

MARINE
M O N E Y

ACADEMY

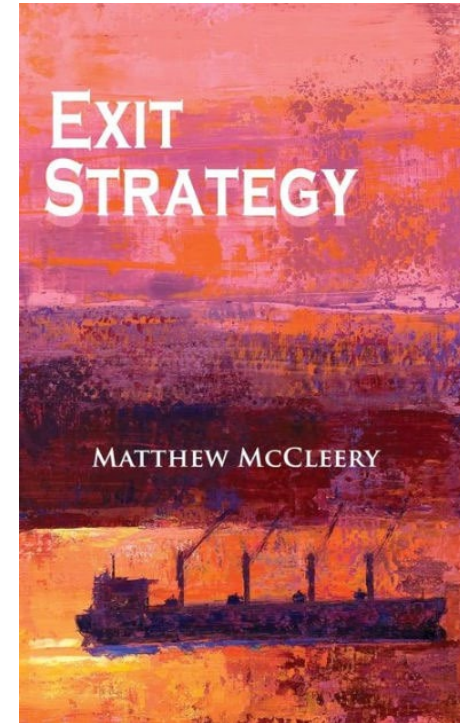
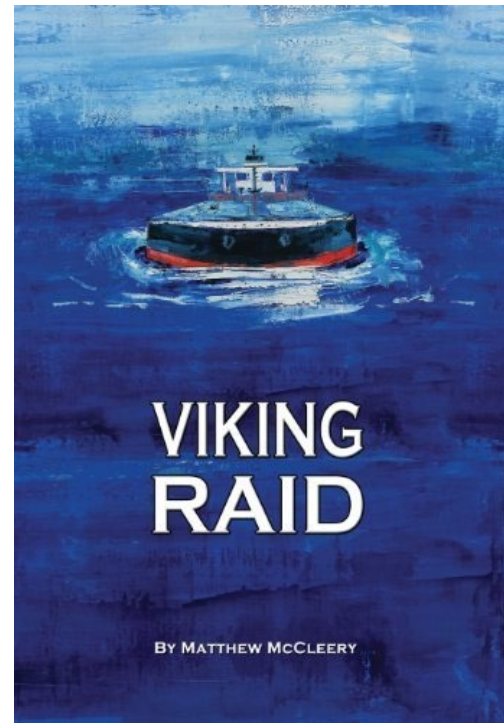
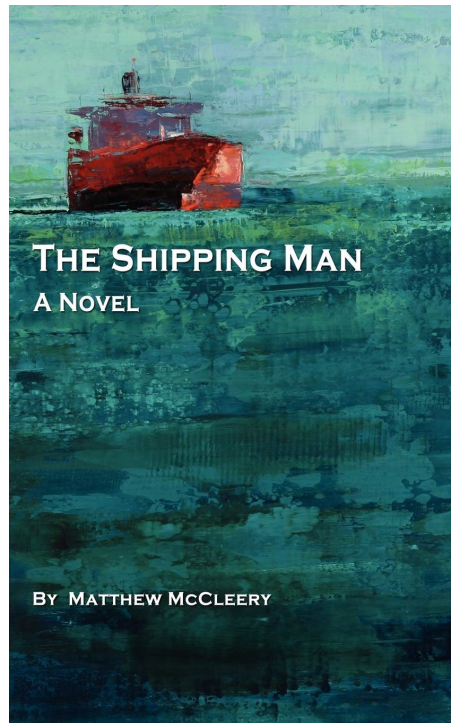
PRESENTED BY:
Holland & Knight

