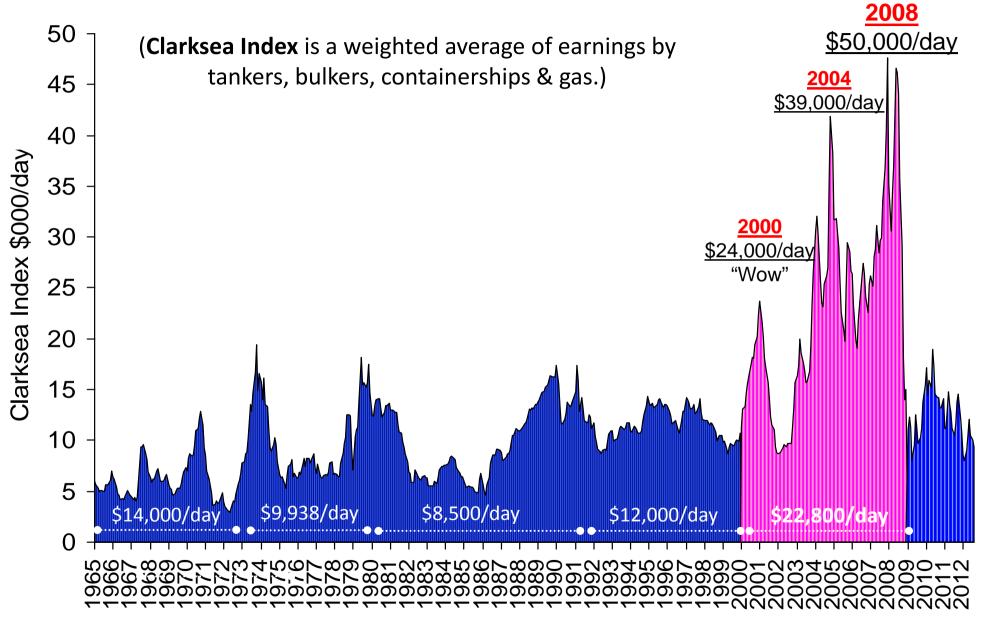
#### Shipping Trends Clarkson Research, October 2012

#### Shipping Cycle 1965-2012



#### **Clarksea Index – cash pressure growing**

\$000/day

- The Clarksea index has edged down from \$19,000 a day to \$8,500 a day in Sept 2012.
- With operating expenses are around \$5,800 a day, free cash flow is now under pressure.

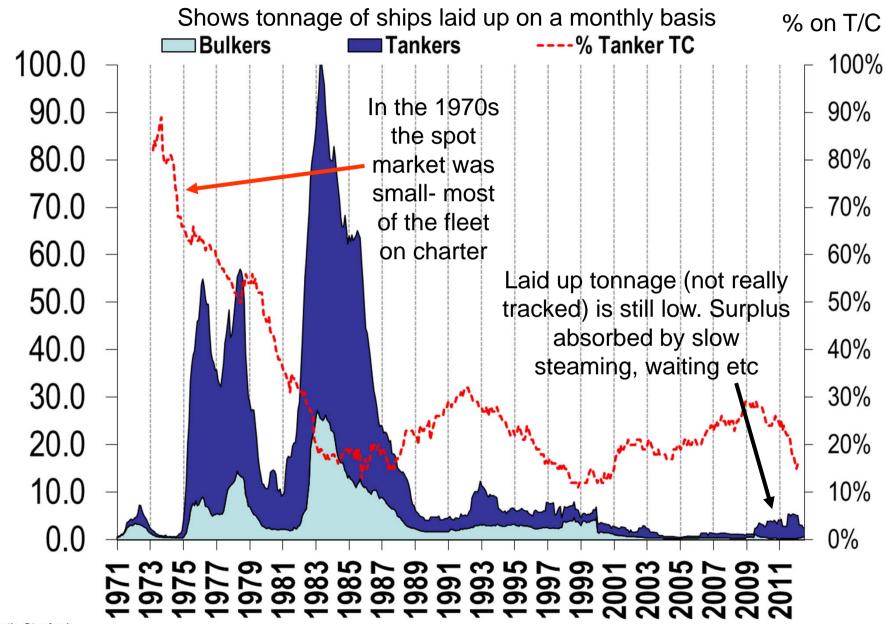
50 45 **40** 35 The cash 30 squeeze is 25 starting 20 15 10 5 OPEX Handymax \$5,800/day Ω 80' 08 00' 09' 09 08 10 10 10 5  $\overline{}$ Jan May Sept Jan May Sept Jan Sept Sept Jan Sep

