

# Economics of a tanker Market - Optimum Operating Conditions



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# Economics of Tanker Market

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- ❧ Understanding Optimum Tanker Market
- ❧ Ship Size elasticity – Tanker market density
- ❧ Where do we stand in terms of an Ideal condition
- ❧ Importance of understanding Tanker Market density

# Vessel operating costs



∞ Operating cost ( OC) = f ( Q x L X S x F )

Q - Size of the vessel

L - Wages and Subsistence

S - Stores , Supplies and Expenses

F - Fuel Consumption

Q / F - Fixed input

L / S - Elasticity and Plasticity

# Historic Movement of Factors



- ⌘ Fuel Costs Not included ( only Consumption)
- ⌘ Q and F - Very Elastic ( Technology , better engines, new initiatives - JIT , SSS )
- ⌘ L/S - Elastic but very Plastic since year 2000 ( Labor unresponsive , new regulation , Ship Vetting and other local requirements )

# Economic Density of Tankers



- ❧ The density of Tonnage in a segment is plastic and does not change and its important to know in which segments there is density economics and where there is density dis-economics
- ❧ Factor K - Measures the response of OC to change in Tonnage , for example if K is 0.4 then for every 10 pct increase in the size of tonnage, the OC effect increases by 4 pct. If  $K = 0$  the OC is perfectly elastic to increase in Size (  $L/S$  - are responsive as required). In this measure the OC is not the actual, OC but as a factor against earnings

# Density Economics



∞ Density Economics is therefore expressed as

$$ED = 1 - K$$

ED = (+) is Density economics

ED = (-) is Density Dis-economics

# What are historical K Values



SIZE	K
☞ 35 - 40 000	0.045
☞ 25 - 35 000	0.066
☞ 40 - 50 000	0.199
☞ < 25 000	0.351
☞ Upto 150 000	0.41 - 0.65
☞ > 150 000	0.892

# Why do we need to know all this??



- ❧ Third party Management service needs to understand earnings of owners
- ❧ More correlation to Market conditions
- ❧ Focus groups on vessels
- ❧ Help owners win the situation
- ❧ Stress group vessels



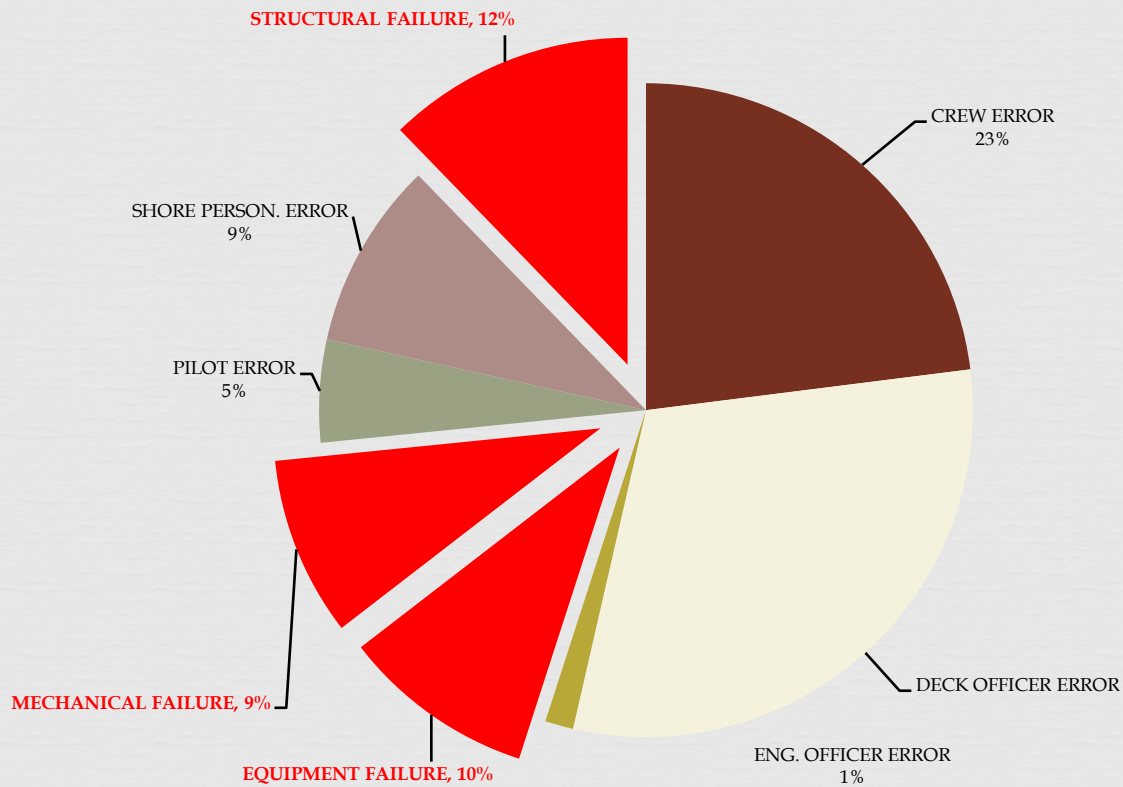
# Ideal Conditions – what we Propose/ Project



