# Investment Opportunities in Ship Recycling



# Investment Opportunities in Ship Recycling - Topics

- 1. Situation Analysis and Opportunities
- 2. How do participate



# Situation Analysis and Opportunities

- Supply
- Demand (Capacity)
- Industry Profile
  - <mark>Size</mark>
  - Virgin Territory (Financial Vacuum)
  - Risks



#### **Opportunities: Supply What is being recycled**

Vessel Types	2008	2009	Change (%)	2010	Change (%)
MPP/GC	29	176	507%	128	-27%
Asp+Bitu	3			2	
Bulkers	103	262	154%	123	-53%
Chem&Oil	41	71	73%	117	65%
Containers	60	198	230%	82	-59%
Cruise	5	6	20%	3	-50%
FSO/FPSO	5	6	20%	11	83%
LNG	4			2	
LPG	20	28	40%	24	-14%
ОВО	3	10	233%	0	-100%
Other	23	22	-4%	53	141%
Pax (Ferries)		2		24	1100%
PCC	24	112	367%	32	-71%
Products	21	34	62%	62	82%
Reefers	31	33	6%	35	6%
RORO	9	52	478%	66	27%
Tankers	35	59	69%	75	27%
Total	416	1071	157%	839	
Dry (Bulk + GC)	64	235	267%	546	<b>132%</b>
Wet (Chem+Product+Dirty)	130	384	195%	293	-24%



#### Supply: UL/VLs

			Fleet P	Profile of World	UL/VLCC	<u>Fleet</u>			
No.Vessels (end)	2008	2009	2010	Jan-11	Orderbook Delivery Schedule		Expected Scrapping (20 yrs or >20)	Net Addition/Deletion to fleet	
Fleet Totals	461	506	548	557	2011	78	43%	22	56
Deliveries	39	54	55	9	2012	61	34%	7	54
Scrappings	8	9	13	0	2013+	42	23%	19	23
Contractings	76	19	50	0	Total	181	100%	48	133
Orderbook	230	195	190	181	% Fleet	32.50%			
DWT (M) Tons (end)	2008	2009	2010	Jan-11	Orderbook Delivery Schedule			Expected Scrapping (20 yrs or >20)	Net Addition/Deletion to fleet
Fleet Totals	137,995,414	152,351,683	165,792,743	168,553,752	2011	24,215,647.00	43%	5,905,428.00	18,310,219
Deliveries	12154148	16,709,840	16,894,317	2,761,009.00	2012	19,364,342.00	34%	1,995,071.00	17,369,271
Scrappings	774,724	2,353,571	3,453,257		2013+	13,293,156.00	23%	5,619,573.00	7,673,583
Contractings	23,816,446	6,077,052	15,921,000	-	Total	56,873,145.00	100%	13,520,072.00	43,353,073.00
Orderbook	71,240,259	60,607,471	59,634,154	56,873,145	% Fleet	33.74%			

	Avg.YoB	Avg.Age	Ships
Average age of demolition in 2008	1985	23	3
Average age of demolition in 2009	1989	20	9
Average age of demolition in 2010	1990	20	13
Weighted Average		20	25



#### Supply: Capes

			Pro	ofile of World Ca	pesize Fle	et			
No.Vessels (end)	2008	2009	2010	Jan-11	Orderbook Delivery Schedule			Expected Scrapping (23 yrs or >23)	Net Addition/Deletion to fleet
Fleet Totals	862	965	1158	1189	2011	298	47%	111	187
Deliveries	44	111	211	36	2012	231	37%	19	212
Scrappings	14	8	18	5	2013+	103	16%	46	57
Contractings	212	77	123	9	Total	632	100%	176	456
Orderbook	781	747	659	632	% Fleet	53.15%			
DWT (M) Tons (end)	2008	2009	2010	Jan-11	Orderbook Delivery Schedule			Expected Scrapping (23 yrs or >23)	Net Addition/Deletion to fleet
Fleet Totals	153,322,646	172,866,381	208,366,186	213,903,085	2011	56,835,224.00	46%	19,222,786.00	37,612,438
Deliveries	8,624,578.00	20,987,005	38,082,105	6,348,561.00	2012	46,073,810.00	37%	3,695,668.00	42,378,142
Scrappings	2,157,823	1,443,270	2,582,300	811,662	2013+	20,264,600.00	16%	8,053,272.00	12,211,328
Contractings	41,348,696	17,294,407	23,003,958	1,687,000	Total	123,173,634.00	100%	30,971,726.00	92,201,908.00
Orderbook	146,811,940	143,119,342	128,041,195	123,379,634	% Fleet	57.68%			

