ASSESSING THE VALUE OF A SUPERYACHT

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VesselsValue

TOPICS

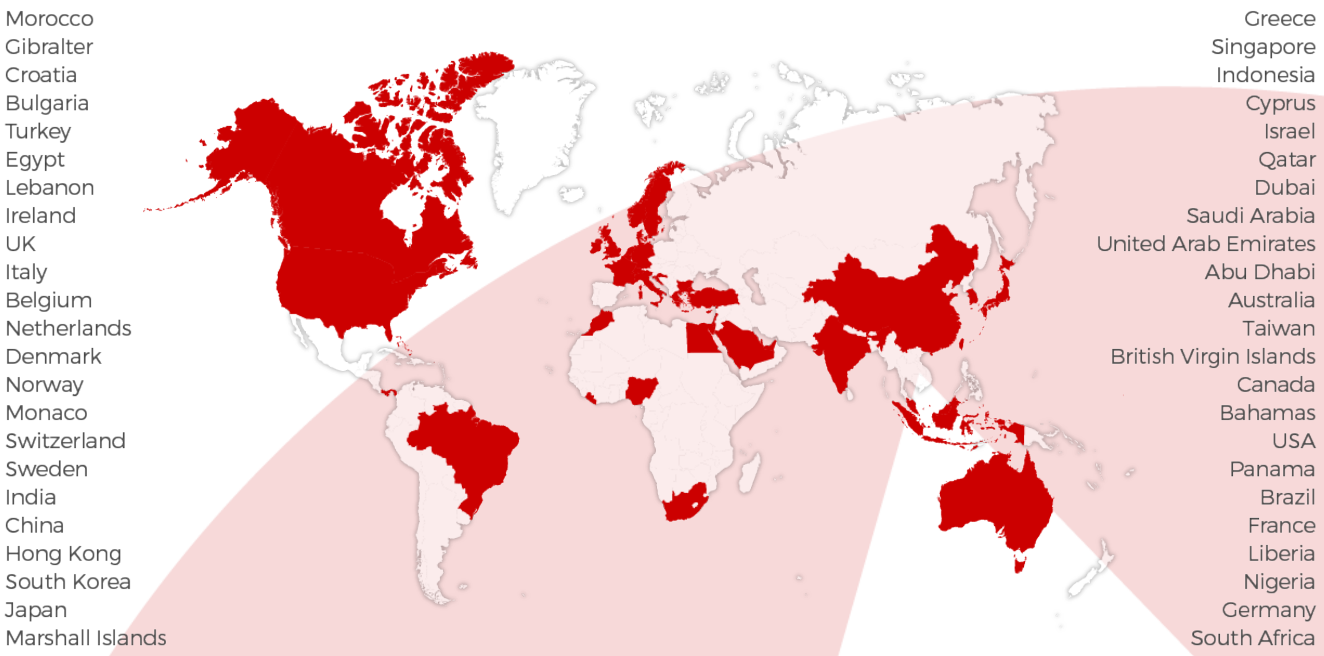
1. A short introduction to VesselsValue
2. Valuation Methodologies
3. Challenges
4. The beginning of our Superyacht Valuation Methodology

INTRODUCTION TO VESSELSVALUE

INTRODUCTION TO VESSELSVALUE

The Online Shipping & Offshore Market Intelligence and Valuation Service

- **Established** – 2010
- **Offices** – London (HQ), Isle of Wight (Data), Stoke (Coders), Singapore (Rep)
- **Clients** - 750 logins, 360 companies, 48 countries
- **Client types** - Banks, Owners, Funds, Governments, Regulators, Lawyers
- **People** – 75 (from 4 in 2010)
- **Press** - quoted in c.20 articles per week across >30 global and regional publications