NEW YORK
2022

Ship Finance & Market Overview

Matt McCleery, President, Marine Money

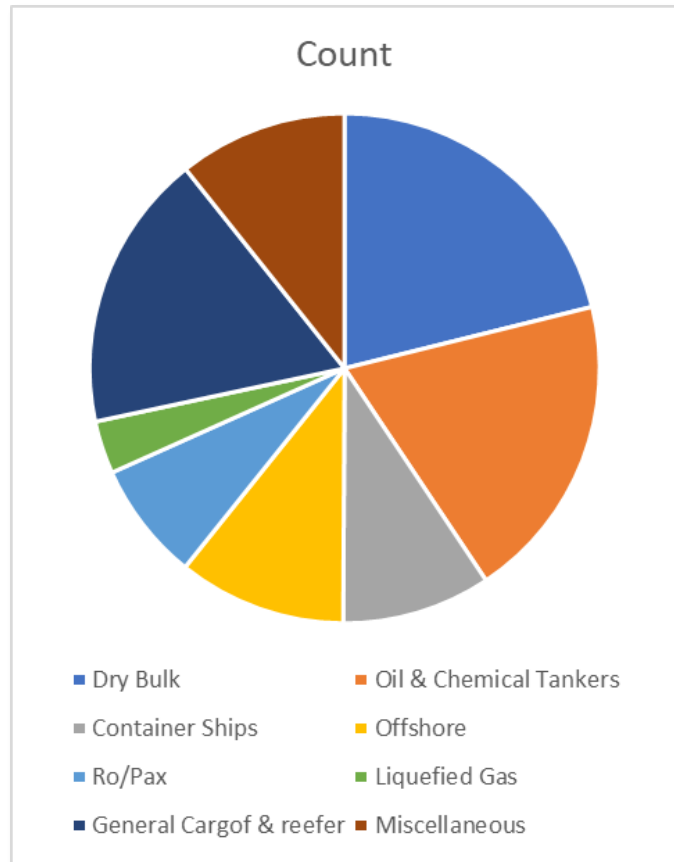
‘The Shipping Man’ Series



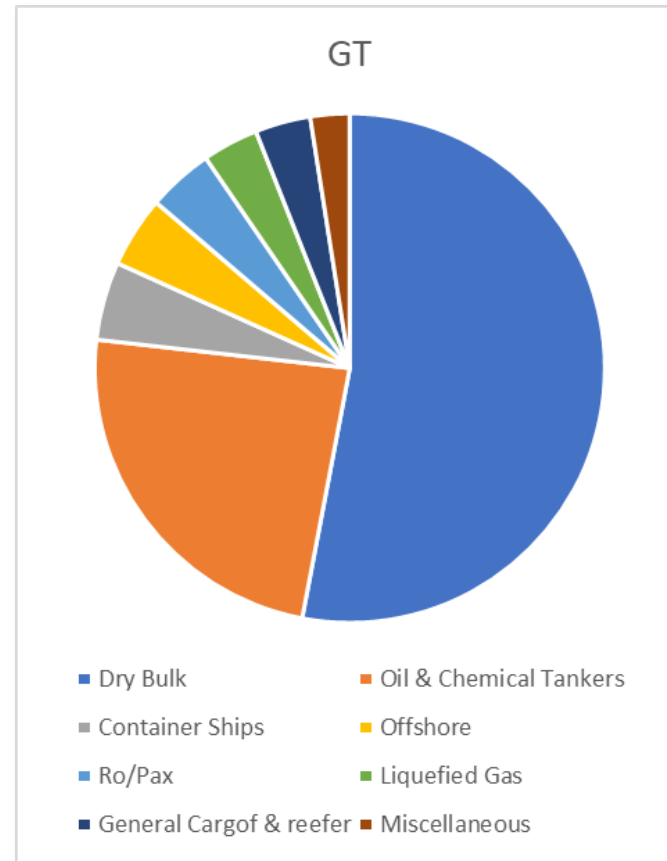
TODAY, WE WILL (QUICKLY) COVER...

- The World Fleet
- Major Shipping Markets
- Vessel Economics – Revenue, Expenses, Management
- Shipping Cycles & Strategies
- Capital for Shipping: Debt, Equity & Leasing