# Market Change 2010 to 2012

Average earnings 1st half 2010, 2011, 2012

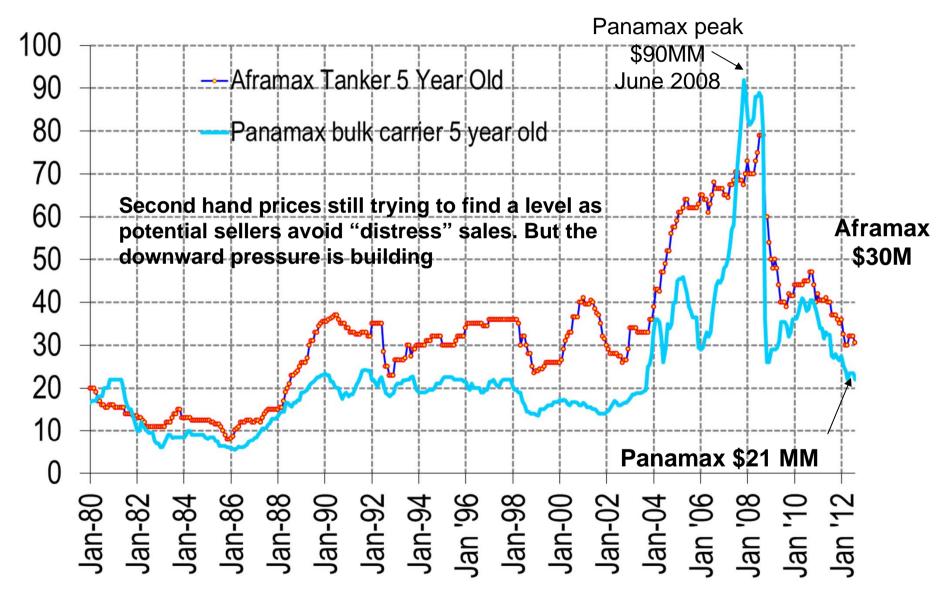
	\$000/day		%	\$000/day		
	2010	2011	change	2012	OPEX	Ratio
VLCC (10 years)	37,929	16,856	-56%	7,171	10,812	0.7
Suezmax	31,259	19,217	-39%	4,497	9,309	0.5
Aframax	19,792	13,528	-32%	12,852	8,374	1.5
Products Clean	13,148	12,644	-4%	8,540	7,908	1.1
Products dirty	14,956	10,535	-30%	10,410	7,908	1.3
Capesize	30,587	14,433	-53%	3,120	7,512	0.4
Panamax	20,221	11,340	-44%	2,667	6,312	0.4
Panamax (Trip)	24,955	13,895	-44%	3,750	6,312	0.6
Handymax (Trip)	12,798	10,884	-15%	9,657	5,991	1.6
Container 1700 TEU	6,800	10,142	49%	6,200	5,000	1.2
Container 3500 TEU	13,250	14,871	12%	7,500	7,000	1.1
Total	22,849	13,704	-40%	6,963	7,826	0.9
All tankers	23,417	14,556	-32%	8,694	8,862	1.0
All bulkers	22,140	12,638	-39%	4,799	6,532	0.7