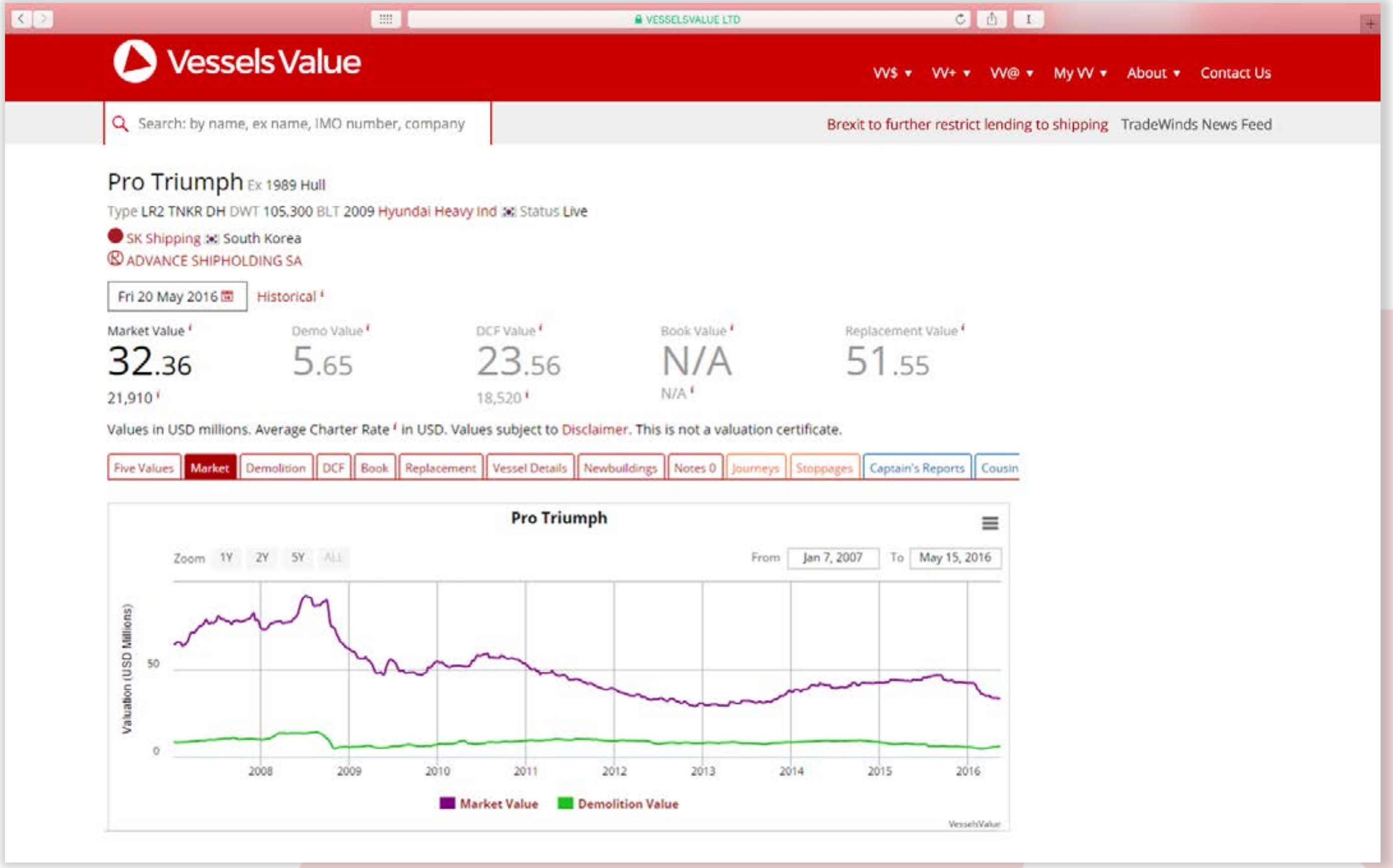


OVERVIEW OF SERVICES

VesselsValue

VV$ Instant Values

- Daily updated values for Vessels, Companies, Portfolios
- Tankers, Bulkers, Containers, LNG, LPG, PSV’s, AHTS’s
- Accuracy tested and reported
- Full supporting information (time series, transactions etc)
- Instant valuation certificates

