

Ship Scrapping - Market Pressures

IMSF Oslo

Foteini Kanellopoulou, Senior Analyst

23 May 2012

www.clarksons.com



Disclaimer

The material and the information contained herein (together, the "**Information**") are provided by H. Clarkson & Co. Ltd ("**Clarksons**") for general information purposes.

The Information is drawn from Clarksons' database and other sources. Clarksons advises that: (i) any Information extracted from Clarksons' database is derived from estimates or subjective judgments; (ii) any Information extracted from the databases of other maritime data collection agencies may differ from the Information extracted from Clarksons' database; (iii) whilst Clarksons has taken reasonable care in the compilation of the Information and believes it to be accurate and correct, data compilation is subject to limited audit and validation procedures and may accordingly contain errors; (iv) the provision of the Information does not obviate any need to make appropriate further enquiries; (v) the provision of the Information is not an endorsement of any commercial policies and/or any conclusions by Clarksons and its connected persons, and is not intended to recommend any decision by the recipient; (vi) shipping is a variable and cyclical business and any forecasting concerning it cannot be very accurate. Clarksons and its connected persons make no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability, suitability or availability with respect to the Information. Any reliance placed on such Information is therefore strictly at the recipient's own risk.

This Information is confidential and is solely for the internal use of the recipient. Neither the whole nor any part of the Information may be disclosed to, or used or relied upon by, any other person or used for any other purpose without the prior written consent of Clarksons. Especially, the information is not to be used in any document for the purposes of raising finance whether by way of debt or equity. All intellectual property rights are fully reserved.

To the extent permitted by law, Clarksons and its connected persons shall not be liable to the recipient or any third party for any loss or damage of any kind arising out of or in connection with the Information, including without limitation any direct, special, indirect or consequential damages (eg damage for loss of business or loss of profits) whether caused by tort (including negligence), breach of contract or otherwise, even if foreseeable. These exclusions do not apply to (i) death or personal injury caused by the negligence of Clarksons and its connected persons or (ii) the liability of Clarksons and its connected persons for fraudulent misrepresentation.

In this disclaimer 'connected persons' means, in relation to Clarksons, its ultimate holding company, the shareholders, subsidiaries and subsidiary undertakings of its ultimate holding company and the respective directors, officers, employees and agents of each of them.

This disclaimer shall be governed by and construed in accordance with English law.

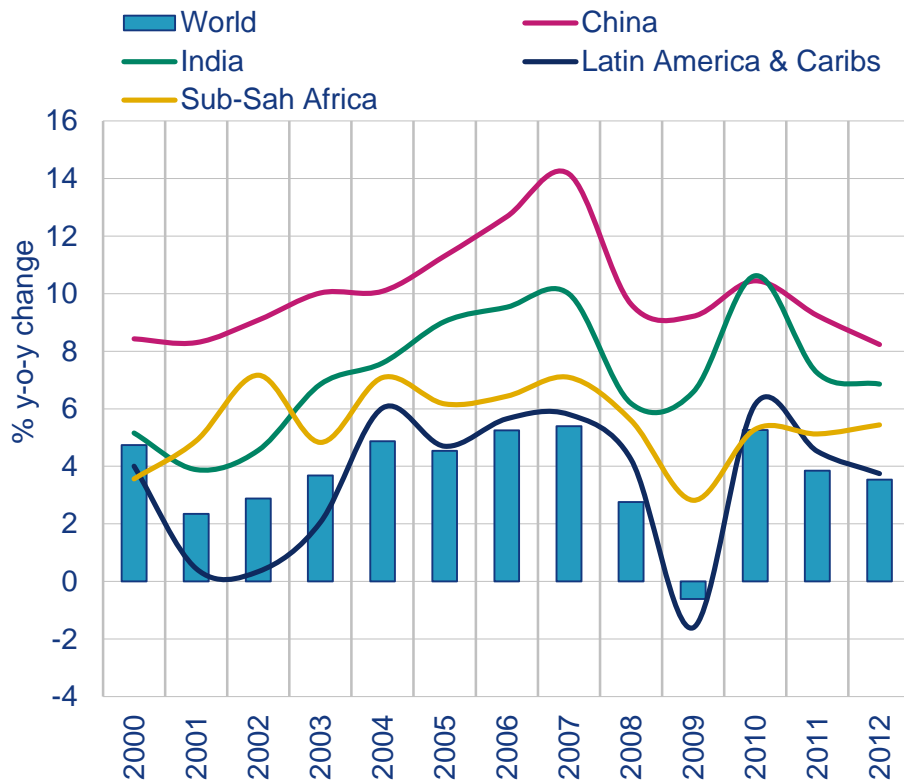
H. CLARKSON & CO. LTD, ST. MAGNUS HOUSE, 3 LOWER THAMES STREET, LONDON, EC3R 6HE