## Laid Up Tonnage



M dwt

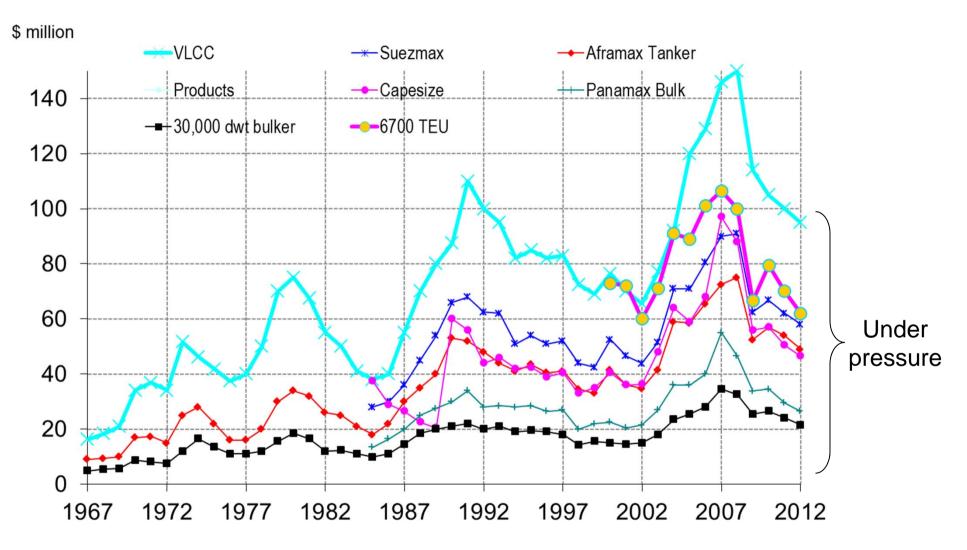
#### 2<sup>nd</sup> hand prices – not bargains but getting there



Martin Stopford Source CRSL

price \$ million

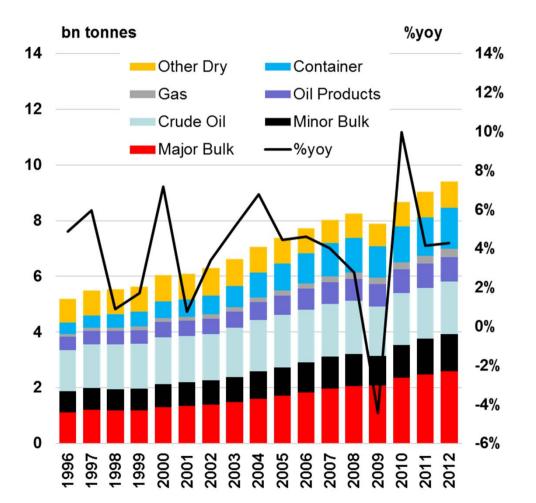
# Newbuilding Prices Edging Down



Source: Compiled from several sources including Fearnleys, CRSL

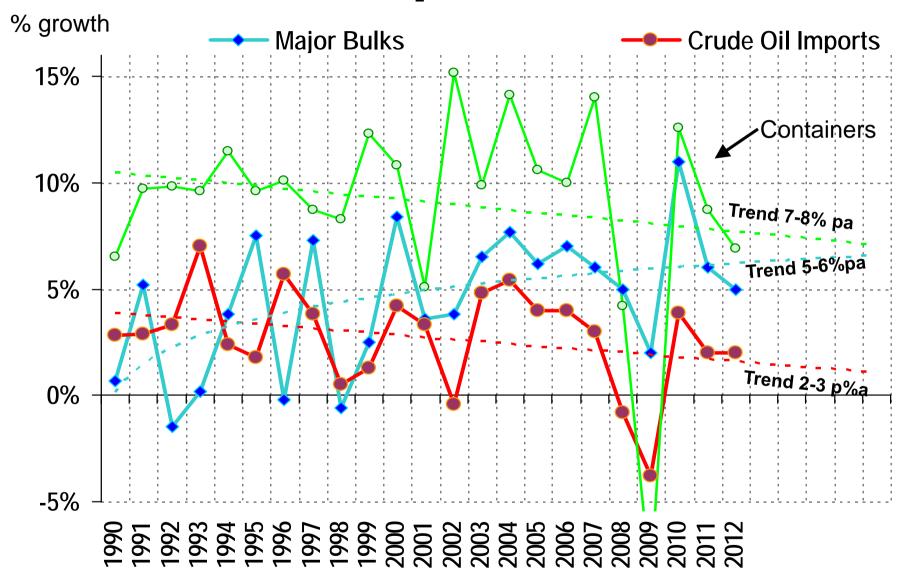
# Seaborne Trade Growth

- World seaborne trade expanded in 2011 by an estimated 4.1% (avg. historical growth 1986-2010 : 3.7%), slowing from the 2010 bounceback.
- In 2012 it is estimated that seaborne trade will grow by 4.3% to take it above 9.4 billion tonnes.
- Box trade is projected to grow by 6% (8% in 2011), dry bulk trade by 4% (6%) and crude and products trade by 2% (-1%).



