Precious Shipping Public Company Limited

Krungsri Corporate Day,
Gainers / Losers Under The IMO Regulation,
Bangkok, 25 September 2019

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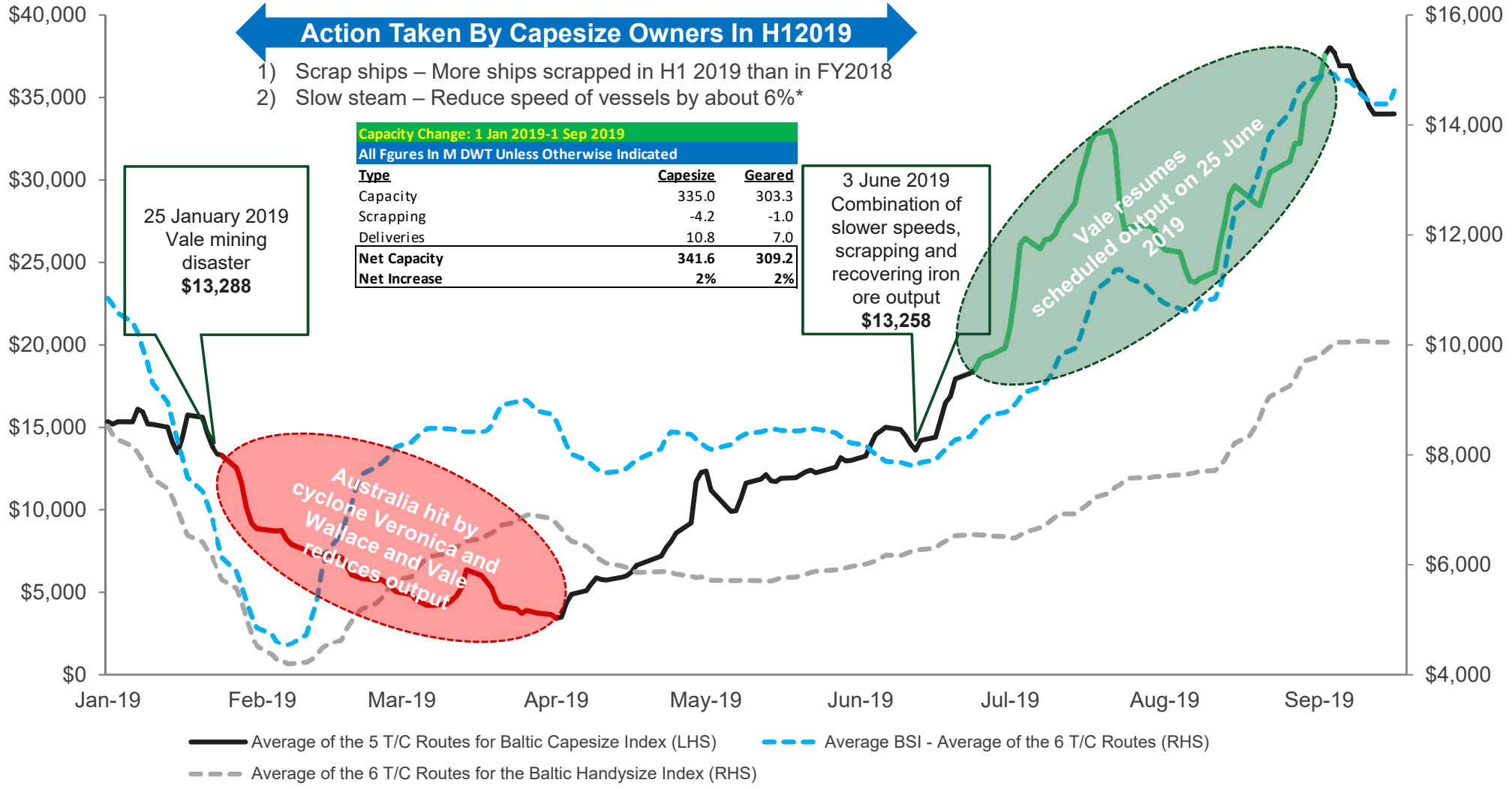
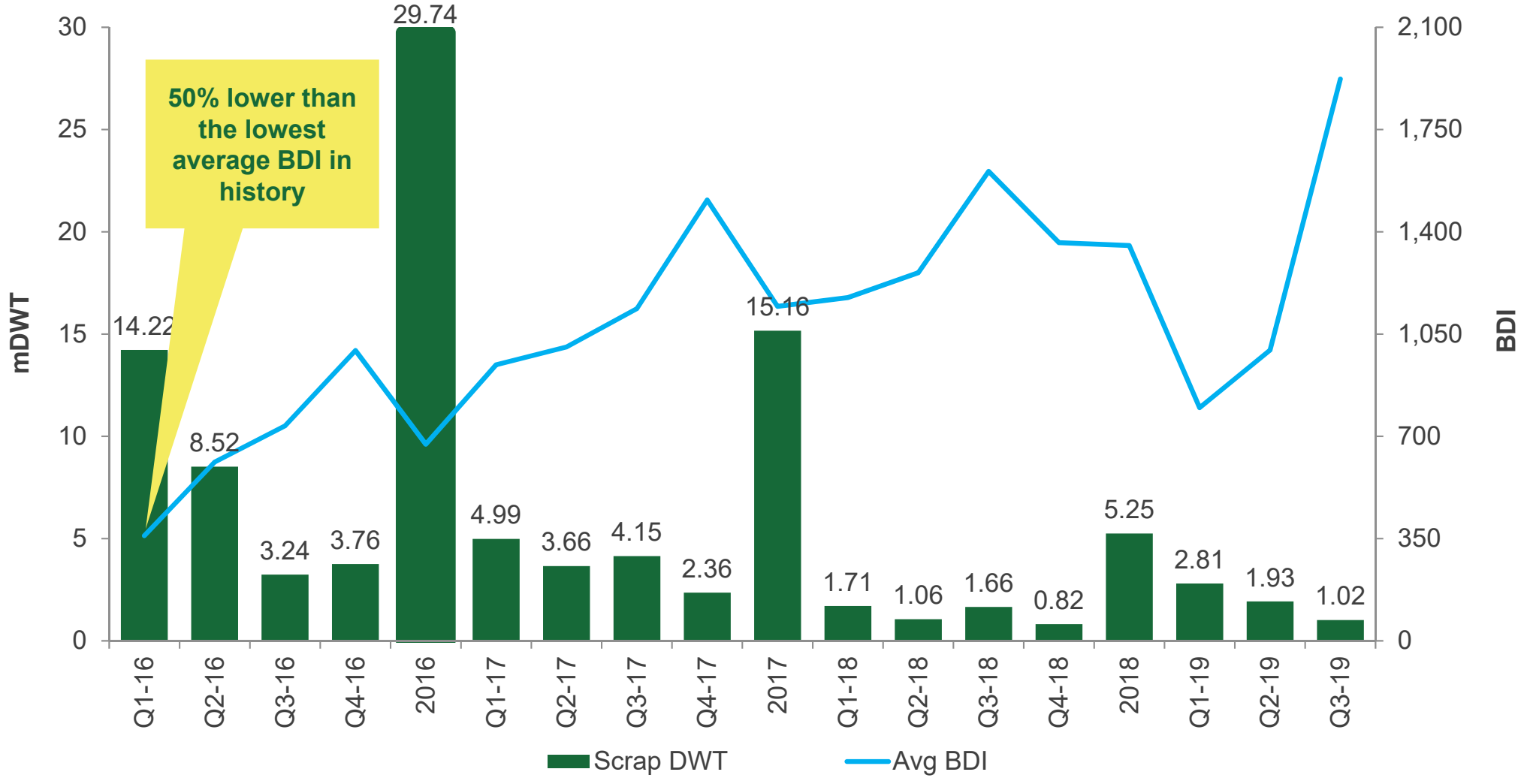
E-Mail psl@preciousshipping.com
ir@preciousshipping.com

Supply & Demand Imbalances and Their Impact on Capesize Rates



Notes: As on 17 Sep 2019
*Speed reduction estimate from DNB Markets
Source: Capsize and Geared vessel supply and rate data – Clarksons

Baltic Dry Index Vs Ships Scrapped From 2016 to 31 August 2019



Q3 -19 shows data up to 31 Aug 19

Is China's Import Growth Sustainable?

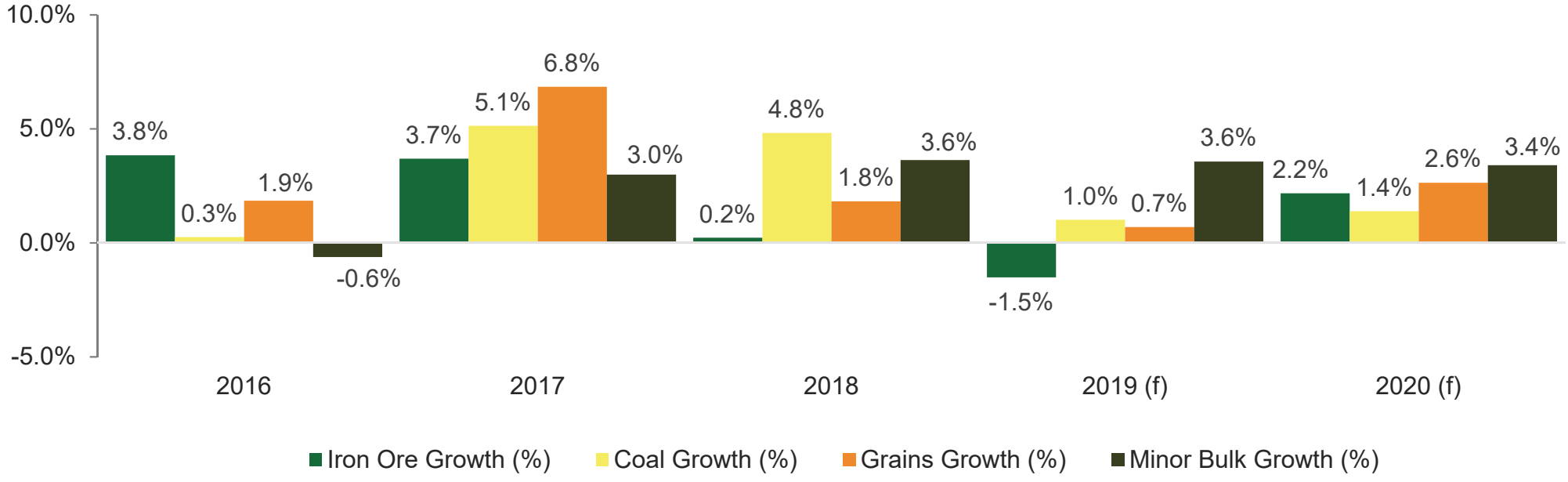
Latest available Data points on China for 2018 & up to July 2019 (annualized):

- Iron Ore imports for 2018 down 1.1% to 1,063.9 MMT. Up to Jul'19 was 591.4 MMT (1,013.8 MMT).
- Coal imports for 2018 up 3.2% to 280.8 MMT. Up to Jul'19 was 186.1 MMT (319.0 MMT).
- Steel production for 2018 up 9.8% to 927.5 MMT. Up to Jul'19 was 576.7 MMT (988.6 MMT).
- Monthly average Steel inventory in 2018 was 11.0 MMT and for 2019 till Jul, it is 13.4 MMT.
- Steel exports for 2018 down 7.9% to 69.6 MMT. Up to Jul'19 was 38.9 MMT (66.7 MMT).
- China consumed more Steel in 2018 up by 11.3% to 871.0 MMT than last year likely due to development of One Belt, One Road project. Up to Jul'19 was 544.5 MMT (933.4 MMT).

Historical Growth In Seaborne Drybulk Trade – Million Tonnes

Seaborne Drybulk Trade					
All Units In Million Tonnes	**2016**	**2017**	**2018**	**2019 F**	**2020 F**
Iron Ore	1,418.1	1,472.6	1,476.0	1,454.0	1,486.4
Coal (includes Lignite)	1,140.6	1,202.4	1,263.4	1,276.4	1,294.5
Grains (includes Soybeans)	298.0	319.9	325.9	328.2	337.1
Minor Bulk	1,880.0	1,938.1	2,011.3	2,085.8	2,159.4
Total	**4,736.7**	**4,933.0**	**5,076.6**	**5,144.4**	**5,277.4**
Total % Change In Trade	**1.08%**	**3.98%**	**2.83%**	**1.32%**	**2.52%**

% age increase over the previous year

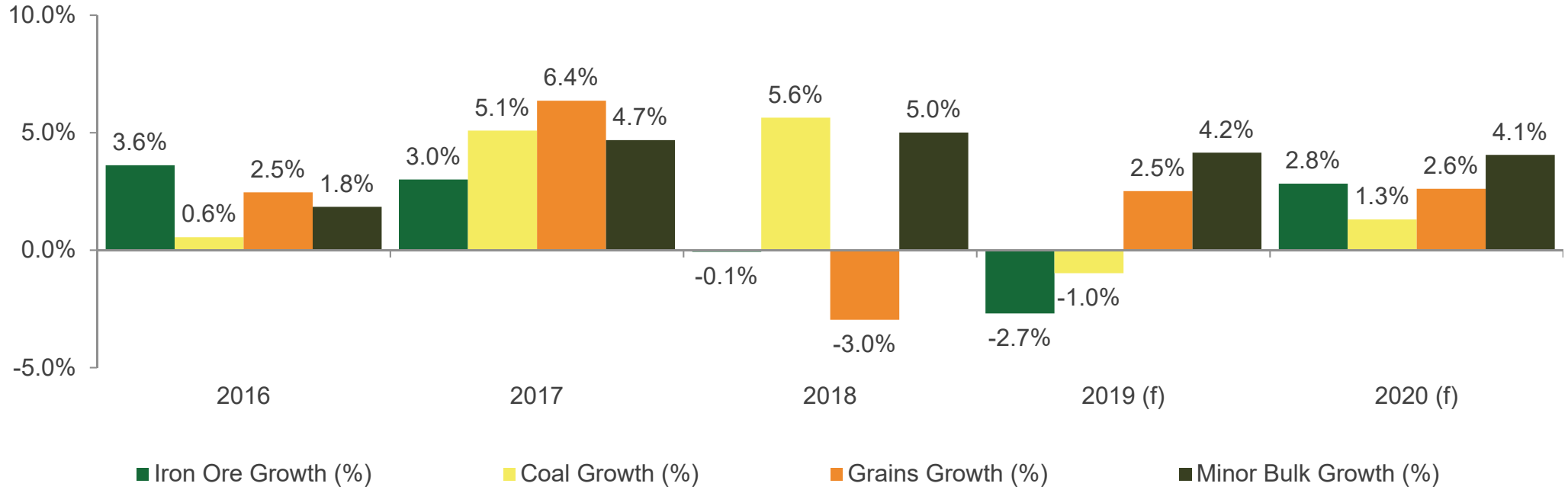


Source : Clarksons
Up to 31 Aug 19

Historical Growth In Seaborne Drybulk Trade – Billion Tonne-Miles

Seaborne Drybulk Trade					
All Units In Billion Tonne-Miles	**2016**	**2017**	**2018**	**2019 F**	**2020 F**
Iron Ore	7,934.3	8,180.4	8,174.9	7,960.7	8,193.1
Coal (includes Lignite)	4,982.4	5,249.6	5,563.5	5,509.7	5,583.2
Grains (includes Soybeans)	3,204.6	3,422.2	3,323.9	3,409.7	3,501.2
Minor Bulk	11,097.1	11,632.1	12,207.0	12,723.4	13,326.5
Total	**27,218.4**	**28,484.3**	**29,269.3**	**29,603.5**	**30,604.0**
Total % Change In Trade	**2.28%**	**4.65%**	**2.76%**	**1.14%**	**3.38%**

% age increase over the previous year

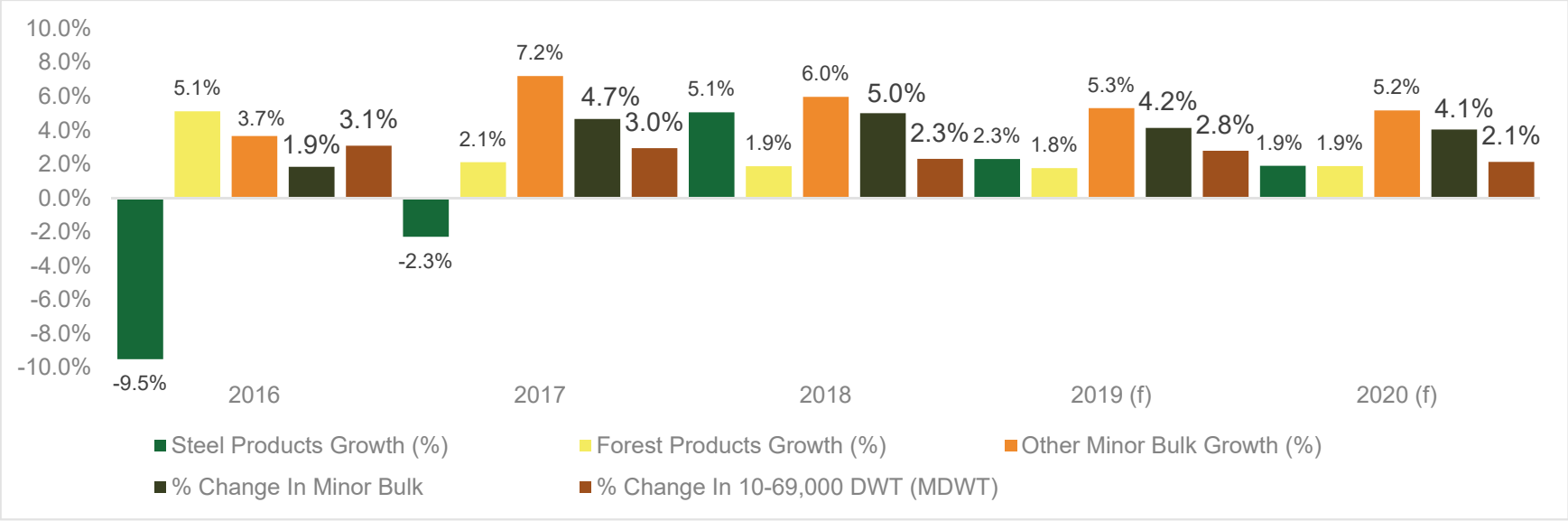


Source : Clarksons
Up to 31 Aug 19

Historical Growth In Seaborne Minor Bulk Trade – Billion Tonne-Miles

Seaborne Minor Bulk Trade					
All Units In Billion Tonne-Miles	**2016**	**2017**	**2018**	**2019 F**	**2020 F**
Steel Products	1,801.0	1,761.0	1,855.0	1,899.0	1,936.0
Forest Products	2,435.0	2,488.0	2,536.0	2,582.0	2,632.0
Other Minor Bulk	6,883.0	7,417.0	7,889.0	8,332.0	8,787.0
Total Minor Bulk	11,119.0	11,665.0	12,281.0	12,813.0	13,355.0
% Change In Minor Bulk	**1.9%**	**4.9%**	**5.3%**	**4.3%**	**4.2%**
Ships 10-69,999DWT (MDWT)	**284.5**	**292.9**	**299.7**	**308.1**	**314.7**
% Change In 10-69,000 DWT (MDWT)	**3.1%**	**3.0%**	**2.3%**	**2.8%**	**2.1%**

% age increase over the previous year

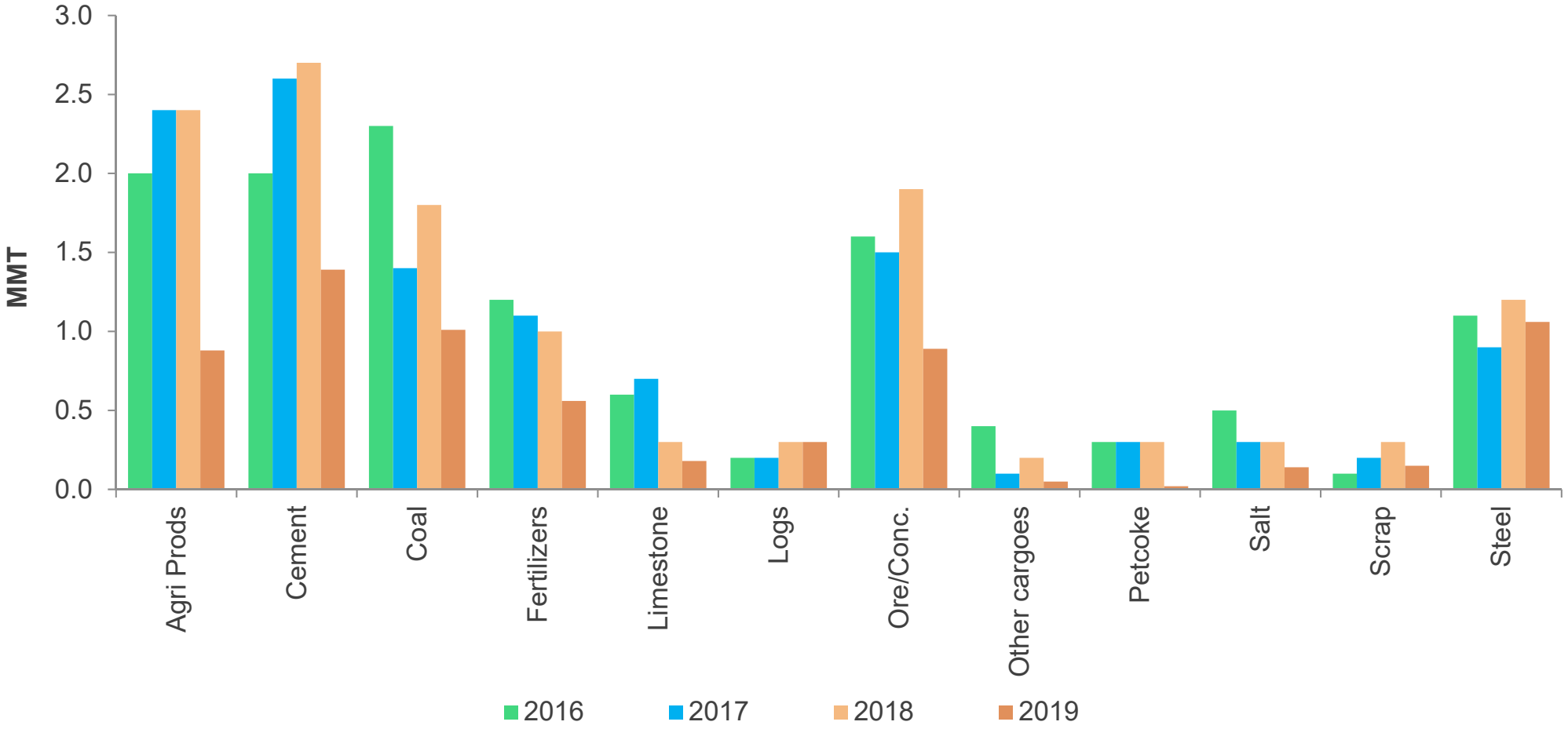


Source : Clarksons

Up to 31 Aug 19

Cargoes Carried By PSL

Bulk cargo in the aggregate amount of 12.3 MMT, 11.7 MMT, 12.7 MMT, 6.63 MMT was carried on PSL ships in 2016, 2017, 2018 and 1H'2019 respectively



Industry Overview
Supply Side Analysis

Vessel Supply

Dry Bulk Fleet as of 31 August 2019

Ship Type	DWT Range (MT)	Ships	Av Age (yrs)	Total DWT (m MT)	Av DWT (MT)	% of DWT
Handysize	10,000 – 39,999	3,959	11.38	107.59	27,716	12.50%
Supra/Ultramax	40,000 – 69,999	3,626	8.17	202.42	58,107	23.51%
Panamax	70,000 – 89,999	2,279	9.59	180.39	79,151	20.96%
Capesize	90,000+	2,056	8.59	370.44	180,173	43.03%
Total / Average		**11,920**	**10.10**	**860.83**	**72,218**	**100%**

Changes in 2019

Ship Type	DWT Range (MT)	Ships No (%age)	DWT m MT (%age)
Handysize	10,000 – 39,999	+309 (+8.47%)	+6.02 (+5.93%)
Supra/Ultramax	40,000 – 69,999	+67 (+1.88%)	+4.31 (+2.18%)
Panamax	70,000 – 89,999	+88 (+4.02%)	+7.23 (+4.18%)
Capesize	90,000+	+25 (+1.23%)	+6.82 (+1.88%)
Total / Average		**+489 (+4.28%)**	**+24.38 (+2.91%)**

