

# Restructuring Ship Finance in a Crisis



Webinar  
Tuesday, April 14th 2020  
2:00 PM (CET)

# MANY FACTORS TO TAKE INTO ACCOUNT

- Financial issues
- Legal issues
- Regulatory issues
- Operational issues

## Disclaimer:

In this webinar I am not providing any legal or financial advise nor any advise on regulatory or operational issues. No statement made should be construed as such advise. The purpose of this webinar is only to share experience and opinions as a basis for discussions.

# ROADMAP

**In the following I will share some of my observations and practical experiences of financial restructuring of shipping companies.**

- **Analytical narrative**
- **Action approach**

# ANALYTICAL NARRATIVE

- **Establish Facts**
- **Assess the situation**
- **Set Objectives**
- **Formulate Alternatives**
- **Communicate with stakeholders**
- **Determine possible actions**
- **Decide on solution(s)**
- **Take action. Implement Solutions**

# WHAT HAPPENS IN A TYPICAL SHIPPING CRISIS?

- Freight rates and ship prices fall as a result of demand being less than supply.
- Slow steaming and lay up to reduce supply.
- Charterers can pick and choose. Older ships find it more difficult to find employment.
- Number of transactions in secondhand sale & purchase markets drops dramatically.
- Cancellation of newbuilding orders.
- Sharp reduction in new shipbuilding contracts.
- Increased scrapping of tonnage (average age of ships scrapped is lower)

## WHAT HAPPENS IN A SHIPPING CRISIS? (Continued)

- Charters are cancelled or renegotiated (Charterers default on their obligations).
- Cash flows from ship operations are insufficient to service debt obligations in full.
- Shipowners seek to renegotiate debt repayments.
- Restructuring of balance sheets (Change in capital structure).
- Some shipowners succeed – others fail.
- Ships are arrested.
- Bankruptcies.

## OTHER (FINANCIAL) CAUSES OF A SHIPPING CRISIS

- **Dramatic shift in interest rates like we saw in the 1970's with USD rates at 18% p.a. (now mostly forgotten).**
- **Excess levels of debt (high gearing over and above debt capacity)**
- **Lack of available bank financing (due to uncertainty or new regulations). Some banks withdraw from ship financing altogether.**
- **Lack of willing equity investors.**
- **Dramatic shift in some operating costs (cost of bunkers / insurance).**

# WHAT IS SPECIAL WITH THE COVID-19 VIRUS CRISIS?

In this crisis we have to deal simultaneously with:

- Drop in demand (Typical Shipping Crisis)
- Reduced availability of financing (Financial Crisis)
- Operational constraints caused by necessary measures to stop or slow spread of the Covid-19 virus:
  - Crew Changes
  - Port Calls
  - Scheduled Dockings and Special Surveys
  - Other Ship Repairs
  - Cargo Handling
  - Other issues caused by necessary health considerations.



# FOCUS ON FINANCIAL RESTRUCTURING

- Cash flows from ship operations are insufficient to service debt obligations in full.
- Renegotiation of debt obligations (repayments and interest payments)
- Restructuring of balance sheets (Change in capital structure)
- Why some shipowners succeed – others fail

## ACTION APPROACH - SEQUENCE OF EVENTS

- Immediate action => (“Accident and Emergency Unit”)
- Achieve some stability => (“Intensive Care Unit”)
- Recovery => (“Open Ward Care”)
- Discharge
- Continued Health Care

Not always straightforward / Linear. Sometimes the “patient” can fall back to previous condition.

KEEP CALM

**“Adrenaline is not a good substitute for intelligence.”**

# THE CRISIS MANAGEMENT TEAM

**More than one – fewer than five member of the core team.**

- **Chief Executive**
- **Finance Director**
  - **Chief Accountant**
  - **Financial Analyst / (Cash Flow Modeller)**
- **Head of Operations**
  - **Chartering Director**
  - **Technical Director)**
- **Legal Advisor**

**What about HR, Media and IT?**

**What about “Financial Advisors”?**

## A WORD ABOUT “FINANCIAL ADVISORS”

**“When making Egg & Bacon, the HEN is involved, the PIG is committed.”**

- **“Financial Advisors” have to be managed carefully.**
- **Have realistic (modest) expectation about what they can contribute.**
- **Stay in charge, and remember that tasks can be delegated, but responsibility remains with the management team and in the end with the CEO and the Board of Directors.**
- **In my experience lending banks prefer to deal with management of a shipping company and may see Investment Banks /Investment Bankers as a nuisance.**
- **Investment banks are most useful when it comes to deal with institutional shareholders and bondholders that the investment banks has a relationship with and know what their policy / pressure points are.**