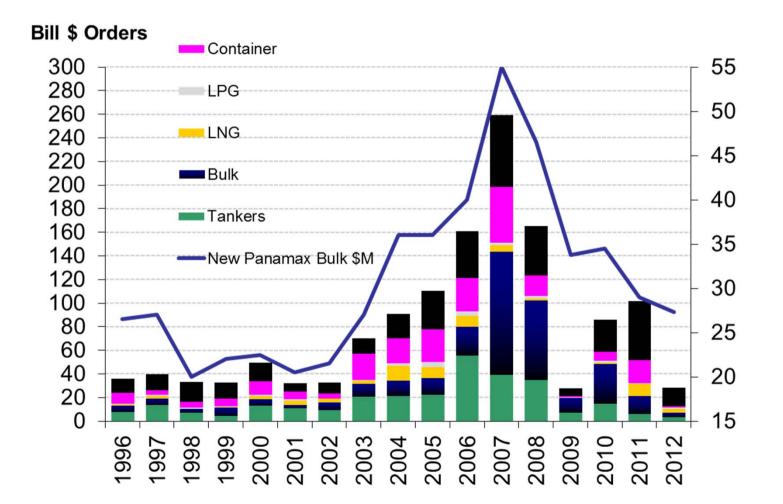
#### World Seaborne Trade Growth

# **Three Speed Trade ?**

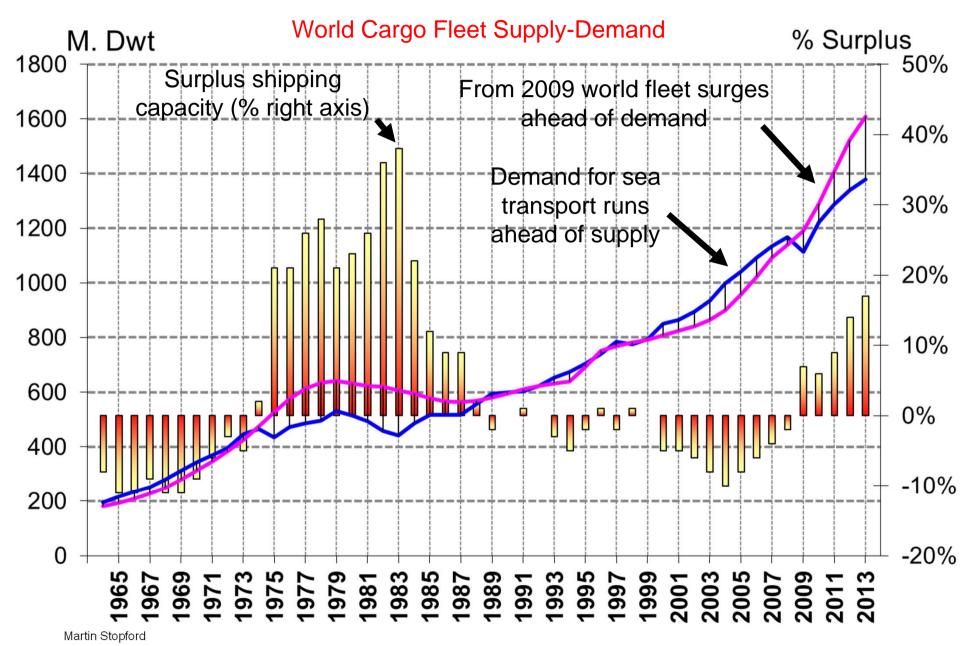


#### The "Classic" Investment Bubble

Bars show Investment In New Ships 1996-2012

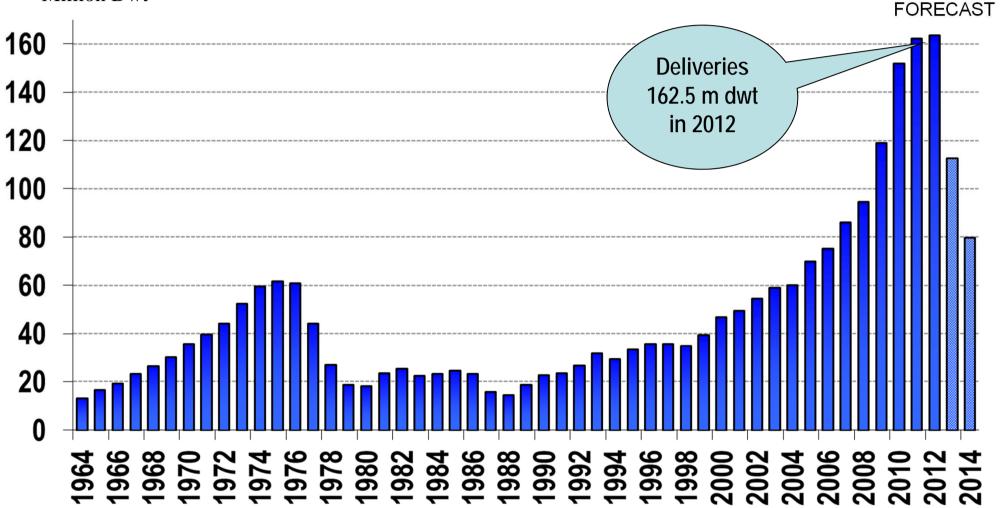