TELEPHONE +44 (0) 207-334-5420

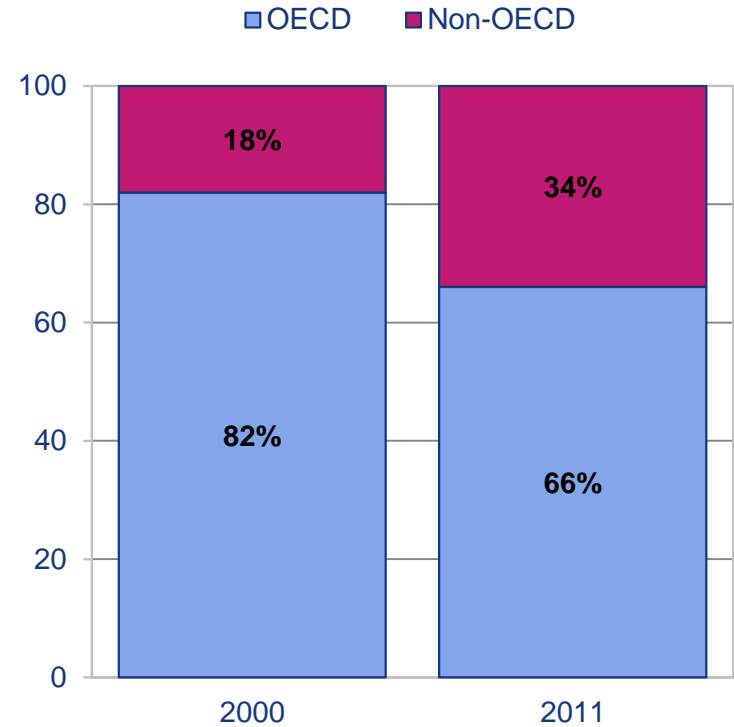


Global Economic Outlook

GDP Growth



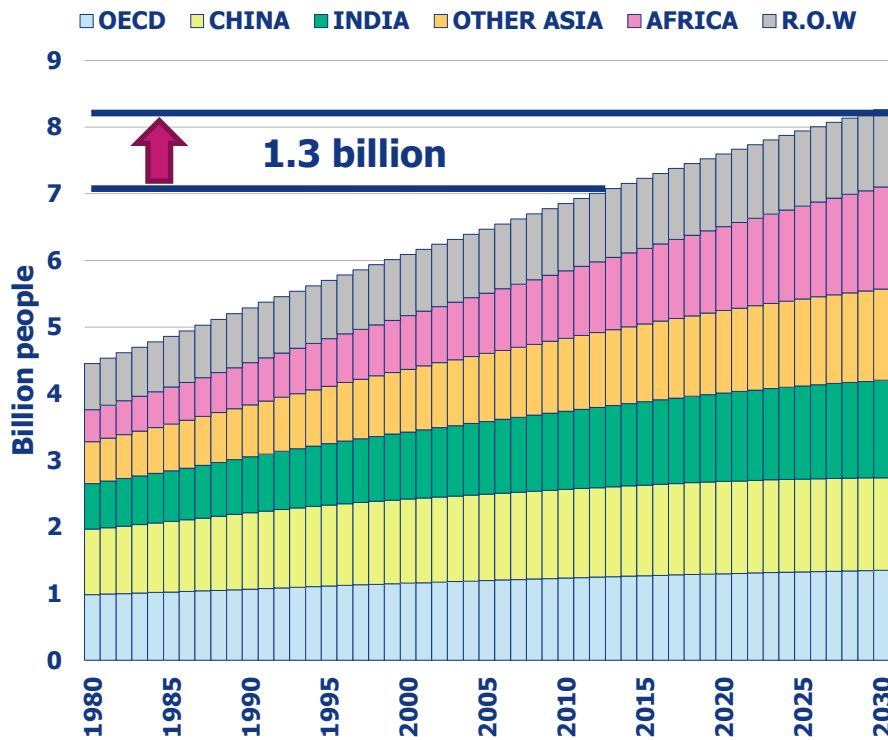
Distribution of World Economic Growth



Data source: IMF

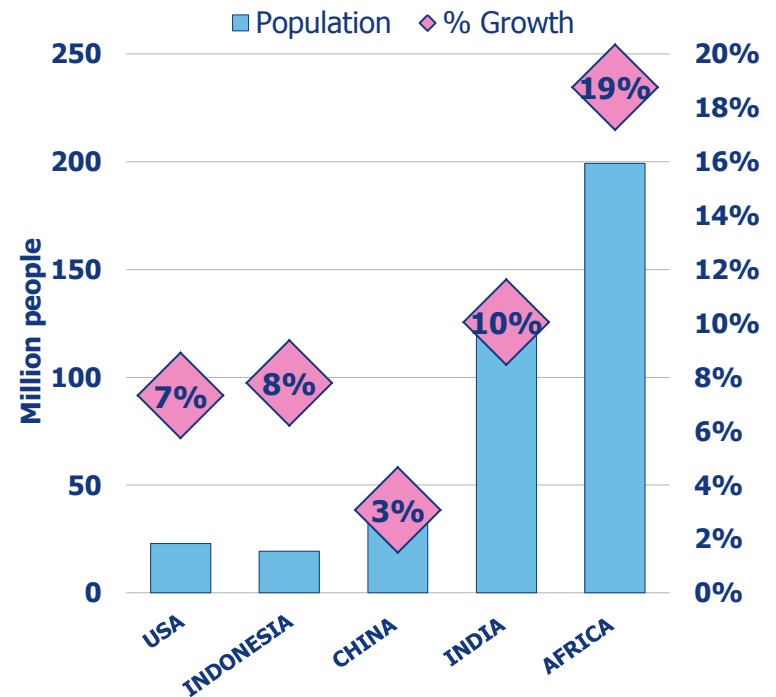
Growing World Population

Impact on Energy, Food & Transportation



Data source: US Census Bureau

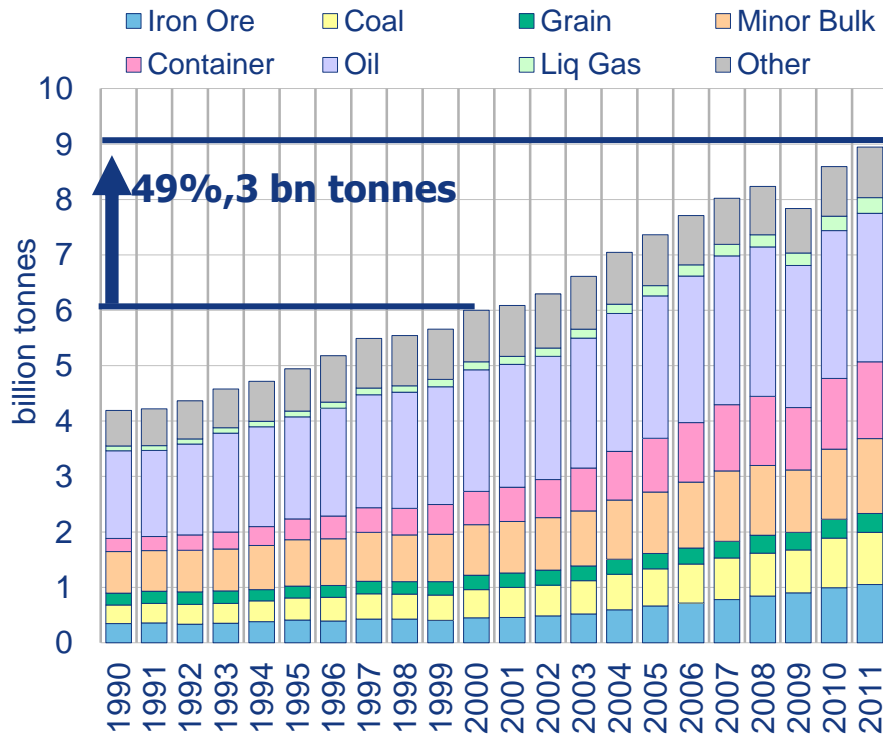
Population Dynamics 2012-2020



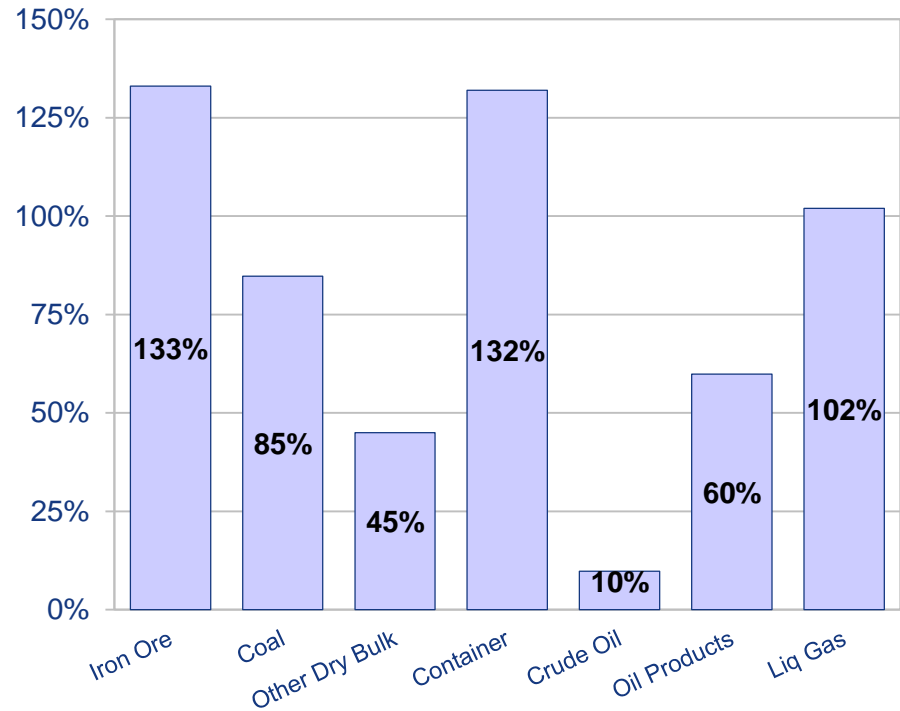


Growing World Trade

Total Seaborne Trade

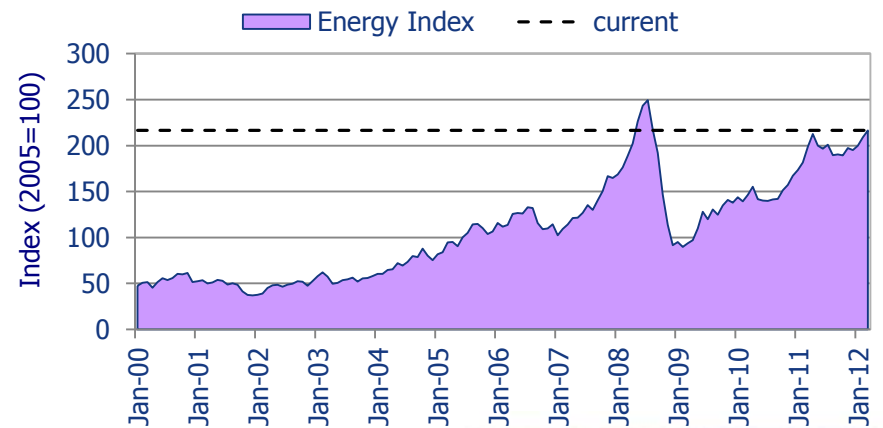
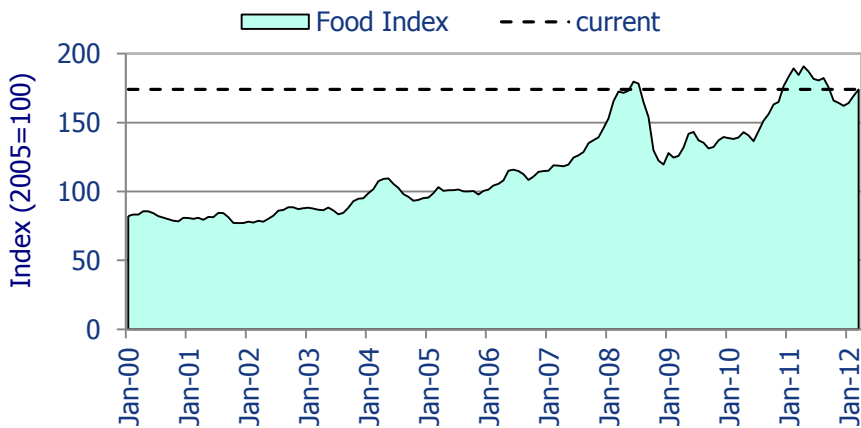
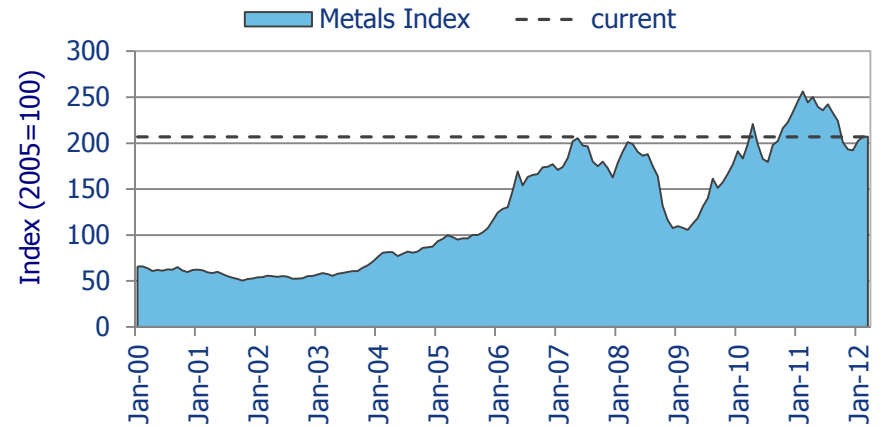
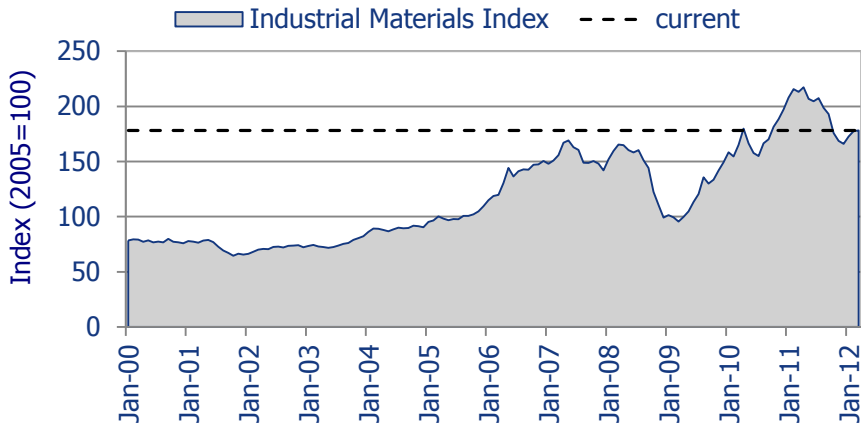