Source: Clarksons

Confirmed Orders As Of 31 Aug 2019 - 31 Dec 2022

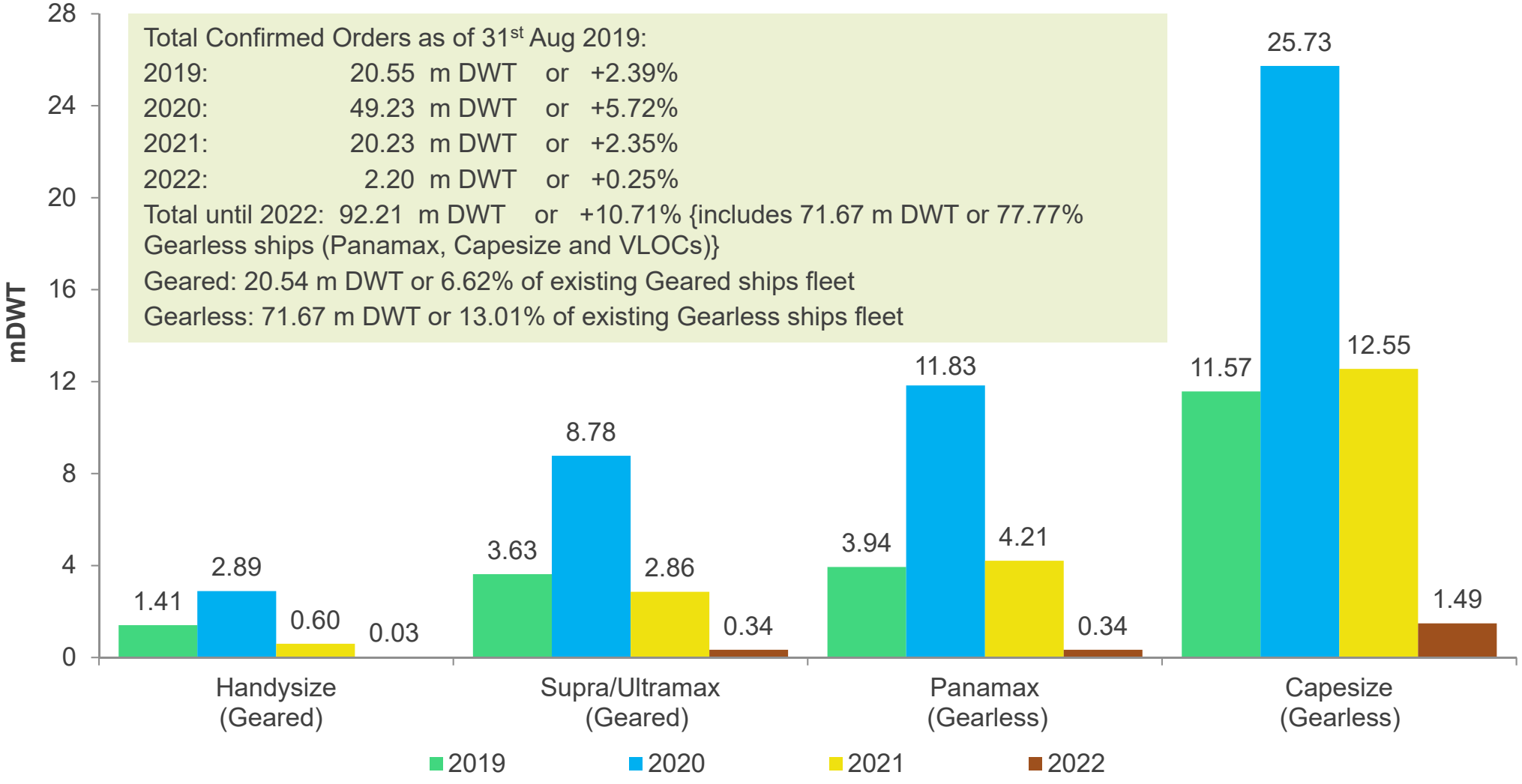
Total Confirmed Orders as of 31st Aug 2019:

2019:	20.55 m DWT	or	+2.39%
2020:	49.23 m DWT	or	+5.72%
2021:	20.23 m DWT	or	+2.35%
2022:	2.20 m DWT	or	+0.25%

Total until 2022: 92.21 m DWT or +10.71% {includes 71.67 m DWT or 77.77% Gearless ships (Panamax, Capesize and VLOCs)}

Geared: 20.54 m DWT or 6.62% of existing Geared ships fleet

Gearless: 71.67 m DWT or 13.01% of existing Gearless ships fleet

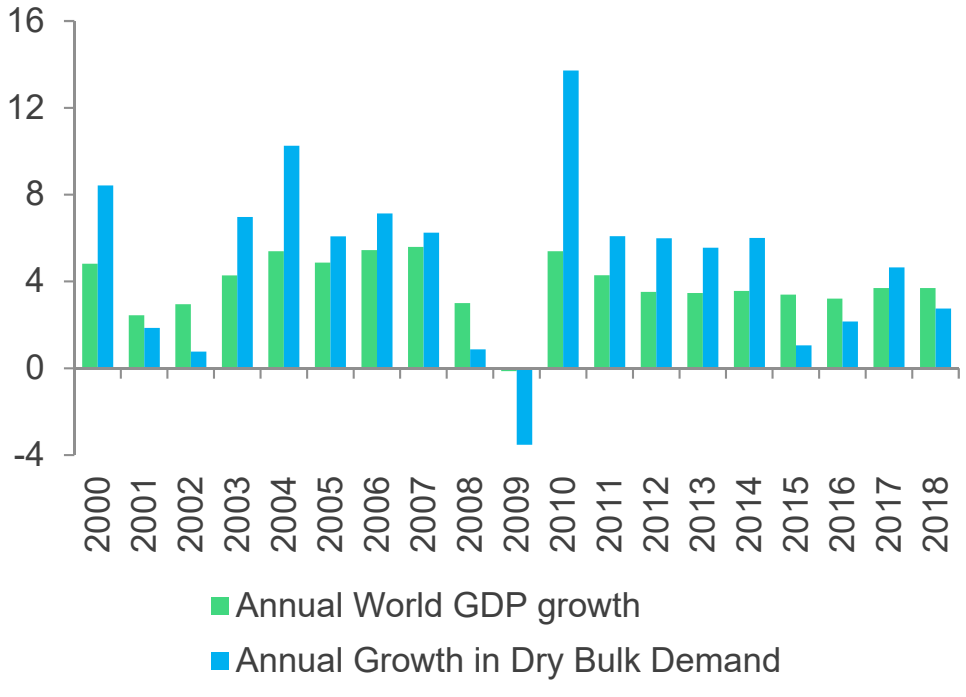


Source: CRS - PSL

Annual GDP Growth vs Drybulk Demand As Of End 2018

Year	World GDP growth (from IMF)	World Seaborne Dry Bulk Trade (billion tonne-miles)	% Change
2000	4.82	12,949.3	8.4
2001	2.46	13,190.2	1.9
2002	3.00	13,292.0	0.8
2003	4.27	14,218.8	7.0
2004	5.38	15,676.8	10.3
2005	4.86	16,630.3	6.1
2006	5.43	17,817.1	7.1
2007	5.56	18,931.6	6.3
2008	3.01	19,097.0	0.9
2009	-0.15	18,424.8	-3.5
2010	5.39	20,951.5	13.7
2011	4.27	22,227.3	6.1
2012	3.52	23,559.1	6.0
2013	3.47	24,869.5	5.6
2014	3.58	26,364.5	6.0
2015	3.45	26,643.3	1.1
2016	3.23	27,218.4	2.2
2017	3.70	28,484.4	4.7
2018	3.70	29,269.3	2.8

Period (2000 – 2018)	World GDP growth (from IMF)	Dry Bulk Trade (billion tonne-miles) % Change
Period	19 years	19 years
Average	3.84	4.90
Difference	1.06	
Basis point	106	

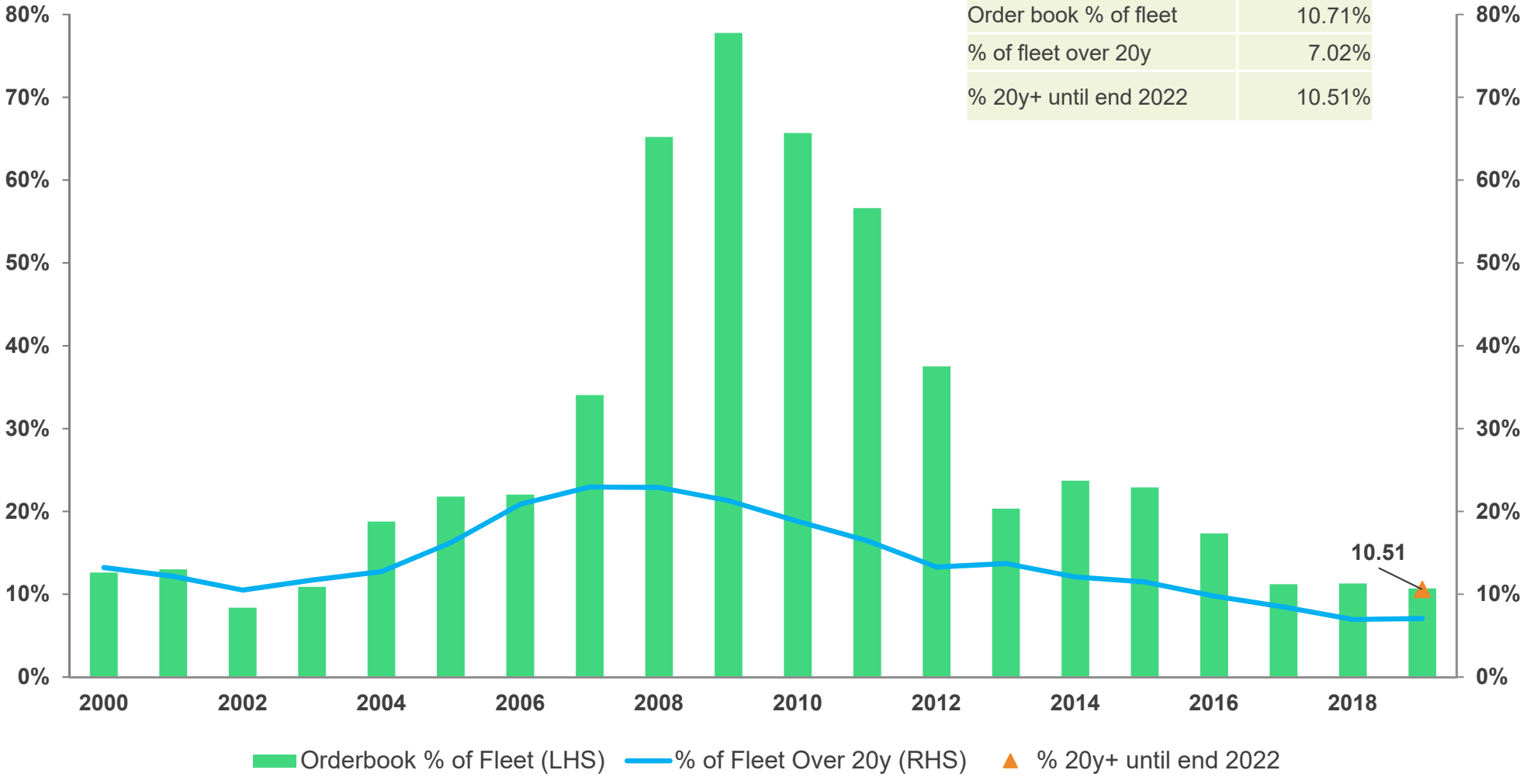


Source: IMF & Clarksons

Up to 30 June 2019

Putting Orderbook Figures In Context – The Overall Drybulk Fleet

Drybulk – 860.83* MDWT	
Order book % of fleet	10.71%
% of fleet over 20y	7.02%
% 20y+ until end 2022	10.51%



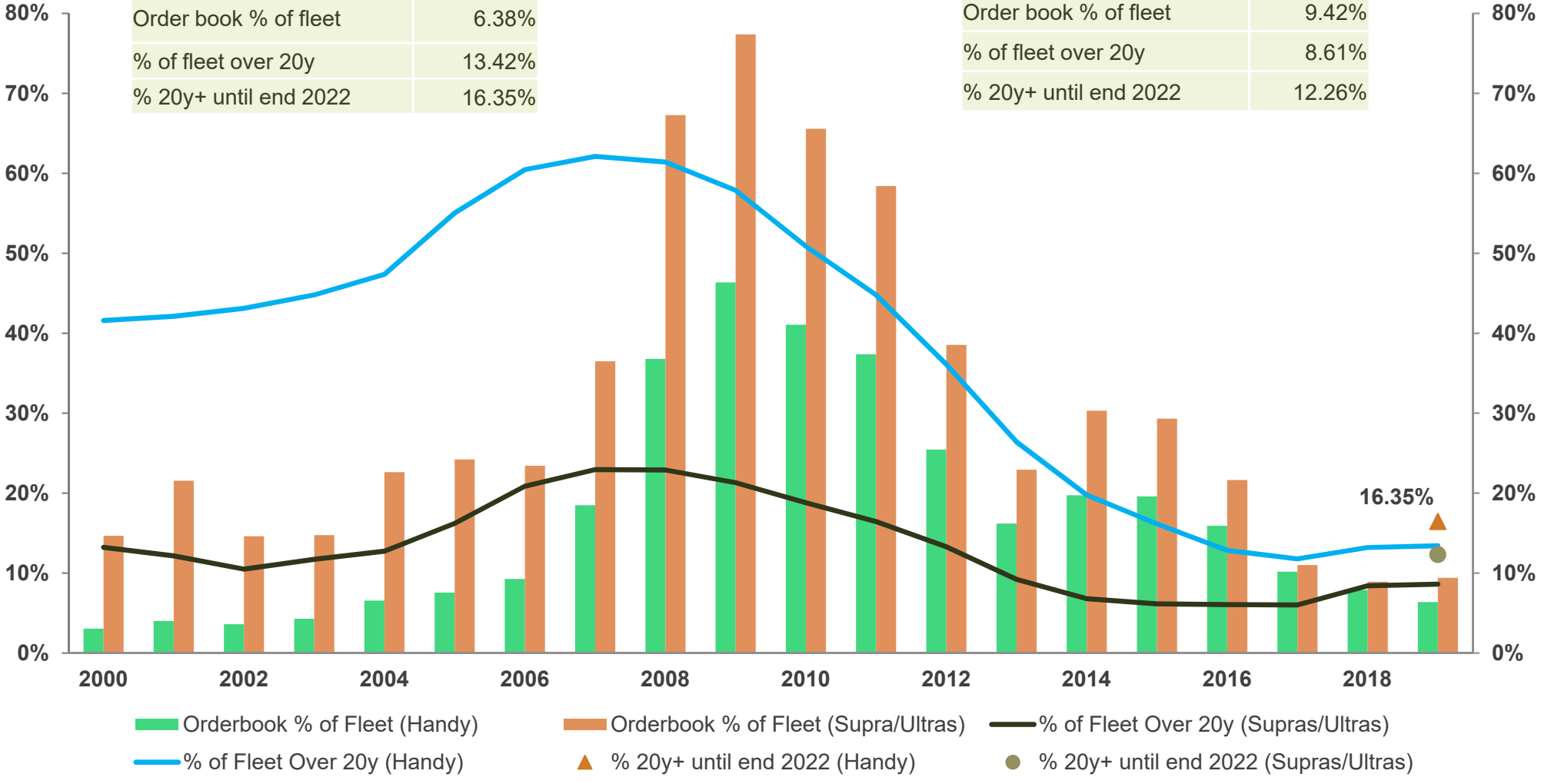
** As of 31 Aug 2019*

Source: CRS - PSL

Putting Orderbook Figures In Context – Geared Vessels Only

Handysize – 107.59* MDWT	
Order book % of fleet	6.38%
% of fleet over 20y	13.42%
% 20y+ until end 2022	16.35%

Supra/Ultra – 202.42* MDWT	
Order book % of fleet	9.42%
% of fleet over 20y	8.61%
% 20y+ until end 2022	12.26%



** As of 31 Aug 2019*

Source: CRS - PSL

Trade Wars and Tariffs

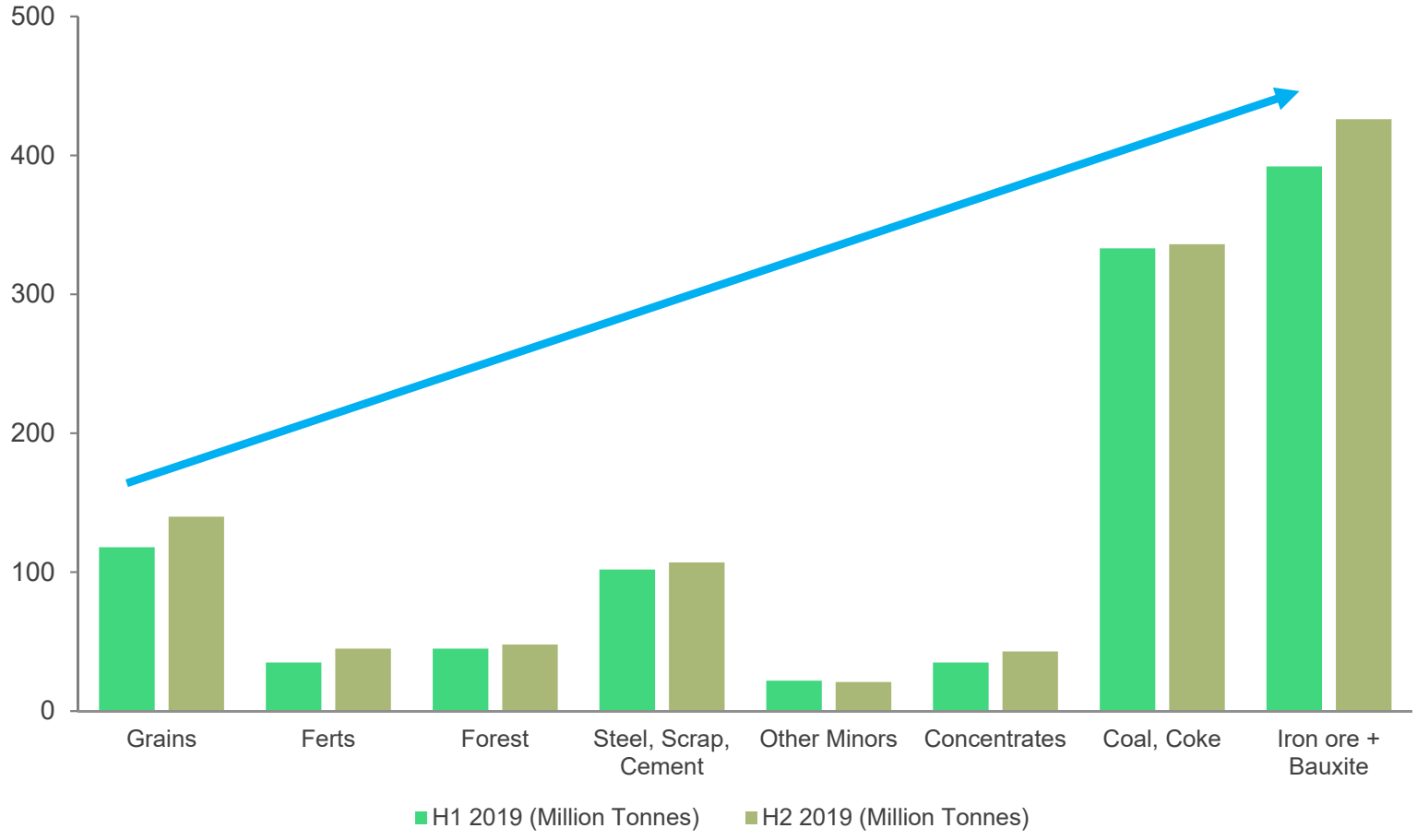
Trump's Tariffs And It's Impact On Drybulk Shipping

PSL's reading of these Tariffs

- Trade sanctions and tariffs are on everyone's minds and lips. The general consensus is that China's export dependent economy will be the one to suffer the most. That would have been true before the Global Financial Crisis but no longer holds good.
- Trade sanctions/tariffs, in and of themselves, cannot destroy demand so long as the sanctioned commodity is either available from some other supplier/country or is substitutable by a similar priced commodity with similar/identical attributes.
- All sanctions/tariffs do is to make shipping of such commodities more inefficient. If this change in supplier/country results in congestion; slower loading of ships (compared to the original supplier/country); and an increase in ton-mile, then that is best for the dry bulk markets.

Global Seaborne Drybulk Trade: 1 Jan 2019-YTD

- Seaborne Drybulk trade volumes have been increasing in 2019 despite the trade war
- This is evident that the trade war is having little impact on Drybulk trade



Source: Clarksons as on 13 Sep 2019

Regulatory Changes

Regulatory Changes Coming Up In Future

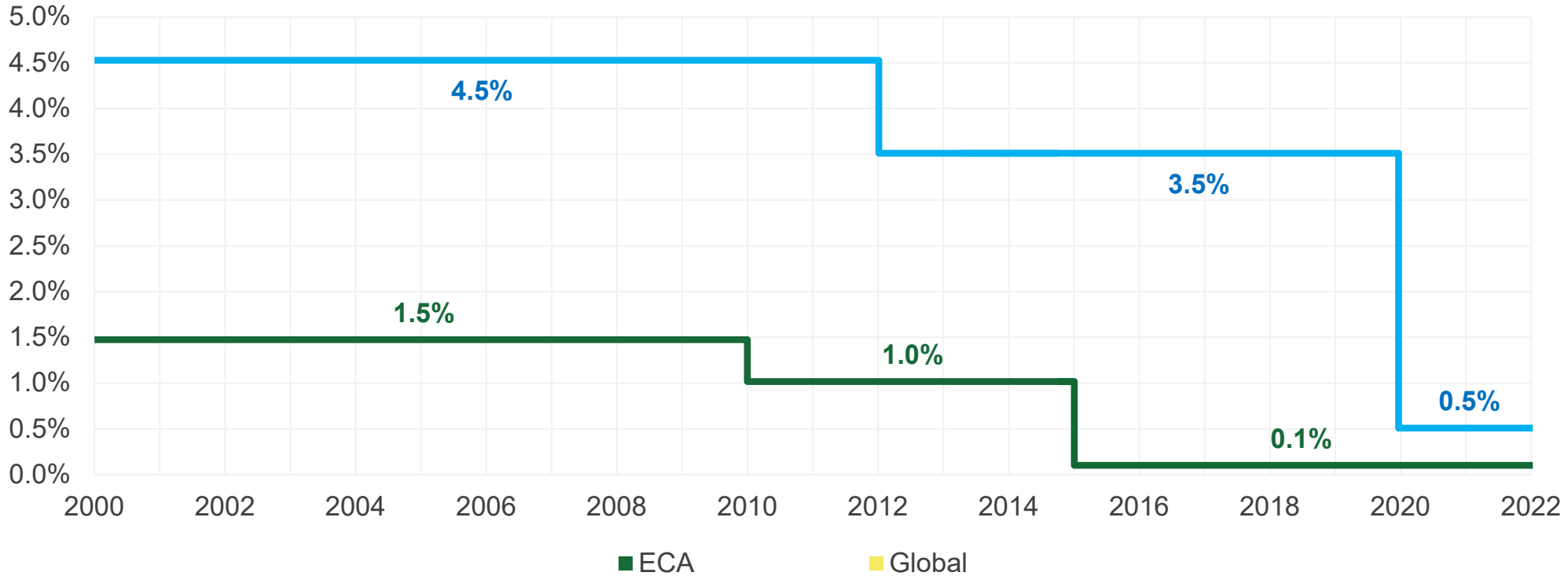
Environmental Regulations

- **SOX regulations:** Global Sulphur cap of 0.5% comes into force on 1st Jan 2020 in accordance with MEPC 70
- **2020 Sulphur Compliance:** Open loop scrubbers are no longer an option with many countries banning it. Picture of global availability of 0.5% compliant LSFO is getting clearer. LNG and "hybrid" fuels are also still being considered as other options for compliance.
- **Ballast water management:** Convention entered into force on 8 September 2017. Every ship in international trade will be obliged to comply sometime between 8 September 2017 and 8 September 2024.
- **NOX regulations:** Effective 1st Jan 2019, all the four ECA's (Baltic Sea, North Sea, North America & US Caribbean) cover both SOX & NOX.
- **CO2 and energy efficiency:** EU MRV CO2 emissions data was collected and reported for the first time for all of 2018. It is being examined now and the first data sets will be published by the EU in mid-2019.
- **New Emission control requirements for China, Taiwan & HK:** In effect from 1st Jan 2019, vessels must use fuel with less than 0.5% sulphur in territorial waters.

Operational Regulations

- **IMSBC code amendments:** Effective from 1st Jan 2019. Most notably, coal is now classified as both Group A & Group B cargo, unless otherwise tested.
- **IMO DCS (Data Collection) and SEEMP Part 2:** Starting from 1st Jan 2019, consumption data to be collected in accordance with SEEMP Part 2 and reported to flag for obtaining a **SOC**.
- **October 26, 2018** IMO adopted non-compliant fuel carriage ban. Effective date 1st March 2020.
- **May 13, 2019 ISO** expected to present 0.5% LSFO specification information to IMO.