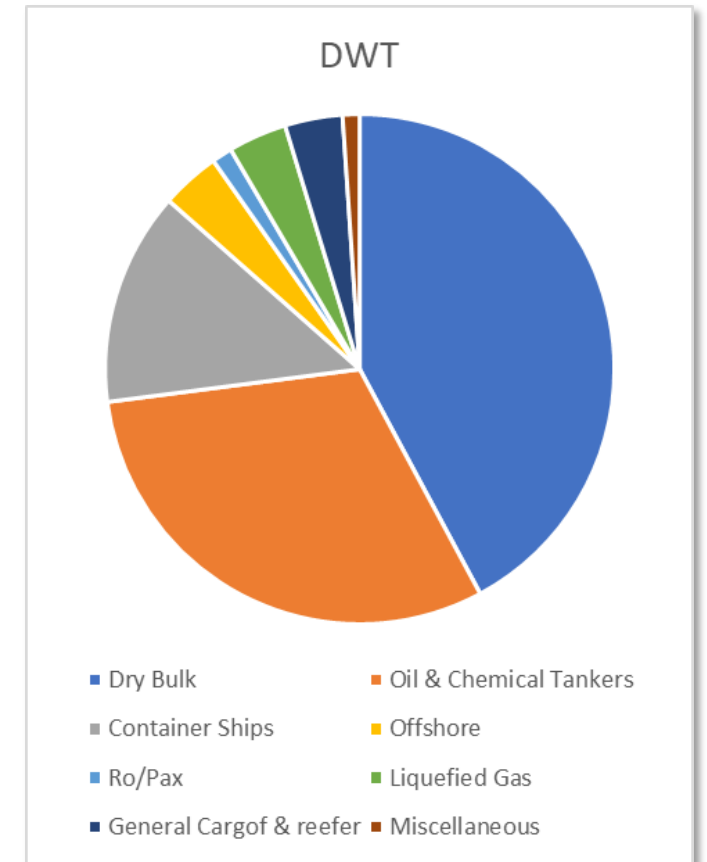
SHIPS, CAPACITIES & SIZES - \$20m each



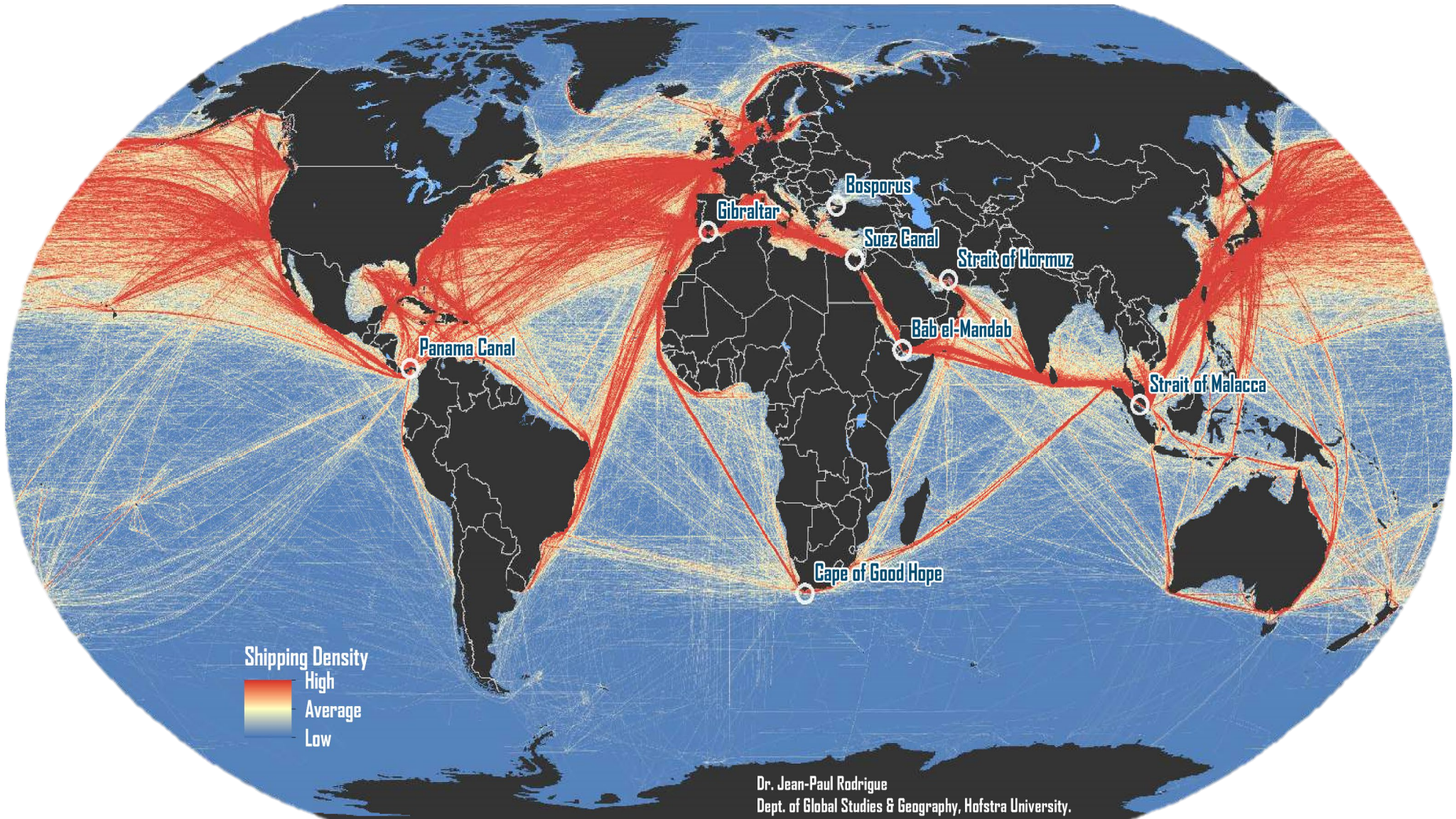
100,000 Vessels



2 Bn Gross Tonnes



2.7 Bn Dead Weight Tonnes



Shipping Density
High
Average
Low

Dr. Jean-Paul Rodrigue
Dept. of Global Studies & Geography, Hofstra University.

THE TANKER MARKET – Ground to Airplane

Name	Dwt Range	Petrochemicals	Clean Petroleum Products	Fuel oil and Crude Oil
Handysize	20,000 to 39,999	◆	◆	
Medium Range	40,000 to 54,999	◆	◆	
Long Range 1	55,000 to 79,999		◆	◆
Long Range 2	80,000 to 124,999		◆	◆
Panamax	55,000 to 79,999			◆
Aframax	80,000 to 124,999			◆
Suezmax	125,000 to 199,999			◆
Very Large Crude Carrier	200,000 up			◆

SUEZMAX CRUDE OIL TANKER

- M/T *Istanbul*
- Built 2015, China
- 158,000 Dwt
- 176,000 cubic metres liquid capacity
- Uncoated cargo tanks
- Crude oil tanker



THE DRY BULK MARKET –Even *More* Markets

			Typical Cargo				
Name	Dwt Range	Geared (Y/N)	Iron Ore	Coal	Grain	Finished Steel	Fertilizer
Handysize	15,000 to 34,999	Yes	♦	♦	♦	♦	♦
Handymax	35,000 to 47,999	Yes	♦	♦	♦	♦	♦
Supramax	48,000 to 59,999	Yes	♦	♦	♦	♦	♦
Ultramax	60,000 to 64,999	Yes	♦	♦	♦	♦	♦
Panamax	65,000 to 79,999	No	♦	♦	♦		
Kamsarmax	80,000 to 84,999	No	♦	♦	♦		
Post-Panamax	85,000 to 109,999	No	♦	♦	♦		
Capesize	110,000 to 199,999	No	♦	♦			
ULOC	200,000 up	No	♦				

HANDYSIZE BULKER

- M/V *Pacific Logger*
- Built 2000
- 31,877 Dwt
- Geared, 4x30.5 T cranes
- 42,210 cubic metre grain capacity
- Many different cargos
- Fragmented ownership
- Classic shipping



CONTAINER SHIPS - Romantic?

- These ships carry 40-foot metal boxes
- Shipping containers allow for secure transport of mostly manufactured and semi finished goods around the world.
- The shipping container (box) can be moved by rail, sea or truck almost anywhere in the world.
- The standard unit is the TEU, twenty-foot equivalent unit, which is the basic dry storage shipping container. Most ships these days carry FEUs, forty-foot boxes. Ten-foot boxes also exist.
- One TEU has a nominal 14 metric tonne capacity.