% Trade Growth 2000-11



Data Source: Clarksons

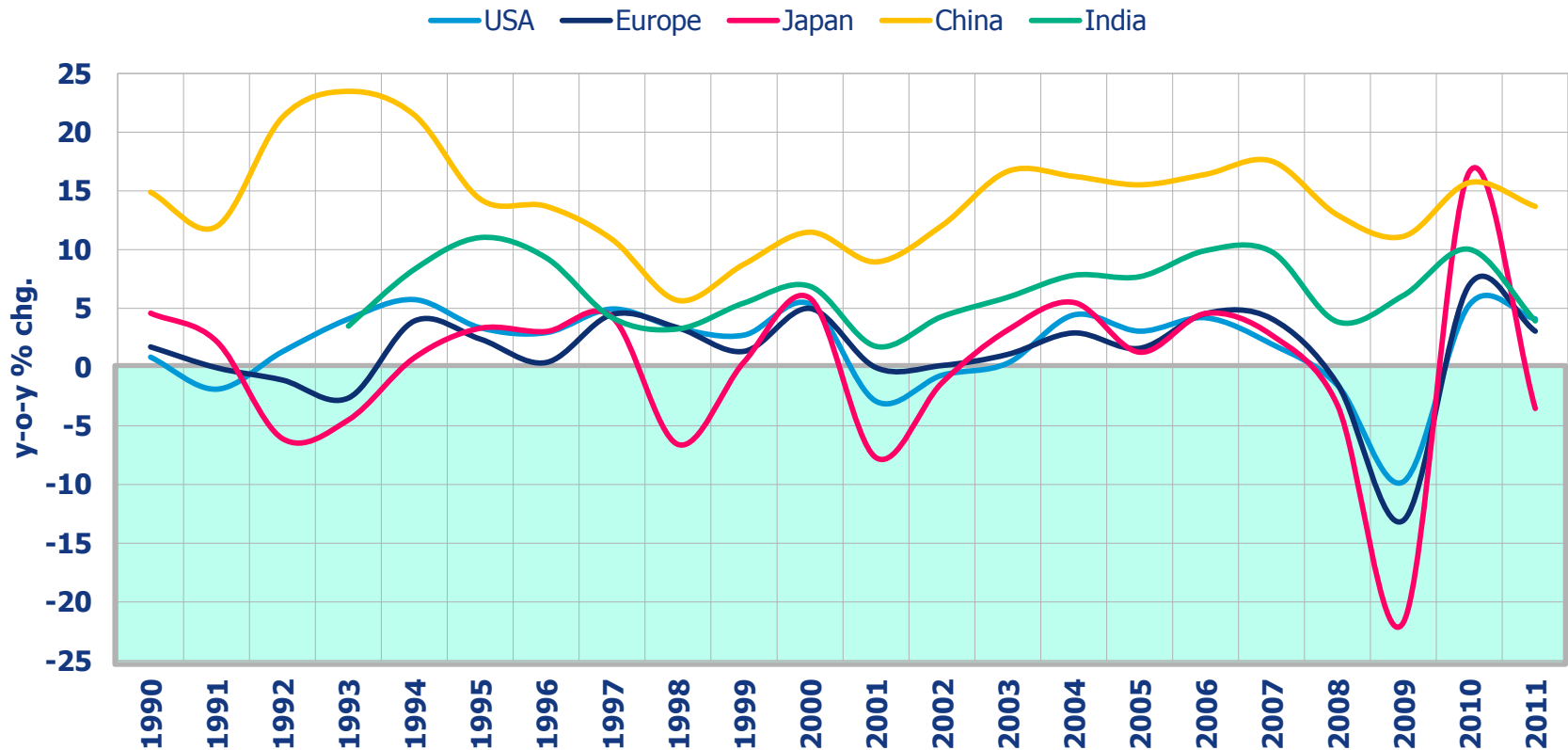
Commodity Price Indices



Data source: IMF



Industrial Production – Key Economies



Data source: Clarksons

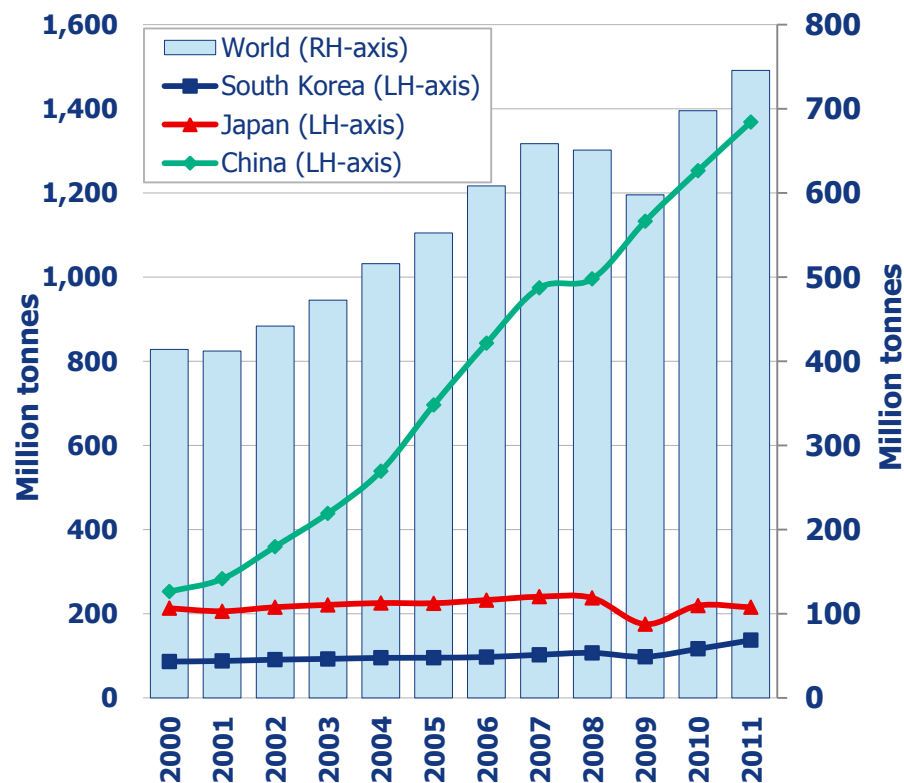
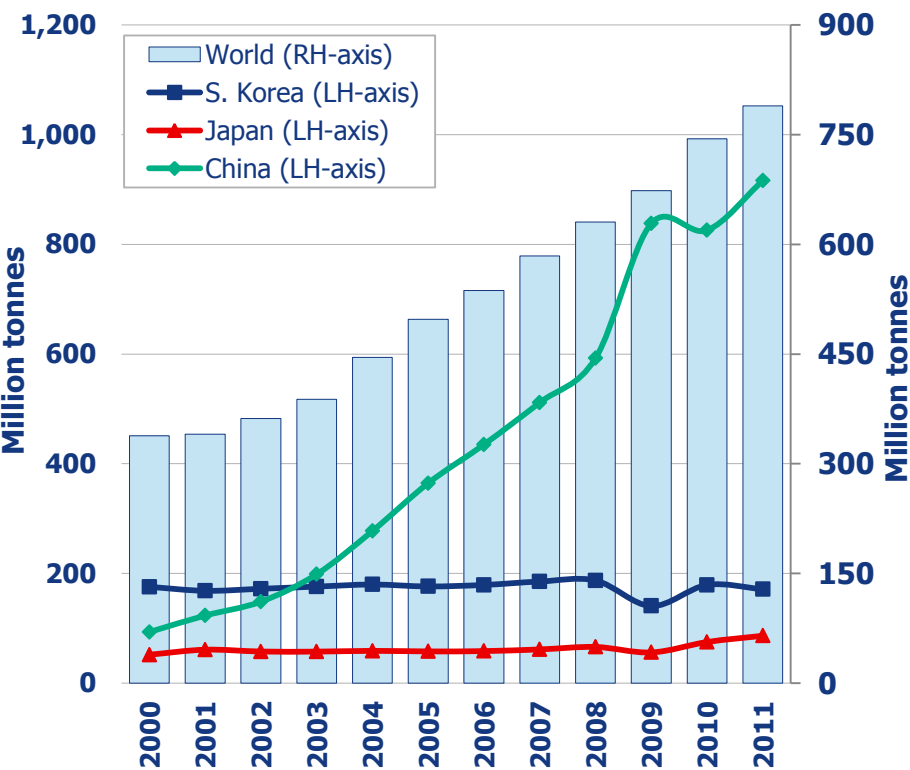


