28.44	21.01
7	148.23	45.44	71.80	53.74	20	68.48	11.84	25.38	19.92
8	143.27	41.81	68.09	50.47	21	59.66	12.43	22.98	18.03
9	138.30	38.18	64.39	47.20	22	50.85	11.55	20.59	16.15
10	133.33	34.38	60.69	43.92	23	42.03	9.44	18.19	14.27
11	124.04	31.55	56.69	40.22	24	33.92	7.34	15.79	12.38
12	121.17	28.44	52.69	36.51	25	30.20	5.24	13.40	10.50

Appendix V –Aframax/LR2 – 20 years to Q1.2017

Representative 115,000 DWT

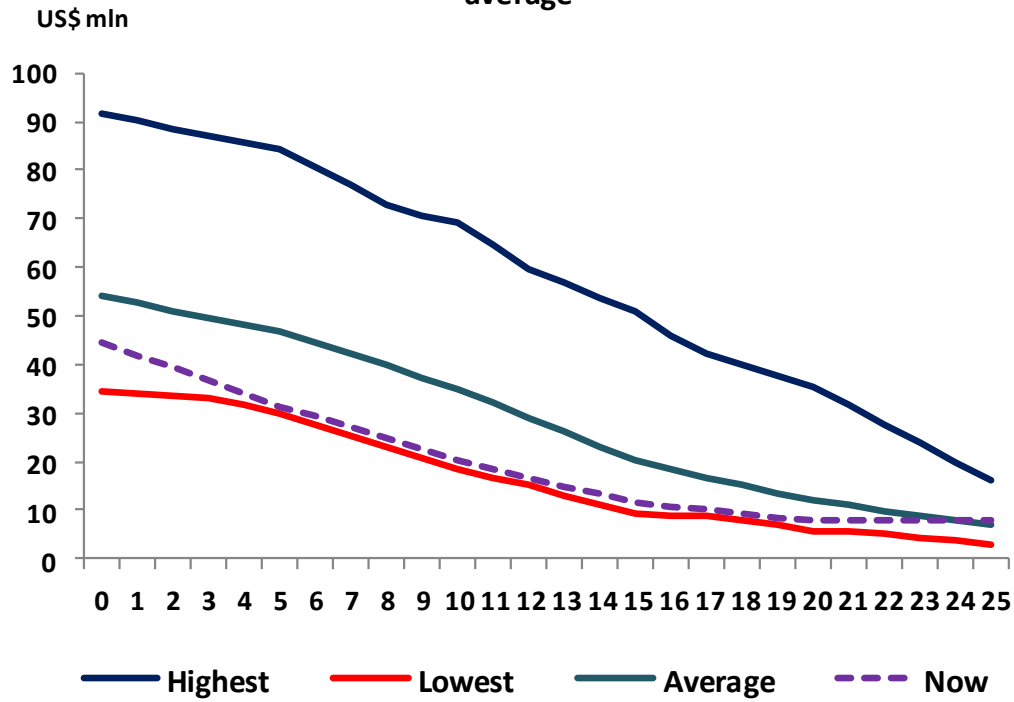


The dramatic fall in Aframax 2nd hand values seen during 2016 appears to have stabilised and our 6-year old representative vessel managed a (very) marginal increase. The orderbook remains largely unchanged from Q4.2016 at around 15 million dwt representing 15% of the trading fleet.



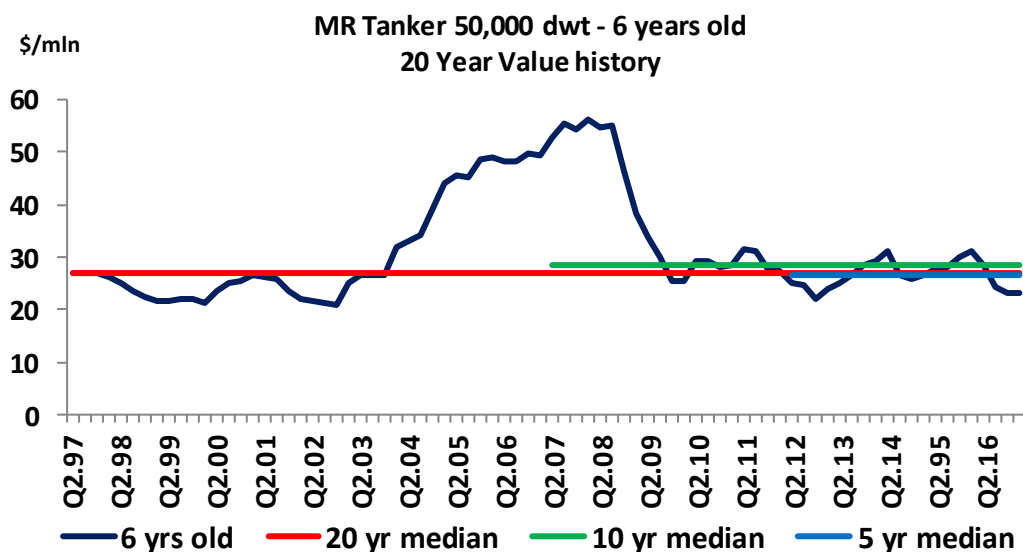
1 year period charters averaged \$16,682 p.d. during Q1.2017, a small decline from Q4.2016, but the implication is that the dramatic slide in market conditions during 2016 may have been stabilised.