CONTAINER SHIPS

- Small: Dwt below 1,000 TEU, usually the oldest ships
- Feeder: 1,000 to 3,500 TEU, usually geared, below 32.3m beam
- Old Panamax: 3,500 to 5,500 TEU, can be geared or gearless, below 32.3m beam
- New Panamax: 5,500 to 14,000 TEU, usually gearless, below 55m beam
- Post Panamax: 14,000 to 18,000 TEU
- Super Post Panamax: over 18,000 TEU, (the largest ships afloat carry approximately 23,000 TEU at full capacity)



GAS CARRIERS: LPG & LNG

- LPG is the catch-all term for a variety of cargoes including:
 - Propane
 - Butane
 - Ethane
 - Ammonia
- LPGs are by-products of natural gas production and oil refining. They are used in industrial processes (plastics, fertilisers etc. Cargos are either cooled or pressurised to liquefy them for transport.
- LNG's chief characteristic as a cargo is that it is cooled to -160C, which liquefies it and reduces its volume to about 1/600th of that of domestic consumption gas.

LNG TANKER

- M/T *Eduard Toll*
- Membrane Type
- Built 2017
- 172,000 cubic metre capacity
- Ice strengthened





VESSEL ECONOMICS

How Ships Generate Revenue and Incur Expenses - and who pays

“MANAGING” THE SHIP – Think Real Estate

- **Technical Management** – Physical operation of vessel (CREW, FOOD, PAINT)
- **Commercial Management** – Generating revenue through “Chartering” activities

HOW SHIPS GENERATE REVENUE

- **Voyage Charter** – a single trip in the “spot market”. In a voyage charter, the shipowner is responsible for “operating” the ships, including crewing (Taxi)
- **Time Charter** – charter vessel for a period of time – months or years. In a time-charter, the shipowner is responsible for operating the ship, including crewing (Taxi)
- **Bareboat Charter** – a long term financial arrangement in which the owner leases the vessel to the user. In a bareboat charter, the charterer is responsible for operating the ship, including crewing (leasing a car).
- **Pools** – Owner places ship in a “pool” of vessels owned by multiple owners. The pool manager, also called “the commercial manager.” Income is pooled (condo rental pool)

DRY DOCKING & SPECIAL SURVEY COSTS

- **Scheduled maintenance**
 - Dry Docking – 2 times every 5 years (AKA “Haircut and a Shave”)
 - Special Survey – every 5 years
- **Time and costs are a function of age, sector & port**
- **Budgets / Costs?**
 - Cost of the Yard
 - Painting
 - Cleaning
 - Steel Renewal (\$\$\$)
 - Cost of Spares and services
 - ENVIRONMENTAL UPGRADES: SCRUBBERS, BALLAST WATER ETC.

OPERATING THE SHIP

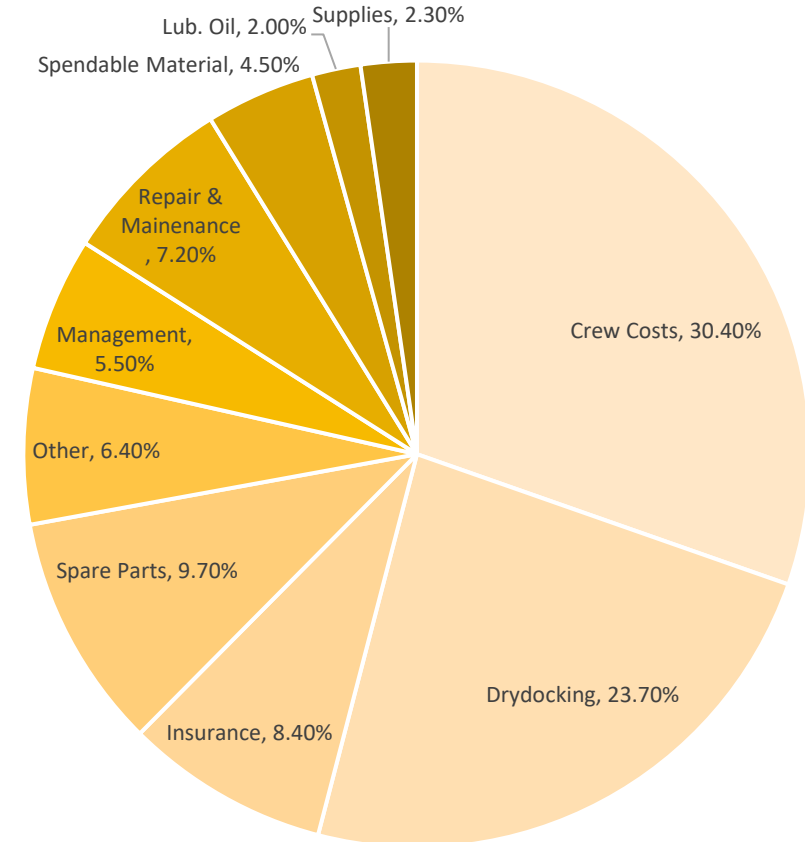
OPEX	% Share
Crew Costs	55%
Salaries	
Travel & Food	
Spares & Repairs	12%
Lube Oil & Consumables	10%
General Admin	5%
Insurance	12%
H&M, War Risk, P&I	
Management Fee	6%

REVENUE vs. EXPENSES – Making Money

Bulkер	
	Daily Operating Cost
Handysize	\$4,995
Handymax	\$5,480
Panamax	\$5,663
Capesize	\$6,691