CLARKSONS

Iron Ore Imports & Steel Production Levels

Iron Ore Imports

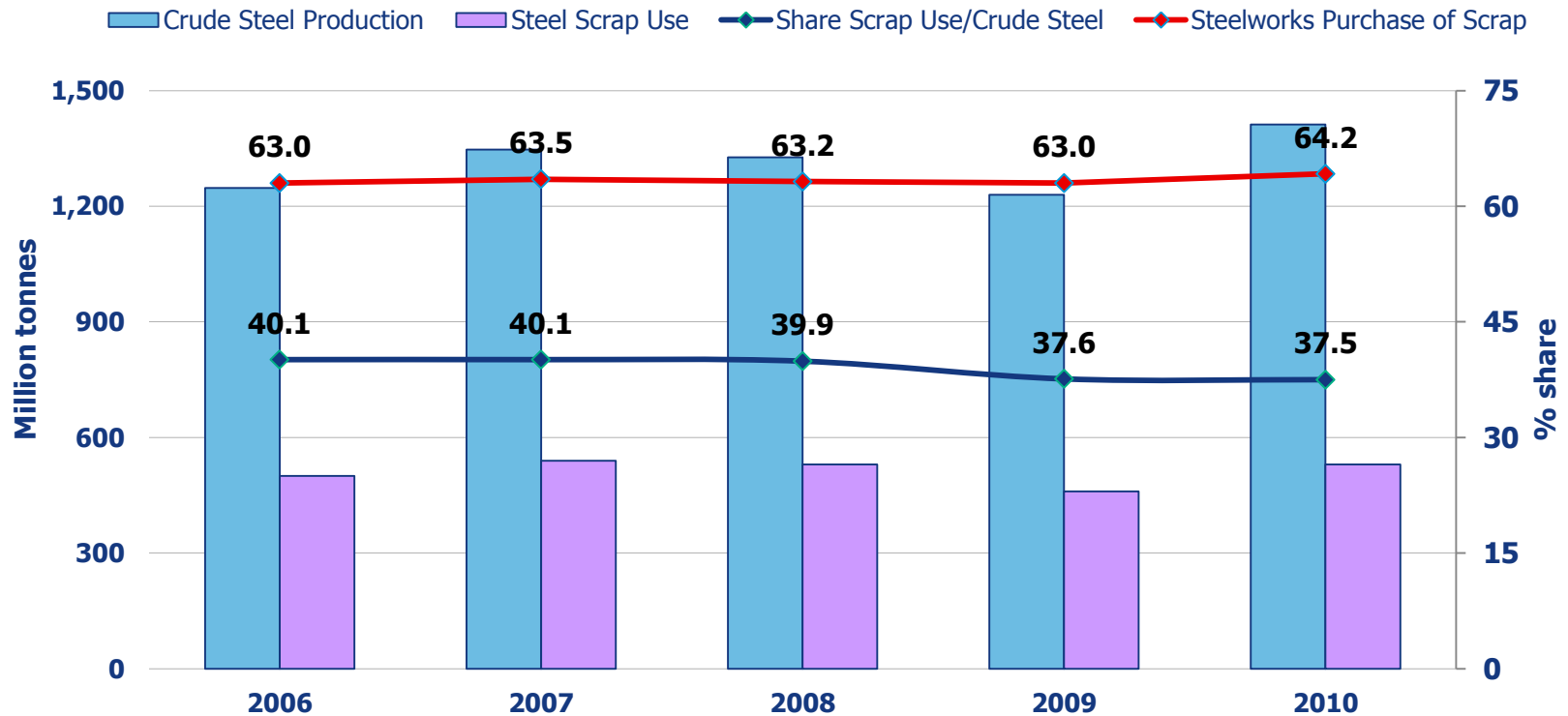
Steel Production



Data source: World Steel Association/Clarksons



World Steel Scrap for Steelmaking

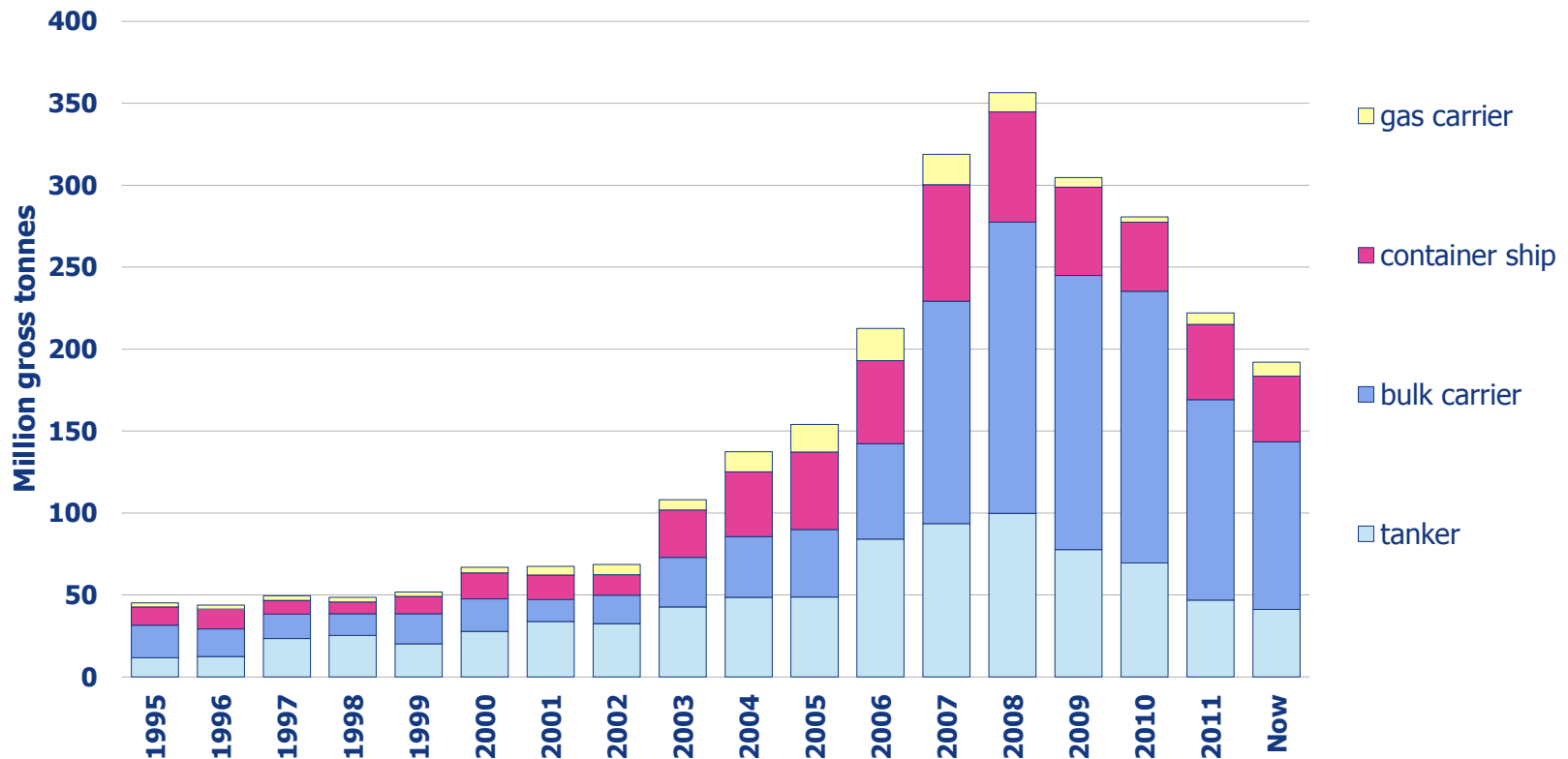


Data source: BIR/Clarksons

23 May 2012

www.clarksons.com

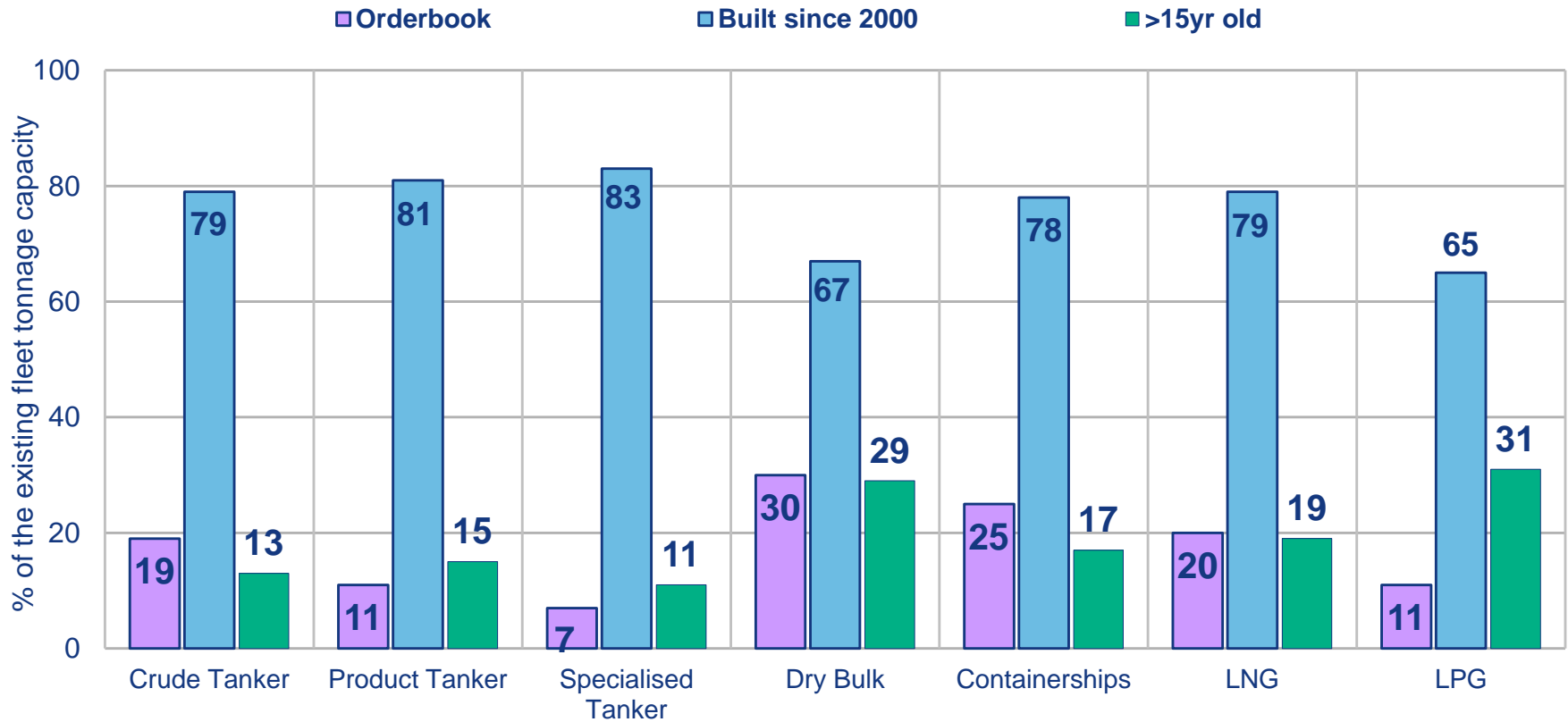
All Types* Orderbook Development (>999GT)