#### Challenge : Shipping Over-Capacity



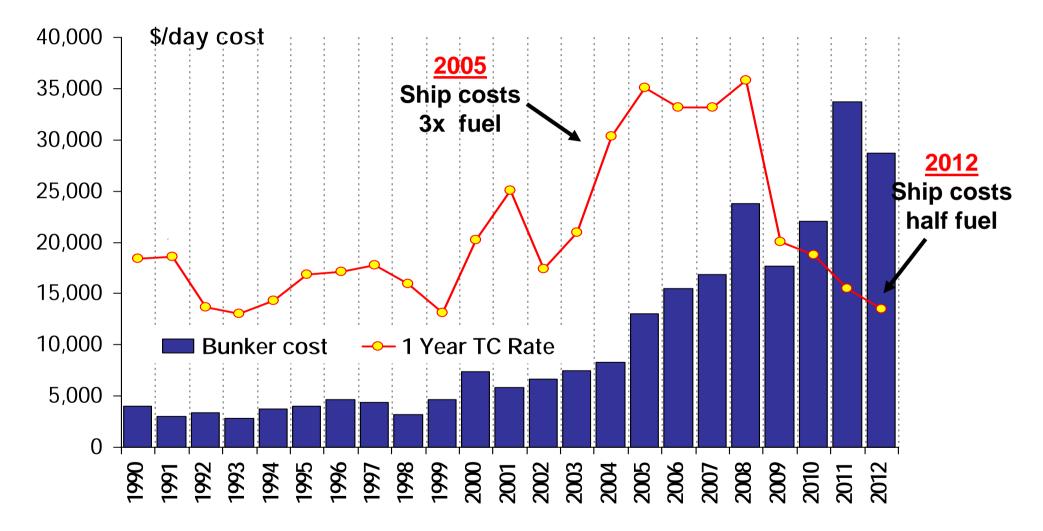
# Challenge : The Shipbuilding Cycle

Million Dwt



# Challenge : Energy Costs

THE SHIP USED TO COST MUCH MORE THAN BUNKERS BUT TODAY BUNKERS COST MORE THAN THE SHIP.