Tanker	
Product	Daily Operating Cost
Handysize Product	\$7,433
Panamax	\$7,557
Aframax	\$8,041
Suezmax	\$7,832
VLCC	\$9,104
	\$9,950

Container	
	Daily Operating Cost
Feedermax (100-1,000 TEU)	\$4,371
Container Ship (1,000-2,000 TEU)	\$5,172
Main Liner (2,000-6,000 TEU)	\$6,830

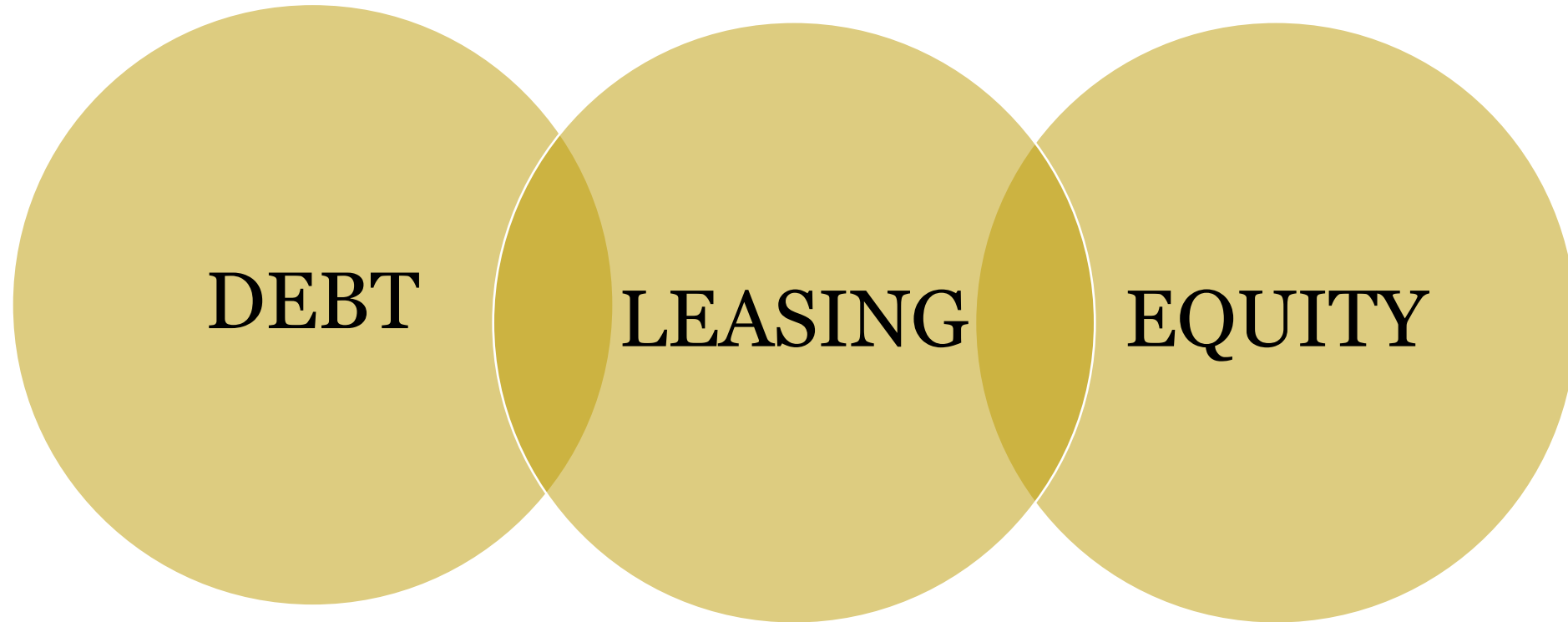


Source: Moore Stephens and Wilson ASA



SHIP FINANCE

\$1 Trillion - MAIN SOURCES OF SHIP FINANCE



DEBT - PRIMARY SOURCES - \$500 Billion

- Commercial Banks
- Direct Lenders, Credit Funds
- Bond Markets, Especially Norway and USA
- Export Credit Agencies (ECA) and Export Import Banks (EXIM), Especially countries that build vessels for export (China, Korea, Japan, Norway, etc)
- Lessees / Leasing Companies

DEBT - CHARACTERISTICS

- Primary source of financing for most shipping companies
- Guaranteed' repayment, but (typically) without any upside
- Repayment is comprised of “Principal and Interest”
- Principal Repayment – Depends on lender & age of vessel, but 15 years standard for new ship
- Interest Payment – LIBOR or SOFR + a “spread” expressed in “basis points” (100th of 1%)
- Debt can have different levels of security – but usually Secured by a “Ship Mortgage”
- Recourse – usually guaranteed by a company, but not always (eg, private equity)
- *Why do owners do it: Cheap, Enhancing return on equity, gives more buying power*
- *Why do lenders do it: Efficient, high \$ volume with low overhead, “Asset backed”*

EQUITY-PRIMARY SOURCES \$500 Billion

- Ship Owners
- Public Equity Investors (Stock Market)
- Private Equity Investors
- Leasing Companies

EQUITY - CHARACTERISTICS

- The “Down payment” on the house
- “Enjoys” Ownership and Control
- Has most upside, but....
- Equity is the “first loss” source of capital
- All other sources of capital have priority of repayment ahead of equity
- Equity earns its return from free cash flow and residual value (Hopefully)
- *Key Terms: Common, financial sponsor, watermark, hurdle rate, secondary, primary, carried interest, Pari Passu, preferred, dilution, Private Equity*
- Why Owners do it: Need the Money, Carried Interest, Fees
- Why Investors do it: Attractive Risk adjusted return (hopefully)