Data source: Clarksons

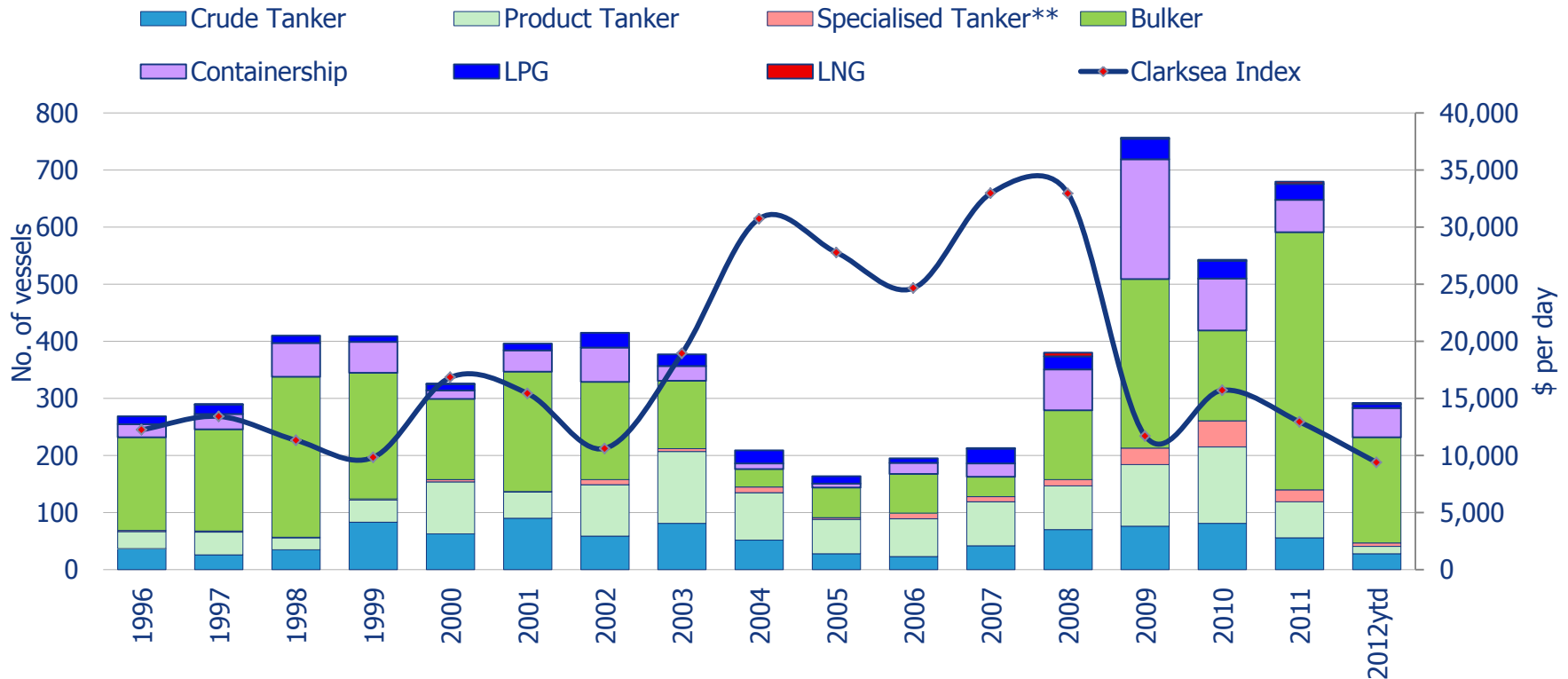


Main Sectors Summary Fleet Components



Data source: Clarksons

Fleet Removals* vs. Clarksea Index



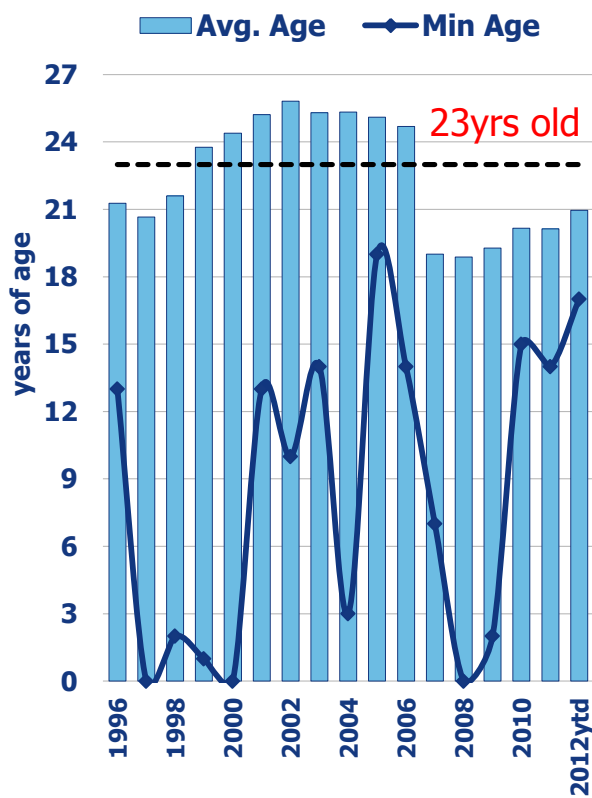
Note: *includes demolitions, losses & removals
**** excludes those in product tanker fleet analysis**