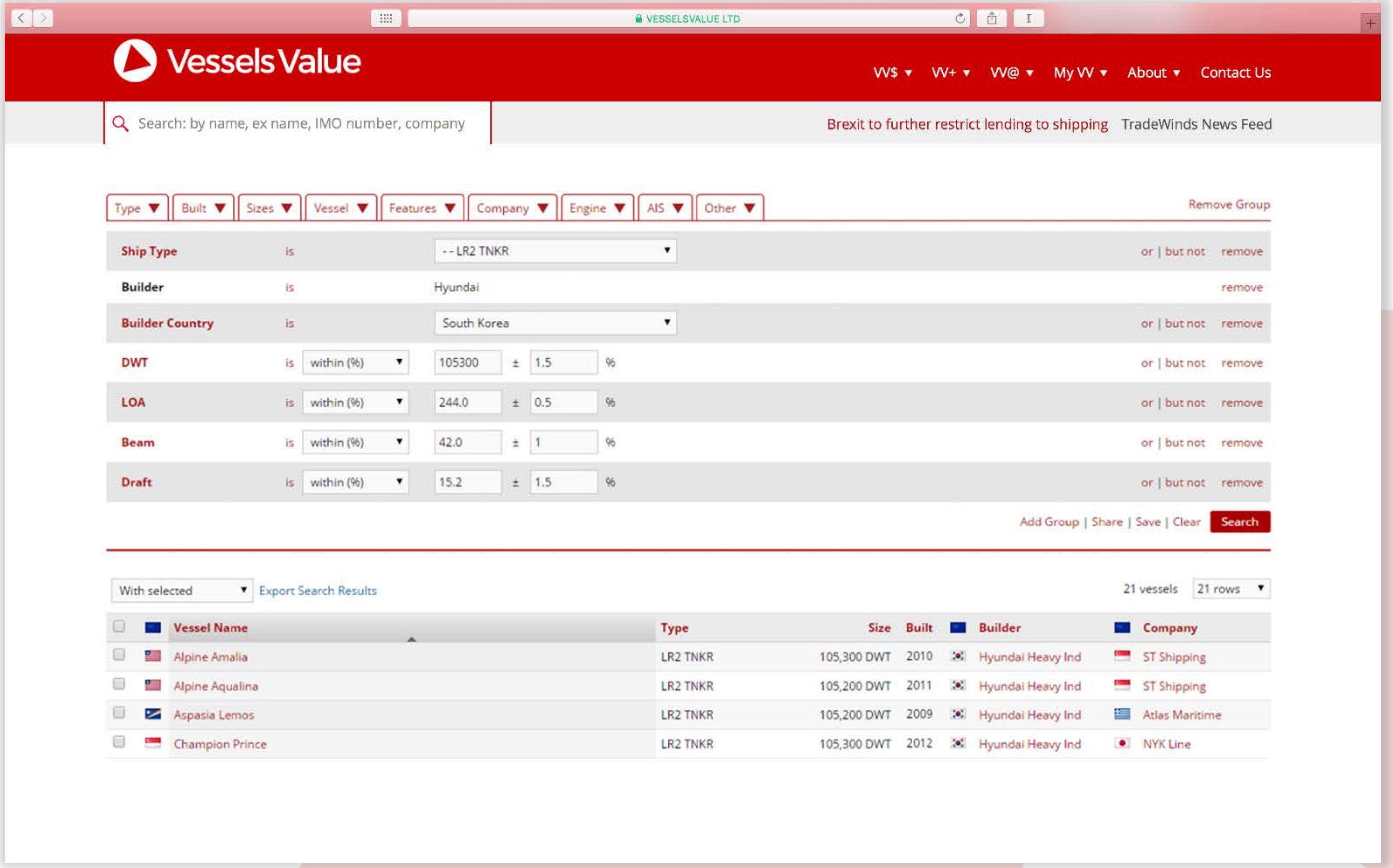


OVERVIEW OF SERVICES

VesselsValue

VV+ Powerful & Interactive Database

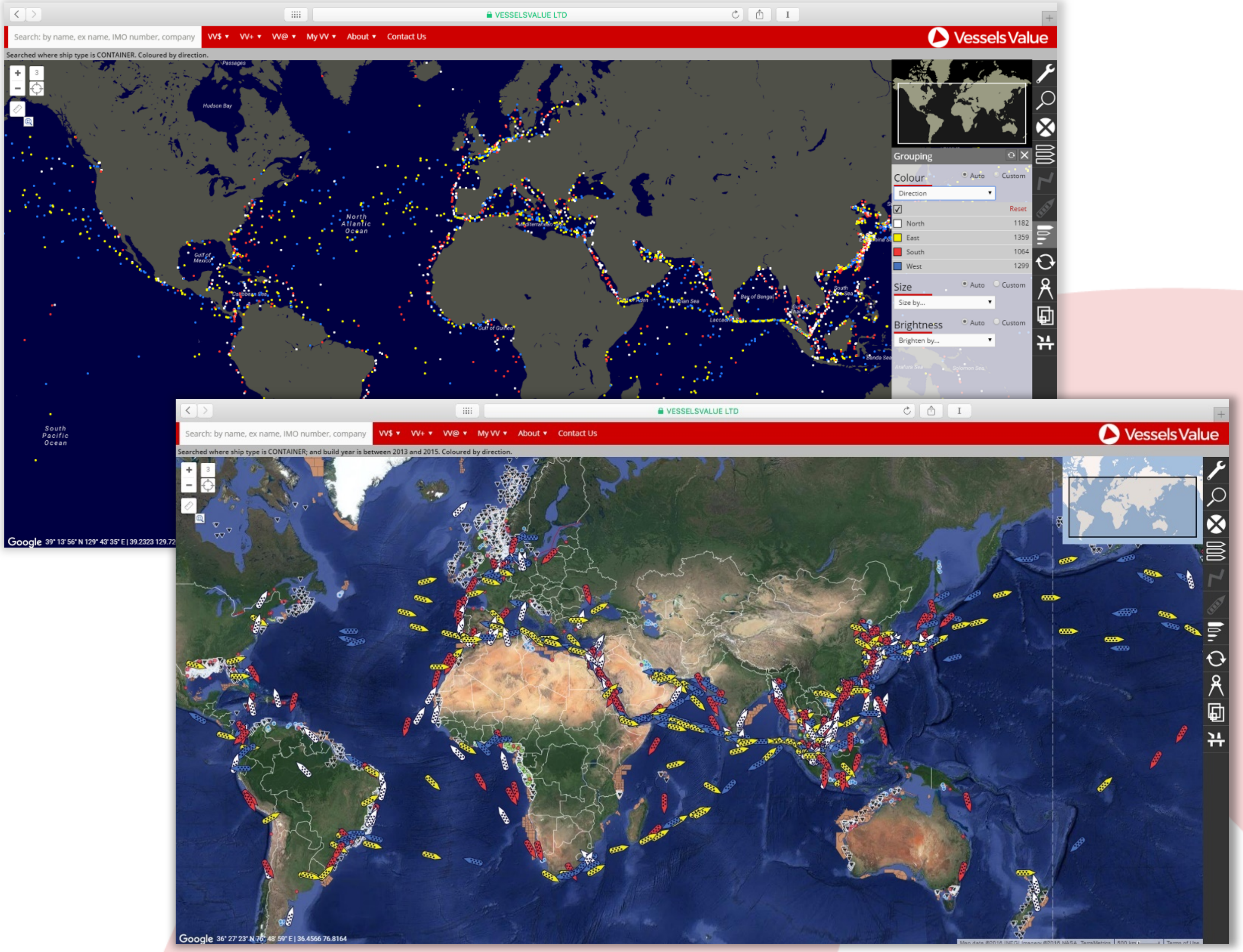
- **Advanced functionality:** Search and compare by any combination of criteria
- **Fleet search:** vessels, companies, specifications, incidents, locations, laden/ballast
- **Deals search**: S&P, Newbuilds, Demolitions, Charters



OVERVIEW OF SERVICES

VV@ Integrated AIS & GIS

- AIS Satellite and Terrestrial mapping/tracking
- GIS Maritime energy infrastructure (oil fields, platforms, pipelines, SBM’s
- Automated alerts (i.e. sanction zones, OSV activity around rigs)



EXECUTIVE OFFICERS

VesselsValue

RICHARD RIVLIN — CEO

- 40 years in the shipping market
- Founder of VesselsValue

GEORGINA GAVIN — CCO

- 10 years sales and management experience
- Founding employee at VV

ADRIAN ECONOMAKIS — COO

- 5 years in Energy consultancy
- 6 years VV
- Founding employee at VV
- MSc Shipping, Trade & Finance

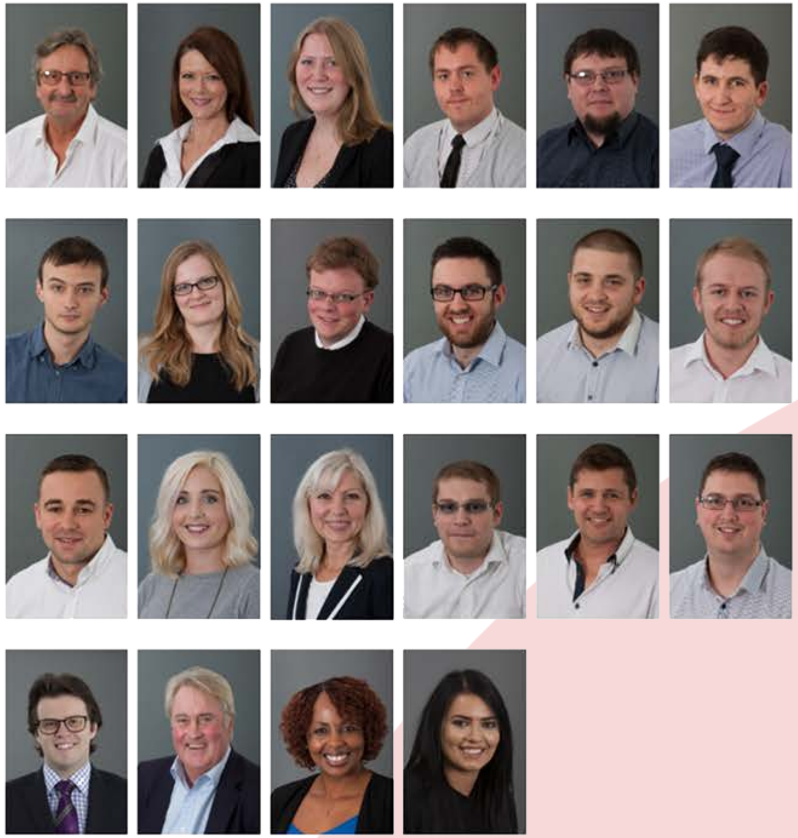
BEN DURBER — CFO

- 1st class mathematics and computer programming degree
- 11 years experience in software development
- Founding employee at VV

KEY STAFF

London

Isle of Wight



Singapore

Consultants

Stoke

VALUATION METHODOLOGIES

THE 5 VALUES

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Alexander the Great Ex New Paradise