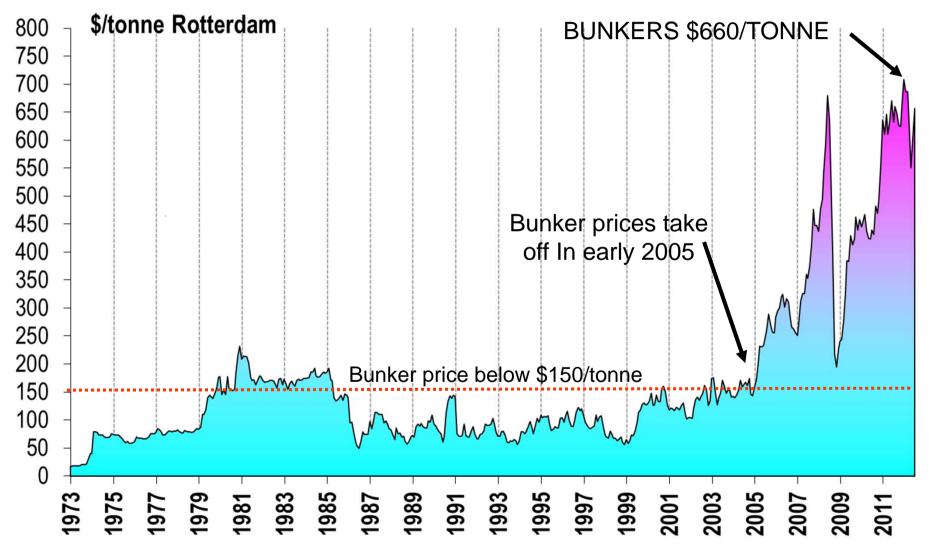


Based on Aframax tanker, 1 year TC rate and Rotterdam bunker price

Martin Stopford

#### **Bunker Prices**

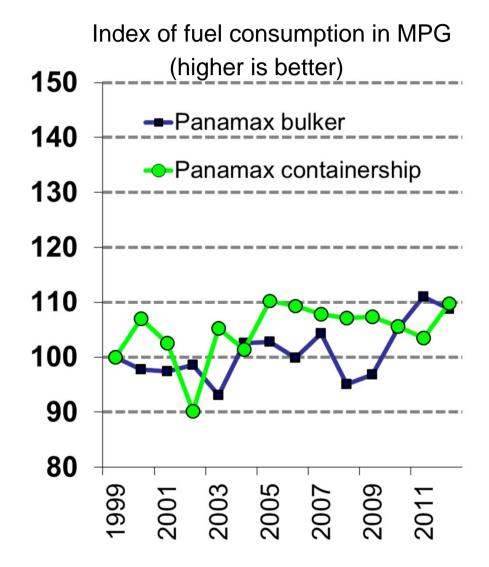
#### RISING FUEL COSTS TURN SHIP ECONOMICS ON ITS HEAD



Martin Stopford

# Fuel Consumption – Ships

- Fuel consumption of ships has not improved much in the last 13 years
- The containership consumption was about 140 tpd at 24.5 knots (latest 136 tpd)
- The bulker was about 35 tpd at 14.5 knots (latest 33 tpd)

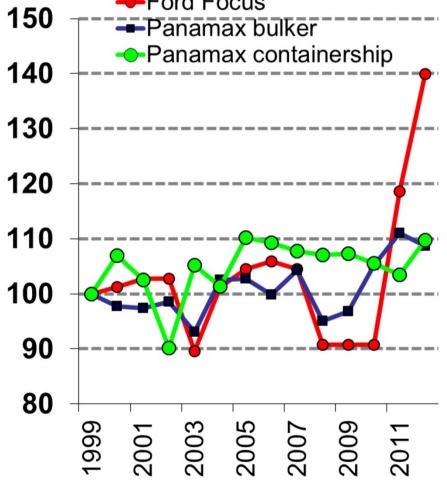


# Fuel Consumption – Cars

- Fuel consumption of cars did not improve much until last year
- The Ford Focus 1.6 Zedtec averaged about 39 mpg.
- The 2011 models pushed that up to 47 mpg and the 2012 model to 56 mpg