IMO 2020 – What Is It?



- October 2016, IMO announced effective date for the reduction of marine fuel Sulphur will be 1st January 2020.
- Ships will have to use marine fuels with a Sulphur content of no more than 0.5% against the current limit of 3.5%.
- Emission Control Areas (ECAs) will remain at the 2015 standard of 0.1%S content.

What Does IMO 2020 Mean For Ship Owners?

- Should you install **scrubbers or exhaust gas cleaning systems**?
- Switch to low Sulphur fuel options, including distillates?
- Are **compliant fuels available** where the vessel is/will be?
- What will **compliant fuels cost**?
- **Freight rates will increase** with the increase in cost of compliant fuel.
- **Bunker costs** may account for 70-80% of total voyage expenses.
- Will ship owners be able to **pass those increased costs** to their clients?

Regulatory changes - BWM Systems & Scrubbers

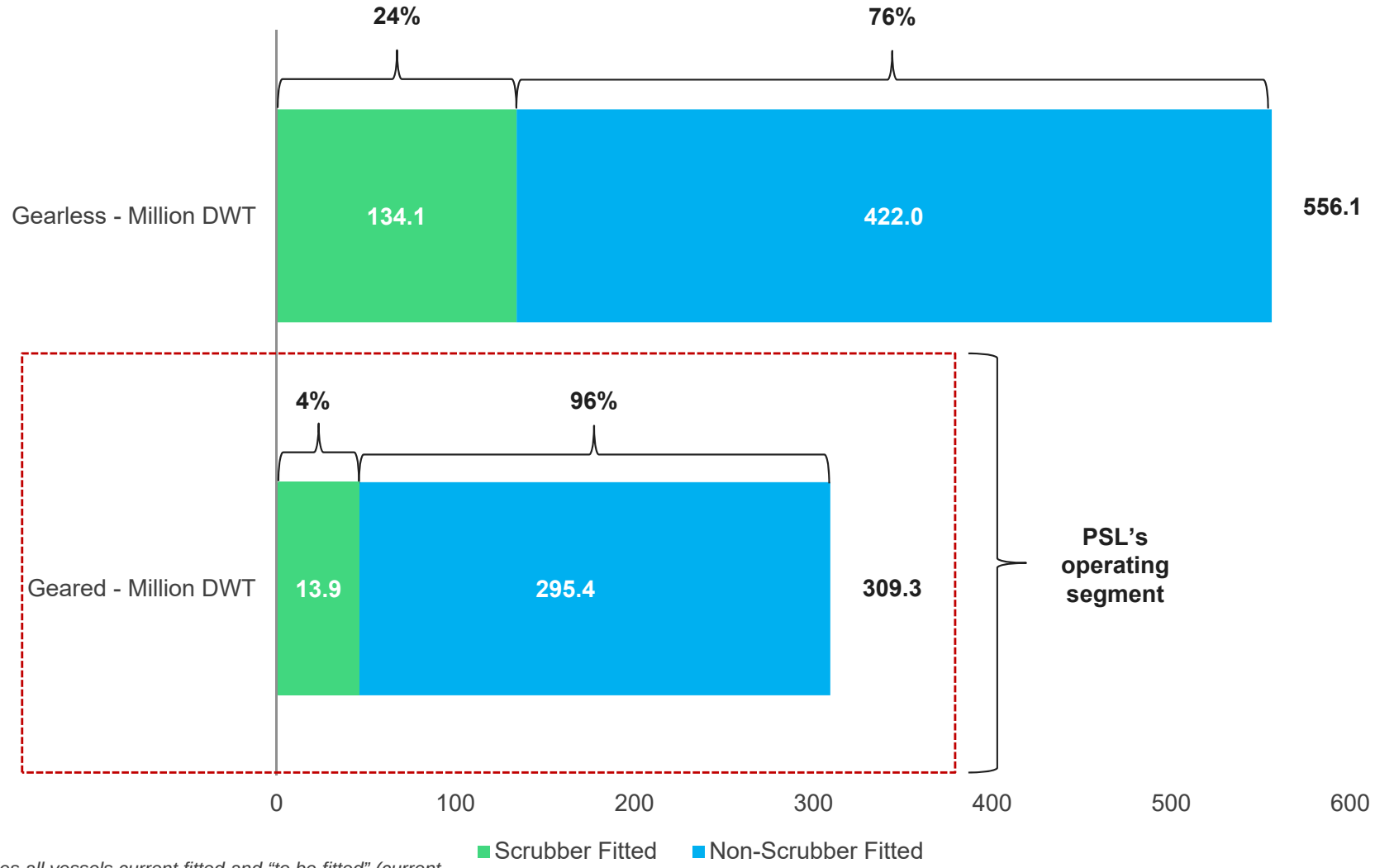
Ballast Water Management Plant

Cost: about USD 0.5 Million
Downtime: about 10 days in drydock

Scrubber Plant

Cost: about USD 3 - 6 Million
Downtime: about 6-8 weeks in drydock

Scrubbers Uptake In Drybulk



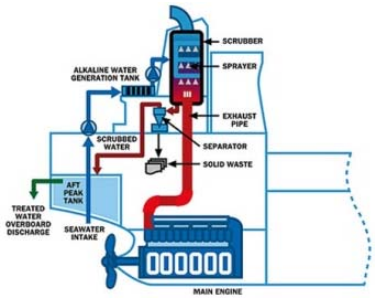
Note: Includes all vessels current fitted and "to be fitted" (current feet and orderbook included)

Source: Clarksons as on 17 September 2019

Issues With Scrubbers

High Maintenance

- Scrubbers pipping requires scheduled maintenance every 6 months due to corrosion
- Ship staff need to be trained on how to operate scrubbers in the event of technical failure
- Requires a dedicated engineer during usage
- Additional power required for dedicated pumps necessary for safe operations = more fuel oil consumed at sea



Source: Seanews.com.tr

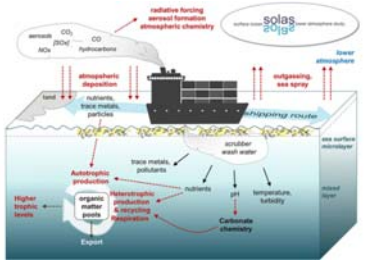
Operational Issues

- Corrosion failures have resulted in engine breakdowns
- Potential danger to the crew should an engine fail at a critical moment
- Towage and other assistance is costly should the need arise
- Repairs are also costly and require a lot of down time
- Hydrex reports that outlet pipes for the scrubber system suffer from constant corrosion and require constant rewelding

Source: Seatowing.com

Environmental Risks

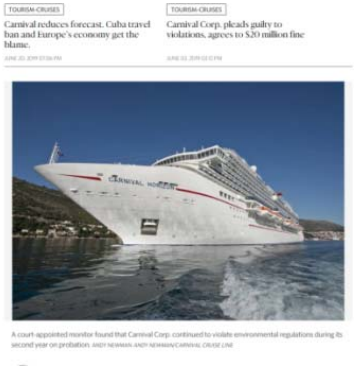
- Open-loop scrubbers (~85% of all scrubbers on vessels) require disposal of discharge water into the ocean
- Singapore has deemed scrubber water discharge as toxic industrial waste
- Singapore and many other countries do not allow scrubber water discharge within port limits



Source: Frontiers

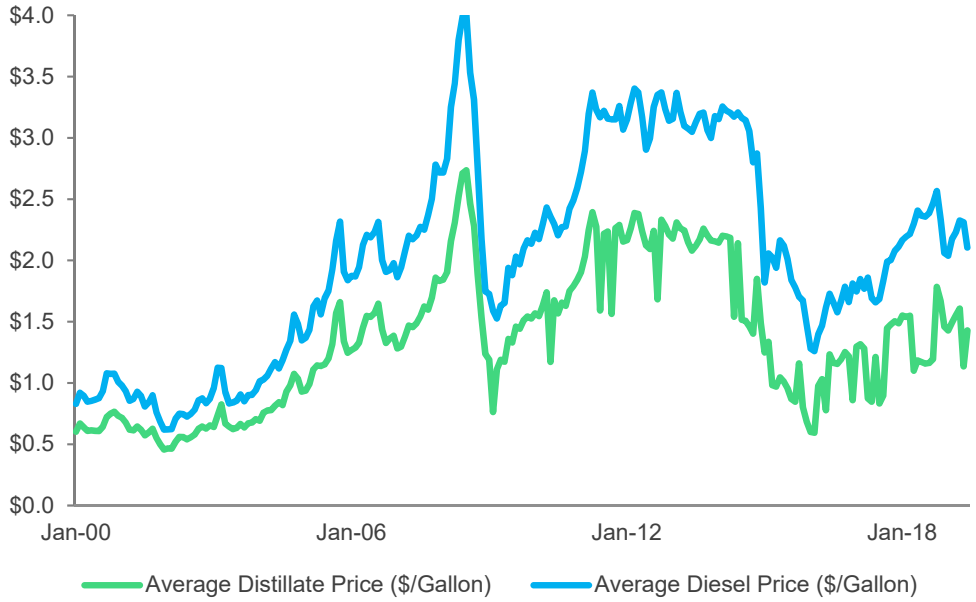
Efficacy

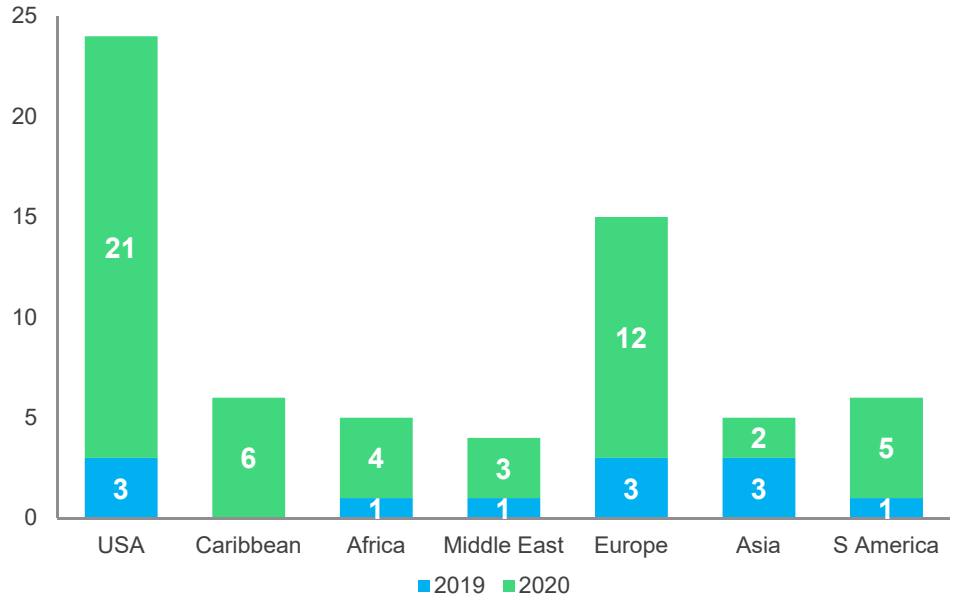
- Scrubbers are effective at reducing air pollution, but do so at the expense of the marine environment
- Carvinal Cruise Lines: multiple environmental pollution failures, including scrubber failures, were reported to US authorities – resulting in USD60m in fines
- Non-compliance comes with severe penalties such as fines and jail time



Source: Miami Herald

Pricing & Availability Of LSFO





Note: Shows Refiner Sale price to retail buyers

- Prices of refined petroleum products (diesel, distillates and LSFO) in the USA indicate a downward trend
- Initial forecasts are indicating LSFO will be at a premium to HSFO, however, based on the statements made by fuel oil suppliers, this premium is likely to narrow throughout 2020
- The above shows the number of ports that are already suppling or will supply LSFO in 2020
- All major bunkering ports will have enough supply to cater for demand come 1 Jan 2020

Source: Clarksons as on 13 Sep 2019, LQM Petrol Services 13 Sep 2019, St Louis Federal Reserve Bank

What do the Oil Majors Say About LSFO Availability?

- The Maritime and Port Authority of Singapore has published a list of 49 accredited and licensed Singapore bunker suppliers that can offer bunker fuels with sulphur content of no more than 0.5%. The 49 Singapore fuel suppliers can offer fuel grades ranging from MGO, low sulphur fuel oil, ultra-low sulphur fuel oil of 0.1% and the 3.5% heavy bunker fuel oil. *http://www.seatrade maritime.com/news/asia/29617.html?highlight=ImltbyAyMDIwIg==*
- On June 5, SINOPEC officially announced the production capability of 10 million and 15 million tons of low-sulfur marine fuel oil in 2020 and 2023. By January 1, 2020, Zhoushan and other China major ports will be fully covered with SINOPEC product availability, and more than 50 key overseas ports, including Singapore, will be covered with SINOPEC supply ability. *https://www.hellenicshippingnews.com/sinopec-announces-goal-of-10-million-ton-low-sulfur-marine-fuel-oil-production-capability-by-2020/*
- ExxonMobil has named the ports of Antwerp, Rotterdam, Genoa, Marseilles, Singapore, Laem Chabang and Hong Kong, where compliant fuels would be available, with locations in North America to follow. And will be ready with the products and point of sales by the third quarter of 2019. *https://www.seatrade-maritime.com/news/americas/imo-2020-exxonmobil-confirms-0-5-fuel-supplies-by-q3-2019/*
- France's Total is readying to make 0.5% sulphur content fuels available at major bunkering ports from the fourth quarter of this year. Low sulphur fuels will be available in the major hubs of Europe, Asia and Africa *http://www.seatrade-maritime.com/news/asia/29847.html?highlight=InRvdGFsIg==*
- Oil major Shell announced that it has carried out 19 successful trials of its very low sulphur fuel oil (VLSFO) at key ports globally and will be carrying out further trials in New Orleans, Rotterdam and Singapore. *https://www.shell.com/business-customers/marine/news-and-media-releases/news-and-media-2019/shell-partners-with-industry-on-successful-fuel-trials-ahead-of-imo-2020.html*
- Finnish oil company Neste have announced that 0.5% LSFO will be available in Northwest Europe and the exact locations and product's technical specification will be released in the fall of 2019. https://www.neste.com/releases-and-news/transportation/neste-introduces-new-imo2020-compliant-low-sulphur-marine-fuel

IMO 2020 – A Catalyst For Higher Time Charter Earnings

- Try and **reduce the additional cost** by burning less clean oil daily.
- This can be done by **slowing the speed** of the ship.
- Daily **consumption would drop** by between 3 to 4 MT per day per Knot of lower speed.
- Most owners would **reduce speed by about 2 knots**.
- Assuming normal speed of say 12 knots the ship would steam 12K X 24 hours X 200 days = 57,600 nautical miles.
- Reducing normal speed to say 10 Knots the ship would steam 10K X 24 hours X 200 days = 48,000 nautical miles.
- This results in a **16.7% reduction in available ship capacity**.
- Post 1st January 2020, owners will **scrap many more older ships**.
- Owners will **slow down their ships** in a significant manner.
- **Supply side will reduce further** due to slow steaming and/or additional scrapping.

Impact Of Scrubbers On The Geared Segment

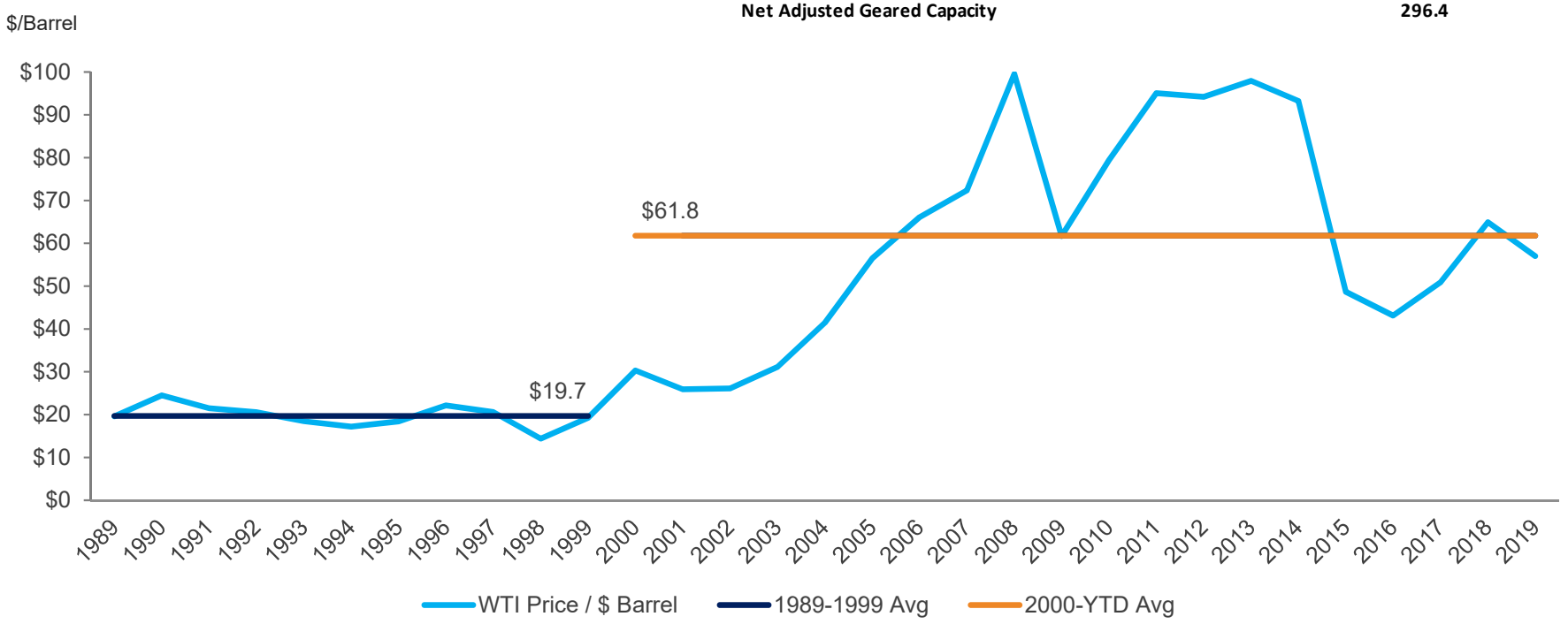
Era of Cheap Oil

- Engines not designed for fuel economy
- Vessels built in this era, more than 20-30 years of age, will struggle to find employment in a high fuel oil price environment

Era of Tight Oil

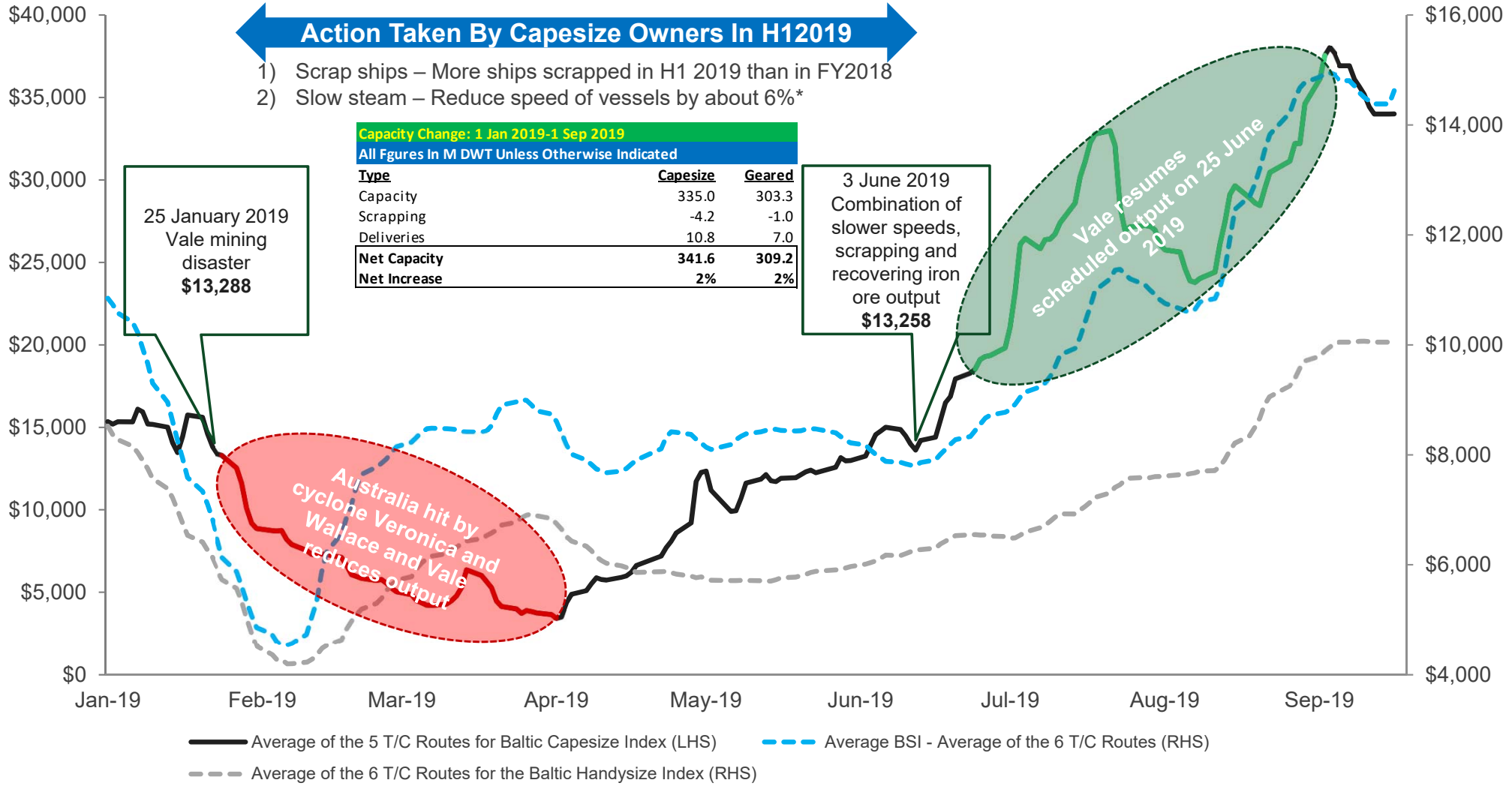
- Engines designed for fuel economy
- IMO 2020 will cause LSFO prices to increase, thus rendering vessels with older engines less competitive
- Older engines will also have operational issues such as breakdowns

Impact of Scrubbers On The Geared Segment	
All Units In Million DWT	**YTD 2019**
Total Geared Fleet Capacity	309.3
% Of Geared Capacity 20-30 Years Of Age	10.2%
Geared Capacity	**309.3**
Potential Impact Of 0.5 Knots Slow Steaming - Basis 200 Sailing Days	4.2%
Net Adjusted Geared Capacity	**296.4**



Source: Internal Estimates, Clarksons, St Louis Federal Reserve

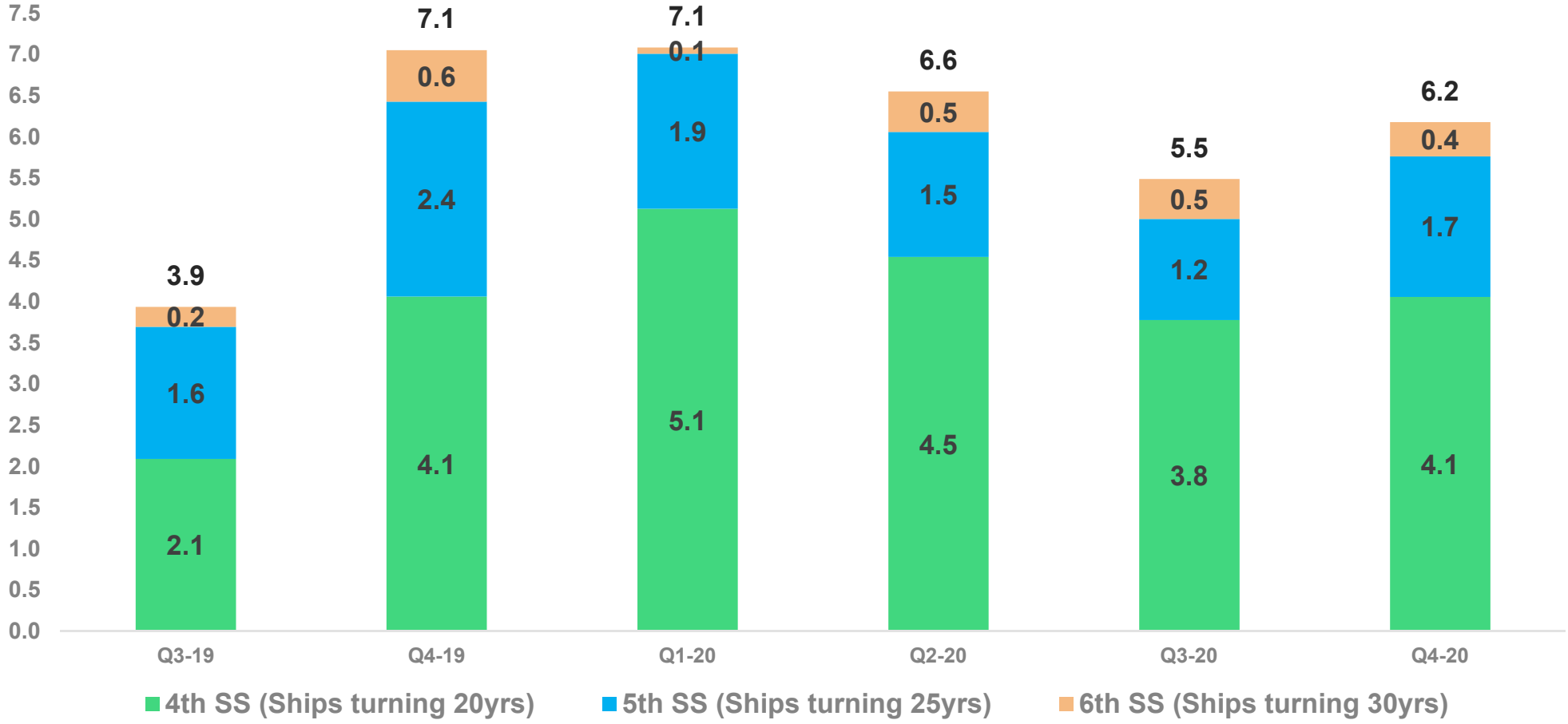
Supply & Demand Imbalances and Their Impact on Capesize Rates