Type VLCC DH DWT 298,000 BLT 2010 Universal Status Live

Crude Carriers Corp Greece

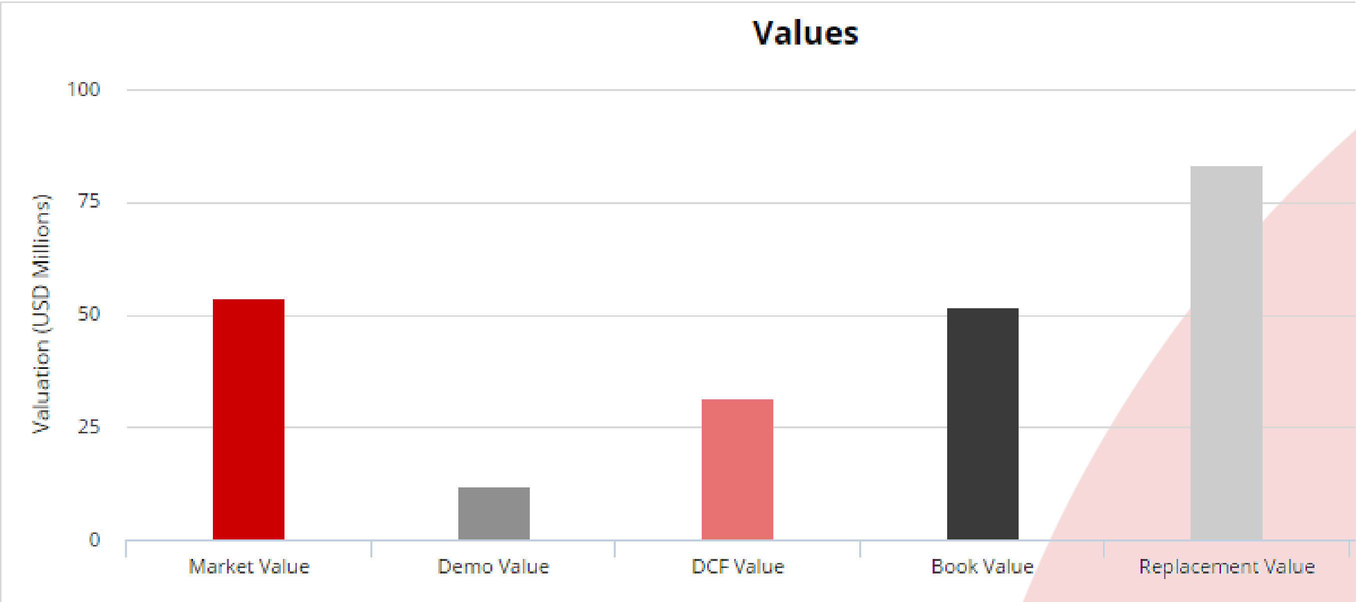
ALEXANDER THE GREAT CARRIERS

Wed 14 Sep 2016 Historical

Market Value	Demo Value	DCF Value	Book Value	Replacement Value
53.73	11.83	31.41	51.81	83.40
32,210		23,650	31,470	

Values in USD millions. Average Charter Rate in USD. Values subject to Disclaimer. This is not a valuation certificate.

Values | Market | Forecast | Demolition | DCF | Book | Replacement | Vessel Details | Newbuildings | Journeys | Stoppages



1. **Market** – buy/sell today
2. **Demo** – end of life
3. **DCF** – present value of future income
4. **Book** – accountants
5. **Replacement** – new version

MARKET VALUE

Traditional – Broker

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Data / Algorithms / Technology

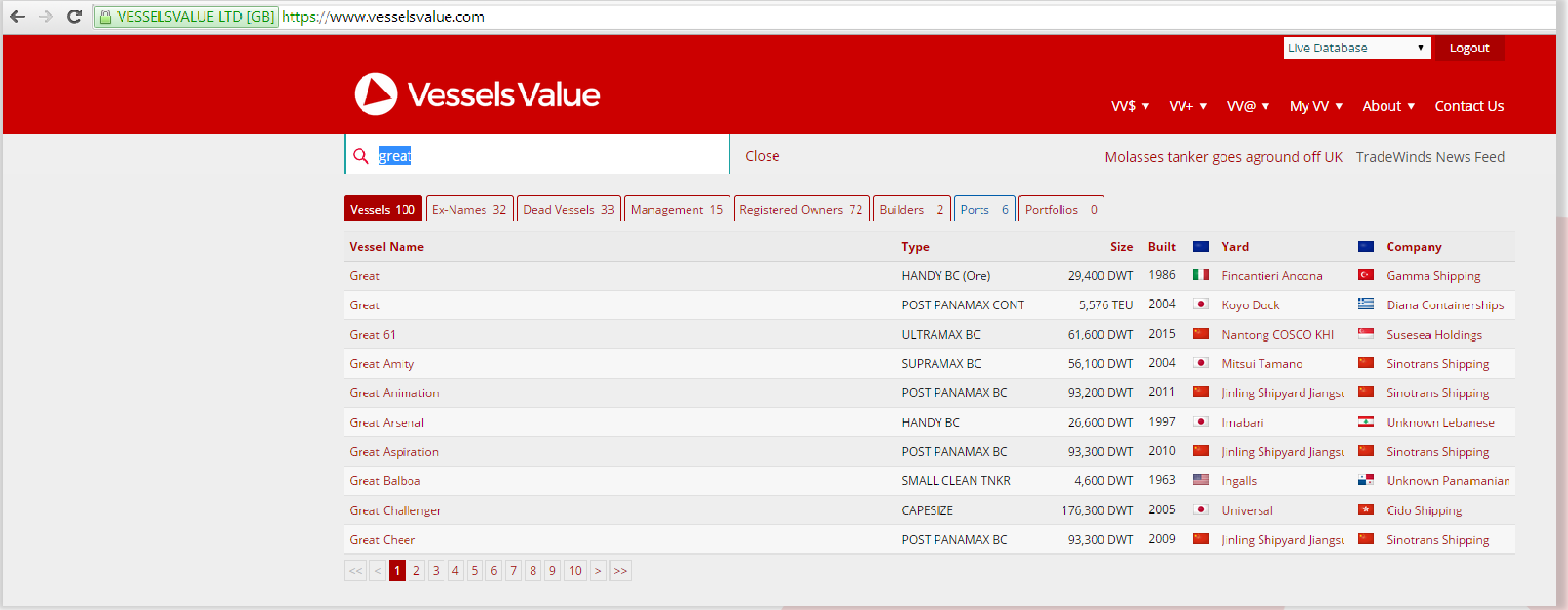
ADVANTAGES OF VV METHOD

VesselsValue

	VesselsValue	TRADITIONAL VALUATION METHODS
ALWAYS OBJECTIVE	✓	✗
IMMEDIATE & ALWAYS AVAILABLE	✓	✗
INTERACTIVE CHARTS & EXCEL EXPORTS	✓	✗
MEASURED ACCURACY	✓	✗
100% CONDIFENTIAL	✓	✗