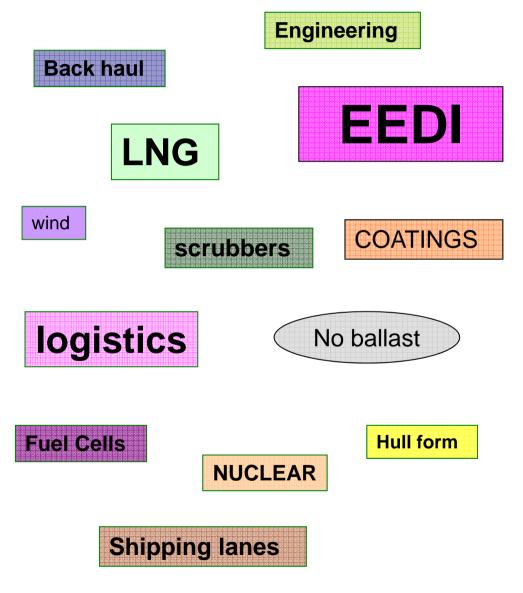
Index of Miles Per Gallon

Ford Focus

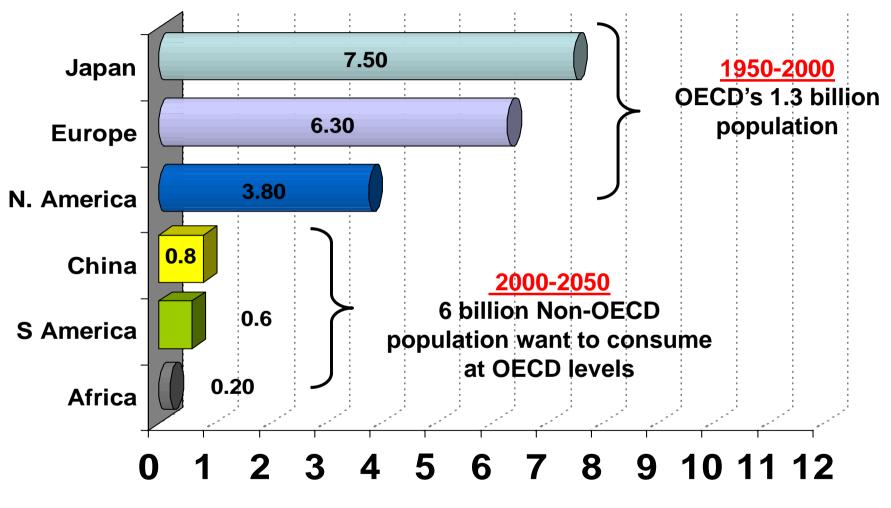


# Challenge : Regulation

- Requirement that new ships must comply with the EEDI, a clear attempt to drive efficiency improvements
- The focus on air emissions; ballast water; recycling; energy efficiency and the carbon footprint.
- The dilemma of gas oil versus scrubbers and the uncertainty over of which ballast water system.
- Many shipyards, after a decade when they were able to sell standard ships, are struggling to respond.
- Eco-ship design is complex.



#### Challenge : Globalization Part 2



Tonnes of sea imports per person a year

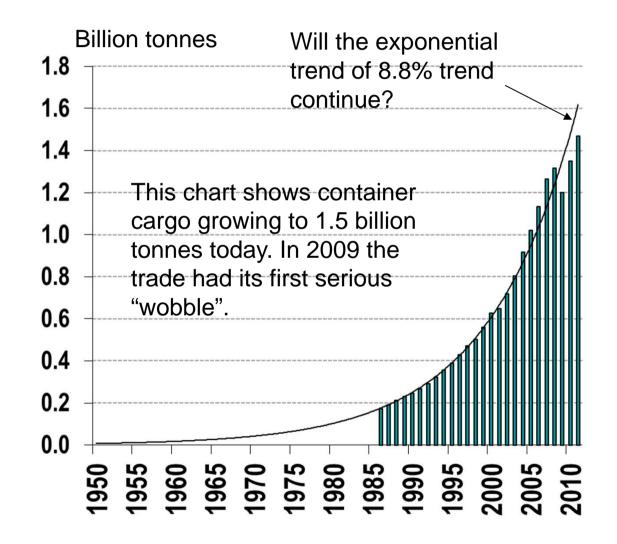
#### **Challenge : Container Business Model**

The container business will be at the heart of change

"Over the centuries technical developments in liner shipping has been not so much a continuous process as an occasional leap forward precipitated by a compelling call for change.

In between there have been long periods of conservatism".

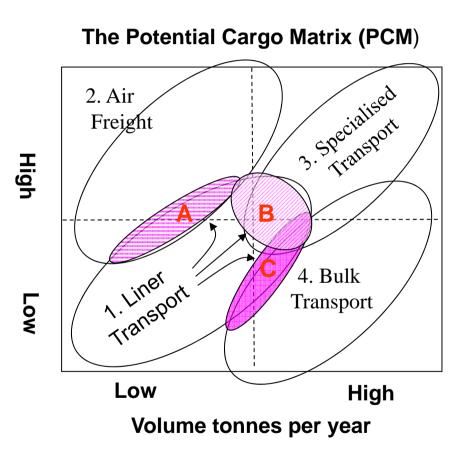
Ronnie Swayne, Chairman OCL 1973



#### **Container Business Model Maturing**

Value \$ per tonne

- Low returns, chasing size
- High investment
   requirement
- Half the ships outsourced to KGs
- Finance problems
- Rising energy costs
- Complexities of globalization



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