Notes: As on 17 Sep 2019
*Speed reduction estimate from DNB Markets
Source: Capsize and Geared vessel supply and rate data – Clarksons

Global Drybulk Fleet Special Survey Quarterly Schedule

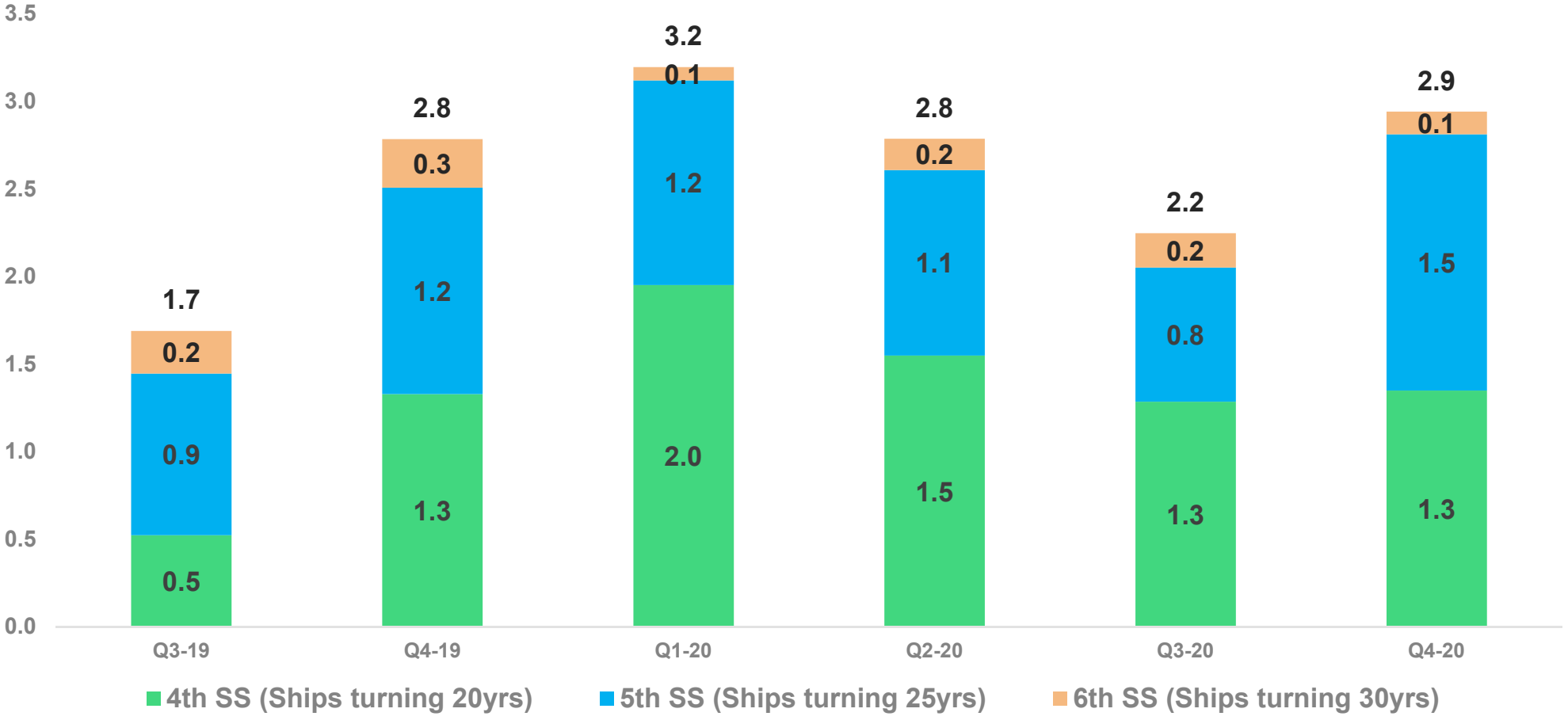
A total of 36.3 MDWT of ships will need to carry out their scheduled 4th or subsequent Special Survey (SS) and will need to fit the BWTS onboard.



Up to 31 Aug 19

Global Geared Drybulk Fleet Special Survey Quarterly Schedule

A total of 15.6 MDWT of Geared ships that will need to carry out their scheduled 4th or subsequent Special Survey (SS) and will need to fit the BWTS onboard.



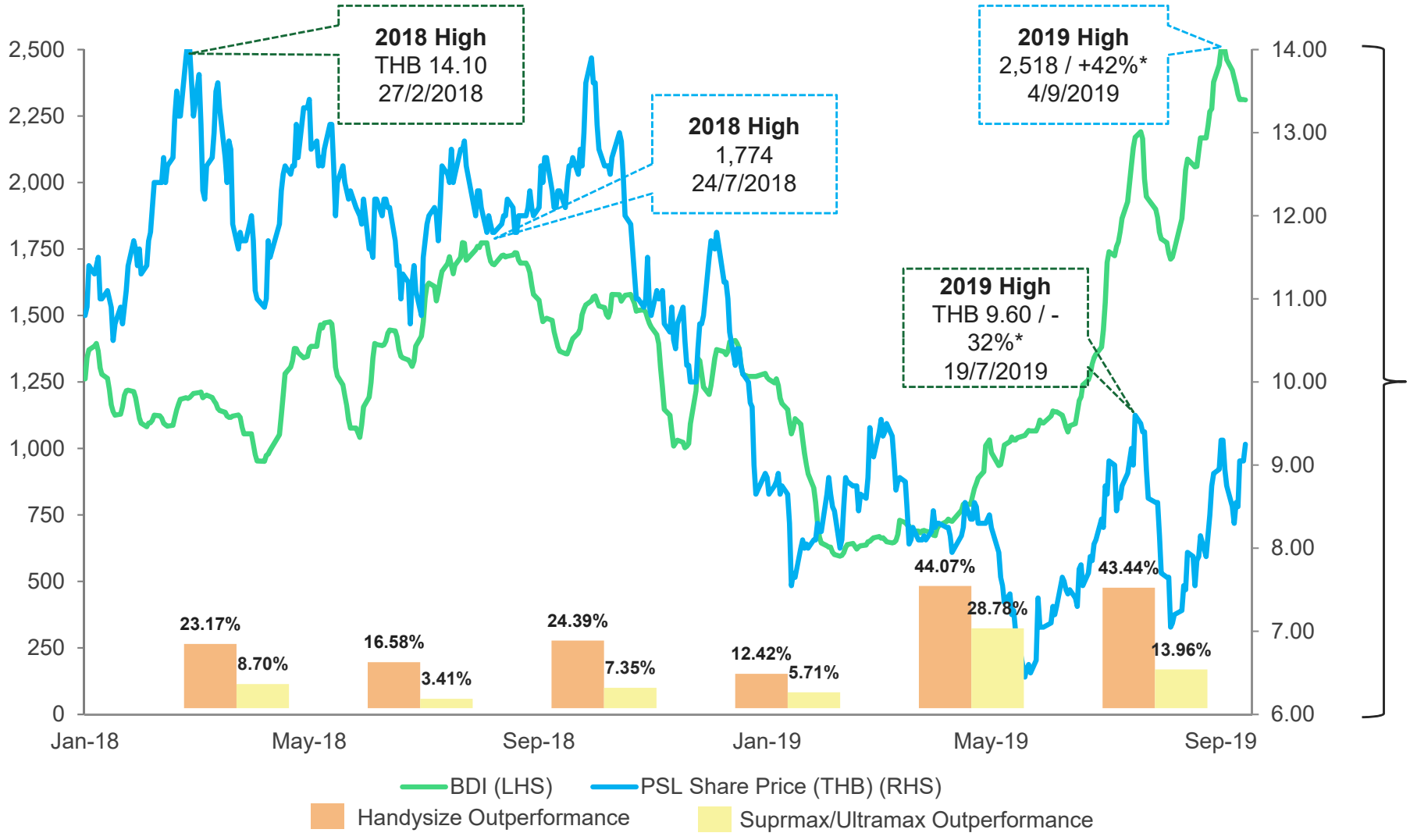
Up to 31 Aug 19

To Summarize

- 2017/2018/2019 taught us – demand/supply balance is really very close – leading everyone to near profitability.
- 2019/2020 demand growth should be about 1 to 2% higher than supply growth and lead to increasing profitability.
- Order book to existing fleet ratio compared with %age of ships over 20 years of age shows that supply will remain tight in the immediate future.
- 2020 would be a very interesting year with slow speed/scrapping, due to higher cost of LSFO, absorbing between 4 to 8% of existing supply.
- Effective cost of capital has risen with Basel 4 rules. This should act as a dampener for rapid increase in future supply of ships.
- Future environmental rules/targets like ‘minimum 50% reduction in CO2 levels by 2050 compared to 2008’ could increase the cost of ships in the future and keep the supply side disciplined.
- Geo Political risks could act as speed bumps along the way increasing volatility.
- Use of tariffs by Trump and retaliation by other leaders/countries could result in demand growth not meeting it’s true potential.

Financial Benchmarking

PSL Share Price Vs BDI: 1 Jan 2018 – 17 Sep 2019



Divergence between PSL's share price and the BDI implies a strong entry point.

Based on a linear relationship between the BDI high points, the implied share price today is THB 20.

Note: * Indicates the % change between the 2018 and 2019 Highs
Source: Clarksons As on 17 Sep 2019

PSL Relative Performance

PSL Vessel Segment Performance Against Industry Benchmarks All Figures In USD/Day Unless Otherwise Indicated						
Period	**Q1 2018**	**Q2 2018**	**Q3 2018**	**Q4 2018**	**Q1 2019**	**Q2 2019**
PSL Handysize	$10,460	$10,232	$10,267	$10,461	$8,686	$8,717
Baltic Handysize	$8,492	$8,777	$8,254	$9,305	$6,029	$6,077
Difference	**$1,968**	**$1,455**	**$2,013**	**$1,156**	**$2,657**	**$2,640**
% Outperformance	**23.17%**	**16.58%**	**24.39%**	**12.42%**	**44.07%**	**43.44%**
PSL Supramax/Ultramax (1)	$11,549	$11,407	$12,410	$12,241	$9,837	$9,336
Baltic Supramax (2)	$10,625	$11,031	$11,560	$11,579	$7,638	$8,192
Difference	**$924**	**$376**	**$850**	**$662**	**$2,199**	**$1,144**
% Outperformance	**8.70%**	**3.41%**	**7.35%**	**5.71%**	**28.78%**	**13.96%**

PSL Vessel Segment Performance Against Industry Benchmarks All Figures In Percentages Unless Otherwise Indicated						
Period	**Q1 2018**	**Q2 2018**	**Q3 2018**	**Q4 2018**	**Q1 2019**	**Q2 2019**
Handysize Outperformance	23.17%	16.58%	24.39%	12.42%	44.07%	43.44%
Supramax/Ultramax Outerformance	8.70%	3.41%	7.35%	5.71%	28.78%	13.96%
Average Quarterly Share Price (THB)	12.1	12.1	12.2	11.2	8.6	7.7
Average Quarterly Share Price Performance	10.71%	-0.08%	1.24%	-8.65%	-23.49%	-10.11%

Note:
1) Average of PSL Supramax and Ultramax vessel performance relative to the BSI
2) As there is no special index for the Ultramax vessels we have compared them with the BSI
Source: Clarksons and internal estimates

PSL, TTA, PB, SALT, JIN, EGL, PNRM and BEL for 6M'19

Description	6M'19							
	PSL	TTA	PB	SALT	JIN	EGL	PNRM	BEL
Handysize				(Unit: USD per Day)				
Average owned vessels	19		82				19	
Average vessels age - owned vessels	8.7		11.0				9.0	
Time Charter Equivalents	8,701		9,015				7,461	
OPEX + G&A Expenses *	5,094		4,750				4,779	
Depreciation & DDSS	2,821		2,830				1,706	
Cash Financial Expenses	1,623		680				844	
Net Earnings (Losses)	**(837)**		**755**				**132**	
Supramax & Ultramax				(Unit: USD per Day)				
Average owned vessels	17	20	29	37	18	46		14
Average vessels age - owned vessels	5.7	12.2	7.5	3.5	11.2	9.2		7.3
Time Charter Equivalents	9,573	9,199	10,609	9,086	8,277	9,669		11,243
OPEX + G&A Expenses *	5,292	4,893	4,620	6,470	5,469	6,142		6,616
Depreciation & DDSS	2,964	2,392	3,270	2,704	2,186	2,301		3,360
Cash Financial Expenses	1,907	707	970	2,298	641	1,485		2,055
Net Earnings (Losses)	**(590)**	**1,207**	**1,749**	**(2,386)**	**(19)**	**(259)**		**(788)**
EBITDA (Unit: million USD)	**19.10**	**15.31**	**101.10**	**34.15**	**6.97**	**25.74**	**8.51**	**18.08**
EBTIDA per ship (Unit: million USD)	**0.53**	**0.39**	**0.44**	**0.60**	**0.38**	**0.45**	**0.46**	**1.19**

** PSL's G&A expenses per day included professional fees and legal expenses for arbitration process of USD 208 per day and past service cost of USD 159 per day.*

Source: Company Annual Reports

PSL, TTA, PB, SALT, JIN, EGL, PNRM and BEL for 6M'19

Description	6M'19							
	PSL	TTA	PB	SALT	JIN	EGL	PNRM	BEL
	(Unit: million USD)							
Equity Capital Raises (2007-YTD)	62.90	483.58	700.00**	1,650.23	24.76	527.46	288.21	28.58
Total Impairments (2007-YTD)	39.60*	688.81***	421.31*	508.56	652.67	183.78	74.68	56.52
Market Cap (30 Aug 19)	452.86	341.96	909.01	397.71	96.80	328.20	86.58	165.42
Total Debt as of (30 Jun 19)	415.67	277.45	1,123.92	858.44	118.22	356.37	95.50	181.06
Cash and Cash Equivalents (30 Jun 19)	47.48	98.60	313.69	139.30	33.08	38.60	17.35	47.39
Net Book Value of Ships (30 Jun 19)	676.16	388.01***	1,842.70	1,391.48	217.76^	678.42	191.60	264.18
Debt / Equity Ratio (30 Jun 19)	1.08	0.47	0.91	0.96	0.47	0.75	0.75	1.29

** Impairment for vessels sold* *** PB Included USD 48.69 million equity shares/options awarded to employees*

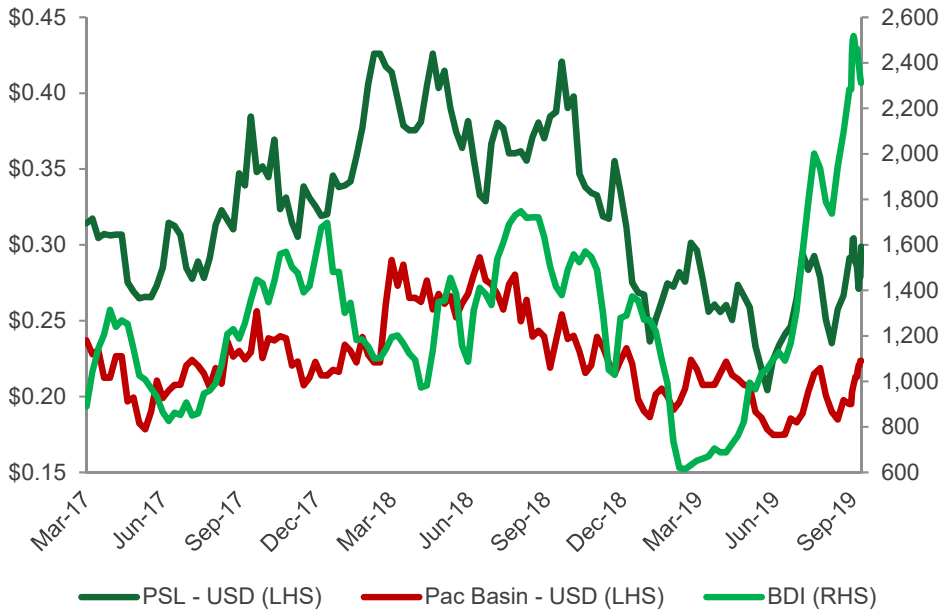
**** TTA - Included USD 8.7 million of impairment for vessels sold and NBV as of 31 Dec 2018 (Included Tender Rigs)*

^ JIN -Included NBV of Vessels, leasehold land and buildings and others

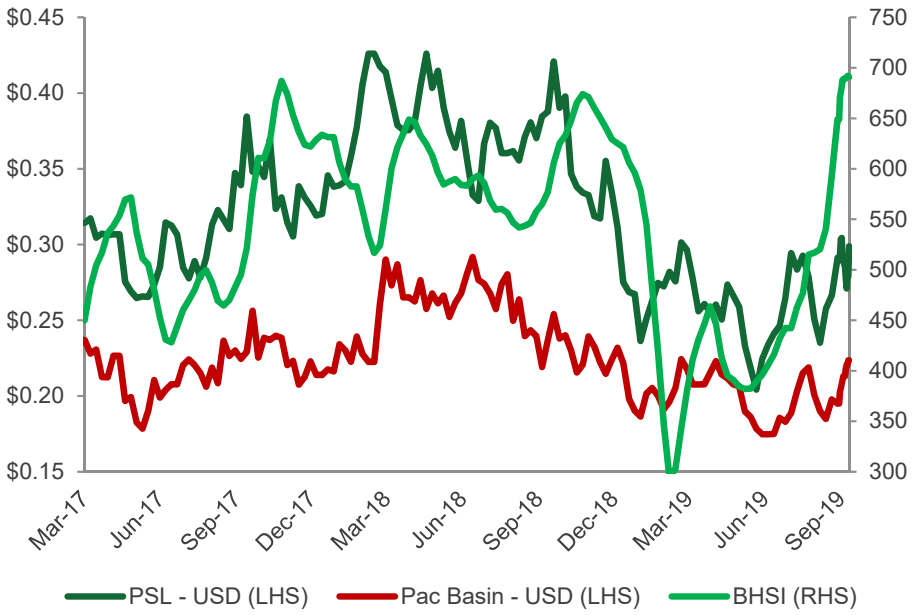
Source: Company Annual Reports

Share Price Comparison

Baltic Dry Index



Baltic Handysize Index

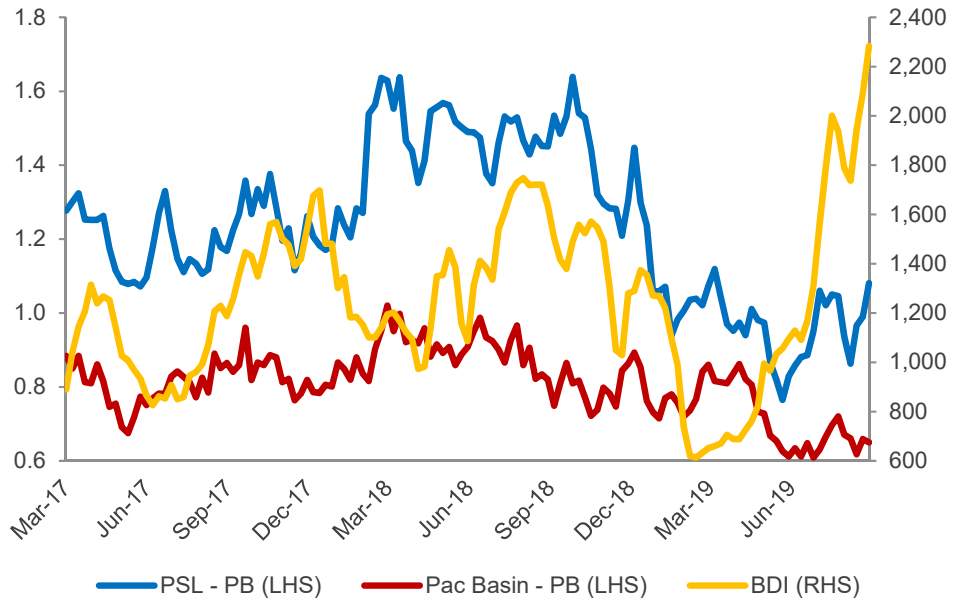


- ***As of 17 Sep 2019***
- **Source: Bloomberg**

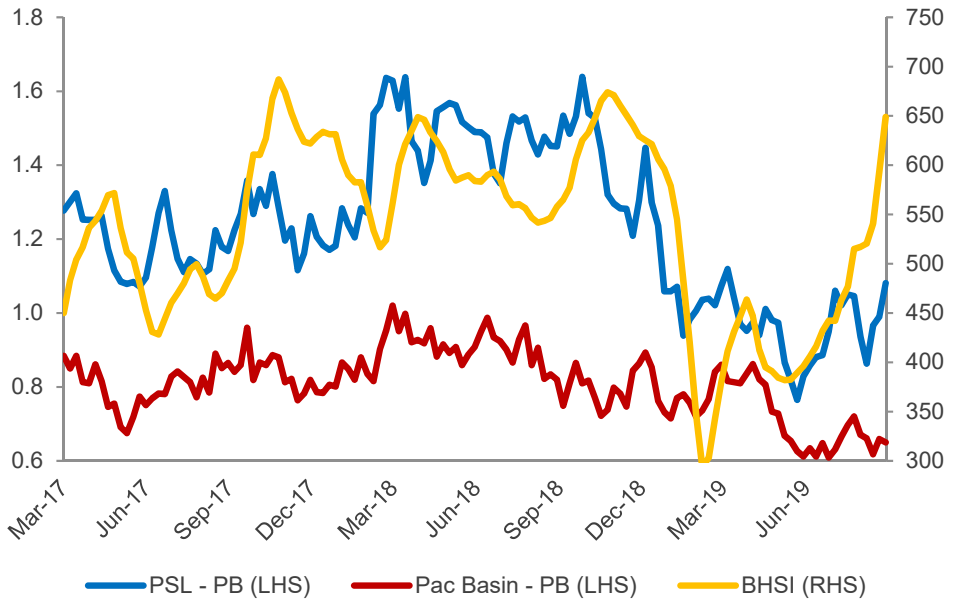
Consensus Price To Book

Requested updated data

Baltic Dry Index



Baltic Handysize Index



- ***As of 3 Sep 2019***
- **Source: Bloomberg**

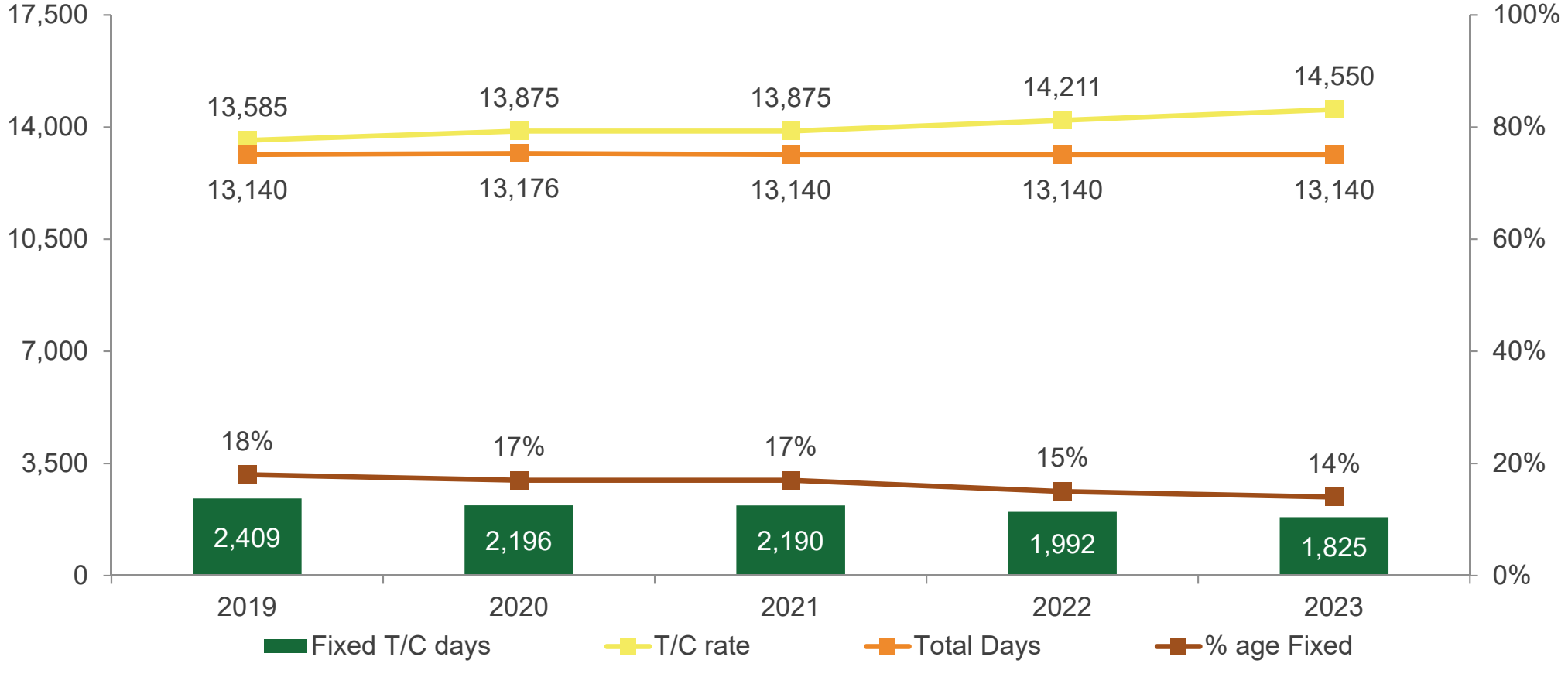
PSL's Strategy

PSL Fleet

As of	31st Dec 2015	31st Dec 2016	31st Dec 2017	31st Dec 2018	30th Jun 2019
Number of Vessels	45	36	36	36	36
Average Age (Simple Avg)	9.78 years	5.83 years	6.28 years	7.28 years	7.28 years
Insured Value	USD 716.90 Million	USD 695.10 Million	USD 673.00 Million	USD 700.30 Million	USD 700.30 Million
Book Value	USD 701.03 Million	USD 715.55 Million	USD 717.19 Million	USD 689.37 Million	USD 676.16 Million
Total DWT	1,628,398	1,541,244	1,585,805	1,585,805	1,585,805
Total LDT	367,844	343,372	350,989	350,989	350,989
Average DWT per Vessel	36,187	42,812	44,050	44,050	44,050

