

The economic activity in naval industry economics essay

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The naval transportation as economic activity is that complex process built from all facts, acts, behaviors and decisions regarding the capital and specific resources management, allotted for producing, repartition and consumption of naval transportation services, having as main target the profit increasing. Similarly, the port economic activity is referring to all activities regarding the port institutions and operator behavior overtaken in order to handle the goods and to assure all the required services for merchandise and for ships. [Popa C., Haulica D., 2008] From the financial point of view, the naval enterprises are accomplishing the same functions as any other economic company, from any sector, in all known dimensions, owed to internal and external environment, as economic, financial, social, political and public dimensions, representing distinct functions in its functional structure. [Popa C., 2008a] The financial function of port and naval enterprises is determined into objective manner by the specific activities of financial sub-system and by the sum of financial relations, resulted from the enterprise interactions with the economic external environment. The major objective of any enterprise, acting in naval industry is to maximize the profit coming from naval and port operation, exploiting its available capacities and capabilities in a creative and competitive manner. In this regard, the present paperwork is approaching into innovative manner the main features of financial function within port and naval enterprises, following to reveal the particularities of manufacturing cycle in relation with financial and investment cycles. [Popa C., 2008a]

2. Main concepts regarding the financial mechanism in naval industry

The transport offer is defining the available transport capacities aggregate throughout the economic circuit, as exchange terms in naval industry, appointed into a virtual market in time and in space. The total transport capacity owed by a naval company can be assimilated with the patrimonial stocks comparing with ordinary enterprises, representing as definition the available transport capacity (ATC). The available transport capacity can be used through freight engagement, considered as employed transport capacity (ETC), or can be unused in off-hire situations, considered as unemployed transport capacity (UTC). [Popa C., 2008a]The stocks in naval enterprises, reported to a fleet functioning properties and features, are calculated as the sum of ETC and UTC, their value being determined in additive manner in relation with off-hire losses of naval company (unachieved incomes) and with stationary costs (investment amortization costs). In relation with the financial function, the design of internal financial mechanisms of naval enterprises is represented in figure no. 1.

Available transport capacity (ATC)

Money

Investment cycle:

Ships aquisitionShip buildingTechnologyTechnical up-date

Operation expenditures:

MaintananceRepairingIndirect costs as overhead

Stocks – Unemployed transport capacity (UTC)

Employed transport capacity (ETC)

Operation costs

FreightCredit or other financing sourcesMoney stockT1 T2 timeFigure no. 1:
Financial mechanisms in naval fleet enterprisesFirst, the money stock should cover the high level of investment in order to make available the transport capacities. In T1 moment obviously the problem is related to investment high amounts which can be covered through bond loan or simple credit loan, on long term, to permit the return of investment and the earning of those profit level to assure the company financial independency. The significant time gap between investment moment T1 and the progressive cumulative moments of returns receiving as T2 ask for a deep analysis of indebt effects determining the company focusing on reducing the stocks of unemployed transport capacities. In order to assure the financial equilibrium it is compulsory that the incomes flow to stand on a proper cash level correlated to debt ratio (installments and interests costs) to cover the fix running costs and the operation expenditure. Also, the lack of liquidities at once should affect the transport capacity operation and further the planned incomes achievement if the running expenditure are not financed throughout a contract execution. Therefore, becomes essential to plan precise and efficient the supply ports and moments, assuring all the time the access to a wide sources of financing even by short time credit, just to sustain the service alive [Popa C., Haulica D., 2008a]. On the other hand, for a naval operator is very important to reduce the transport capacity on stock, trying to maintain the fleet employed as much as possible. The unemployed