FIND YOUR VESSEL

VesselsValue



Vessel Name	Type	Size	Built	Yard	Company
Great	HANDY BC (Ore)	29,400 DWT	1986	Fincantieri Ancona	Gamma Shipping
Great	POST PANAMAX CONT	5,576 TEU	2004	Koyo Dock	Diana Containerships
Great 61	ULTRAMAX BC	61,600 DWT	2015	Nantong COSCO KHI	Susesea Holdings
Great Amity	SUPRAMAX BC	56,100 DWT	2004	Mitsui Tamano	Sinotrans Shipping
Great Animation	POST PANAMAX BC	93,200 DWT	2011	Jinling Shipyard Jiangsu	Sinotrans Shipping
Great Arsenal	HANDY BC	26,600 DWT	1997	Imabari	Unknown Lebanese
Great Aspiration	POST PANAMAX BC	93,300 DWT	2010	Jinling Shipyard Jiangsu	Sinotrans Shipping
Great Balboa	SMALL CLEAN TNKR	4,600 DWT	1963	Ingalls	Unknown Panamanian
Great Challenger	CAPESIZE	176,300 DWT	2005	Universal	Cido Shipping
Great Cheer	POST PANAMAX BC	93,300 DWT	2009	Jinling Shipyard Jiangsu	Sinotrans Shipping

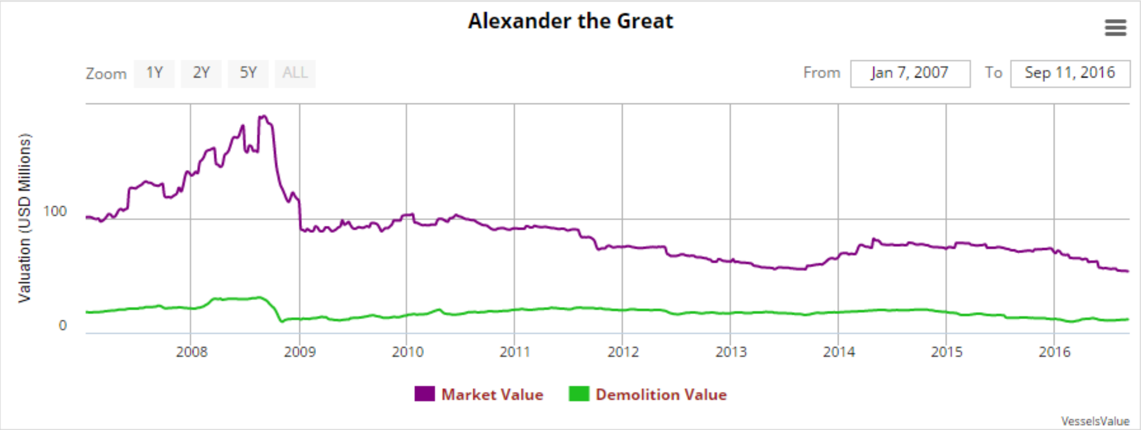
EXAMPLE VALUATION PAGE

VesselsValue

Market Value i	Demo Value i	DCF Value i	Book Value i	Replacement Value i	1Y Forecast Value i
53.73	11.83	31.41	51.81	83.40	36.94
32,210 i		23,650 i	31,470 i		

Values in USD millions. Average Charter Rate i in USD. Values subject to Disclaimer. This is not a valuation certificate.

Values | Market | Forecast | Demolition | DCF | Book | Replacement | Vessel Details | Newbuildings | Journeys | Stoppages | Captain's Reports | Cousins | Notes 1 | VV Documents 0



EXPORT HISTORICAL VALUES
Monthly | Weekly | Daily

CHANGE CHART
Historical Valuation
Market Value Analysis

CHART GUIDE
Historical Chart Guide

Previously Sold As

Sold Name	Sold Type	Sold Size	Comments	Price	Sale Date	Buyer	Seller
Alexander the Great	VLCC	298,000 DWT	Undisc Price		07 Jan 13	Crude Carriers Corp	Capital Product Partner
Alexander the Great	VLCC	298,000 DWT		96.50	29 Jan 10	Capital Product Partner	Cido Shipping

87 Sales in Sector

Export | Show Freight and Change | Failed Sales | Hide Undisclosed Prices

87 rows

Sale Date	Comments / En Bloc ID	Price	Sold Name	Sold Type	Size	Built	Age	Builder	Buyer	Seller
05 Aug 2016	Conversion	28.00	GenMar Victory	VLCC	312,700 DWT	2001	15	Hyundai Heavy Ind	Nathalin Managemen	Gener8 Maritime
02 Aug 2016		28.30	Kaminesan	VLCC	303,900 DWT	2003	13	Universal	Eurotankers	MOL
27 Jul 2016	Resale / 12112	84.50	Hull 791 Hyundai Saml	VLCC	300,000 DWT	2016	0	Hyundai Samho Heav	Euronav	Product Shipping and
27 Jul 2016	Resale / 12112	84.50	Hull 792 Hyundai Saml	VLCC	300,000 DWT	2016	0	Hyundai Samho Heav	Euronav	Product Shipping and