## SHIP FINANCING – A FEW REMINDERS

- A ship have an asset price and a cash yield.
- Yield curve for charters reflects forward expectations (rising market, falling market). Charters have different durations and rates depends on duration (period).
- During a crisis ships are no longer traded in liquid, transparent, well reported global markets 24 hours a day. Market liquidity disappears.
- Credit risk (counterparty risk on charters).
- Age of ship determines remaining economic life (characteristic similar to duration for bonds and options).

# BANK FINANCING ISSUES

- Typical duration of loan is 5-8 years with a balloon in line with a percentage of historical average value of a ship of that type and age at the end of the loan.
- Banks typically have restrictions on age in terms of not lending on ships older than 15 years and ships being free of any debt by age 20 years.
- For older ships scrap value becomes a higher percentage of total ship value than for younger ships.
- A 3 year old ship is more likely to be able to regain value during its remaining economic life than a 15 year old ship.
- Banks can agree to rescheduling of loan repayments without having to write off loans (less need to make loss provisions).
- Stricter rules for banks to make provisions for non-payment of interest. (Full write off provisions).

# STAKEHOLDERS OF DIFFERENT KINDS

MARITIME LIENS: Seafarers, Suppliers (Bunkers food etc.), Port charges, (Ship Management Fees),

SECURED CREDITORS:

Debt providers (Banks, Bondholders, other debt providers)

OTHER CREDITORS:

Office Staff, Classification Authority, Tax authorities

EQUITY HOLDERS

Equity Investors (Shareholders) (Institutional/Private/Family)

OTHER STAKEHOLDERS:

Charterers (Cargo owners). (Lien over cargoes in case of non payment of charter), Trade Unions, Ship Register (Flag State), Investment Banks (Analysts following the company)



# OPERATING EXPENSE (OPEX)

- Daily opex \*):
  - Crew
  - Spare Parts
  - Insurance
- Dry Docking / Special Survey:
  - In accordance with DD/SS schedule
- Off-hire:
  - Ordinary off-hire (annual average)
  - Off-hire due to Dry Docking / Special Survey

*\*) For TC - charterer pays bunkers. On BB - owner does not pay opex.*

# OPEX

- Great attention is paid to the opex number, sometimes at the expense of what really matters.....

....that is: to keep the ship operating to ensure safe and uninterrupted performance of the ship as an earnings-generating asset;

....to preserve the quality of the ship in a cost efficient way, and to maximize the value of the ship when sold.

- Opex is not the most critical number in terms of investment performance. The IRR of a ship investment is not highly sensitive to higher / lower opex within a small margin.
- The overall cash flow is what matters and in this context it is important to keep opex under tight control without impairing the value of the ship.

# FORMULATING AND DOCUMENTING A PLAN

**Presenting facts and documenting alternative outcomes.**

- **Financial Model with sensitivities (stress testing) and scenarios,**
- **Overall Restructuring Agreement (“Master Agreement”).**
- **Amendments to existing documentation (loans documentation, lease**
- **agreements, charterparties, service agreements etc.)**

## KEY QUESTIONS

- **What financial restructuring alternatives are available?**  
**=> Analyse and compare alternatives.**
- **What alternative do I choose?**
- **What do I need to prepare to execute?**

## SOME TOOLS OF REMEDY IN A SHIP FINANCE CRISIS

- *Moratorium on debt service to banks.*
- *Rescheduling of repayment of bank debt.*
- *Bondholders Agreement (Sometimes difficult to get all on board).*
- *Rescheduling of leasing payments (Can be difficult).*
- *Convert debt to equity (Redeemable Preference Shares).*
- *Find new source of financing to buy back existing loans at a discount. (Debt bought by Private Equity Firms with a view to convert debt to equity).*

# FINANCIAL MODELLING

- A model is an abstraction of a real world situation.
- Modelling is valuable because it makes it possible to describe complex situations.
- The process of modelling provides understanding of the deal and various possible outcomes (scenarios).
- A good model is an excellent tool of communication.
- The process helps us to be thoughtful and find solutions to anticipated problems.