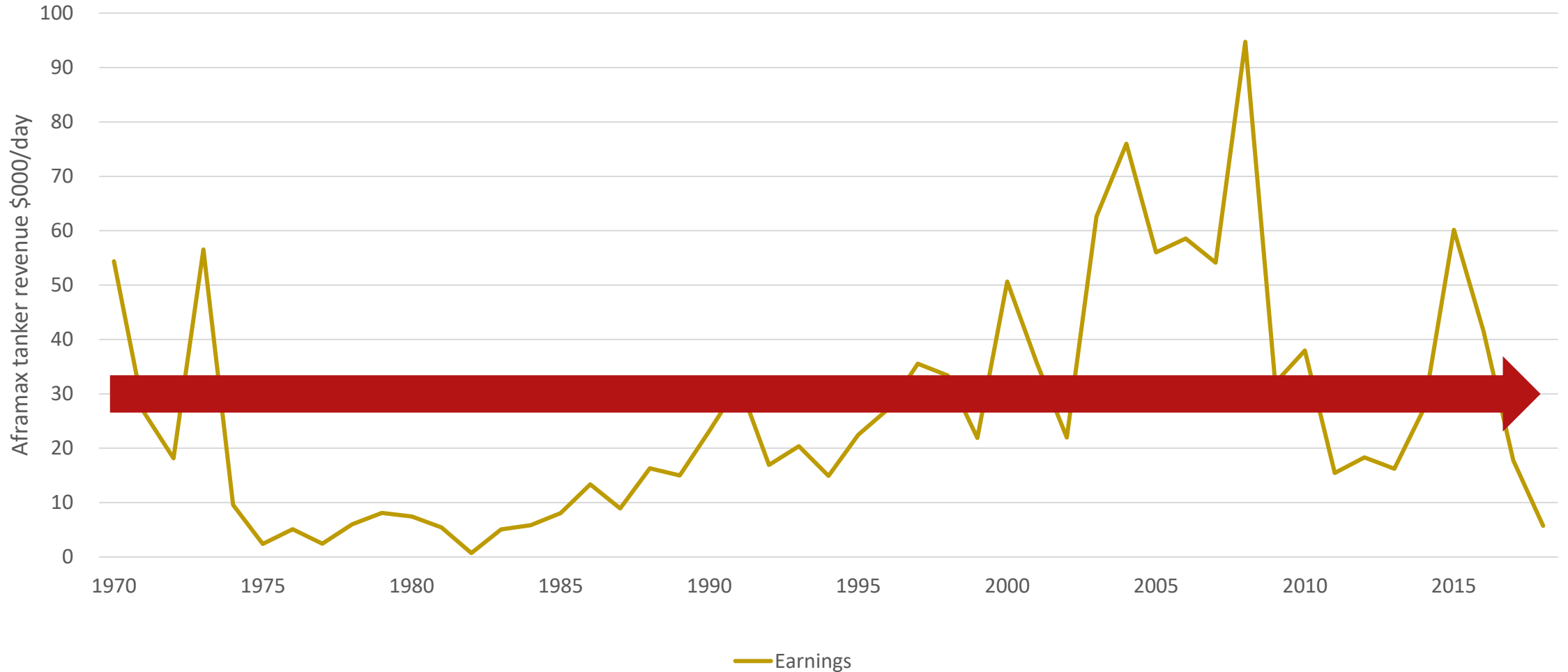
LEASING – CHARACTERISTICS

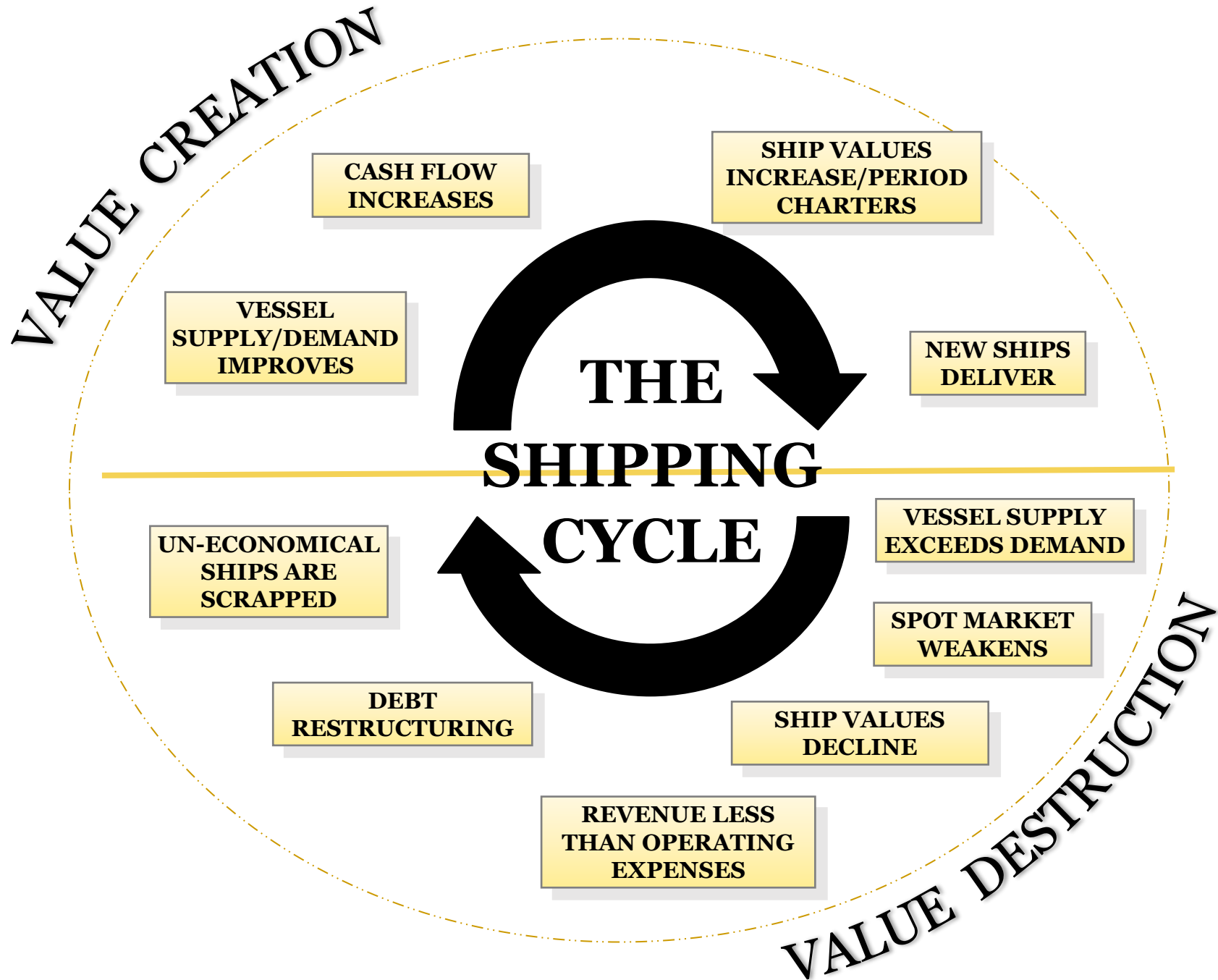
- Tool for extracting equity
- Lessee buys ship for 80-100% of value
- “Bareboat” charters ship back to owner for fixed period
- Lessor uses its equity and borrows debt
- At end of lease, owner may have right to buy it, or leasing company might keep it
- China, Japan, Germany, Korea, Corporate



Shipping is Volatile and Cyclical