Current and Rolling 4 Year Forward Book (23rd Aug 2019)

Contract value	USD 32.72 m	USD 30.47 m	USD 30.39 m	USD 28.30 m	USD 26.55 m

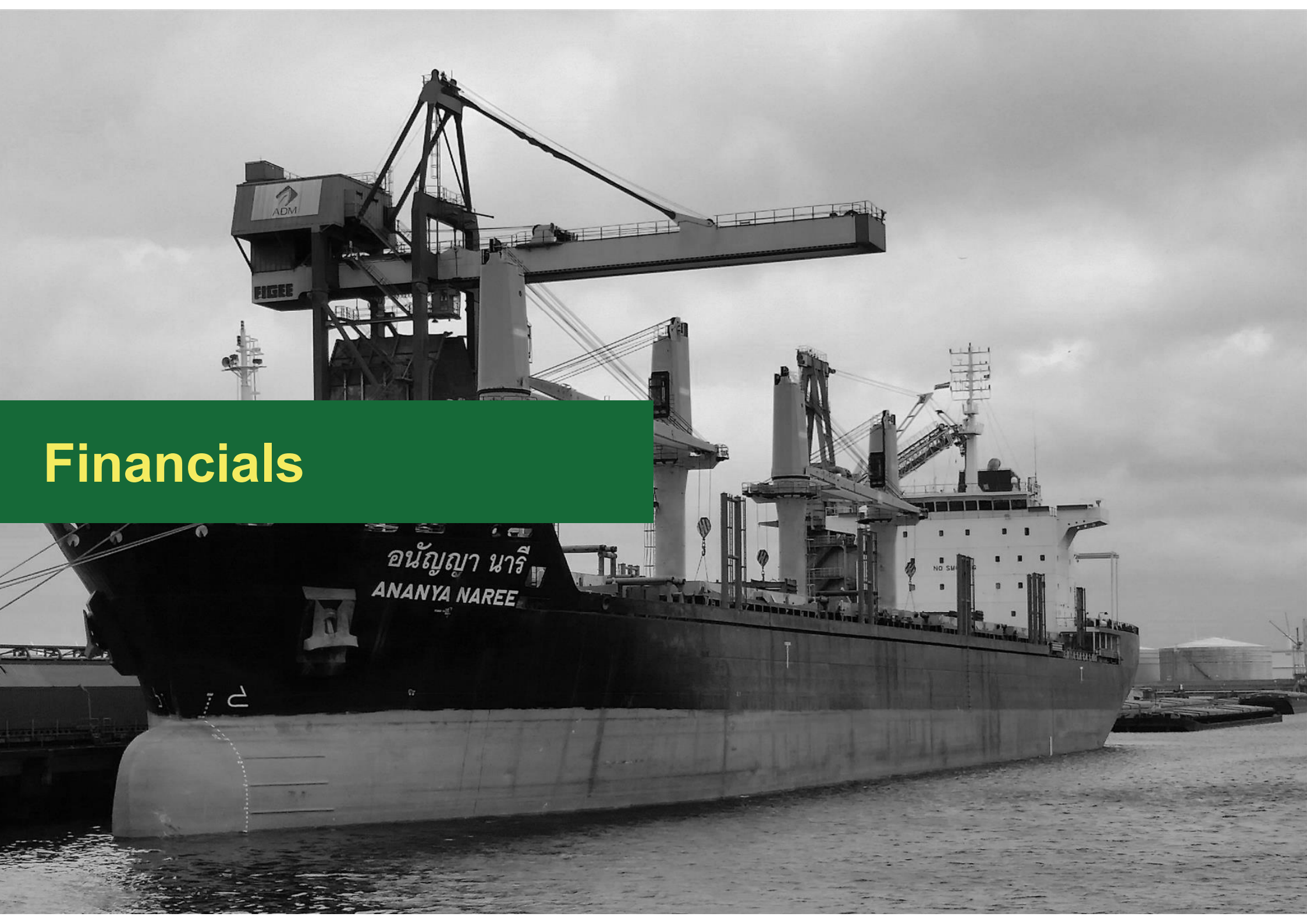


Only vessels fixed on T/C for a period of more than one year are considered for this analysis.

Market Segmentation Q2 2019

Index	Q2 2019 Average Index	Market Av. TC Rate	PSL Av. TC Rate	Performance vs Benchmark
BHSI (Handysize)	407	USD 6,077	USD 8,717	+43.44%
BSI (Supramax)	754	USD 8,192	USD 9,071	+10.73%
Ultramax	-	USD 8,192*	USD 9,600	+17.19%

* As there is no special index for the Ultras we have compared them with the BSI



Financials

Operating Expenses

- These are the fixed costs required to run a ship and are evenly spread over the entire year of 365 days.
- PSL's Opex per day per ship for 2018 and H1-2019 was USD 4,621 and 4,875 respectively.
- Broken into:

Particulars	2018		H1-2019	
	USD	%	USD	%
Crew costs	2,328	50.38%	2,348	48.16%
Manning Expenses	174	3.77%	172	3.53%
Victualing	158	3.42%	159	3.26%
Lube oils	164	3.55%	195	4.00%
Insurance	295	6.38%	321	6.59%
Repairs/Maintenance	121	2.62%	140	2.87%
Stores/Spares	454	9.82%	474	9.72%
Dry-dock/Special Surveys	479	10.37%	585	12.00%
Management Expenses	384	8.31%	374	7.67%
Misc. expenses	64	1.38%	107	2.20%
Total	**4,621**	**100.00%**	**4,875**	**100.00%**

OPEX Target For 2019: USD 4,750 per day per ship

Operating Expenses Comparison

- OPEX Comparison with Industry compiled by BDO LLP (formerly known as Moore Stephens & Co.)
- OPEX excluding dry dock and special survey cost

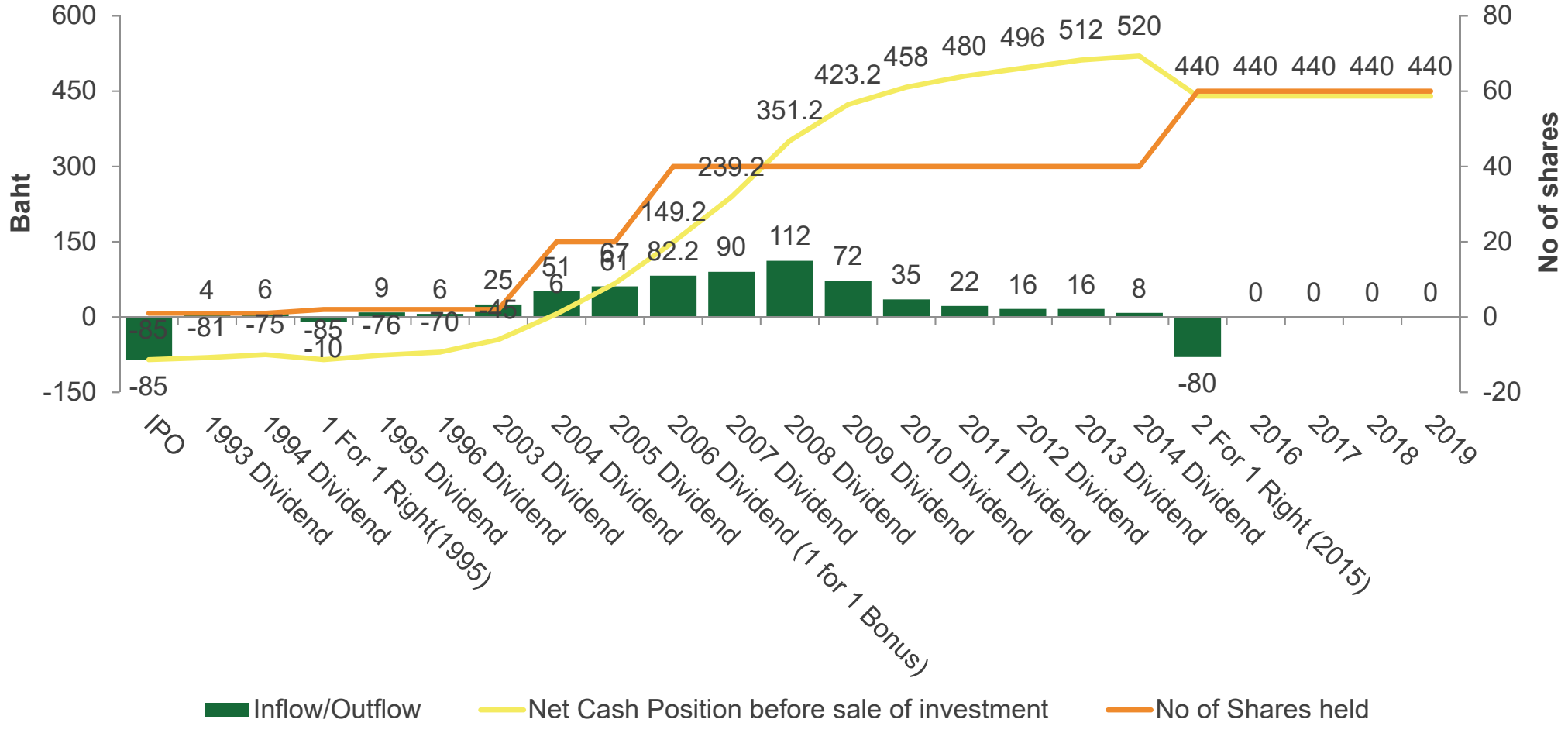
For Years	2012		2013		2014		2015		2016		2017		2018	
Particulars US$ (Per Day)	Industry	PSL	Industry	PSL	Industry	PSL	Industry	PSL	Industry	PSL	Industry	PSL	Industry	PSL
Crew Cost	2,539	2,311	2,569	2,413	2,581	2,648	2,641	2,769	2,621	2,728	2,639	2,646	2,637	2,660
Stores	655	496	620	491	587	459	548	400	521	370	506	375	483	379
Repairs & Maintenance	769	322	771	358	748	388	702	259	683	328	659	326	661	360
Insurance	483	359	464	397	458	359	432	378	411	302	391	298	357	295
Administration	825	451	798	354	817	371	785	342	759	358	734	391	703	448
Total Operating Costs	**5,271**	**3,939**	**5,222**	**4,013**	**5,191**	**4,225**	**5,108**	**4,148**	**4,995**	**4,086**	**4,929**	**4,036**	**4,841**	**4,142**

Financial Profile

	H1-2019	2018	2017	2016	2015	2014
Cash & Cash Equivalents	$47.5m	$56.8m	$56.7m	$74.7m	$12.6m	$16.2m
Total Assets	$846.6m	$857.9m	$882.3m	$901.9m	$899.4m	$846.7m
Gross Debt	$415.7m	$432.8m	$469.4m	$482.1m	$410.4m	$361.4m
Net Debt	$368.2m	$376.0m	$412.6m	$407.4m	$397.8m	$345.2m
Equity	$383.9m	$391.2m	$377.5m	$381.2m	$456.8m	$463.7m
Gross Debt/Equity	1.08	1.11	1.24	1.26	0.90	0.78
Net Debt/Equity	0.96	0.96	1.09	1.07	0.87	0.74
No. of Vessels	36	36	36	36	45	44
EBITDA	$19.1m	$68.2m	$53.2m	$17.9m	$14.0m	$42.9m
Debt/EBITDA	7.31*	6.10*	8.50*	20.25*	16.92*	8.30
Daily Earnings	$9,113	$11,063	$9,486	$6,476	$6,266	$8,096
Daily Opex	$4,875	$4,621	$4,355	$4,503	$4,652	$4,695
Net Profit (Loss)	($7.2)m	$14.1m	($3.8)m	($75.6)m	($69.4)m	($2.5)m
Total Revenues	$62.8m	$153.6m	$130.2m	$107.5m	$123.6m	$143.3m

* Calculated per Debt Facility Agreements

Total Return to Shareholders: 1993 to 2019



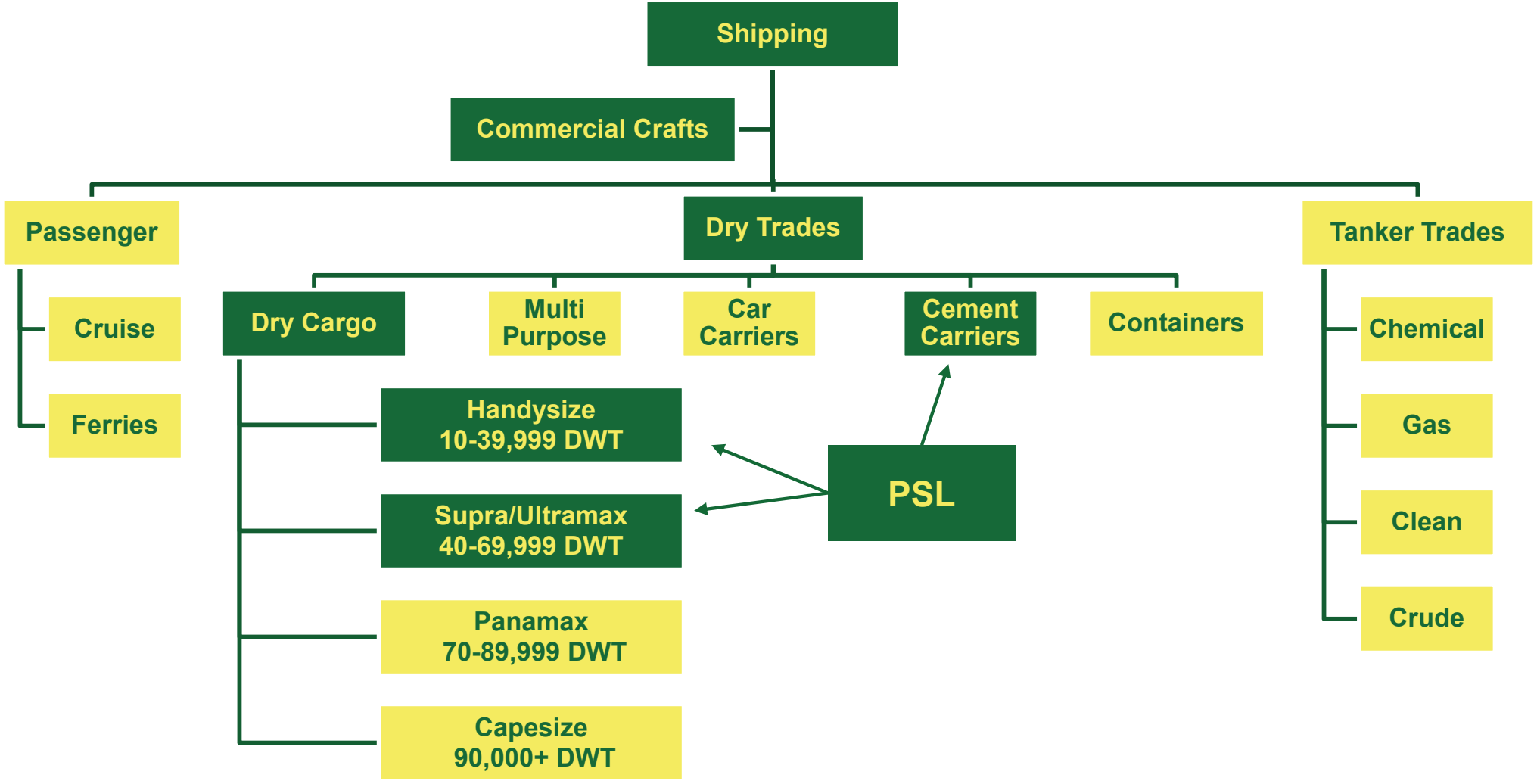
1 IPO share value after 26 years @ 8.10 Baht / share (as of 28th June 2019) adjusted for rights, splits and bonus = 486 Baht
Total net cash position = 926 Baht Returns = 10.89 times

Thank You !

Precious Shipping Public Company Limited

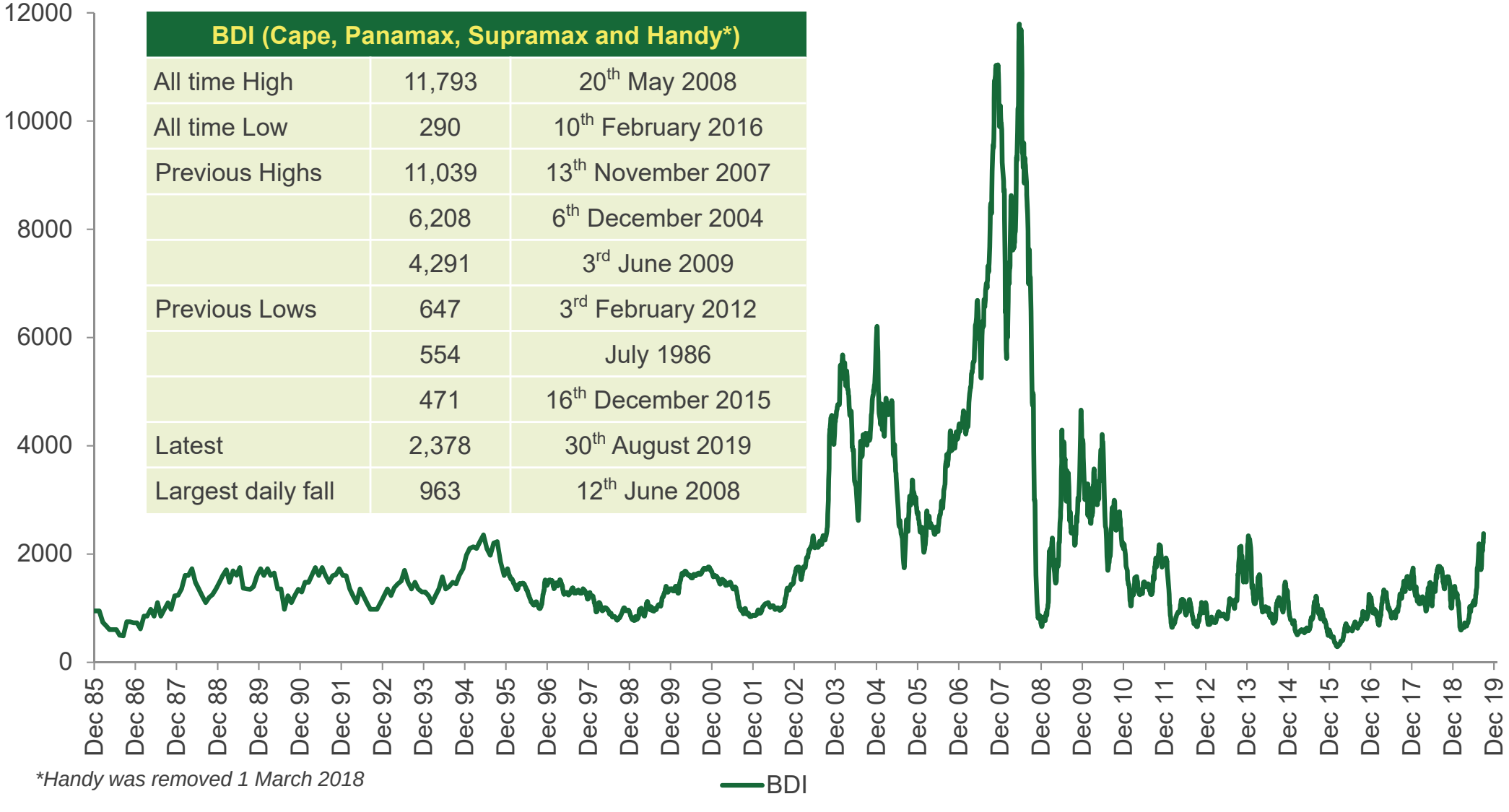
***Website*:** www.preciousshipping.com | **E-mail:** psl@preciousshipping.com, ir@preciousshipping.com

Industry Overview



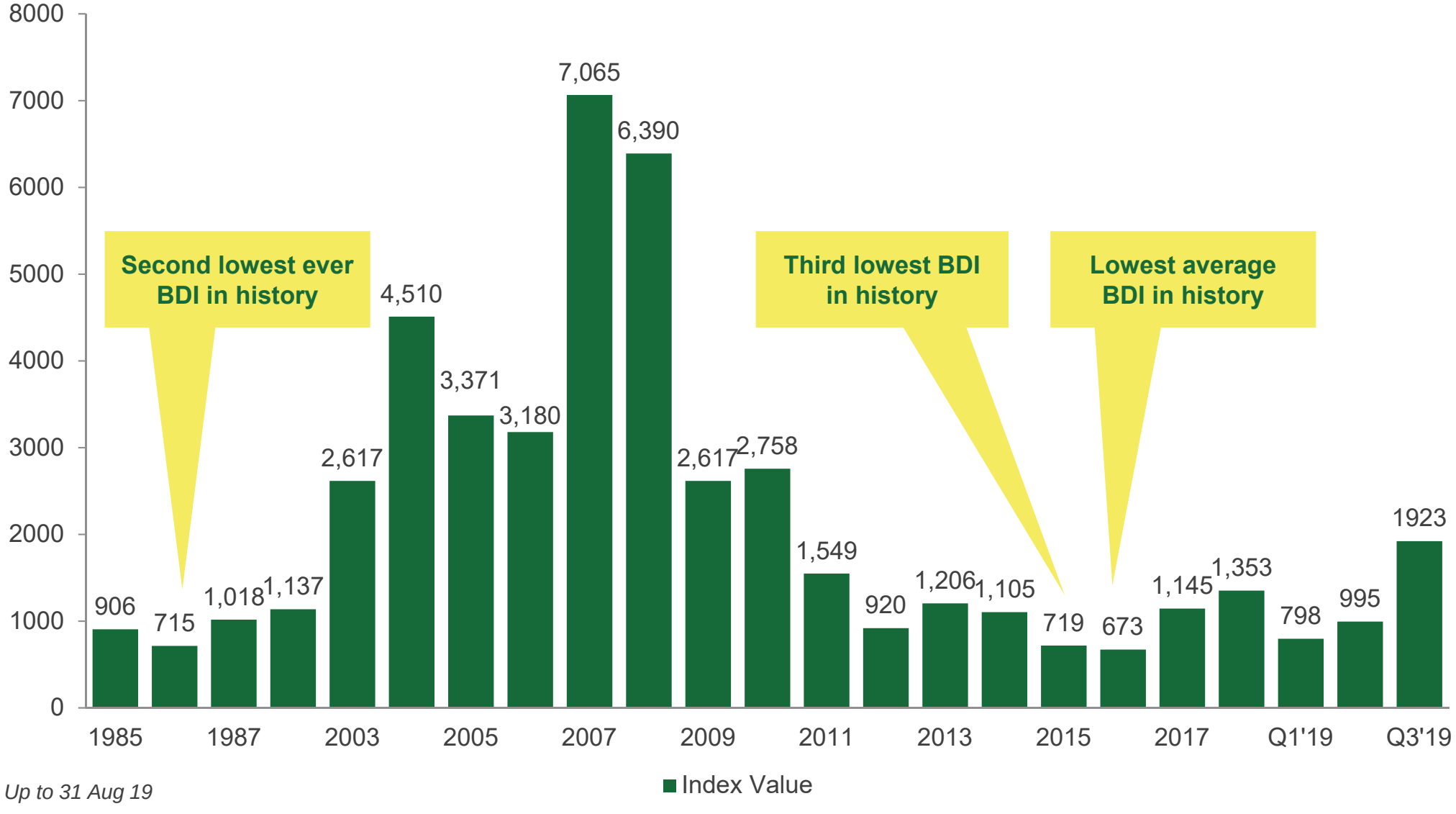
Changes in the Baltic Dry Index (as of 31 August 2019)