Data source: Clarksons

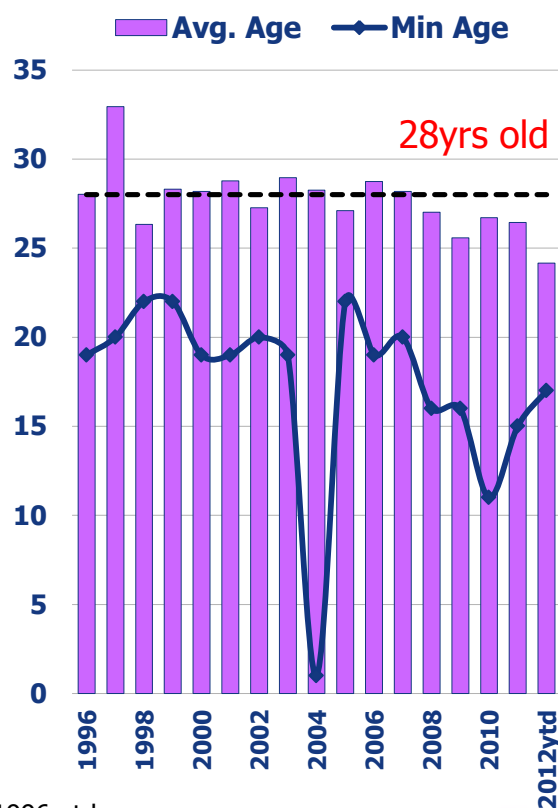


Removed Fleet Age Profile Evolvement - Tankers

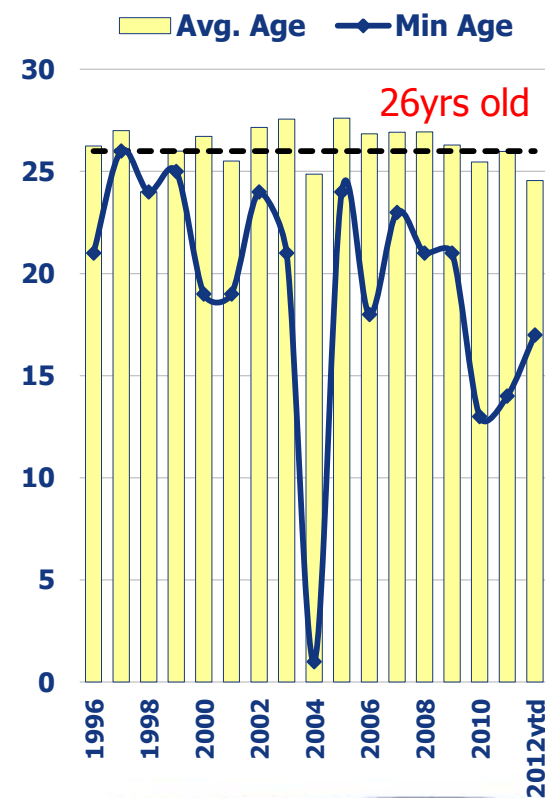
Crude Tanker



Product Tanker



Specialised Tanker

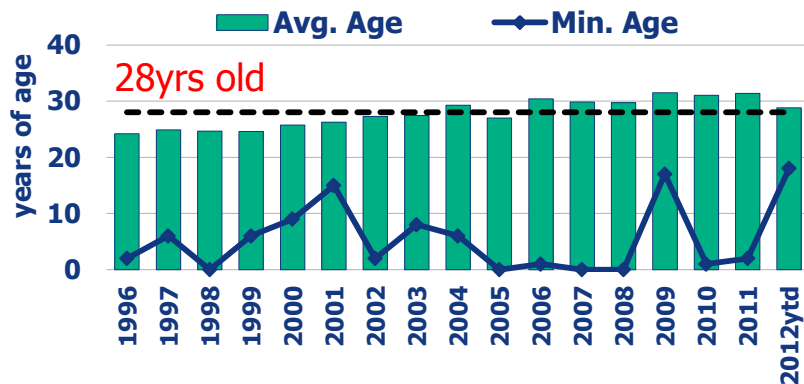


Note: Dashed line represents the average age 1996-ytd

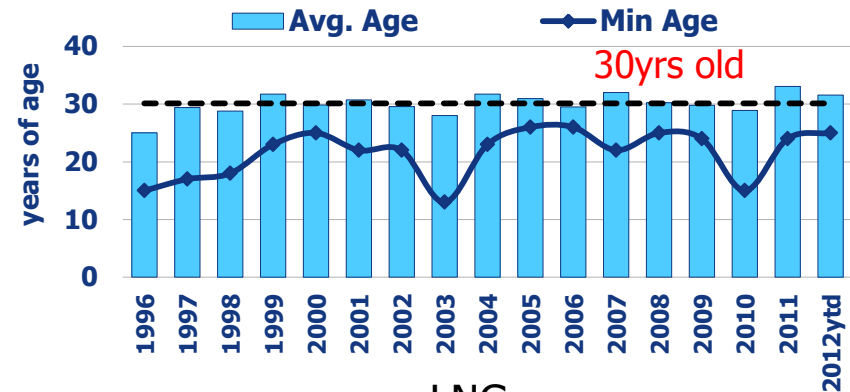
Data source: Clarksons

Removed Fleet Age Profile Evolvement - Dry & Gas

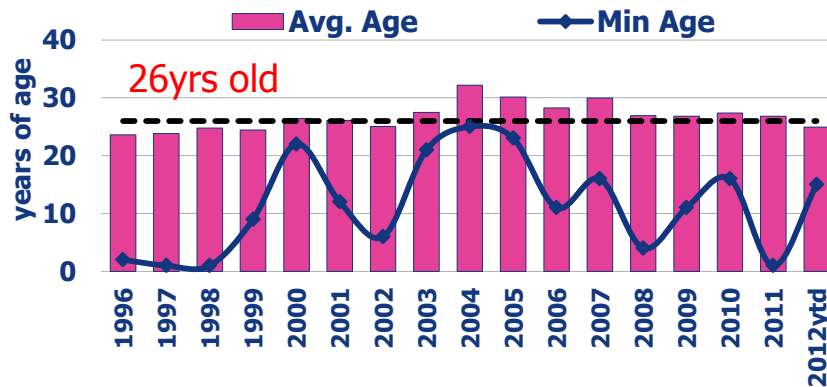
Dry Bulk



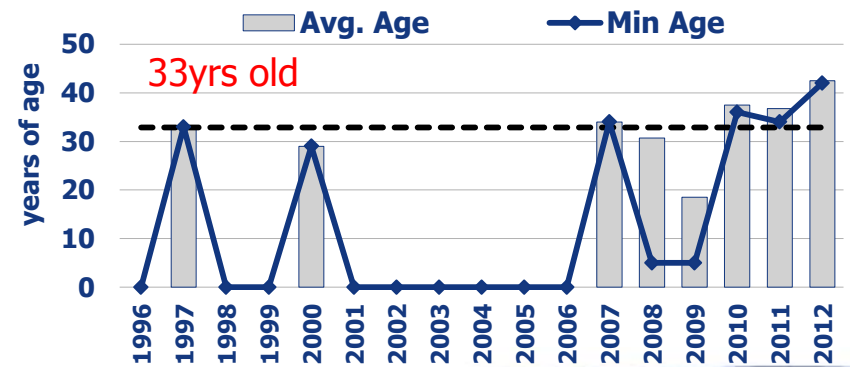
LPG



Containership



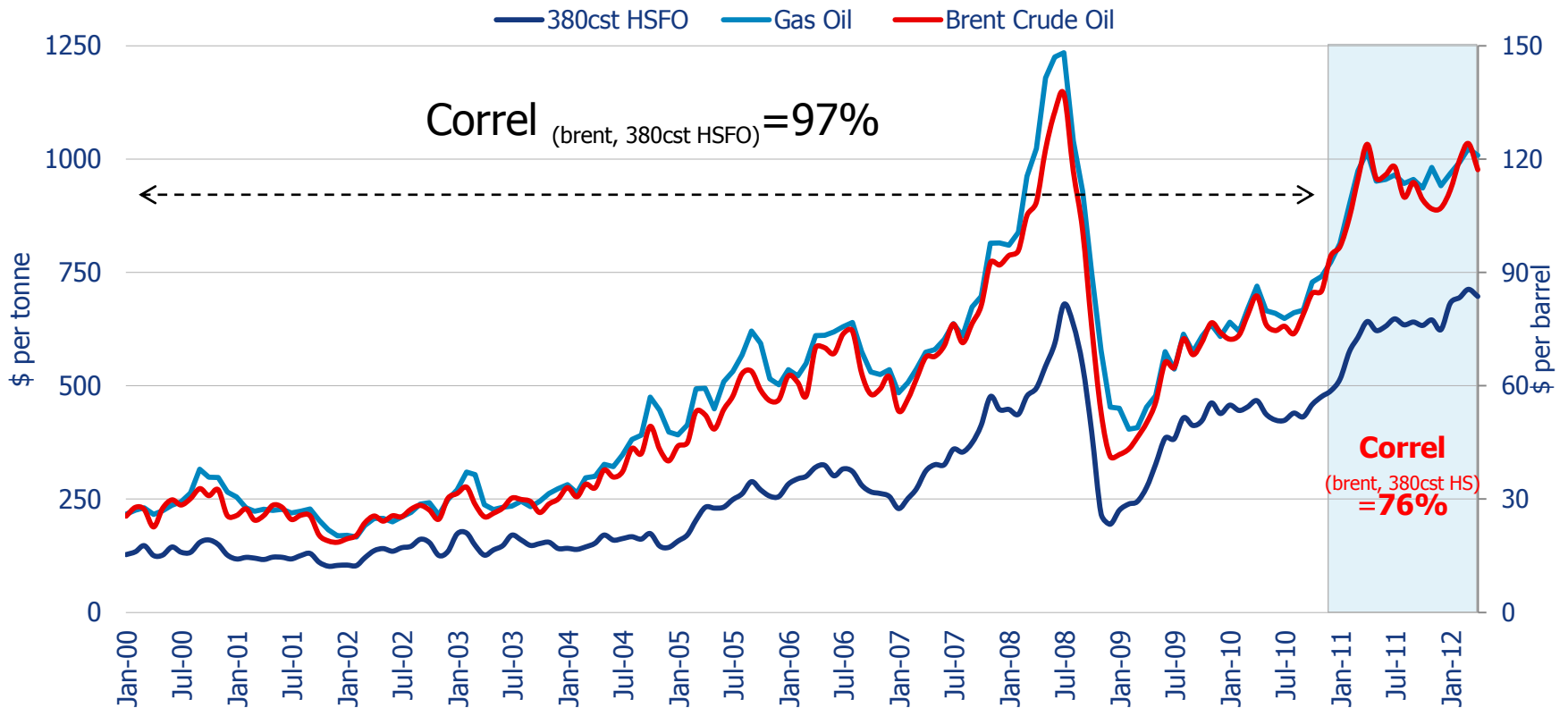
LNG



Note: Dashed line represents the average age 1996-ytd

Data source: Clarksons

Oil Price vs. Bunker Prices



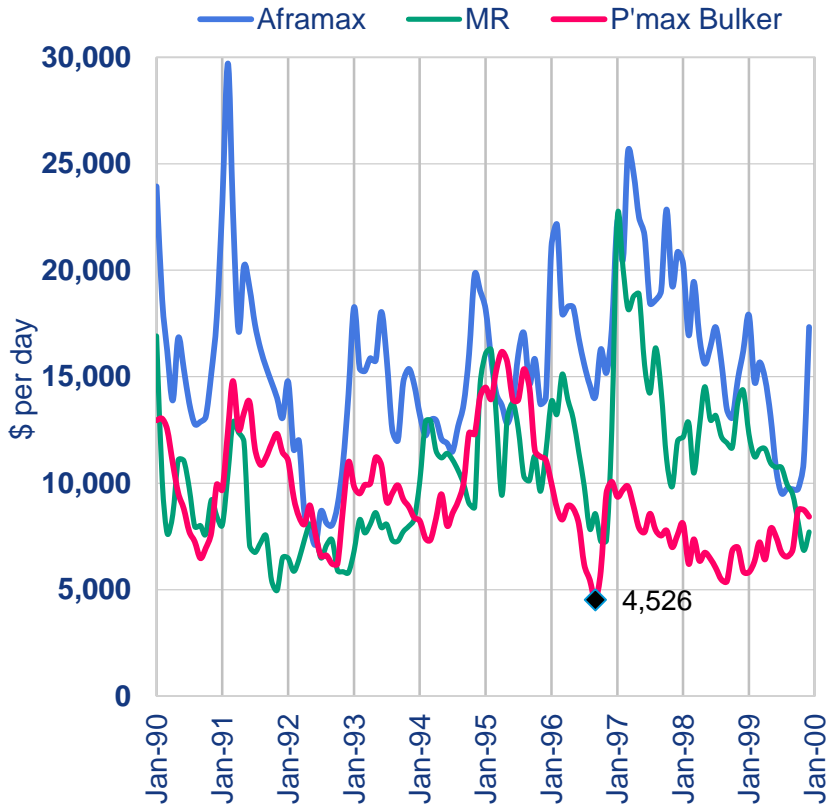
Note: Rotterdam bunker prices

Data source: Oceanconnect