Imbalance in supply and demand causes dramatic change to charter rates, values





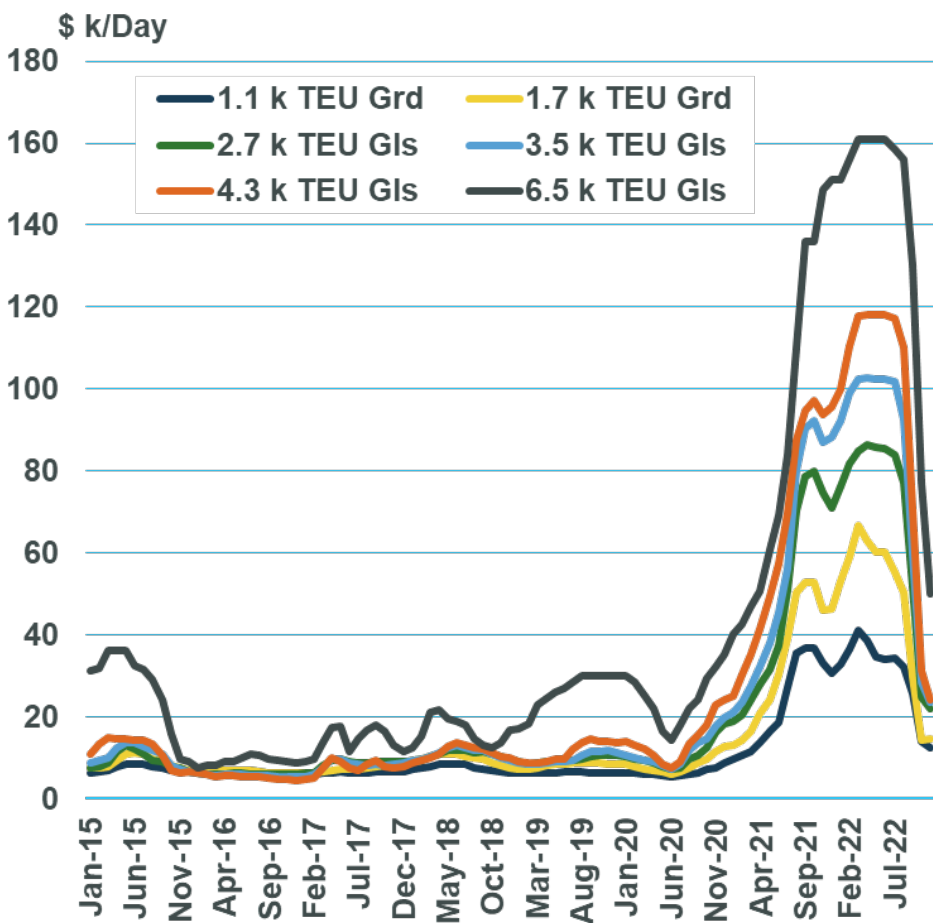
STRATEGIES

- * “Asset Play” (AKA, Buy Low, Sell High)**
- * Industrial Shipping (Oil companies, grain houses)**
- * Opportunistic Shipping (Buy low, operate)**
- * Family Owned (Safeguard wealth, employ family members, generate fees)**
- * Service Providers (technical managers, pools)**
- * Asset Light (**