BDI (Cape, Panamax, Supramax and Handy*)		
All time High	11,793	20th May 2008
All time Low	290	10th February 2016
Previous Highs	11,039	13th November 2007
	6,208	6th December 2004
	4,291	3rd June 2009
Previous Lows	647	3rd February 2012
	554	July 1986
	471	16th December 2015
Latest	2,378	30th August 2019
Largest daily fall	963	12th June 2008



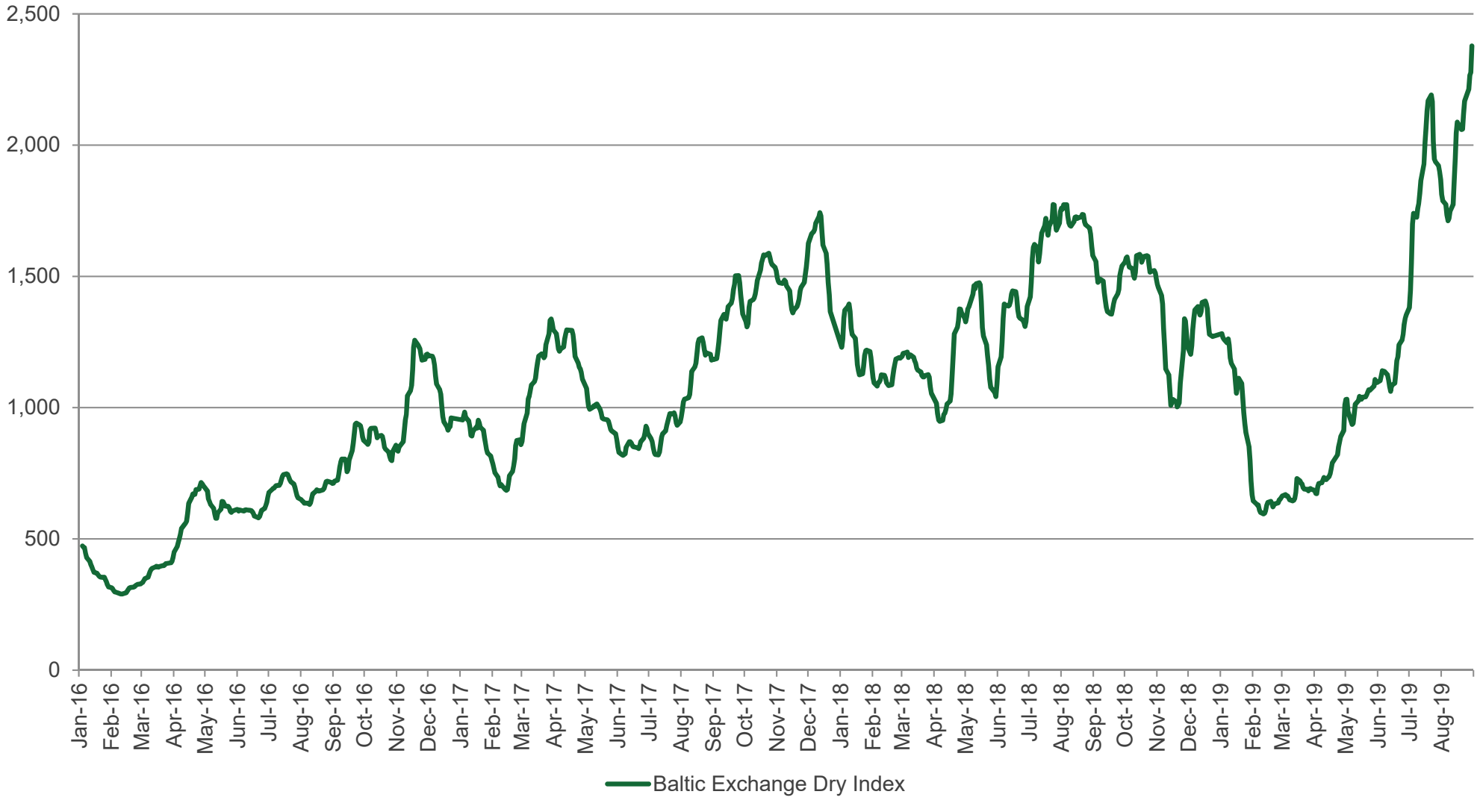
*Handy was removed 1 March 2018

Changes in annual Baltic Dry Index (average figures)



Up to 31 Aug 19

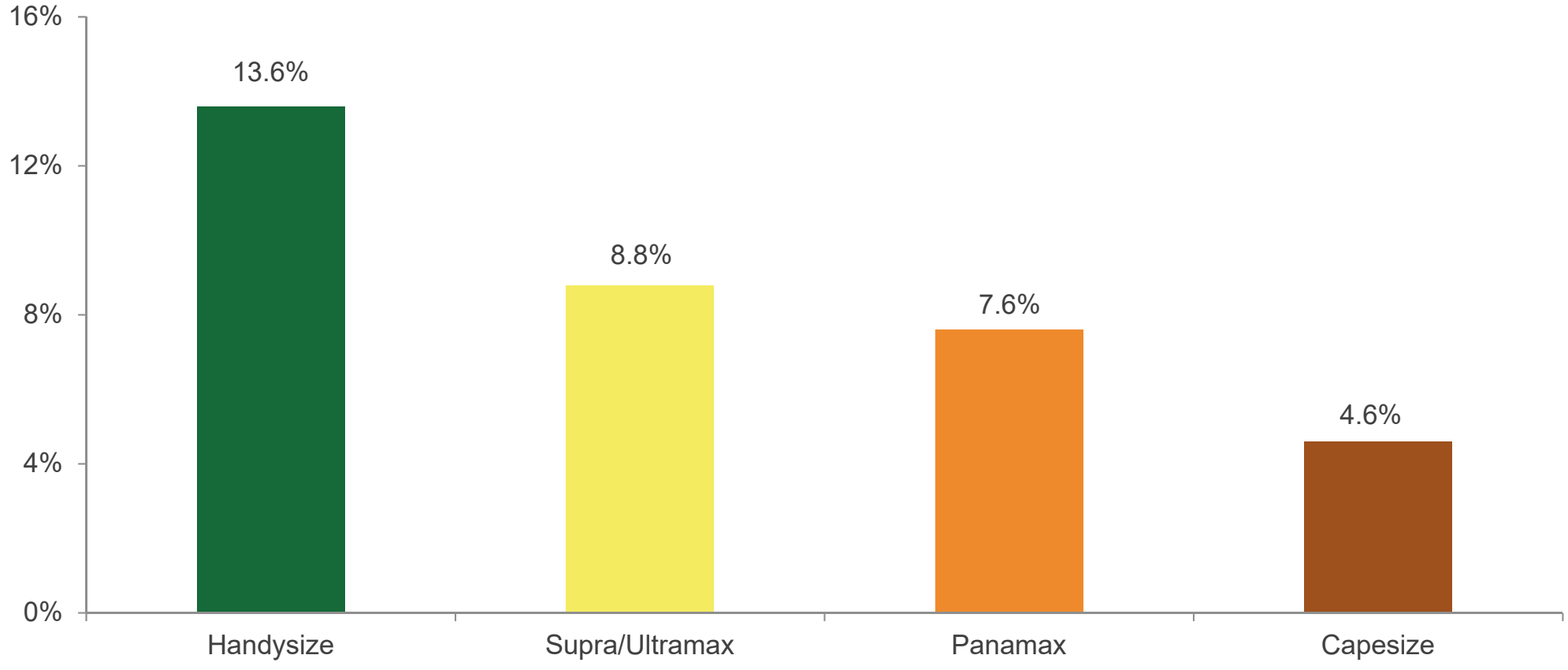
Evolution of the Baltic Dry Index since 2016



Up to 31 Aug 19

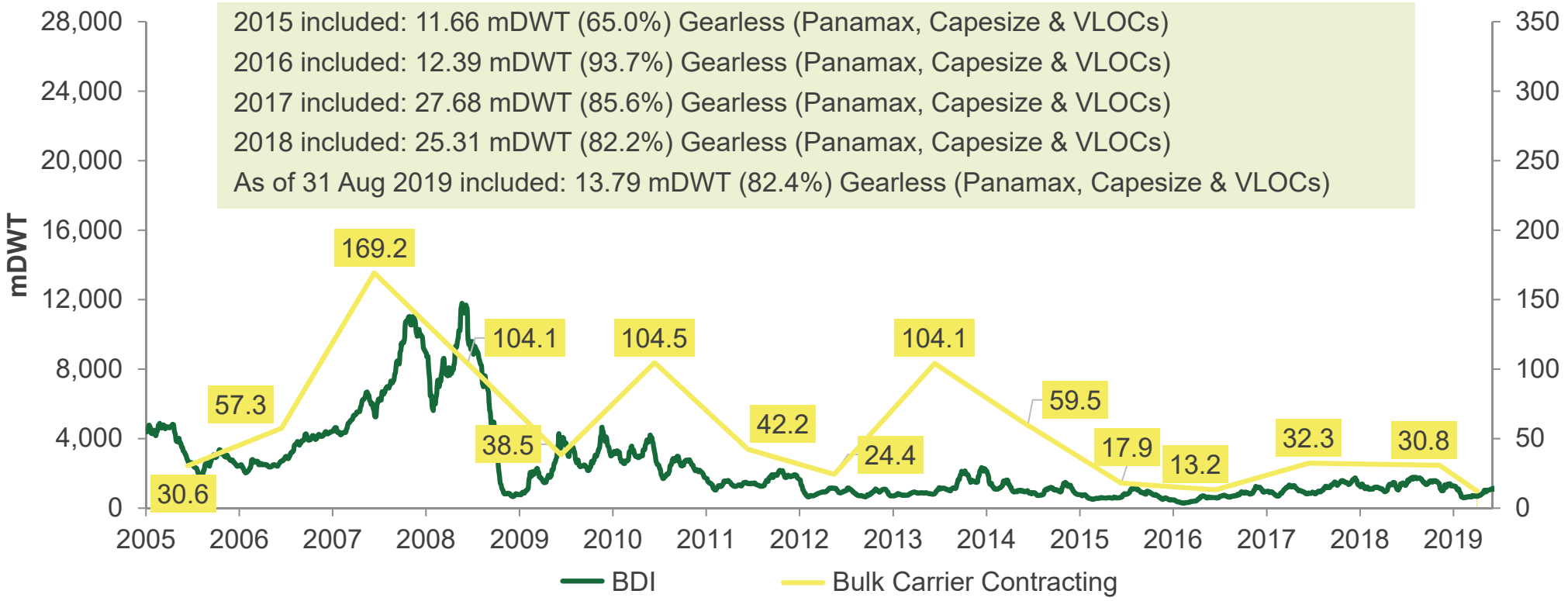
Regulatory impact of LSFO from Jan 2020 (as of 31 August 2019)

By the start of 2020, there will be 63.17 MDWT or 7.3% of existing dry bulk fleet that would be over 20 years of age and become likely scrapping candidates due to expensive regulatory environment. By the end of 2020, this figure will reach 72.75 MDWT or 8.5% of the existing fleet.



As of 31 Aug 2019

BDI vs Bulk Carrier Contracting (mDWT)

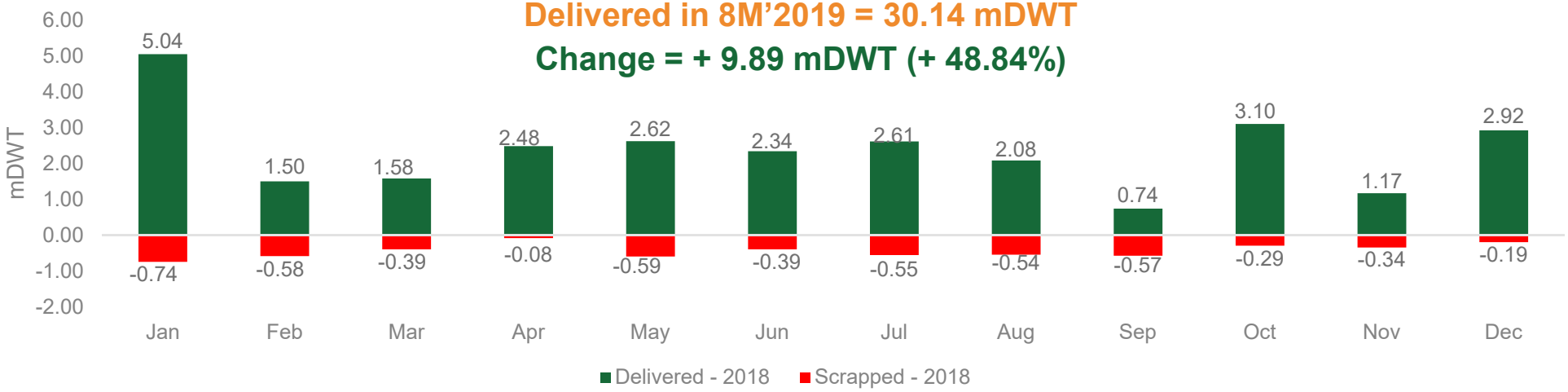


Start of Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	31Aug 19
Fleet (mDWT)	322.50	344.89	368.05	392.04	417.64	458.64	536.58	615.63	692.74	735.19	770.33	788.42	790.41	813.53	836.46	860.83

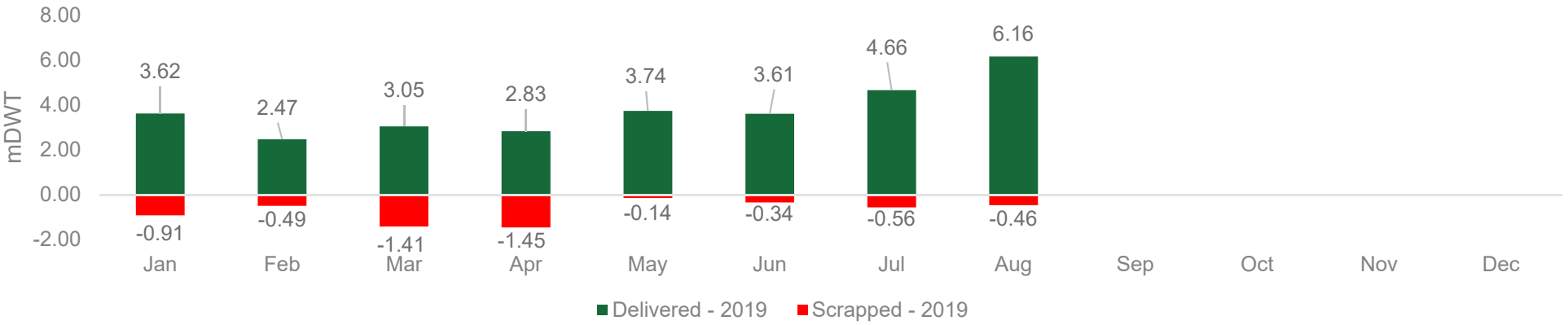
Source: CRS – PSL
Up to 31 Aug 19

Ships Delivered & Scrapped (1 Jan 2018 – 31 August 2019)

Delivered in 8M'2018 = 20.25 mDWT
Delivered in 8M'2019 = 30.14 mDWT
Change = + 9.89 mDWT (+ 48.84%)



Scrapped in 8M'2018 = 3.86 mDWT
Scrapped in 8M'2019 = 5.76 mDWT
Change = + 1.90 mDWT (+ 49.22%)



Annual Increase In Drybulk Ship Supply in DWT

Year End	No of ships	Av Dwt	Total Dwt	% Change
2001	5,475	52,281	286,240,329	4.16%
2002	5,557	53,024	294,652,566	2.94%
2003	5,632	53,834	303,190,410	2.90%
2004	5,847	55,139	322,395,450	6.33%
2005	6,161	56,687	349,250,814	8.33%
2006	6,412	57,953	371,596,437	6.40%
2007	6,670	58,716	391,638,490	5.39%
2008	6,978	59,880	417,841,795	6.69%
2009	7,312	62,820	459,343,243	9.93%
2010	8,154	65,626	535,110,328	16.49%
2011	9,072	67,160	609,272,229	13.86%
2012	9,628	70,341	677,238,680	11.16%
2013	10,112	71,123	719,197,997	6.20%
2014	10,514	71,721	754,070,036	4.85%
2015	10,755	71,771	771,899,513	2.36%
2016	10,967	72,072	790,409,109	2.40%
2017	11,210	72,572	813,530,004	2.93%
2018	11,431	73,175	836,460,643	2.82%
2019*			868,465,211	3.58%
2020*			892,933,527	2.28%

CAGR (8 years period)

6.09 %

7.41%

Geared: 4.00% & Gearless: 3.35%

Geared: 1.70% & Gearless: 2.61%

** based on 50% slippage (actual was 60.94% until 31 Aug'19) & 10 MDWT scrapping (actual was 5.76 MDWT until 31Aug'19) for 2019 and 2020*

PSL, TTA, SALT, JIN, EGL, PNRM and BEL for Q1'19

Description	Q1'19						
	PSL	TTA	SALT	JIN	EGL	PNRM	BEL
Handysize	(Unit: USD per Day)						
Average owned vessels	19					19	
Average vessels age - owned vessels	8.7					9.4	
Time Charter Equivalents	8,686					8,523	
OPEX + G&A Expenses *	4,886					4,772	
Depreciation & DDSS	2,844					1,835	
Cash Financial Expenses	1,660					864	
Net Earnings (Losses)	**(704)**					**1,052**	
Supramax & Ultramax	(Unit: USD per Day)						
Average owned vessels	17	20	37	18	46		14
Average vessels age - owned vessels	5.7	12.0	3.5	10.8	9.2		7.0
Time Charter Equivalents	9,828	9,024	9,177	7,658	9,607		11,359
OPEX + G&A Expenses *	4,927	4,947	6,531	5,971	6,171		6,005
Depreciation & DDSS	2,964	2,376	2,762	2,237	2,261		3,361
Cash Financial Expenses	1,955	729	2,337	583	1,504		2,077
Net Earnings (Losses)	**(18)**	**972**	**(2,453)**	**(1,133)**	**(329)**		**(84)**
EBITDA (Unit: million USD)	**10.64**	**7.50**	**17.34**	**2.85**	**15.37**	**6.18**	**10.11**
EBITDA per ship (Unit: million USD)	**0.30**	**0.18**	**0.30**	**0.16**	**0.27**	**0.33**	**0.67**

**Includes legal and professional fees for arbitration of USD 108 p/d*

Source: Company Annual Reports

PSL, TTA, SALT, JIN, EGL, PNRM and BEL for Q1'19

Description	Q1'19						
	PSL	TTA	SALT	JIN	EGL	PNRM	BEL
	(Unit: million USD)						
Equity Capital Raises (2007-YTD)	62.90	483.58	1,650.23	24.76	527.46	288.21^	14.29
Total Impairments (2007-YTD)	39.60*	688.81**	508.56	652.67	183.78	74.68^	56.52
Market Cap (31 May 19)	346.18	295.56	265.01	92.56	332.48	89.80	133.60
Total Debt as of (31 Mar 19)	424.29	293.86	813.64	116.63	367.83	99.26	171.30
Cash and Cash Equivalents (31 Mar 19)	53.08	102.48	50.82	41.58	60.72	12.31	34.74
Net Book Value of Ships (31 Mar 19)	681.99	388.01**	1,443.67	204.29^^	695.34	199.56	253.78
Debt / Equity Ratio (31 Mar 19)	1.09	0.49	0.95	0.46	0.77	0.78	1.40

** Impairment for vessels sold*

*** TTA - Included USD 8.7 million of impairment for vessels sold and NBV as of 31 Dec 18 (included Tender Rigs)*

^ Since listed ^^ JIN - NBV as of 31 Dec 18

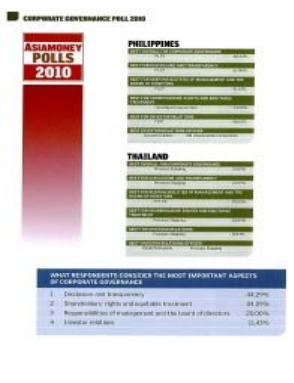
Source: Company Annual Reports

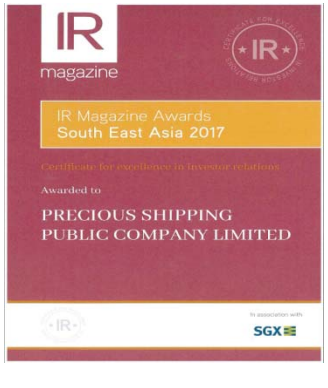
Awards and Achievements

Industry Awards and Honors

- PSL was adjudged as a Finalist for Ship Owner/Operator Award in the 11th Seatrade Maritime Awards Asia 2018.
- GCSA (PSL's wholly owned subsidiary) was adjudged as a Finalist for Ship Manager Award in the 11th Seatrade Maritime Awards Asia 2018.
- PSL was a Finalist of ClassNK Dry Bulk Operator of the Year Award in the Lloyd's List Asia Pacific Awards 2018.
- GCSA (PSL's wholly owned subsidiary) was a Finalist of Ship Manager of the Year Award in the Lloyd's List Asia Pacific Awards 2018.
- PSL was a Finalist of Bulk Ship Operator of the Year Award in the International Bulk Journal's IBJ Awards 2018.
- Apinya Naree, our cement carrier was a Finalist of Bulk Ship of the Year Award in the International Bulk Journal's IBJ Awards 2018.
- PSL was adjudged as the Third Best in "Industrials Sector" category for Investor Relations Awards at the IR Magazine Awards South East Asia 2017.
- PSL won the Public Debt Deal of the Year for 2016 from Marine Money.

Industry Awards and Honors





Industry Awards and Honors

- The PSL Board was among 10 finalists for the Board of the Year award instituted by the Thai Institute of Directors & the Stock Exchange of Thailand, in the category for companies with a market capitalization below Baht 30,000 million.
- PSL was one of the recipients of the Thailand Sustainability Investment Awards at the SET Sustainability Awards 2015 on 16 October 2015.

Industry Awards and Honors

Asiamoney Corporate Governance Poll 2014

- Overall Best Company in Thailand for Corporate Governance
- Best for Disclosure and Transparency in Thailand
- Best for Shareholders' Rights and Equitable Treatment in Thailand
- Best for Responsibilities of Management and the Board of Directors in Thailand
- Best for Investor Relations in Thailand
- Best for Corporate Social Responsibility in Thailand

Corporate Governance

- Good Corporate Governance is a must – treat everyone equally and fairly. CLSA ranked PSL the second best company in Thailand for Corporate Governance for 2008.
- Transparency with good flow of information is vital for Investor confidence. Be consistent with the quality and timeliness of your information release.
- Avoid Financial Engineering of your balance sheet so that even the least savvy investor can understand the financial health and well being of your company.
- Stick to your business model. If you are a shipping company then that's what you should be doing. And in that space stick to what you know best.
- Do not speculate in any fashion or at all. If investors wished to speculate they would go to the casino and not hand you their money to run a shipping company.
- ASIAMONEY adjudged PSL as the Best Company for Overall Corporate Governance, Disclosure and Transparency, Shareholders' rights and equitable treatment, Investor Relations and also Best Investor Relations Officer in Thailand in 2009, 2010 and 2014.
- The Securities Analysts Association of Thailand voted PSL as having the Best CEO in the small mid cap companies category for 2009.