	Avg.YoB	Avg.Age	Ships	
Average age of demolition in 2008	1981	27	14	
Average age of demolition in 2009	1983	26	8	
Average age of demolition in 2010	1982		18	
Average age of demolition in 2011	1982	28	8	
Weighted Average		23	48	

# Supply

#### Next 3 years will be busy

- Order books
- Poor freight rates
- Legislation
- Selective charterers

Capes: In 2009 less than 1% of the fleet capacity was recycled. In 2010 about 1.5%. In 2011, we expect this figure to be in excess 3.5%



### **Opportunities:** Supply

- About 30 mill DWT of tonnage is expected to be recycled this year.
- 2011-2013 are expected to be busy years/
- Due to substantial increase in the number of vessels that are available for recycling (1200) coupled with an increase in ship prices, Cash (investment) requirements have increased significantly.



### **Opportunities – Demand** (Capacity)

Demand exceeds Supply Capacity - 2010: 26.6/6.88 mill DWT/LDT - 2009: 28.2/8.1 mill DWT/LDT - 1983: 33.3/7.1 mill DWT/LDT - 1985: 42.6/9.0 mill DWT/LDT (HISTORICAL HIGH) About 14.4/1 mill LDT > 2009)

#### Demand: Where it is done

Indian subcontinent

 India (180)
 Bangladesh (80)
 Pakistan (50 of 125)

 China (20)
 Turkey (25)

Note: all figures are approximates

#### These 5 countries recycle more than 90% of the world's fleet

# Industry Volume (\$)

With an average transaction value in excess of US\$ 4 mill/per vessel, the industry turnover for this year is estimated to be about US\$ 5.0 Billion.



#### **Opportunities – Vacuum**

Banks, the only source of funds. But,

- Absence of:
  - Major Banks
    - Limited availability of cash flow
  - Other Financial institutions
  - Financial instruments
  - Understanding of the trade
    - Traditional ship financing tools (mortgage based) are ineffective

#### Bottom line: Lack of funds



#### Investment Vehicles -Options

#### 1. Equity routes

a. Public Listing, Private Placements through VCs and PEs, Joint Ventures, etc.

#### 2. Debt routes

a. Investment Funds, Banks, Bonds, Private lenders, etc.

#### 3. Mezzanine routes

a. Investment Funds with a debt and/or equity component

#### We believe debt based instruments; especially INVESTMENT FUNDS, are the ideal tools for this trade.



### **Ship Recycling Fund**

- Ship Recycling Fund of US\$ 200 Million can be deployed profitably.
- Gross annual return of 15% can be targeted.
- Open or close-ended
- Fund could also venture in the market of Scrap Futures via arbitrage and hedging



#### Liquidity Risk:

- With an average inventory turnover of 35 days, the liquidity risks are low.
- Demand exceeds Supply

#### Value risk:

- The price of a vessel is almost equal to the value of the steel in it, thus leaving minimal scope for value depreciation of the asset... limited downside
- Correlated to/hedged against steel prices

#### Credit risk:

 Since confirmed sources of payments (e.g. LCs), credit risk is low.

### How do I participate -Players

Ship owners
Ship brokers (500+)
Cash Buyers (5+)
Ship Recycling Yards (300+)

#### **Cash Buyers**

- Cash Buyers are not brokers.
- Cash Buyers are TRADERS. They buy vessels on cash basis from ship owners and resell to ship recycling yards world wide on Letters of Credit.
- Cash Buyers take delivery of vessels on both "delivered" and "as is where is" terms.
- IMO's Hong Kong Convention on Ship Recycling will consider Cash Buyers as OWNERS of vessels.

# **Closing Thought**

- Combination of macro and micro factors make this the perfect time to invest in ship recycling.
- Hidden (ignored) "pillar" of shipping
- Industry is recession proof.
- Recycling old ships is good for the environment and for the safety of the crew.
- IMO's Hong Kong Convention has established guidelines for the safe and responsible recycling of ships. Most nations have started abiding by these guidelines. Green processes are emerging.
- Maturity of players with strong record
- Time to act is NOW!!!



### Thank you!