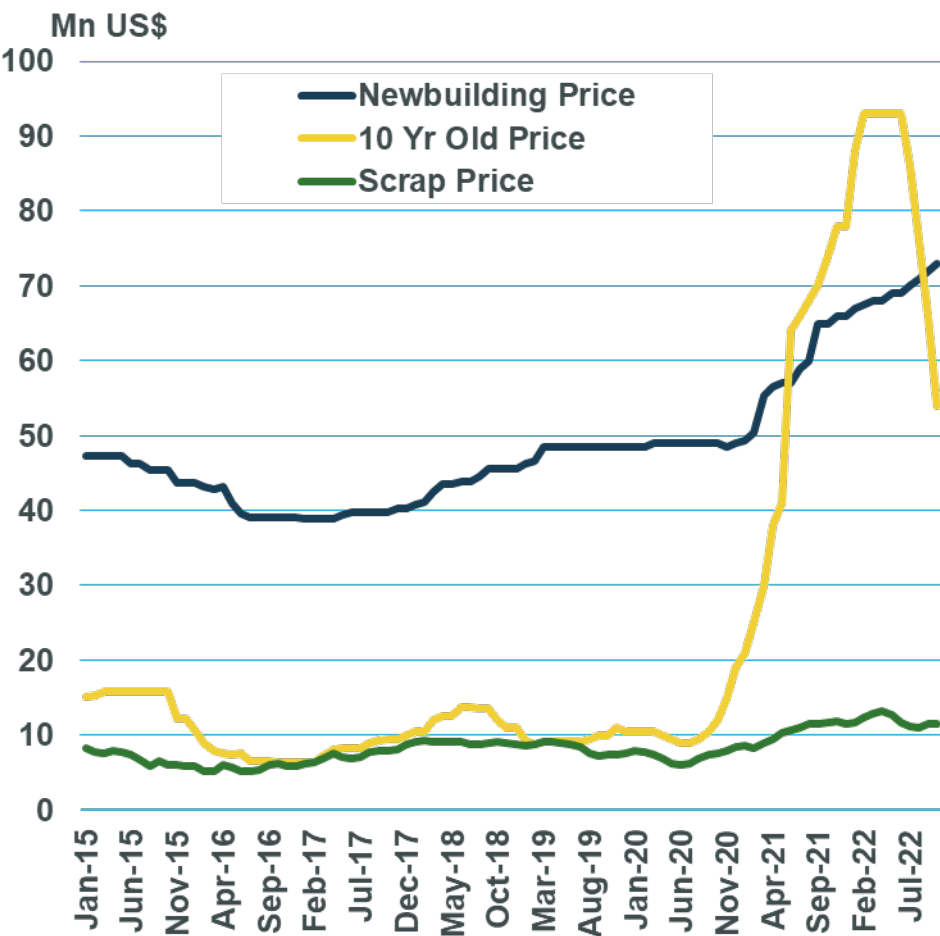
Containerships

Huge post COVID gains and recent falls

Containership 1 Yr Timecharter Rates



4.2/4.4 k TEU Panamax Containership Prices

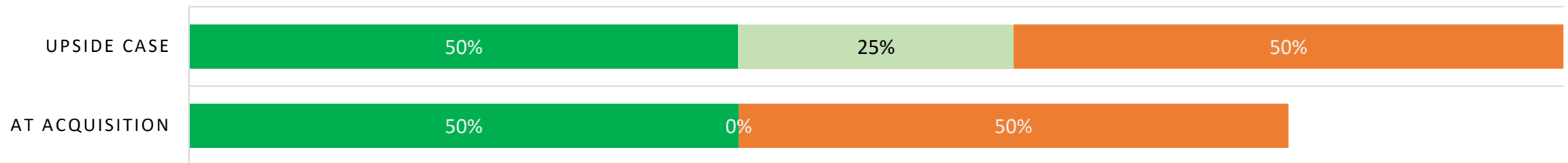


UPSIDE SCENARIO

- Vessel's market starts at \$20m, loan is \$10m
- Vessel value increases to \$25m
- Debt balance remains \$10mm
- Equity value rises from \$10m to \$15m ($\$25\text{mm asset} - \$10\text{mm debt} = \$15\text{mm equity value}$)

CAPITAL STRUCTURE

■ Equity ■ Change in Value ■ Debt

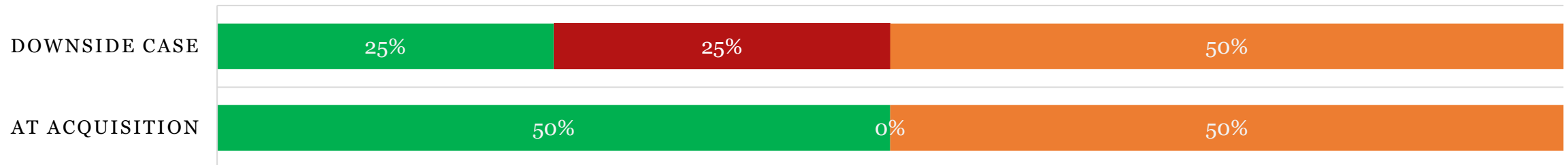


DOWNSIDE SCENARIO

- Vessel's market value decreases to \$15m
- Debt balance remains \$10mm
- Equity value drops from \$10m to \$5m ($\$15\text{mm asset} - \$10\text{mm debt} = \$5 \text{ equity value}$)

CAPITAL STRUCTURE

■ Equity ■ Change in Value ■ Debt



Thank you!