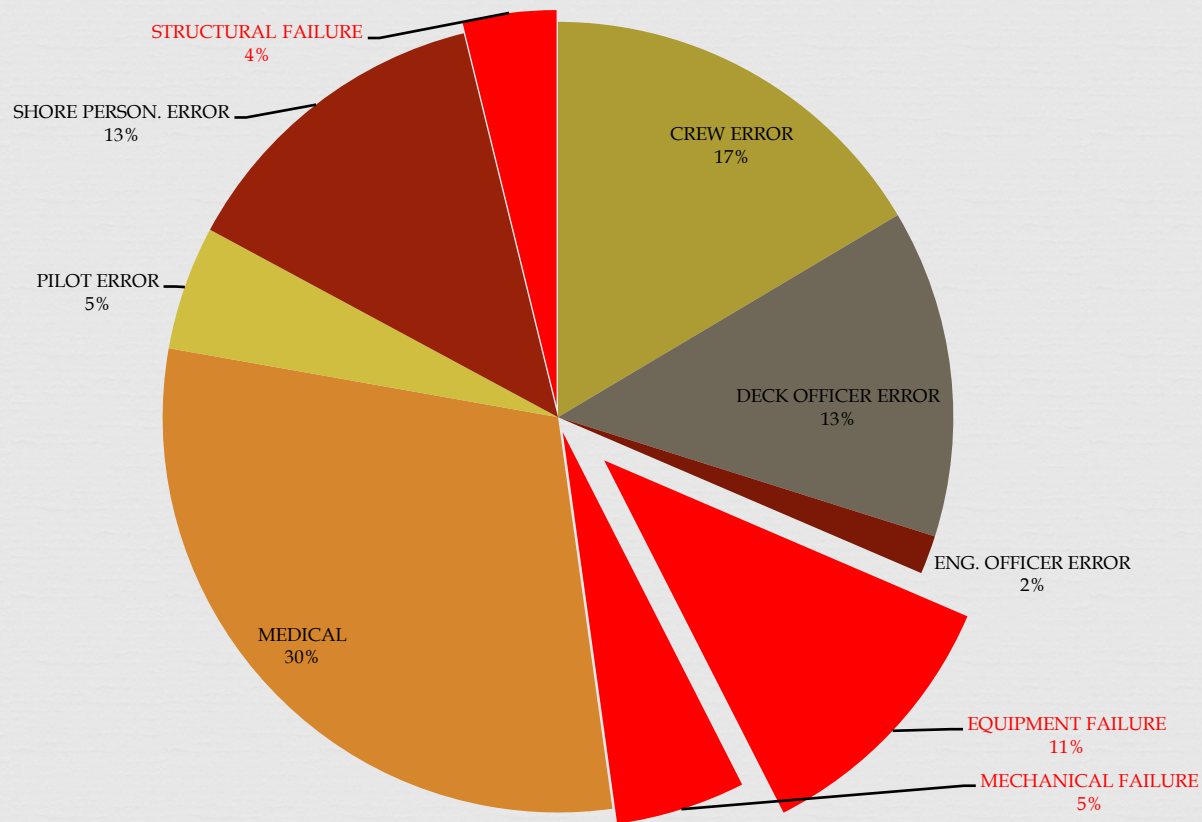
## ☞ OPEX IN PERSPECTIVE

- ☞ CREWING COSTS 55%
- ☞ STORES 6%
- ☞ **SPARES 7%**
- ☞ LUB OIL 8%
- ☞ PROVISIONS 3%
- ☞ **REPAIRS & MAINTENANCE 5%**
- ☞ **INSURANCE 12%**
- ☞ GENERAL 4%

# Club Statistics - 1989



# Club Statistics - 2012



# Conclusions



- ❧ Understand the Operating Cost inflexibility of the Market and high plasticity in L and S Factors
- ❧ Understand Owners' perspective by correct market density statistics and response
- ❧ Align vessel management – Create Focus groups
- ❧ **Reduce the cost variables for owners**

# Reducing Cost Variables



- ❧ Spending per 10 ship Basis – upto year 2000 and beyond
- ❧ Operations ( marine support- Non Standard)  
0.05 – 0.8
- ❧ Operations ( Marine Safety support –Standard )  
0.5 – 1.1
- ❧ Training - Negligible – measurable

# Need of the Hour



- ❧ Get Owners' specific Needs
- ❧ Increase operational expertise - The Big Names in pool markets far beat the stats
- ❧ Increase standard protocols
- ❧ INVEST - In Training , target pools where the K value will hurt the owners - Help them ride this Market

# Questions



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