Corporate Governance (cont.)

- In 2011, IR Magazine distinguished PSL as the 'Best investor relations' in the Singapore market by a Thai company.
- PSL Managing Director, Mr. Khalid M Hashim was accorded "The Lifetime Achievement Award for 2012", at The Seatrade Asia Awards Ceremony. PSL was a finalist for The Dry Bulk Operator of the year award at the same function.
- PSL is 2012's Best Ship Operator, Lloyd's List Asia Awards.
- PSL is 2013's Winner of the Maritime Security & Safety Award, Seatrade Asia Awards 2013. At the same ceremony, PSL was a finalist in 'The Wet / Dry Bulk Operator Award' category.
- PSL was awarded Best Investor Relations (10-20 Bn Baht) at the SET 2013 Awards ceremony held on 20th November 2013.
- Conferred the "CSR Recognition" Award in 2013 and 2014, this award for honoring Thai Listed Companies which have shown that they are committed to continuously operating with social responsibility and are good role model of sustainable businesses by Thailand's Corporate Social Responsibility Institute (CSRI) and the SET.
- PSL received a full score on the evaluation of the quality of annual general meetings of shareholders for 6 years: 2012, 2013, 2014, 2015, 2018 and 2019 by the Thai Investors Association.

Corporate Governance (cont.)

- Certified as a member of the Private Sector Collective Action Against Corruption (CAC) since August 2019.
- Classified as one of the listed companies with “Excellent” Corporate Governance conducted by IOD & National CG Committee for nine consecutive years from 2010 to 2018.
- Also, for the years 2012 - 2018, PSL has consistently been ranked among the “Top Quartile” of listed companies in terms of Corporate Governance in PSL’s respective market cap categories over this period.
- Classified as one of the top 50 publicly listed Companies in Thailand from ASEAN Corporate Governance Scorecard guidelines for 2013/2014 and 2015.
- Conferred the “Thailand Sustainability Investment” Award in 2015 at the SET Sustainability Awards 2015.
- Precious Shipping PCL awarded with trophy at IRMA South East Asia 2015 award ceremony for "Best in Sector: Industrials" category in Investor Relations.

Marine Money International Rankings 2013-2018

Particulars	1st Rank 2018	PSL Rank 2018	1st Rank 2017	PSL Rank 2017	1st Rank 2016	PSL Rank 2016	1st Rank 2015	PSL Rank 2015	1st Rank 2014	PSL Rank 2014	1st Rank 2013	PSL Rank 2013
	SITC	16	SITC	32	Golar LNG Partners	62	Matson	74	Golar LNG Partners	55	Safe Bulkers	52
Total Return to Shareholders (TRS)	14	37	8	28	4	10	18	55	26	66	5	36
Total Assets Turnover Rate	8	63	8	74	42	79	1	68	39	49	49	58
Profit Margin	67	22	63	27	5	50	62	59	5	33	10	36
Return on Equity (ROE)	3	36	3	57	2	79	6	79	1	58	8	37
Return on Assets (ROA)	1	23	2	40	2	76	6	80	2	55	4	57
Price / Book Value	1	16	2	14	4	25	1	61	3	46	16	58

PSL Rank in 2018:

- **16th of 97 Rank in Overall Performance**
- **22nd of 97 Rank in Profit Margin**

Source: Marine Money

Ranking 2016-2018 – Dry Bulk Sector

Particulars	1st Rank result in Dry Bulk Sector 2018	Pangaea ranking in Dry Bulk Sector 2018	PSL Rank in Dry Bulk Sector 2018	PSL result 2018	1st Rank in Dry Bulk Sector 2017	PSL Rank in Dry Bulk Sector 2017	1st Rank in Dry Bulk Sector 2016	PSL Rank in Dry Bulk Sector 2016
	Pangaea Logistics Solutions		**2**		**Pangaea Logistics Solutions**	**3**	**Pangaea Logistics Solutions**	**6**
Total Return to Shareholders (TRS)	-17.66%	9	8	-17.62%	12	10	5	3
Total Assets Turnover Rate	0.85	1	17	0.17	1	13	1	11
Profit Margin	14.61%	18	4	49.33%	17	4	10	6
Return on Equity (ROE)	10.81%	1	9	3.65%	1	8	1	13
Return on Assets (ROA)	8.42%	1	7	4.40%	1	3	1	11
Price / Book Value	0.57	9	2	1.06	7	2	4	2

- **PSL was ranked 2nd of 19 Listed Dry Bulk Companies in Marine Money International Rankings for 2018**
- **19 Dry Bulk Companies in Marine Money International Rankings for 2018 and 2016**
- **18 Dry Bulk Companies in Marine Money International Rankings for 2017**

Source: Marine Money

Top 10 Ranked Companies during 2005 - 2012

According to Marine Money June/July 2013, PSL was ranked in Top 10 Companies based on performance since year 2005.

CHAMPAGNE TOAST!

Quote from Marine Money

“ Let’s celebrate for a minute the top performers from Marine Money’s Top Ranked companies over the past eight years. It is, in fact, an eclectic group, proving that management, strategic focus, financial structure and a little bit of sectoral good fortune is critical.

The following ranked the highest based on their annual placement: Norden, Frontline Ltd, SFI, CMB, Precious Shipping, U-Ming, Grindrod, Safe Bulkers, Kirby Corp, and Navios Maritime.

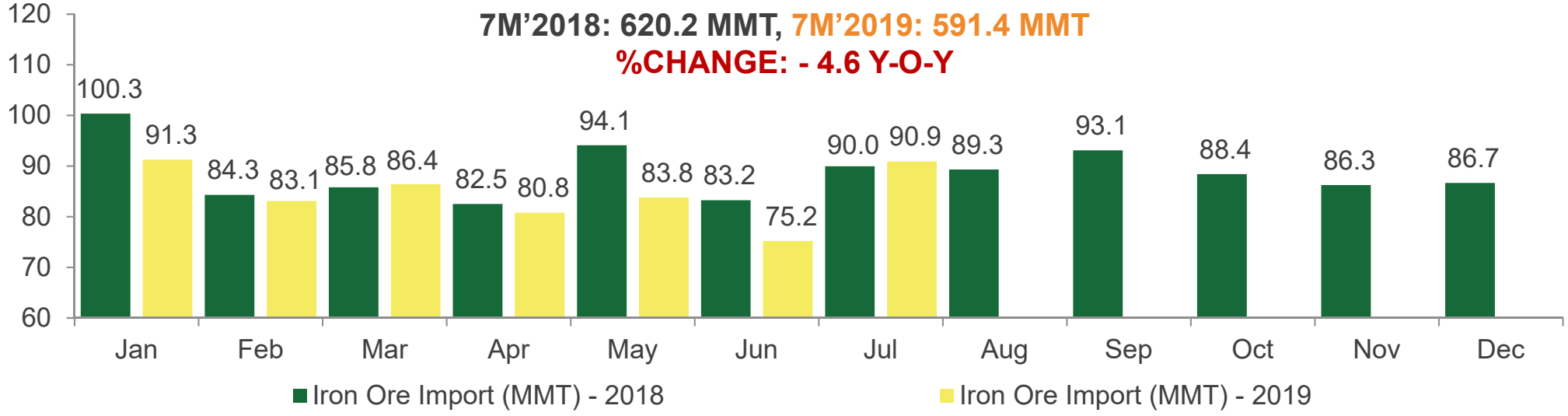
The rankings weigh Total Return to Shareholders, Turnover, Profit, RoE, RoA and Price/Book for a final Ranking and so, are a broad based spectrum of results. That some seemingly pure commodity companies are at the top over time is a testament to management’s skills through a cycle and worthy of note.”

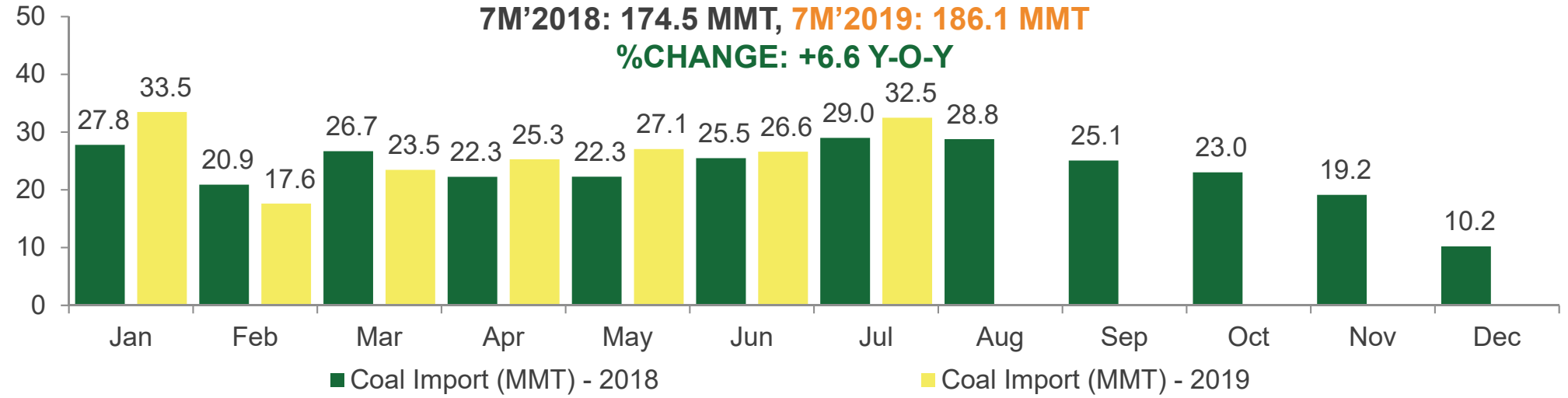
Shareholder's returns

Value of Investment to Shareholders

Investment (Beginning of Year)	1993(IPO)	1995	2000	2005	2010	2015
Cost of Investment (THB)	1,000	1,000	1,000	1,000	1,000	1,000
Share price (THB)	85.00	302.00	10.00	39.75	18.60	13.60
Shares Obtained (Nos.)	11.76	3.31	100.00	25.16	53.76	73.53
Dividends Received (THB)	7,235.29	2,003.31	29,500.00	646.54	130.11	-
Paid for Rights (THB)	-1,058.83	-298.01	-4,000.00	-100.62	-107.52	-147.06
No. of Shares as at 30.06.2019	705.89	198.68	3,000.00	75.47	80.64	110.29
Value as at 30.06.2019 (THB)	11,894	3,315	49,800	1,157	676	746

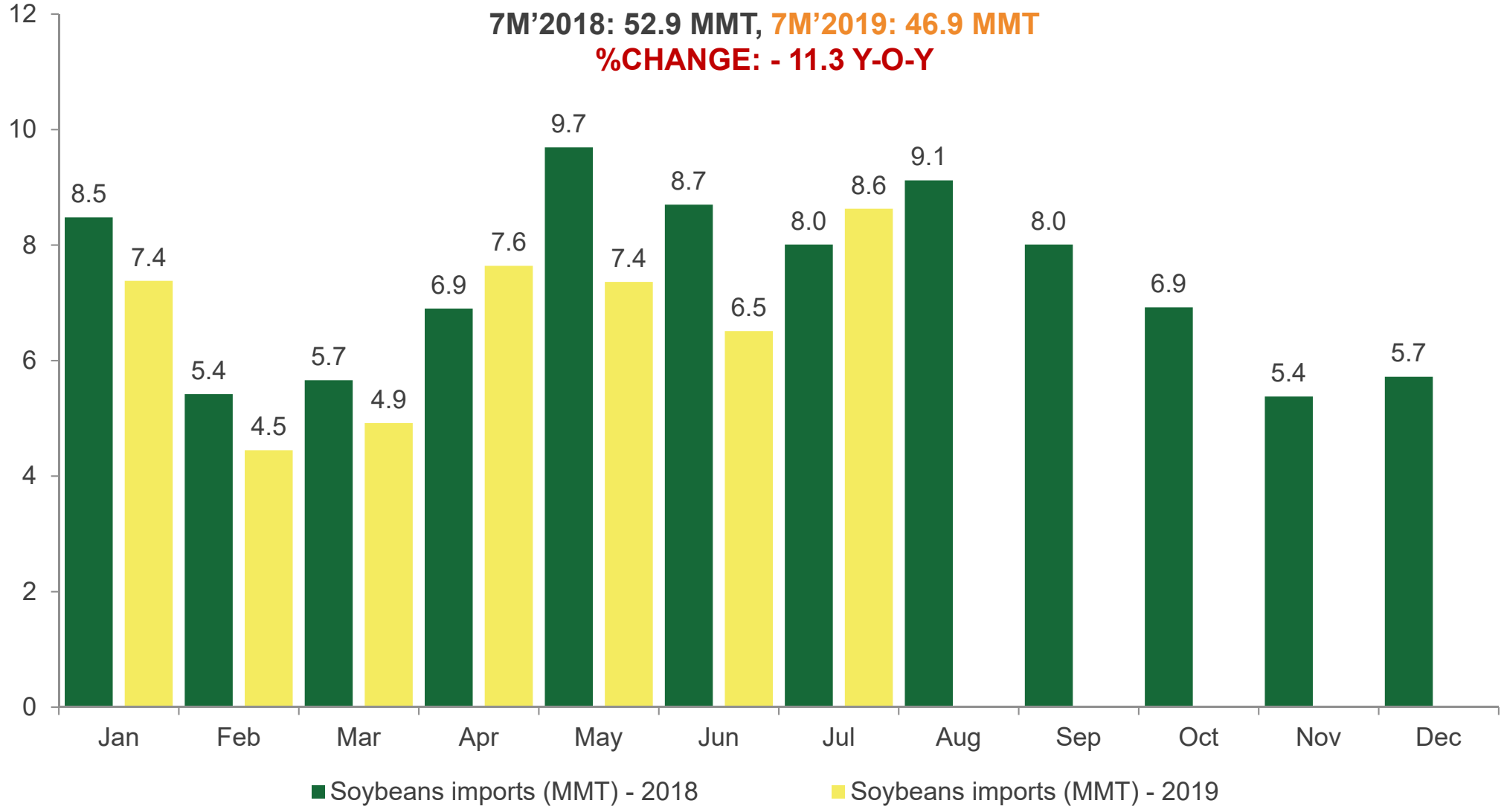
Chinese Iron Ore and Coal imports





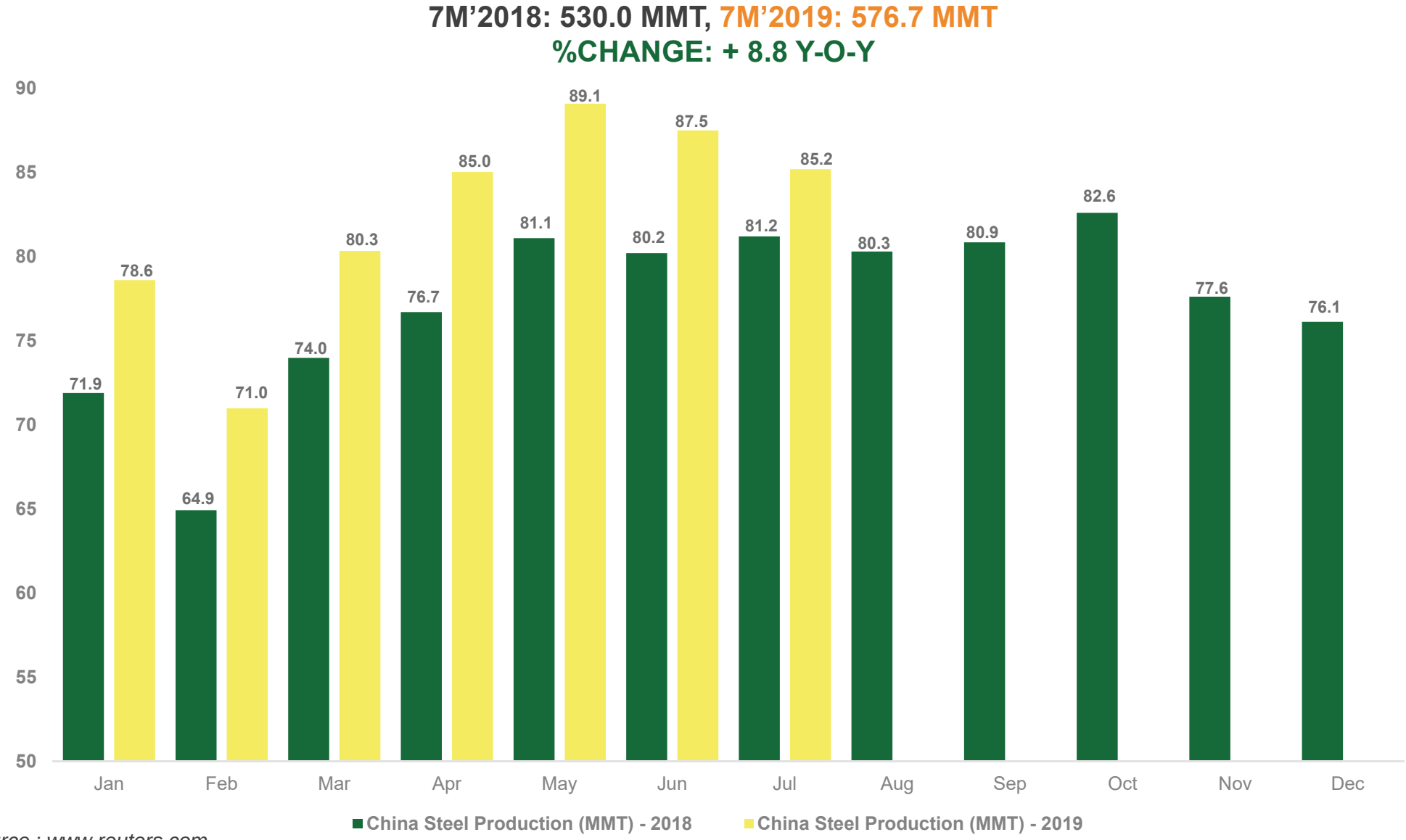
Source : www.reuters.com, www.agriculture.com

Chinese Soybean imports



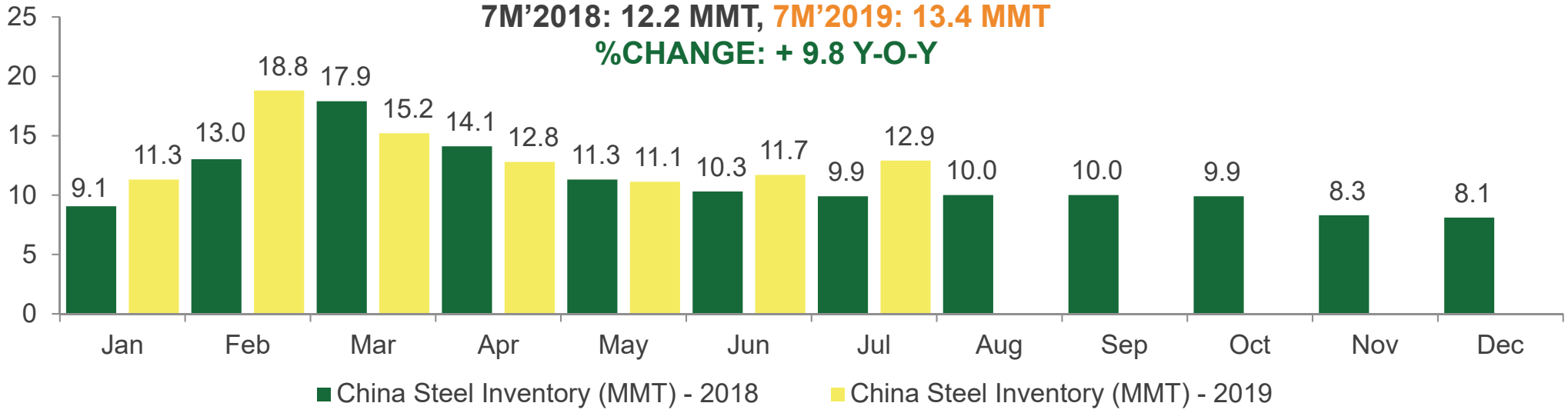
Source : www.reuters.com, www.agriculture.com