115,000 DWT Aframax Tanker Depreciation Curve - 20-year average



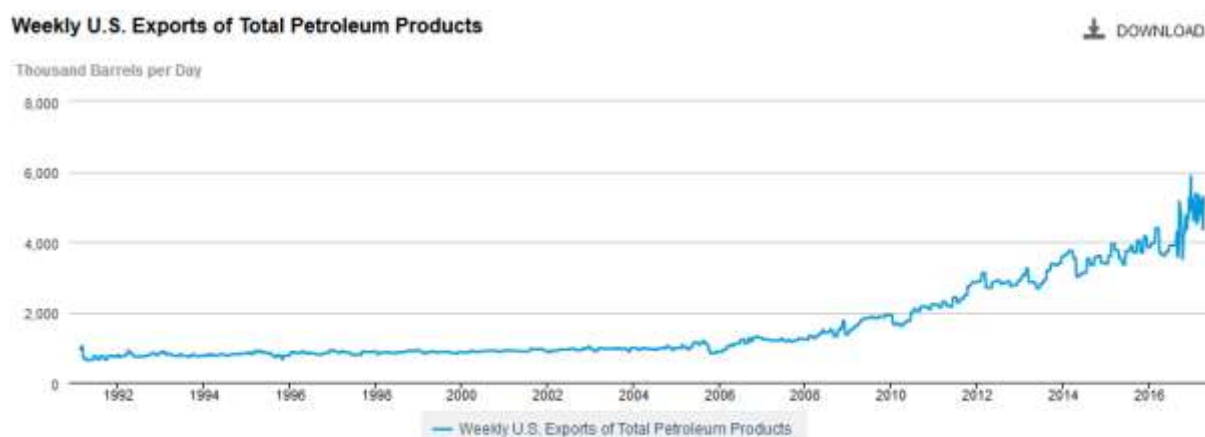
Age	Highest	Lowest	Average	Now	Age	Highest	Lowest	Average	Now
0	91.55	34.45	53.97	44.57	13	56.79	13.10	26.03	15.01
1	90.08	34.05	52.55	41.95	14	53.82	11.10	23.05	13.26
2	88.61	33.66	51.13	39.33	15	50.84	9.10	20.07	11.51
3	87.13	33.18	49.71	36.71	16	46.09	8.89	18.45	10.79
4	85.66	31.62	48.29	34.09	17	42.18	8.69	16.84	10.06
5	84.19	29.84	46.87	31.46	18	39.93	7.78	15.22	9.33
6	80.50	27.63	44.49	29.22	19	37.69	6.82	13.60	8.61
7	76.80	25.34	42.12	26.98	20	35.45	5.87	11.99	7.88
8	73.11	23.04	39.74	24.74	21	31.58	5.76	10.99	7.89
9	70.74	20.75	37.36	22.50	22	27.72	5.10	9.99	7.91
10	69.45	18.46	34.98	20.26	23	23.85	4.41	8.99	7.92
11	64.44	16.85	32.00	18.51	24	19.98	3.69	7.99	7.94
12	59.77	15.10	29.02	16.76	25	16.12	2.71	6.98	7.96

Appendix VI – 50,000 Products Tanker (MR) - 20 years to Q1.2017

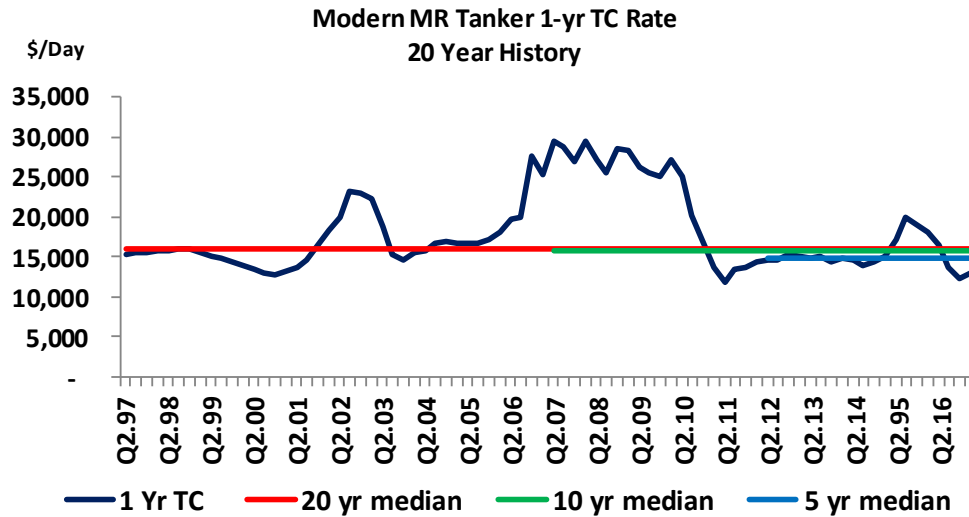


Clarksons data (for vessels between 10,000 and 55,000 dwt) shows an increase in the orderbook of 1.2 million dwt, from 123.7 to 124.9 million dwt. The orderbook is now at 11.4% (Q1.16 – 10%) of the trading fleet.