# SCOPE OF MODEL

- Demonstrate ability to service debt:
  - => Interest payments
  - => Loan repayment (repayment of principal loan)
- Demonstrate probability to generate required return to equity:
  - => Dividends
  - => Residual value
- Acceptable level of risk:
  - => Probability distribution of outcomes

# TOOLS IN EXCEL

- Sensitivity Analysis
- Simulation (Monte Carlo)
- Stress Testing (What If Scenarios)
- Goal Seek

Example: What is the maximum percentage of borrowing if our bonds are to have a default risk of less than 3% ?



## REPORTS – Granularity

	<b>Year</b>	<b>6 months</b>	<b>Quarterly</b>	<b>Monthly</b>
Key Features (“Dashboard”)				
Cash Flow				
Profit & Loss Statement				
Balance Sheet				
Ratios				
Sensitivities (Risk)				
Graphs				

# DEBT CAPACITY

**Max age at final repayment \***

20
----

 years

**Loan Profile**

15
----

 years

**Bank Loan Tenure \***

8
---

 years

**Loan residual value as % of historical average ship price \***

20%
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**\*) Individual Bank Lending Criteria**

# TRADE OUT RATE

Ship age at end of TC	10.00	years		
Remaining economic life of ship	15.00	years		
Loans to be repaid by ship age	20.00	years		
Remaining time for loans to be repaid	10.00	years		
Scheduled loan when coming off TC	\$13.6	million		
Cash accumulated on redelivery	\$4.5	million		
Net Debt on redelivery	\$9.1	million		
Cost of debt going forward	4.50%	p.a.		
Required loan trade out rate to zero	\$1,894	BB	\$8,558	TCE
Scrap value	\$1.2	million		
Required loan trade out rate to scrap	\$1,792	BB	\$8,456	TCE

# Trade Out Rate

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FINANCING

General Loan 1

Project

**SUMMARY**

**Project Type:**  
 Ship Name:  
 Ship Type:  
 Ship Size:  
 Built:

**Project Start Date:**  
 Contract Price:

**Ship Delivery Date:**  
 Employment:  
 Average Daily Rate:  
 Total Project Period:

**Project End Date:**  
 Ship Residual Value:  
 Debt Balance:

Lender: DnB  
 Borrower: International Ship Investm.  
 Contract Price: 23.500 USD Million  
 Loan as % of Contract Price: 60 %  
 Loan Amount: 14.100 USD Million  
 Balloon: 6.000 USD Million  
 Loan Drawdown: January-2021  
 Number of Instalments: 22 Semi-Annual  
 Loan Term: 11 Years  
 Loan Type: Serial  
 Loan Margin: 1.50 % Plus LIBOR = 2.75 %  
 Arrangement Fee: 2.00 %  
 Day Count Convention: Actual 360

Covenants:  
 Loan as % of Ship Value: 80 %  
 Loan To Value (LTV): 1.25 Ratio  
 Minimum Cash Balance: 1.000 USD Million

Scheduled Final Loan Repayment: January-2032

Trade Out Rate to Scrap Value Loan 1 USD per day

	H1	H2
Year 1	1,914	1,854
Year 2	1,845	1,795
Year 3	1,784	1,734
Year 4	1,712	1,671
Year 5	1,657	1,606
Year 6	1,590	1,538
Year 7	1,520	1,468
Year 8	1,440	1,395
Year 9	1,372	1,318
Year 10	1,292	1,237
Year 11	1,208	1,151
Year 12		
Year 13		
Year 14		
Year 15		
Year 16		
Year 17		
Year 18		
Year 19		
Year 20		

Definition:  
 Trade Out Rate to Scrap Value is the Bareboat Rate (Debt Service) per Day required to pay the remaining debt balance down to estimated scrap value over the remaining economic life of the ship.

CANCEL OK

DASHBOARD REPORTS

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# Sensitivity of Project NPV

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## SENSITIVITY OF PROJECT NPV:

CHANGE STEPS: UPDATE SENSITIVITY TABLE

Opex per Day	Daily Rate Rate % Change	Residual Value	Contract Price	US\$ LIBOR
\$100	5%	\$1.00 million	\$1.00 million	0.10% p.a.