VV MARKET VALUE METHODOLOGY

Daily Recalibration

Daily Updates

Type

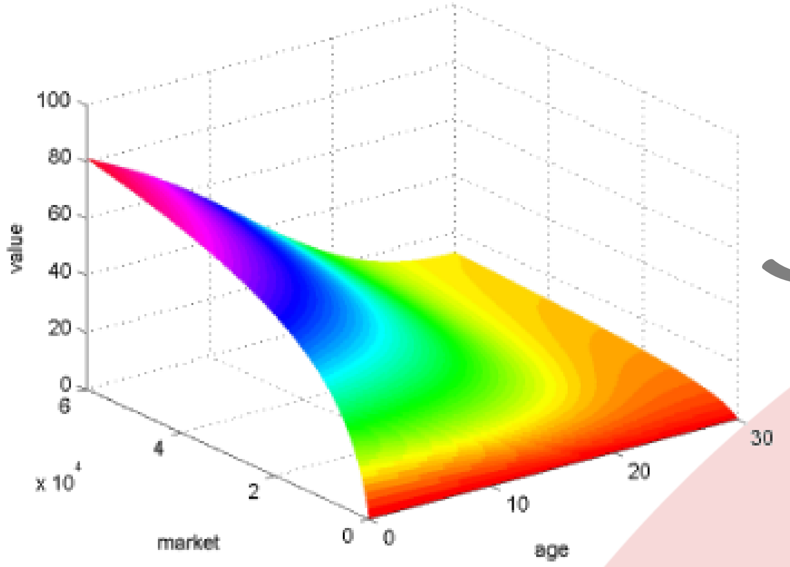
Size

Age

Other features

Transactions

Market sentiment



Instant Access

Ship, Fleet & Portfolio values

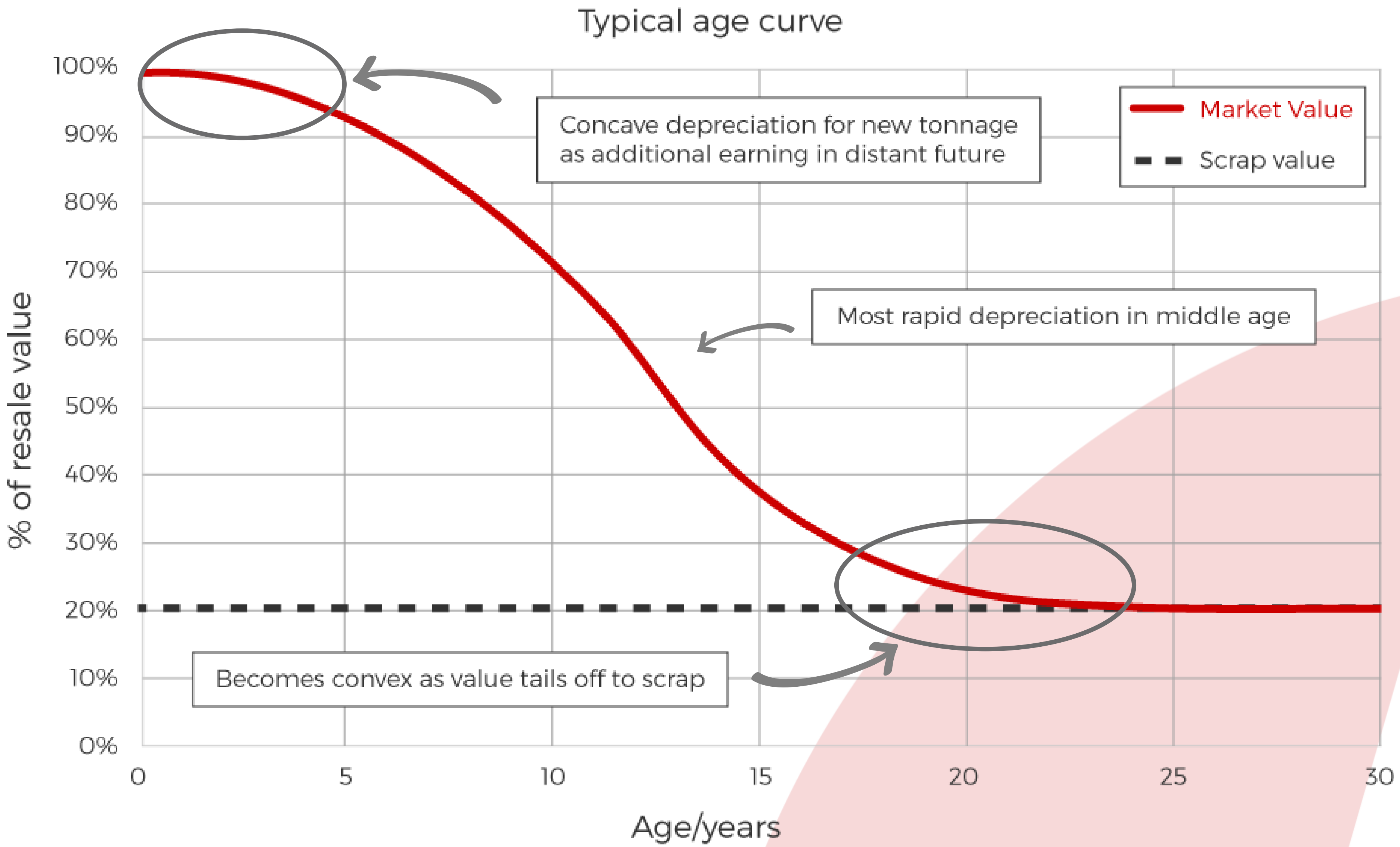
Historical Time Series

Fleet Statistics

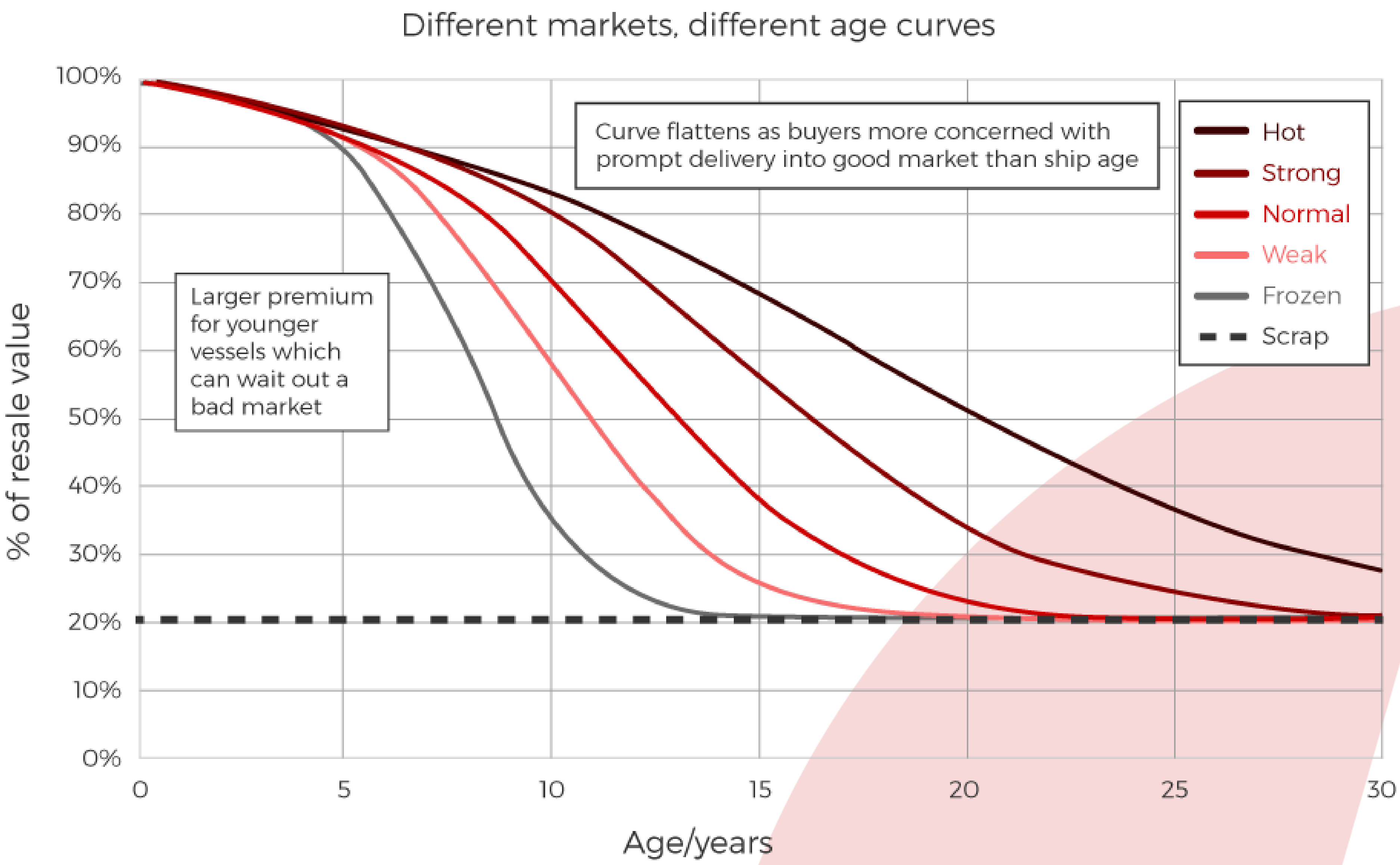
Ownership/Relationships

AGE (DEPRECIATION)

VesselsValue



AGE (DEPRECIATION)



OTHER FEATURES – COMMERCIAL VESSELS

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For commercial vessels, do the features help the vessel:

- Save money (i.e. engine efficiency, build quality)
- Make money (i.e. cargo systems, segregations)

Example of bespoke vessel (OSV) features VVs value

- DWT (PSV's)
- Bollard pull / BHP (AHTS's)
- Fire-fighting (FiFi) capability
- Deck strength
- Deck area
- Total accommodation
- Supply capacity (methanol/glycol etc.)
- Dynamic positioning
- Chain capacity
- Chain lockers
- Oil recovery
- Survivor capacity/equipment
- Generators
- Number of winches/drums
- Helideck
- Gearing
- Design

OTHER FEATURES – COMMERCIAL VESSELS

VesselsValue

Incorporating features into value

Parameter space too large to model mathematically (the “art” of valuation)

Modelled heuristically through detailed quantitative and qualitative research

Feature scores converted into a logic module which interfaces with algorithms

Scores constantly updated (as trends change)

OTHER FEATURES - SUPERYACHTS

For Superyachts, more tricky:

- How do they make the owner feel?
- Saving money, making money can be secondary
- 2nd hand value (depreciation) may be important

Quantifying "Feel"?

- **Taste is personal**, especially for UHNWI
- For example - most expensive houses are gutted by new owners (see Chelsea mansion, Angelopoulos full refurb quickly followed by Fredriksen full refurb)
- **Quality is measurable** – premium for top outfitter (i.e. Winch), teak decking, paint, appearance
- **Critical features are measurable** – pools, number of hull doors, balconies, commercial coding

OTHER FEATURES - SUPERYACHTS

VesselsValue

- **Premiums** for features **change over time** and across different vessel classes