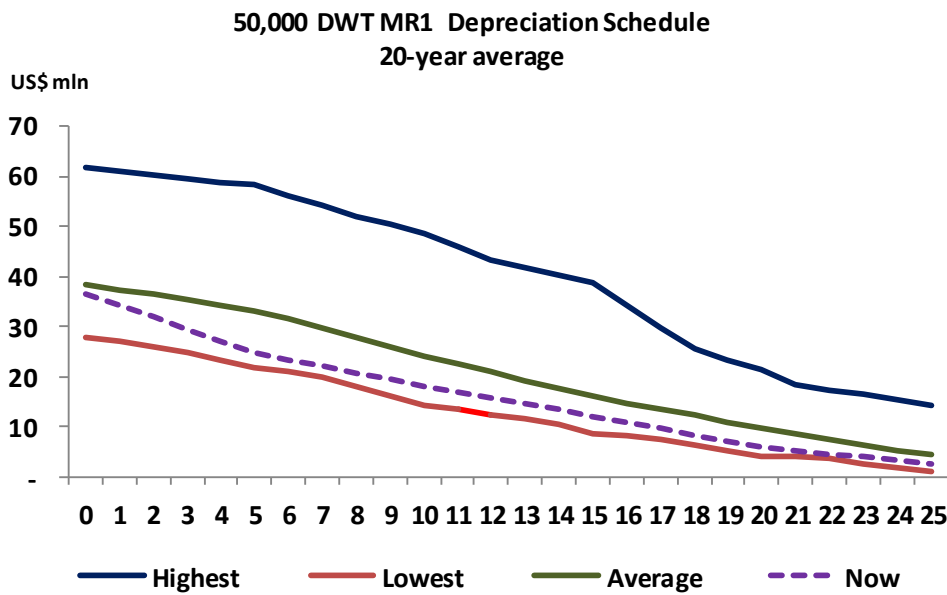
The rise of USA exports of petroleum products has been exponential since the development of shale oil and gas since 2005. With further trends in refining at point of crude production the long run view of the MR, LR1 and LR2 markets must be optimistic, with the usual caveat that owners must continue to exercise discipline on the ordering side.



Source: U.S. Energy Information Administration



Average 1 year TC rates improved from Q4.2016, albeit by only about 5%. The average rate during Q1.2016 was close to \$13,000 p.d. Not great and still below 20, 10 and 5 year medians.



Age	Highest	Lowest	Average	Now	Age	Highest	Lowest	Average	Now
0	61.69	27.84	38.41	36.56	13	41.72	11.54	19.26	14.54
1	60.96	26.95	37.37	34.17	14	40.30	10.65	17.66	13.33
2	60.23	26.07	36.34	31.78	15	38.87	8.70	16.06	12.12
3	59.51	24.93	35.30	29.40	16	34.33	8.13	14.76	10.86
4	58.78	23.41	34.27	27.01	17	29.79	7.56	13.47	9.60
5	58.40	21.89	33.24	24.63	18	25.58	6.51	12.17	8.34
6	56.19	20.85	31.40	23.34	19	23.20	5.36	10.88	7.08
7	53.98	19.73	29.57	22.04	20	21.52	4.08	9.58	5.83
8	52.07	17.89	27.73	20.75	21	18.51	4.20	8.52	5.20
9	50.33	16.06	25.90	19.46	22	17.44	3.58	7.46	4.58
10	48.59	14.22	24.07	18.16	23	16.40	2.69	6.40	3.96
11	45.69	13.32	22.46	16.95	24	15.37	1.81	5.34	3.33
12	43.15	12.43	20.86	15.75	25	14.34	0.93	4.28	2.71

Methodology

Ship prices for 2nd hand, newbuildings, resales and scrap are collated on a quarterly basis from observed data, supplemented on a monthly basis by Clarksons Research estimated values for selected ship types and published in the Shipping Intelligence Weekly for benchmarking purposes. Where data is not available for a recorded sale of a vessel of a specific age, its price is interpolated from observed data from the nearest younger and older vessels. The ship value charts are quarterly averages and are intended for use in trend analysis only and not for specific valuation purposes.

The charts are for a 6 year old vessel which is considered a good benchmark for modern 2nd hand units being:

Not influenced by either newbuilding or scrap prices
Recently passed SS so assumed in good condition and regulatory compliant.

Dry Bulk Carrier earnings are taken from period charters reported on a daily basis in Lloyds List and other sources. Period charters range in periods between 3 and 12 months in general.

For dry-bulk prices and earnings and tanker prices data is recorded on a \$/DWT basis and thereafter converted back to actual prices for the specific representative values.

Tanker earnings are the quarterly average of 12 months TC rates published by Clarksons Research in their Shipping Intelligence Network weekly report, supplemented by similar rates published weekly by C.R. Weber in their weekly Tanker Report and Seasure in their weekly market report.