### SENSITIVITY OF NPV OF PROJECT CASH FLOW TO CHANGE IN:

Ship Opex	NPV USD million	Average Rate per day	Daily Rate % of Base Case	NPV USD million	Ship Residual Value	NPV USD million	Contract Price Ship	NPV USD million	Loan Interest Rate p.a.	LIBOR	NPV USD million
\$4,800	-1.13	\$11,115	80%	-5.05	\$15.00	-4.67	\$19.50	2.84	2.35%	0.85%	-1.49
\$4,900	-1.26	\$11,810	85%	-4.20	\$16.00	-3.92	\$20.50	1.69	2.45%	0.95%	-1.54
\$5,000	-1.40	\$12,504	90%	-3.36	\$17.00	-3.17	\$21.50	0.56	2.55%	1.05%	-1.58
\$5,100	-1.53	\$13,199	95%	-2.51	\$18.00	-2.41	\$22.50	-0.56	2.65%	1.15%	-1.62
<b>\$5,200</b>	<b>-1.66</b>	<b>\$13,894</b>	<b>100%</b>	<b>-1.66</b>	<b>\$19.00</b>	<b>-1.66</b>	<b>\$23.50</b>	<b>-1.66</b>	<b>2.75%</b>	<b>1.25%</b>	<b>-1.66</b>
\$5,300	-1.79	\$15,283	110%	0.03	\$20.00	-0.91	\$24.50	-2.75	2.85%	1.35%	-1.70
\$5,400	-1.93	\$16,673	120%	1.73	\$20.00	-0.91	\$25.50	-3.84	2.95%	1.45%	-1.74
\$5,500	-2.06	\$18,062	130%	3.42	\$20.00	-0.91	\$26.50	-4.91	3.05%	1.55%	-1.79
\$5,600	-2.19	\$19,451	140%	5.12	\$20.00	-0.91	\$27.50	-5.98	3.15%	1.65%	-1.83

\*) Project Net Present Value (NPV) with Discount Rate: 6.02% p.a.

DASHBOARD REPORTS

# CAPITAL STRUCTURE - WEIGHTED COST OF CAPITAL

	AFTER			BEFORE		
Senior Debt	5% p.a.	70%	<b>3.5%</b>	3% p.a.	50%	<b>1.5%</b>
Subordinated Debt	10% p.a.	10%	<b>1.0%</b>			
Redeemable Pref Shares	15% p.a.	15%	<b>2.3%</b>			
Equity	25% p.a.	5%	<b>1.3%</b>	12% p.a.	50%	<b>6.0%</b>
<b>WACC</b>		100%	<b>8.0%</b>		100%	<b>7.5%</b>

## Covenants:

Dividends

No

Yes

**=>Project Cash Flow and Cash Flow to Investor are not the same thing.**

**=>Value of shareholders equity is dramatically reduced, but share of potential upside remains attractive. Think of it in terms of an option: It is better to have than not to have.**

# Sensitivity of Equity Return

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## SENSITIVITY OF RETURN ON EQUITY

CHANGE STEPS: UPDATE SENSITIVITY TABLE

Opex per Day	Daily Rate Rate % Change	Residual Value	Contract Price	US\$ LIBOR
\$100	10%	\$1.00 million	\$1.00 million	0.10% p.a.

SENSITIVITY OF NPV OF CASH FLOW TO EQUITY INVESTED TO CHANGE IN:

Ship Opex	NPV USD million	Average Rate per day	Daily Rate % of Base Case	NPV USD million	Ship Residual Value	NPV USD million	Contract Price Ship	NPV USD million	Loan Interest Rate p.a.	LIBOR	NPV USD million
\$4,800	-1.18	\$8,336	60%	-7.13	\$15.00	-4.11	\$19.50	2.14	2.35%	0.85%	-1.42
\$4,900	-1.28	\$9,726	70%	-5.72	\$16.00	-3.48	\$20.50	1.21	2.45%	0.95%	-1.46
\$5,000	-1.38	\$11,115	80%	-4.25	\$17.00	-2.84	\$21.50	0.28	2.55%	1.05%	-1.50
\$5,100	-1.47	\$12,504	90%	-2.87	\$18.00	-2.21	\$22.50	-0.65	2.65%	1.15%	-1.54
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\$5,600	-1.97	\$19,451	140%	3.61	\$23.00	0.96	\$27.50	-5.29	3.15%	1.65%	-1.72

\*) Equity Net Present Value (NPV) with Discount Rate: 10.00% p.a.