- **Continuous updating** and research required
- Accuracy testing to identify valuation errors
- Feedback loop for continued optimisation of values
- Client use further tightens up values (but must maintain objectivity)
- Benefits of being **SPECIALIST VALUATION PROVIDER**

MARKET VALUE ACCURACY

VesselsValue

Behind the Screens

Accuracy Report

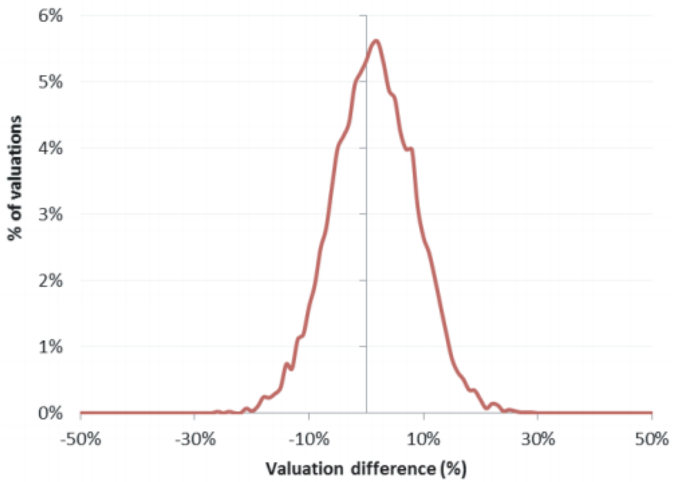
Analysis of valuations vs sales prices from 1.3.2011 to 1.3.2016

Valuation accuracy is assessed as the difference between the prices vessels are sold at and the VesselsValue valuations the day before the sale date. This is expressed as the % of valuations (as % of sales) within certain accuracy ranges and in chart format.

All Vessels (3633)

Sales	3633
Mean age (yrs)	14

Accuracy Range	% of Transactions
+/- 1%	15.4%
+/- 2%	25.4%
+/- 3%	35.7%
+/- 4%	45.7%
+/- 5%	54.3%
+/- 10%	84.9%
+/- 20%	99.4%
+/- 30%	100.0%



Statistics	
Mean	0.8%
Std dev	7.2%

CHALLENGES

TRANSACTIONS

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Transactions are the most **significant variable** to value

“*Valuation has been received from accredited brokers for all vessels. Due to a limited number of sale and purchase transactions in the current market,* ***there is a large uncertainty related to the received broker estimates.***”

Notes on public shipping companies accounts

TRANSACTIONS

S/H Liquidity important (but not critical)

- VV Sparse market model (newbuild prices + depreciation + feature scores)
- NB prices, hard to find but not impossible
- Aviation – true NB price is c40% of published prices by manufacturers / airlines (found out through research)

Transaction transparency very important

- Difficult to find true prices (newbuild and S/H)
- Lack of reporting / confidentiality
- Identifying other factors that may have affected the price (sold with finance, discount for personal relationships, distressed sale)
- Specifications and effects of value critical when analysing / using transaction (better vessels sell for more, must be separated from effects of the market)

LEVEL OF CUSTOMISATION

- **Are one-off vessels more valuable than a series?**
- Are there buyers for one-offs?