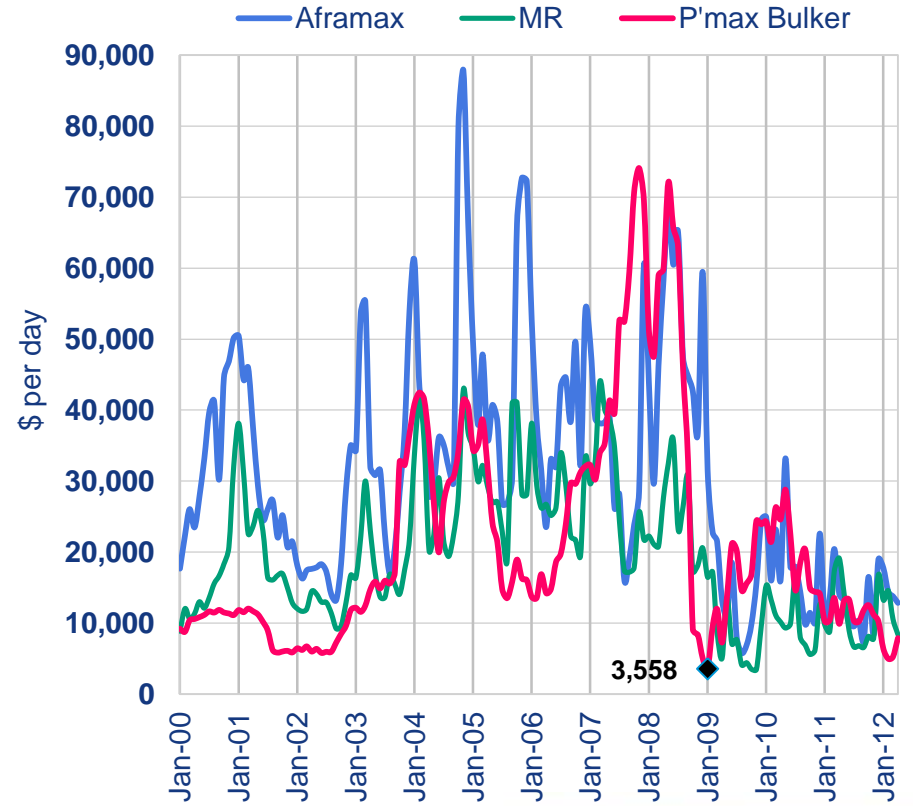


Spot Freight Market

1990-1999



2000-2012ytd



Data Source: Clarksons

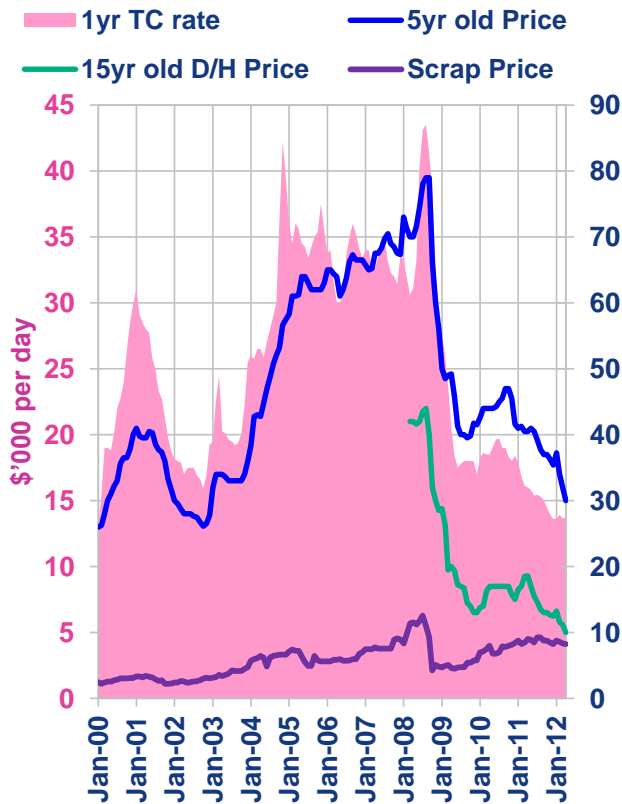
23 May 2012

www.clarksons.com

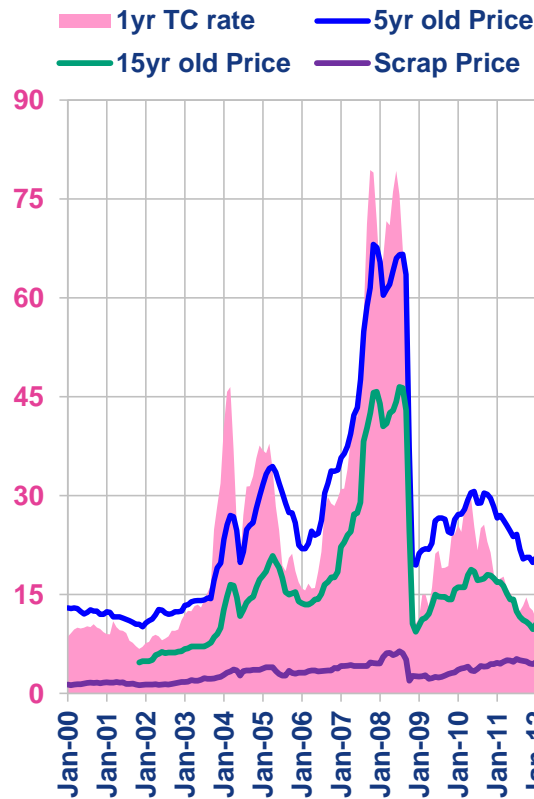


Cross Market Rates vs. Prices

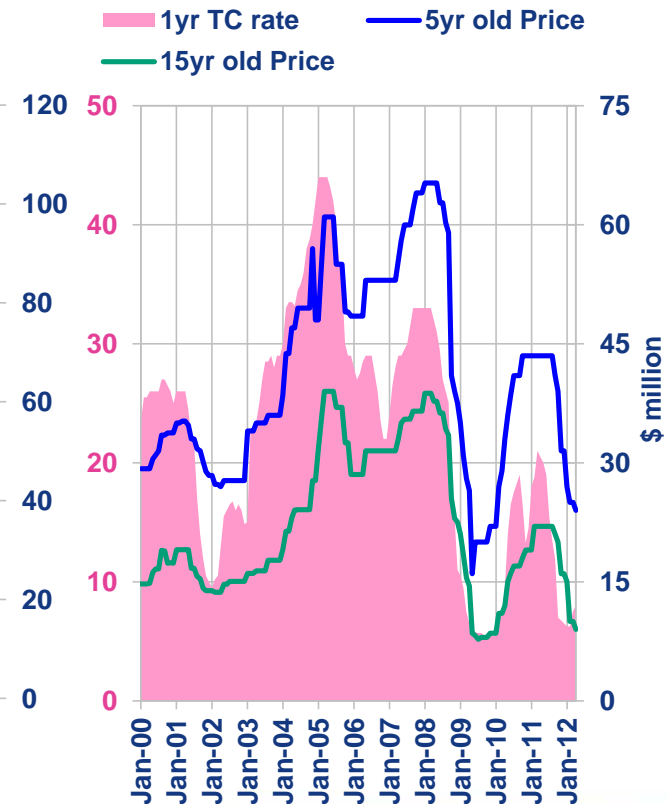
Aframax



P'max Bulker



P'max Container

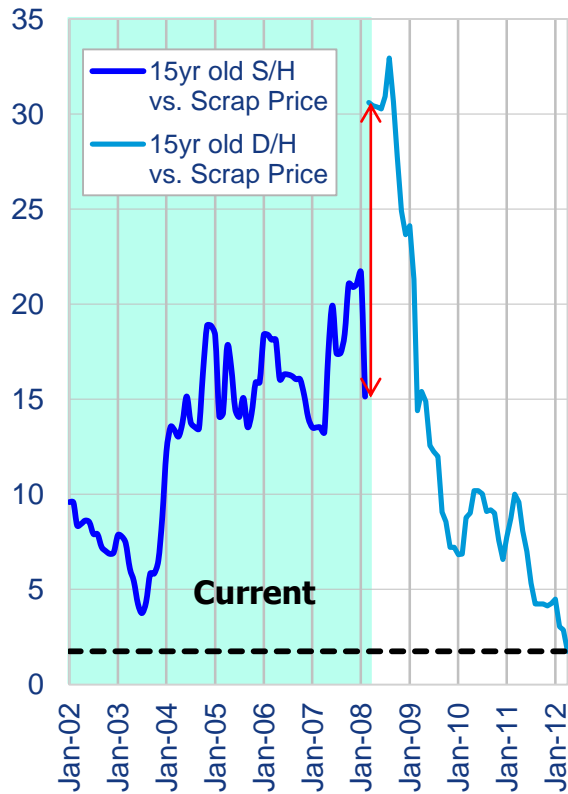


Data Source: Clarksons

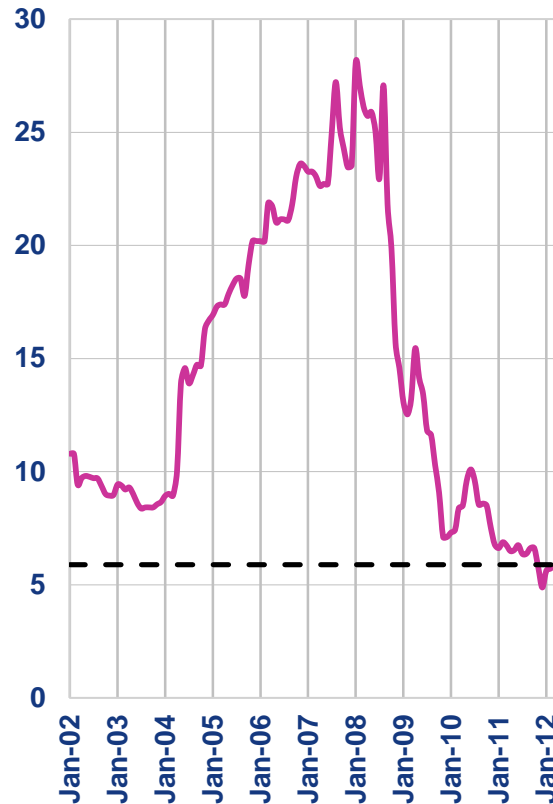


15yr old vs. Scrap Price Differential

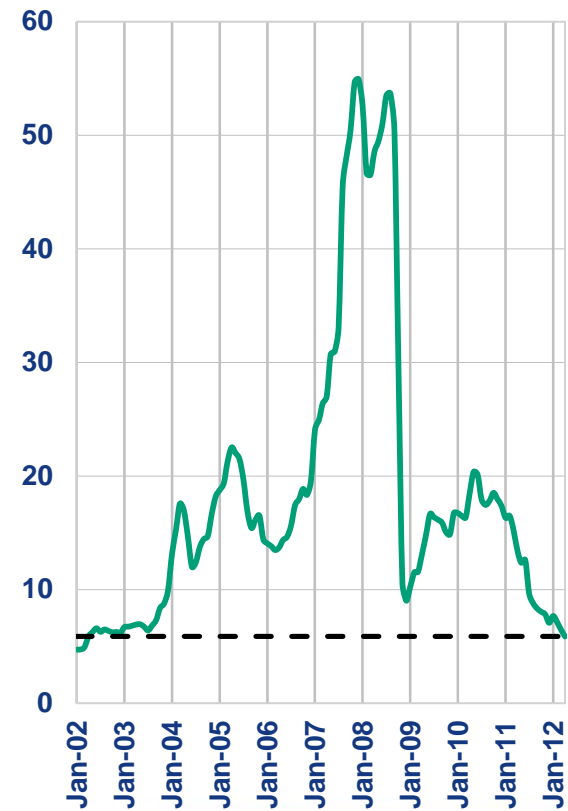
Aframax Tanker



MR Tanker



P'max Bulker

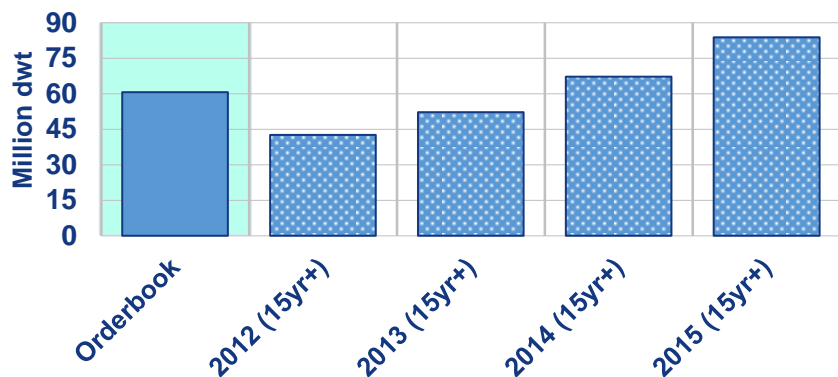


Data Source: Clarksons

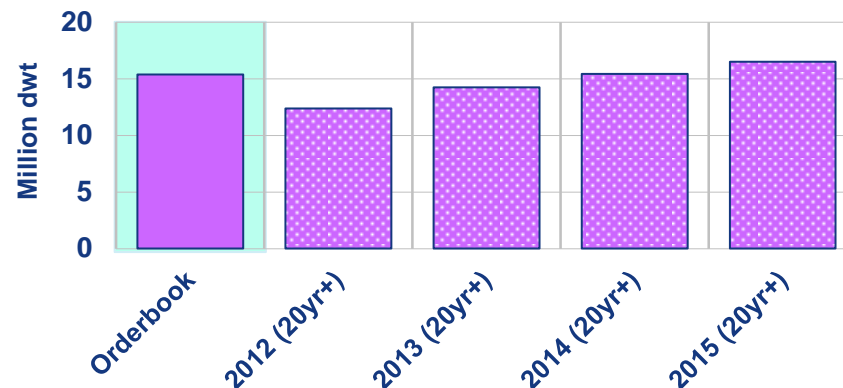


Tanker Orderbook vs. Older Tonnage

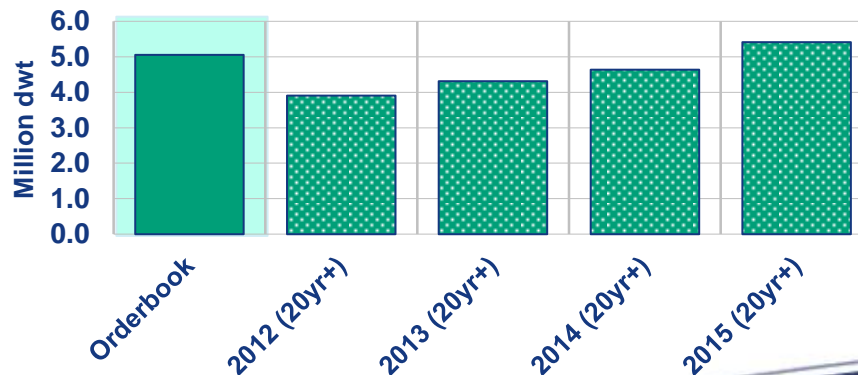
Crude Tanker Orderbook vs. 15yr old Fleet