DASHBOARD REPORTS

# COMMUNICATING AND IMPLEMENTING THE PLAN

**Presenting facts and documenting alternative outcomes:**

- **Financial Model with sensitivities (stress testing) and scenarios**
- **Overall Restructuring Agreement (“Master Agreement”).**
- **Amendments to existing documentation (loans documentation, lease agreements, charterparties, service agreements etc.)**



## RISK Debt Providers point of view

- Default Risk => Need to make provisions for bad loans.
- Bankruptcy Risk => Recovery of assets and realise loss.
- Documentation Risk => Dealt with by lawyers
- Cost of Funding => Loan portfolio becomes unprofitable
- Availability of Funding => Liquidity squeeze

## RISK (From The Shipowners point of view)

- |                  |   |
|------------------|---|
| • Market Risk    | Ship Prices<br>Earnings (Spot, TC and FFA's)                |
| • Credit Risk    | Charterers Payment Default<br>Newbuilding refund guarantees |
| • Operating Risk | Off-hire<br>Hull and Machinery<br>P&I                       |
| • Financing Risk | Interest Rate Risk<br>Refinancing Risk                      |

Principle of Risk Pricing => The entity that is most capable of managing the risk should be the entity able to absorb the risk at the lowest cost.

# DO WE BELIEVE IN THE SURVIVAL OF THE COMPANY?

**Stakeholders must believe that they are better off agreeing a restructuring plan than to force a company into liquidation.**

**Quality of the Restructuring Plan?**

**How well is the Restructuring Plan Communicated?**

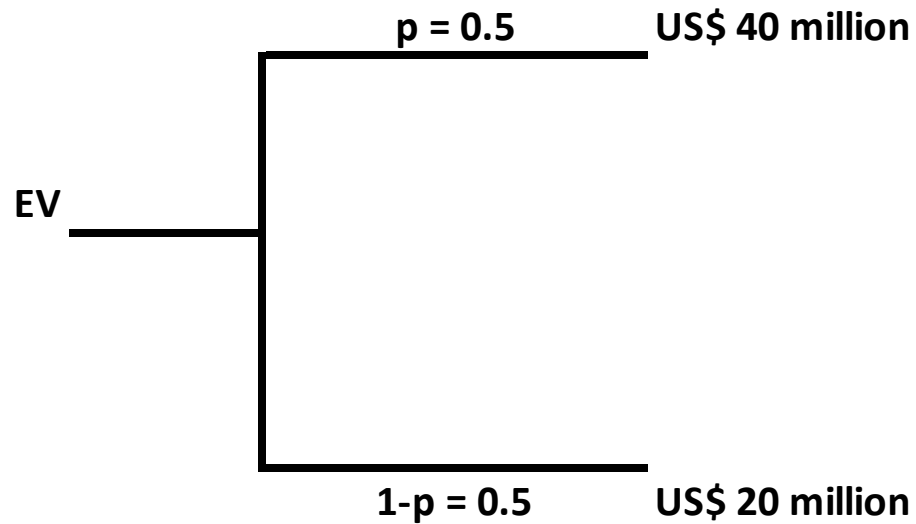
**Are Stakeholders treated fairly? (Transfer of value from one group to another)**