Spares & repairs

Exclusivity

Features

MARKET REACTION

Some Negative

"*VesselsValue does not know what they are doing and should concentrate on assessing the value of tankers and bulk carriers.*"

Norweigan Shipowner X, quoted in Dagens Naeringsliv (a Norwegian daily newspaper) in May 2016

Some Positive

"*Vessels Value have come a long way in setting the standard for blue sea shipping in precise, prompt valuations in a relatively short period of time. By applying similar metrics along with known differentiators in the offshore space they will achieve this too with their offshore product.*"

Singaporean Offshore Broker Y

DEALING WITH FANTASY

Huge variation in values provided by brokers

For example, same AHTS (blt 2016, 28k bhp), same day, charter free market value:

Far East offshore broker: **USD 30m**

Scandinavian offshore broker: **USD 90m**

c.200% spread, very limited supporting evidence = lack of confidence in values

REALITY

VesselsValue

Bourbon Arctic Ex 802 Hull

Type AHTS (Super Large) BHP 28,000 BLT 2016 Vard Brattvaag Status Live

Bourbon France

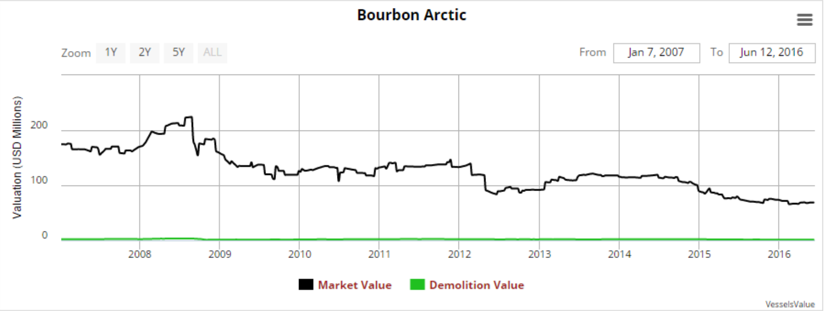
CAROLINE 63 SASU

Wed 15 Jun 2016 | Historical

Market Value	Demo Value	DCF Value	Book Value	Replacement Value
68.77	1.19	N/A	N/A	69.52

Values in USD millions. Values subject to Disclaimer. This is not a valuation certificate.

Values | Market | Forecast | Demolition | DCF | Book | Replacement | Vessel Details | Newbuildings | Journeys | Stoppages | Captain's Reports | Cous

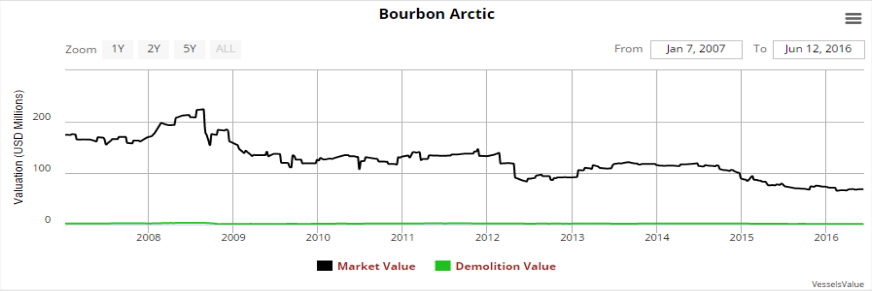


Mon 10 Feb 2014 | Back to Today

Market Value	Demo Value	DCF Value	Book Value	Replacement Value
114.01	2.04	N/A	N/A	109.82

Values in USD millions. Values subject to Disclaimer. This is not a valuation certificate.

Values | Market | Forecast | Demolition | DCF | Book | Replacement | Vessel Details | Newbuildings | Journeys | Stoppages | Captain's Reports | Cousi



31 Sales in Sector

Export | Failed Sales | Hide Undisclosed Prices — 31 rows

Sale Date	Comments / En Bloc ID	Price	Sold Name	Sold Type	Size	Built	Age	Builder	Buyer	Seller
15 Apr 2016	Undisc Price		Pacific Brigand	AHTS (Large)	12,240 BHP	1998	18	Ulstein Verft	Red Sea International	Swire Pacific Offshore
03 Mar 2016	Undisc Price		Far Sea	AHTS (Very Large)	13,219 BHP	1991	25	Simek	Unknown	Farstad Shipping
19 Feb 2016		7.00	Union Bear	AHTS (Very Large)	15,000 BHP	1999	17	Kleven Verft	Smit International	Ship Finance Internat
18 Feb 2016		7.00	Sea Lynx	AHTS (Very Large)	15,000 BHP	1999	17	Loland Verft	Smit International	Deep Sea Supply
29 Jan 2016	Undisc Price		Hull 1152	AHTS (Super Large)	21,760 BHP	2017	-1	SPP	Unknown	Rimorchiatori Riuniti
27 Jan 2016		1.30	Normand Skarven	AHTS (Very Large)	13,196 BHP	1986	30	Ulstein Verft	Karadeniz Holding	Solstad Offshore
23 Dec 2015	Undisc Price		Normand Drott	AHTS (Large)	12,000 BHP	1984	31	Ulstein Verft	SeaOwl France	Solstad Offshore
05 Nov 2015	Bank Sale	25.00	Malaviya Nine	AHTS (Very Large)	14,998 BHP	2008	7	Amursky	Unknown	GOL Offshore
15 Oct 2015	Undisc Price		Maersk Chignecto	AHTS (Large)	10,880 BHP	1983	32	Hyundai Heavy Ind	Armamex Naviera SA	Maersk Supply Servic
28 Sep 2015	Undisc Price		Maersk Promoter	AHTS (Very Large)	15,598 BHP	1992	23	Vard Soviknes	Unknown Greek	Maersk Supply Servic
14 Jul 2015		15.00	Pacific Banner	AHTS (Large)	12,240 BHP	1998	17	Ulstein Verft	Tag Offshore Ltd	Swire Pacific Offshore

Newbuilding History

Yard Hull No	Sold Type	Sold Size	Comments	En Bloc Count	Price	Sale Date	Buyer	Builder
802	AHTS (Super Large)	28,000 BHP			119.00	10 Feb 14	Bourbon	Vard Brattvaag

VALUES

Values and prices may have a large spread

Full supporting information can fill in the gaps

Information is power

BENEFITS VV MAY BRING TO SUPERYACHT FINANCE

BENEFITS

Help increase bank lending – capital adequacy rules

Better informed owners - break the monopoly of information

Increased competition – better pricing

THANK YOU

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