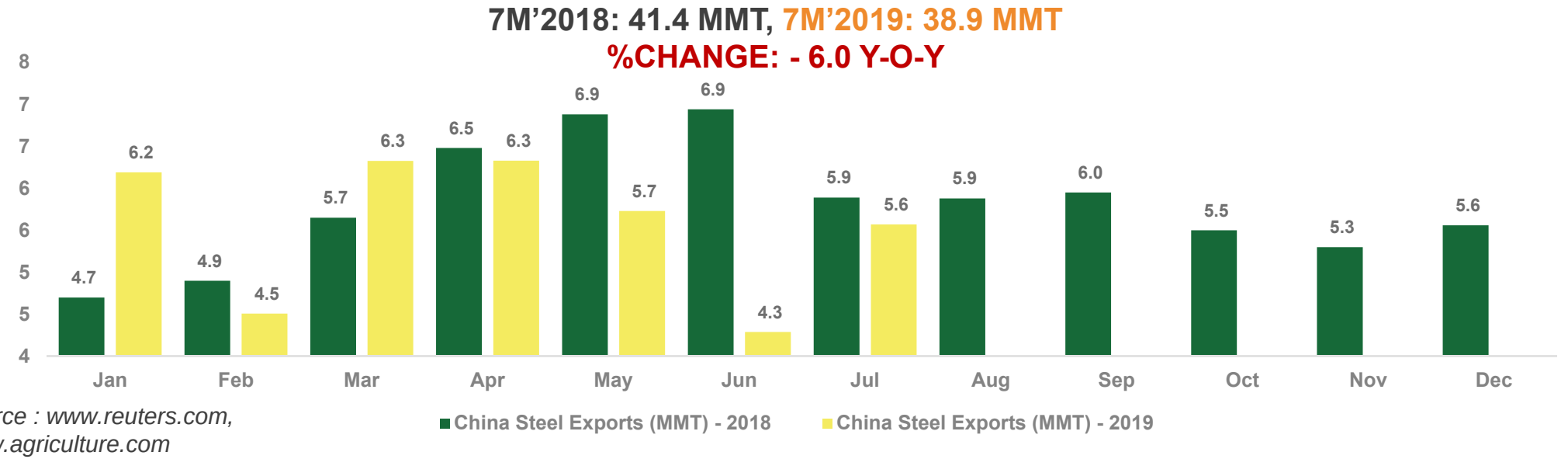
Chinese Steel Production



Source : www.reuters.com, www.agriculture.com

Chinese Steel Inventory and Exports

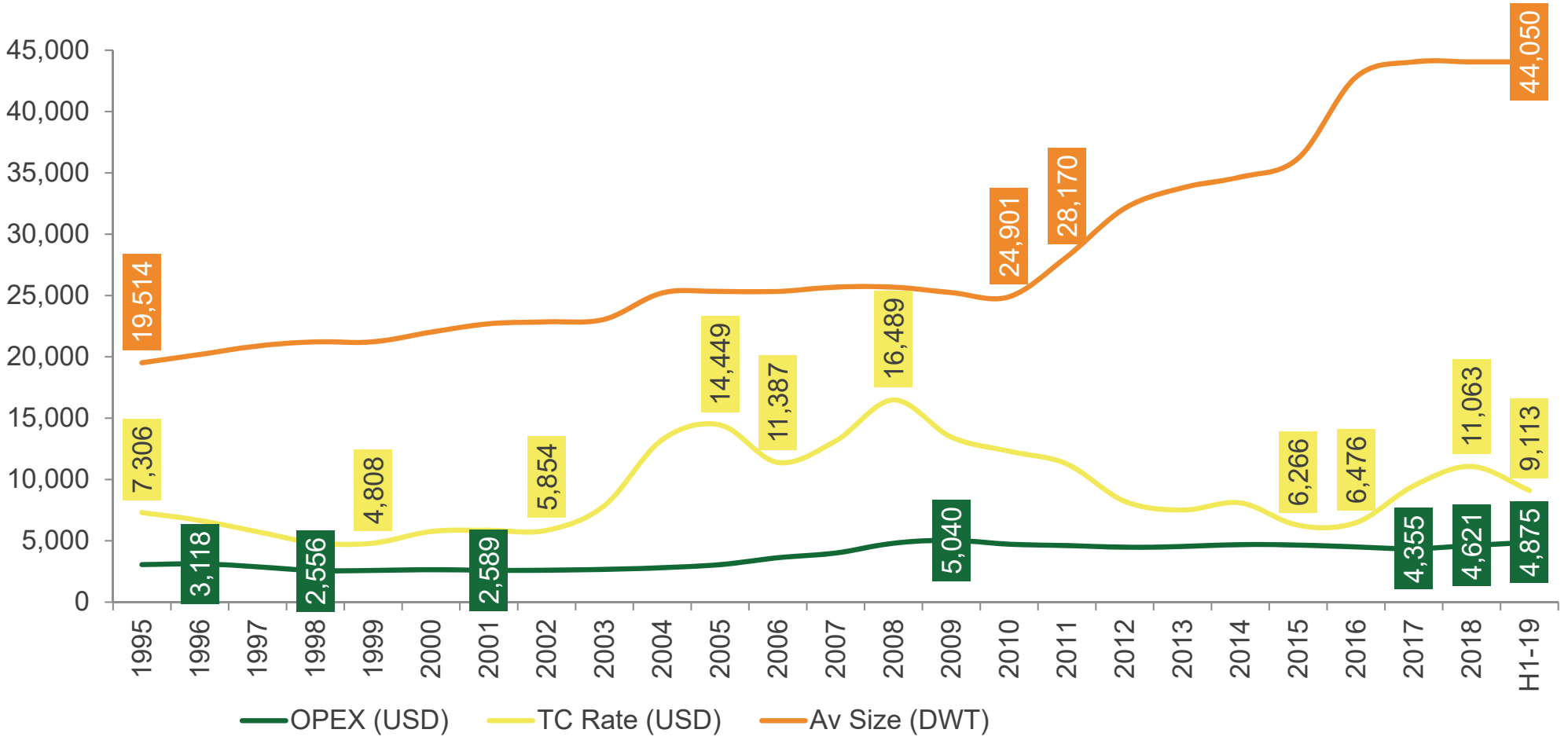




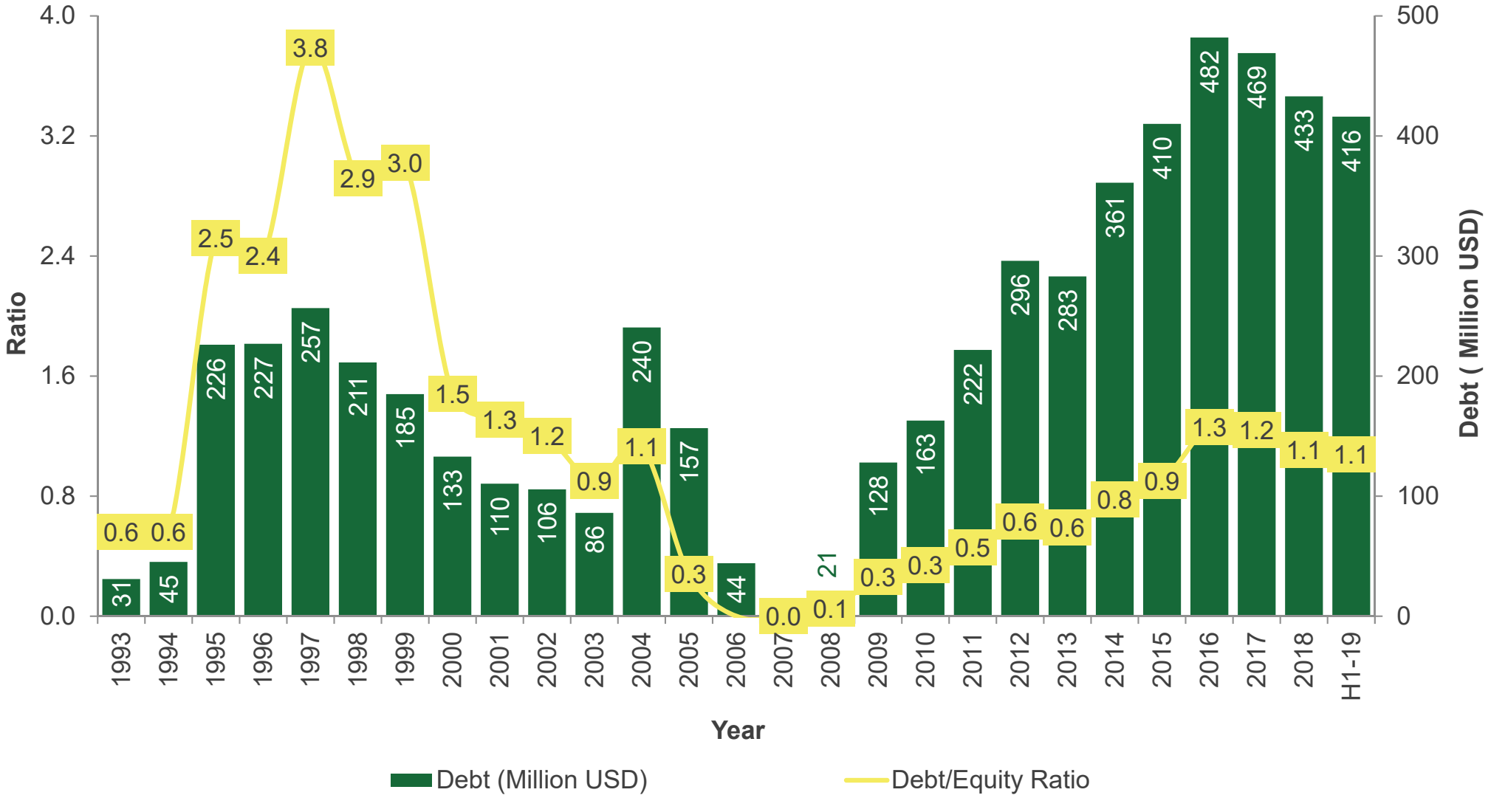
Source : www.reuters.com, www.agriculture.com

Average OPEX / TC Rates (1995 – H1'2019)

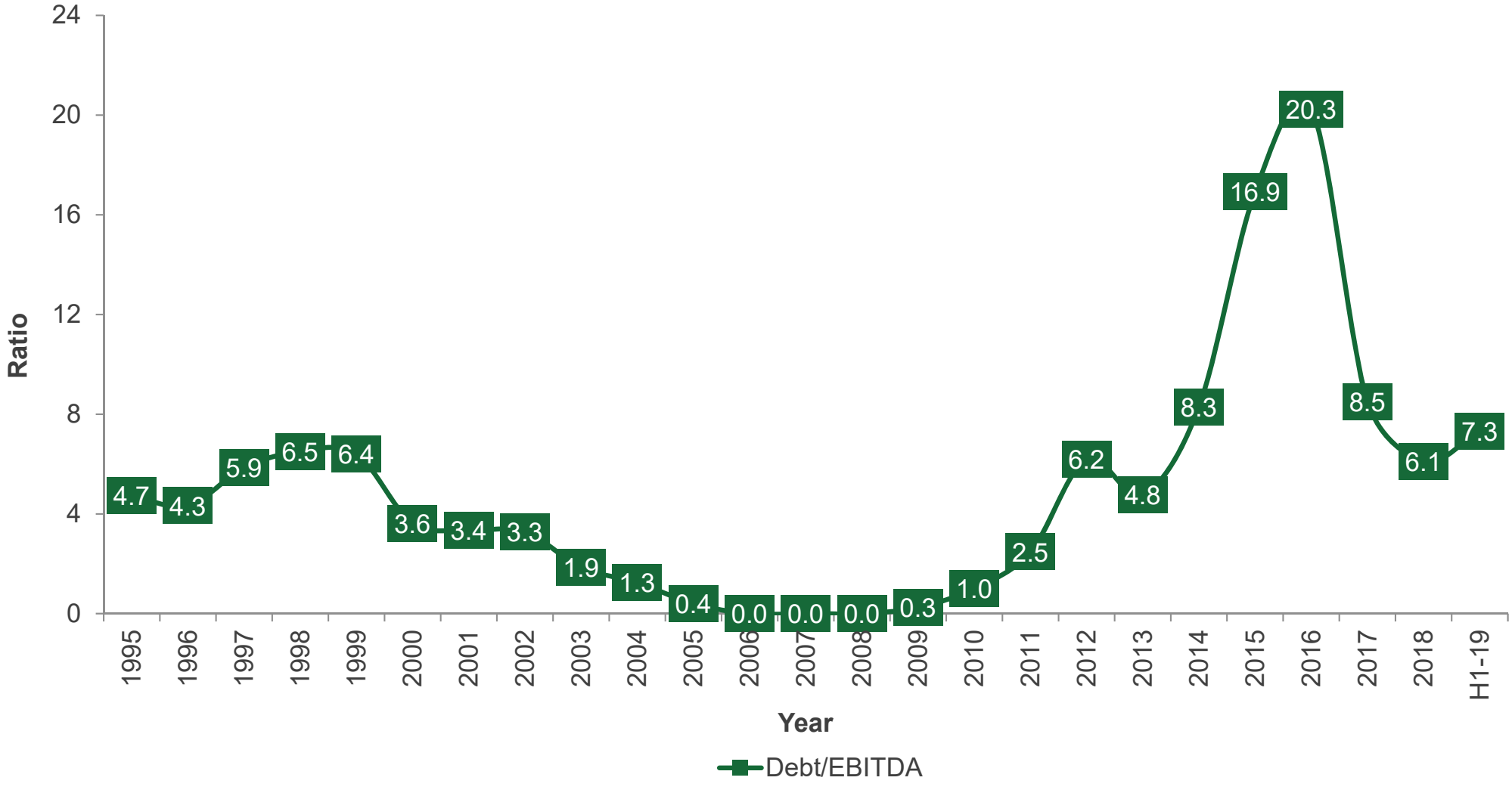
Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	H1-19
Avg Age	15.97	16.18	14.24	14.59	15.59	15.57	15.65	15.82	16.60	17.35	18.98	19.98	19.59	20.59	17.08	15.43	14.20	11.36	11.35	10.45	9.78	5.83	6.28	7.28	7.28



Debt & Debt / Equity Ratio (upto 1H2019)

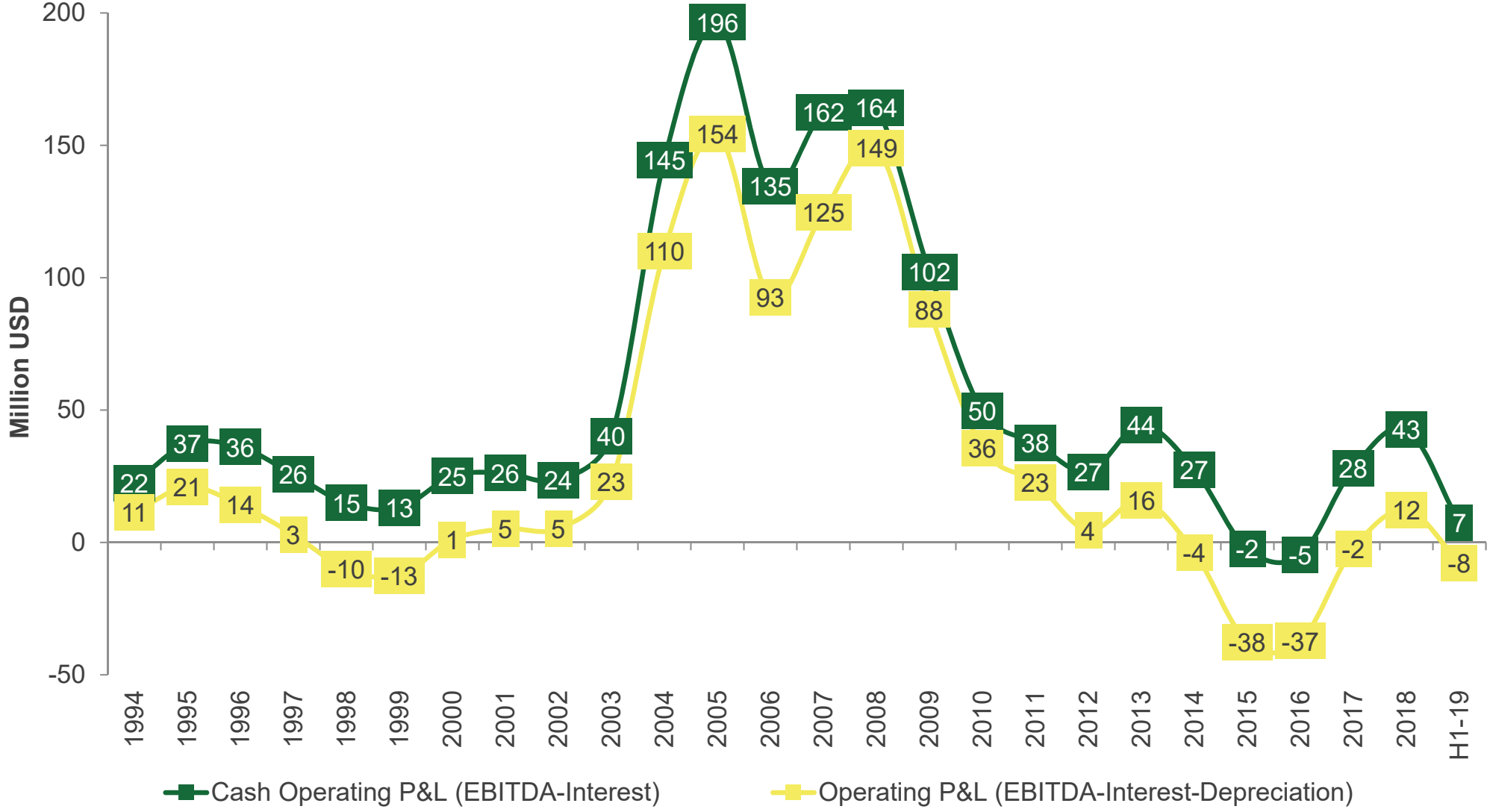


Debt / EBITDA (upto 1H2019)

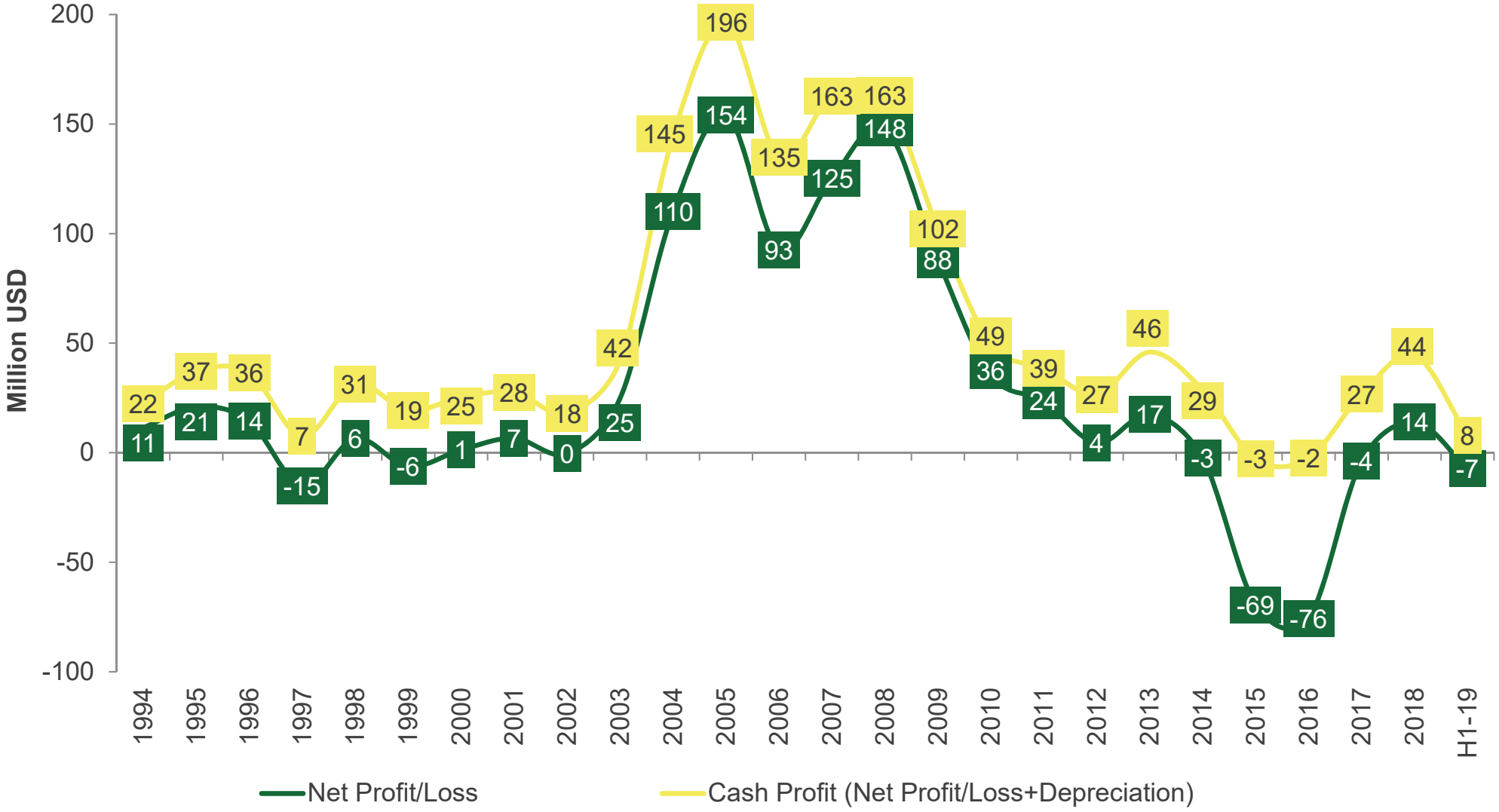


* Calculated per Debt Facility Agreements

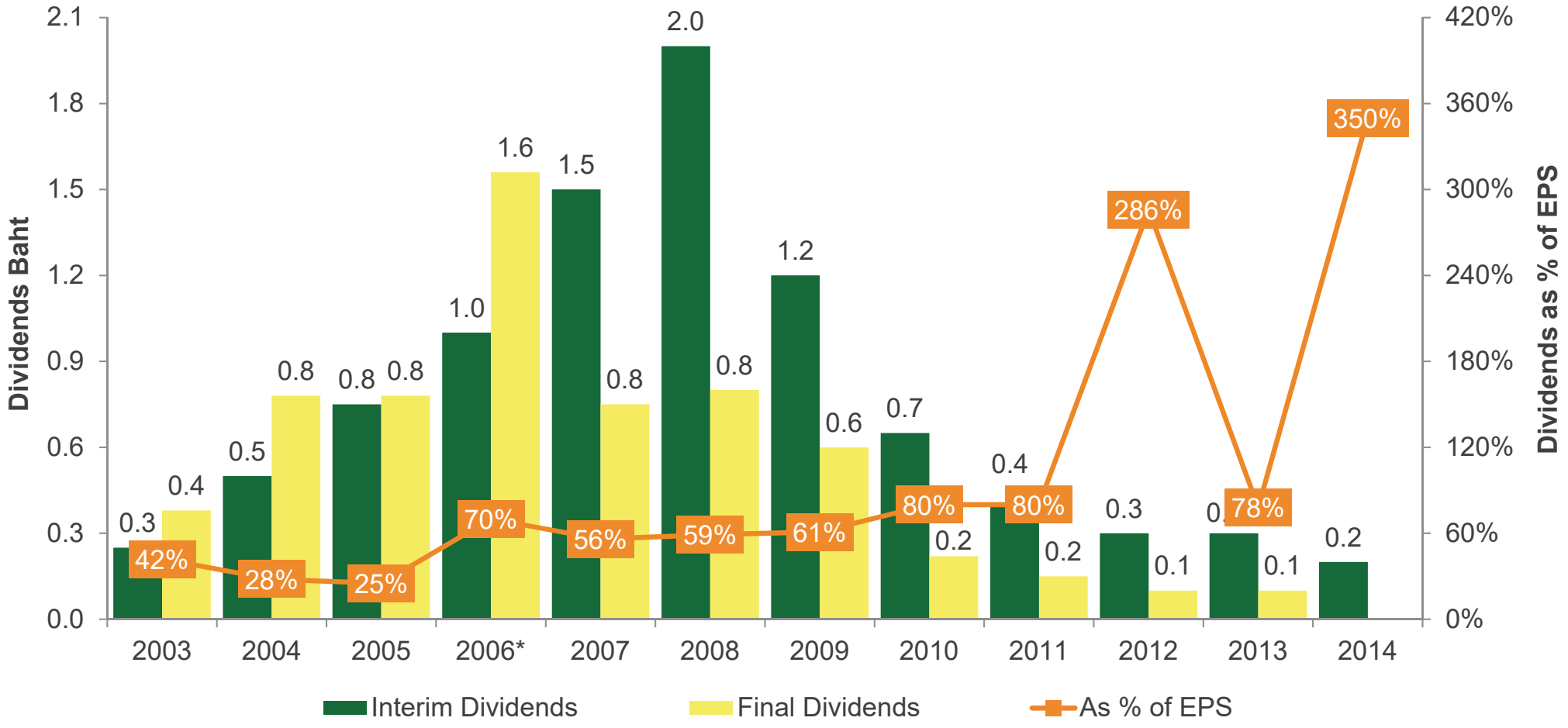
Cash Operating Profit / Operating Profit (upto 1H2019)



Net Profit / Cash Profit



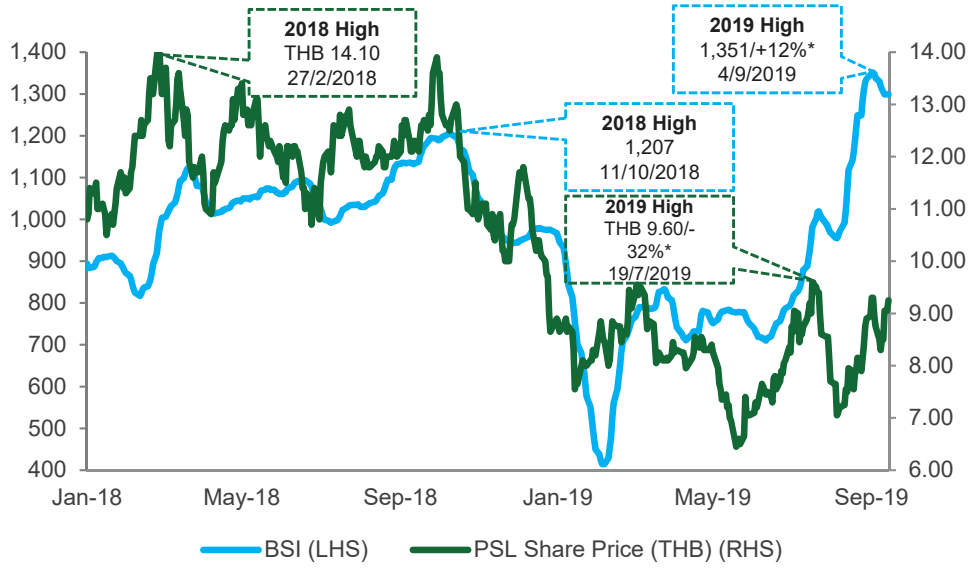
Dividends



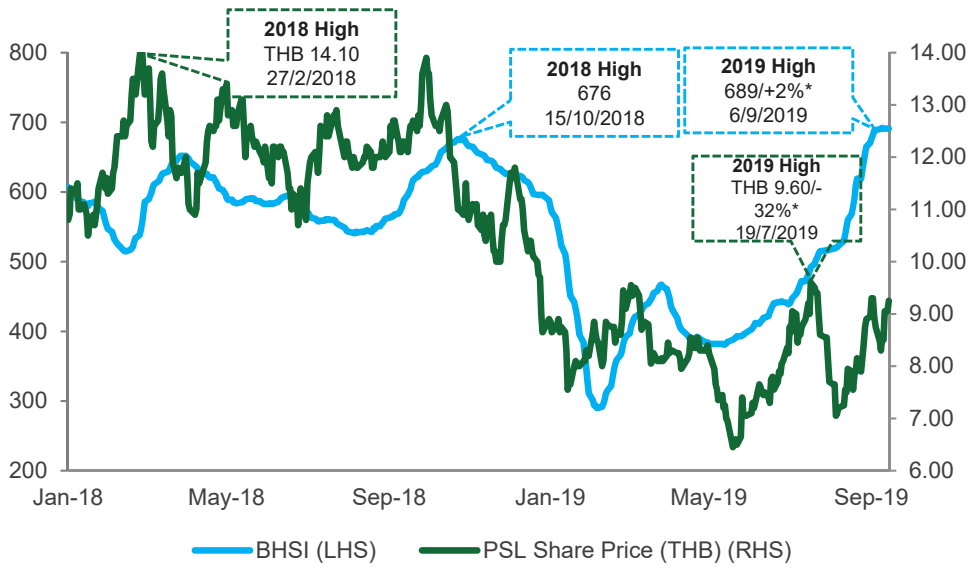
Dividend Policy: not less than 25% of net profit

* 2006 Final Dividend includes 1:1 bonus share at par
All dividends shown adjusted for 1:1 bonus shares at par
No Final Dividends for 2014 and No Dividends for 2015 - H1'2019

PSL Share Price Vs BSI/BHSI: 1 Jan 2018 – 17 Sep 2019



Note: * Indicates the % change between the 2018 and 2019 Highs
Source: Clarksons As on 17 Sep 2019



Note: * Indicates the % change between the 2018 and 2019 Highs
Source: Clarksons As on 17 Sep 2019