capacity represents for real, at T 2 moment, a stock of frozen liquidities, blocked under a unproductive capital, without any contribution to final results, but who produce additional losses. The losses generated by stocks unemployment are represented by stock costs indicator (Cs), calculated as value from the formula (1). $Cs = Cst + Ci + Coh + Ai$, (1) where: Cst - the unemployed ship stationary costs on-shore; Ci - the indirect costs for unemployed assets; Ai - investment amortization; Coh - unemployment losses as off-hire. The unemployment costs as off-hire loss (Coh) are calculated as unitary freight multiplied with unemployed transport capacity, from which we should extract the presumptive operation costs (Oc) and the amortization as well (2). $Coh = [(Freight / Tonnage) \times UTC] - Oc - Ai$ (2) The assets treatment as elements who generates losses is right in case of productive assets unemployed, with exploiting or manufacturing economic potential, as is the case of naval meaning of transports, in position as unemployed. Thus, the financial cycle within naval industry enterprises is determined successive by the transforming stages of money stock in available transport capacity, and further in reverse, by the money stock regenerating through transport capacity employment. In figure no. 2 is represented the transformation of money in ATC and the reverse flow of getting back the money stock from ETC profit, as the financial cycle synthesis.

Money

Money

ETC

ATC

UTC

Figure No. 2: The financial cycle synthesis

3. The financial cycle in naval enterprises

Within the financial cycle of naval enterprises as it has been generally defined for every enterprise we can distinguish three stages of money circulation, but like expected, with many functional particularities as will be described bellow. a. The exploiting cycle – is targeting the service overtaken and contains three distinct stages, as following: The stage of ship availability engagement – represents the prior phase on which the stocks are assured in order to use most of the transport capacity and port infrastructure, when is being operable the notion of available transport capacity (ATC). In this supply stage the company will spent money to keep available its transport capacities providing the ship engagement technical and economic features. In this stage the expandable goods, the operational services and the repairing and maintenance needs are satisfied through specific procurement decisions. 2. The stage of ship employment – in this phase the naval enterprise will overtake its transport service function, becoming operable the notion of employed transport capacity (ETC). The naval company will operate the ship and will record the operation costs but will draw back the money stock receiving the freight for its contracts. 3. The stage of ship preservation

- is an intermediate phase when the company is preserving its transport capacity becoming operable the notion of unemployed transport capacity (UTC). In lack of voyages or because of technical and maintenance reasons a ship can be preserved in technical manner, on-shore, in order to maintain or to rebuild the transport availability. The company is sustaining the ship costs, paying availability costs as stationary expenses on quay, technical costs on-shore or off-hire costs. The relations within the exploiting cycle can be represented graphically as in figure no. 3. b. The investment cycle - represents the capital creation related to productive assets, useful for naval transport services or for naval operation. In investment cycle are procured main of fixed assets or good for long term use there are executed the technical improvements and new technologies insertion. The investment are overtaken in accordance with investment annual programs, being further amortized through direct transfer in freight structure or in operation tariffs. c. The financial operations cycle - in this stage are included all credit and financing operations, the bond and share acquisitions, or the operations for claim cession. In naval transport comparing with other sectors, are recorded a high level of expenditure and incomes, situation that requires a proper rank of liquidity and solvability, the enterprises being in difficulty to appeal often to treasury credits in order to sustain the current activities and the cash flow. The uncertainties related to the naval transport risks diminish the possibilities for long term credit, the major type of financing being more close to internal sources or to shareholders lendings.

Available transport capacity (ATC)

Unemployed transport capacity (UTC)

Capacitate de transport angajată C. T. A.

Investment cycle Procurement cycle Operational costs

Money

Availability costs

Financing sources

Freight

Availability engagement Ship employment Ship preserving Figure No. 3: The Financial Cycle in Naval Transportation Enterprises

4. Conclusions

Then main financial particularity is issued by the international feature of naval transport as economic enterprises, starting from the foreign currencies implied and finishing with the payment instruments used in this sector. The foreign currency transactions can produce after case additional incomes but also tensions on short time in case of exchange rates losses. In order to control its financial policies in exchange rates for naval enterprises internal mechanism we propose the next solutions: the correct analysis for exchange rates on long term as trend, on a contract enclosure date, and right currency chosen - as example for payment positions we have to find the currency on falling trends and for cash positions we have to chose the currency on positive trends; the extension or reduction of cash or payment terms correlated to the medium term tendencies of exchange rates on stock

markets; the coverage of exchange rates risks by hedging or swap operations on financial markets, or by risk assurance after case; the preference for credit titles as letters of credit or incasso, in place of direct or conditional payment order; usage of coverage clauses in transport contracts as the clause of overcharged price, indexed price clause, currency clause or hardship clause;