Product Tanker Orderbook vs. 20yr old Fleet



Specialised* Tanker Orderbook vs. 20yr old Fleet



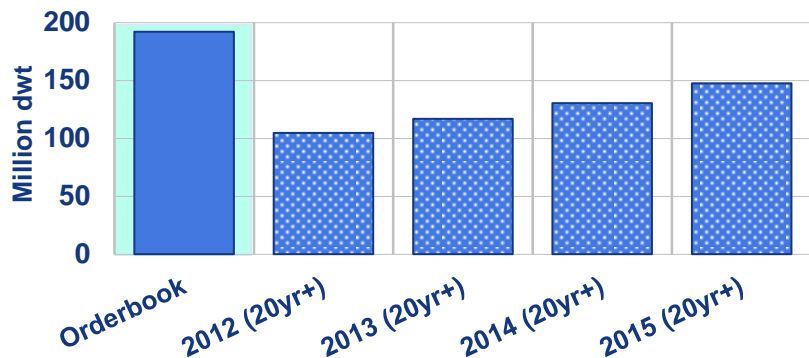
Data source: Clarksons

*including IMO vessels in the product tanker fleet

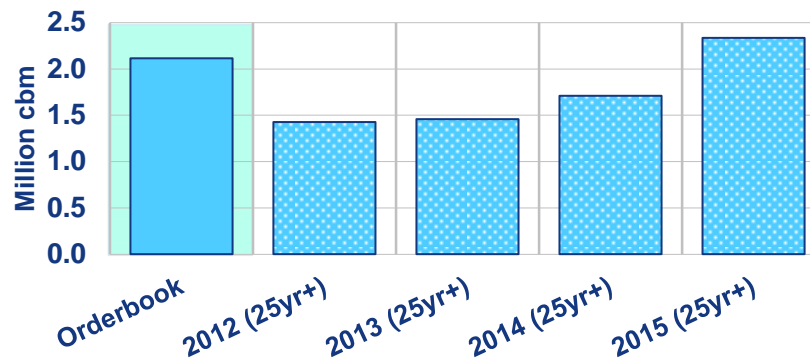


Dry & Gas Carrier Orderbook vs. Older Tonnage

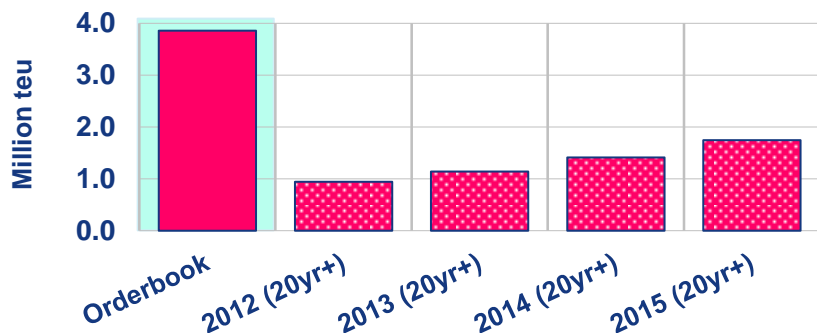
Dry Bulk Orderbook vs. 20yr old Fleet



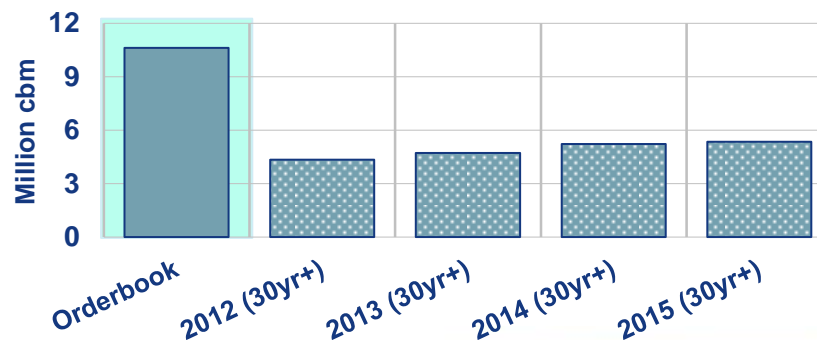
LPG Orderbook vs. 25yr old Fleet



Containership Orderbook vs. 20yr old Fleet



LNG Orderbook vs. 30yr old Fleet



Data source: Clarksons



Concerns when operating old tonnage

- Voyage Expenses
- Operating Expenses
- Drydocking Costs
- New Technology
- Fuel Efficiency
- ECA Requirements
- Ballast Water
- Emissions and other environmental issues

...



Thanks for your attention!