**Is it credible? Is it well understood? Is it fair? Is it realistic?**

## WHY OPTIONS ANALYSIS IN SHIP INVESTMENTS ?

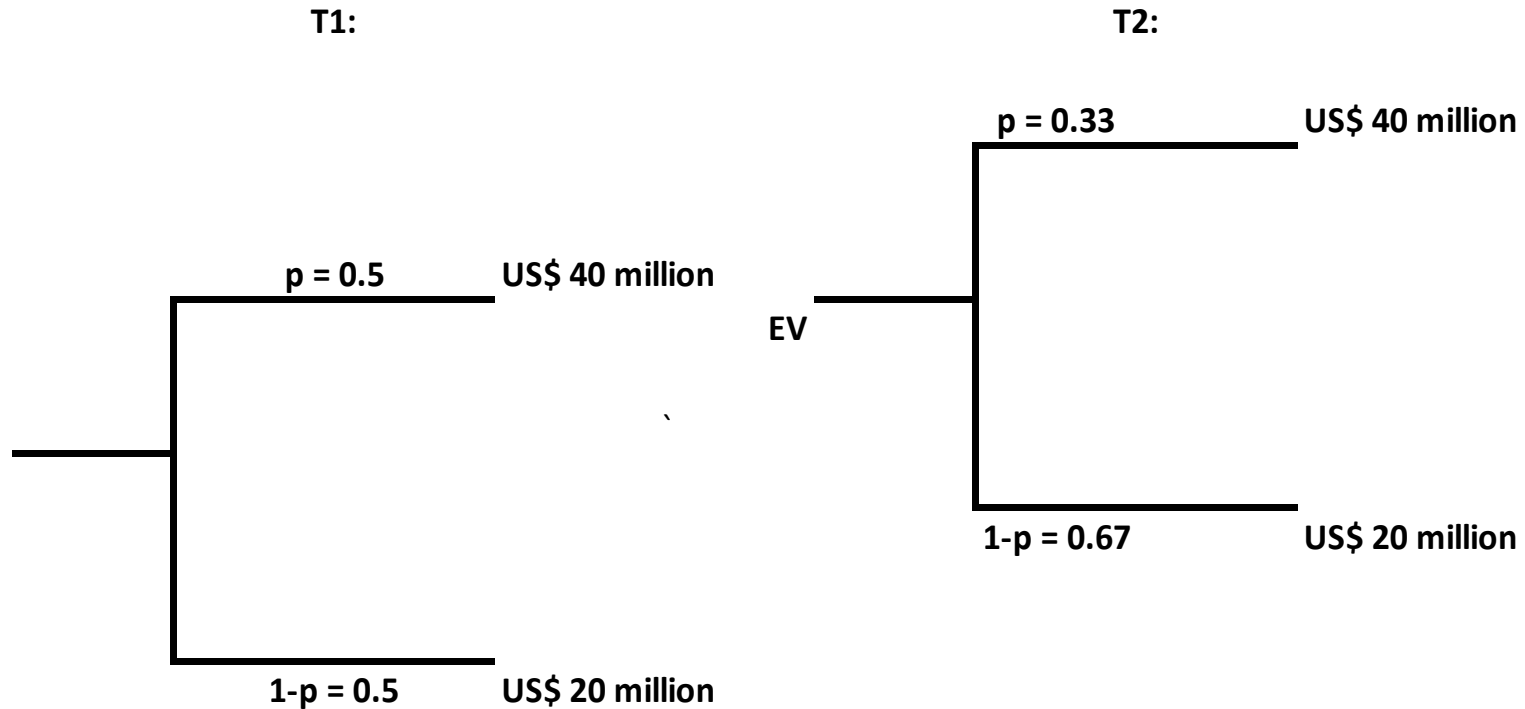
- The standard approach to evaluating an investment, in this case a restructuring alternative, is to estimate the cash flow and calculate the Net Present Value (NPV) and Internal Rate of Return (IRR) based on certain assumptions.
- Without taking into account the value of optionality, the standard NPV analysis understates the value of a restructuring alternative (the decision to “invest” in a restructuring by extending an existing commitment of capital or allocating further capital to the entity being restructured).

# SIMPLE DECISION TREE




**Expected value:                      30                      =                      0.5x40+0.5x20**

# TWO-PHASE DECISION TREE



Expected value\*):            26.6        =         $0.33 \cdot 40 + 0.67 \cdot 20$

## WE ARE DEALING WITH UNCERTAINTY

		Ship Sale at End of Year				
		Year 1	Year 2	Year 3	Year 4	Year 5
S a l e P r i c e	\$10.0					
	\$20.0					
	\$30.0					
	\$40.0					
	\$50.0					
	\$60.0					
	\$70.0					
	\$80.0					
	\$90.0					

# VALUE OF OPTIONALITY

**The value of flexibility and the ability to adjust to take advantage of market volatility:**

- Value of optionality is the difference between the Net Present Value (NPV) of the cash flow from the investment taking into account the range and probability of possible outcomes and the NPV of the static or “single-point” cash flow from the investment.



**What makes the deal work ?**

## SOME THINGS TO REMEMBER

- Debt holders and equity investors have a common interest in maximizing the value of the company (“Enterprise”).
- Debt holders and equity investors are have to agree on how to divide the value of the restructured Enterprise.
- As long as nobody can manage and operate the ships better than the current owner and his management, banks and other debt providers have no incentive to arrest / repossess ships.
- Be open and honest.
- Be co-operative and create value for all stakeholders.
- Be kind.
- Be grateful.

*Believe in your own value and the value of your business principles.*

**Thank you!**

## CONTACT DETAILS

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The logo for Pacomarine, featuring the word "Pacomarine" in white, underlined, sans-serif font, centered within a solid black square.

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