The vlcc tanker shipping market

One of the most effective and perilous markets worldwide which instantly relates to the shipping industry is the crude oil industry and VLCC Tankers play a great role in transporting oil from the production area to the consumption area. Out of 3. 9billion tonnes of crude oil 2. 7 billion tonnes were transported through sea. (BP Statistical Review of World energy 20In 1960's global oil industry were dominated by seven major companies Esso, Mobil, Gulf, Texaco, Shell , BP and Socol-Chevron together they were known as seven sisters. In early 1970's command over oil industry by seven sisters started declining and this was mainly due to emergence of new companies into retail market . The worlds regulated oil industry finally came to an end by the Arab-Israel war on 1973 . The Oil Crisis in the 1970 and 1980 were the worse the shipping industry has ever seen. Increasing oil consumption in the present world resulted in the high demand of oil transportation from major oil producing centres either in crude or in refined form. (Grammenos 2010)

Last four years oil prices were shown in the above graph. The peak rate is found to be in 2008 and the decline of oil price made the oil tankers hit all time low in the beginning of 2009. Oil prices surpassed $100 a barrel in January for the first time and oil peaked at $147 a barrel in July 2008 A sudden drop in the price of oil was observed in the fourth quarter of 2008 and the oil price fell below $35 a barrel at the same year (OAPEC, 2009).

VLCC (Very Large Crude Carrier)

These are tankers with carrying capacities over 200. 000 tons deadweight and are mostly employed in the long voyages, which relate to the transportation of crude oil from the Arabian Gulf and Asia to Western Europe

and United States via the Cape of Good Hope. However a VLCC tanker is more economical than any other tanker and it can carry a great cargo quantity in every voyage and thus a charterer always prefer to hire a VLCC, rather than chartering two or three Aframax. (Alderton, 2004)

. The character of VLCC market can only be known by analysing world's oil industry. Figure shows the number VLCCs from 1976 to 2007, and it is clear that in 1993 there has been an enormous increase in the VLCCs and in the following years, there was a decline in the market demand and thenceforwards, since 1999, the VLCC tanker demand steadily rose.

Source: Poten & Partners, 2008

VLCC Tanker Supply and Demand

Transformation of spot market transactions from 10% to 90% of tanker capacity from spot market was greatly accelerated by crash in demand in 1970 accompanied by oversupply of tonnage in VLCC segment. (Grammenos 2010). The determination of the crude oil tanker demand is clearly and indissolubly associated firstly with the crude oil price and secondly with the world crude oil importing and consuming trends and needs. The demand for tanker shipping could also be as a result of differences in oil market quality (Yana 2008). The demand here is price inelastic

Furthermore, tankers' supply and demand remain considerably influenced to the various political events. For example, the World Oil Crisis, in 1973 and 1979, represented unfortunate periods for the tanker history

After the mid-1990s, the increasing crude oil production of OPEC and non-OPEC countries, and especially of the Eastern bloc economies, acted as determinant for the growing tanker demand over that period.

Oil Companies' Impact on Supply and Demand

Demand for VLCC tankers largely depends on the Major Oil Companies. Significant degree of consolidation in the past decade in crude oil industry has largely influenced chartering patterns. Over the last decades, " Oil Majors" have played a major role in the ownership of the world's crude oil fleet. Majority of the world's tanker fleet is owned by independent owners and the top 20 ship-owners account for almost half of the tanker fleet by deadweight, though ownership in the larger sectors is more concentrated. Nevertheless, owning and operating the largest tankers requires considerable capital investment

Major Oil Companies have owned considerably more tonnage and have contracted a very large share of independent owners' vessels for the last 10 to 12 years. (Shasi N Kumar, 2007) However, Table below shows the increasing share of the independent tanker owners against the oil companies' tanker fleet

Table below shows " Oil Majors'" share in the world's tanker fleet ownership is only 6% of the total. The already fragmented tanker market, in terms of fleet ownership, has continued to lose its concentration as more and more independent tanker owners have entered the market. After such a change, " Oil Majors'" hold on freight rate determination has been significantly reduced. Market share of major oil companies is too small that even under

an organized attempt and cooperation to determine the freight rates per se as a ''conference'', their effort would not have any effect. (Grammenos, 2010)

VLCC Fleet and Market

For the last two years VLCC trading fleet has been growing rapidly, there is a 10% increase in total VLCC fleet since September 2008, to 545 vessels. At present VLCC order book consists of 189 tankers or 34% of the existing fleet, to be delivered by the end of 2014. (Nikos Roussanoglou, 2010)

Source: INTERTANKO, 2008

A combined fleet of 90 VLCCs are owned by nineteen Greek tank owners and an order book of 25 units. The major oil companies, ExxonMobil, BP, Shell, ChevronTexaco have a VLCC fleet totalling 26 units and do not have any VLCCs on order. They have about 18 VLCCs on long-term contracts until 2009 and beyond.

Mitsui with 35 VLCCs, NYK with 29, Frontline with 24 and Acol Tankers/Kristen Navigation (Angelicoussis) with 23 are the four largest VLCC owners (JGO's list 2008)

Spot Charter Earnings.

The above figure shows the spot charter rates from 2005 to 2009 . The spot charting declined in 2005 and began to improve by the fourth quarter of 2005 and again declined in the fourth quarter of 2006. The progress was shown in the first quarter of 2008 and sustained till first quarter of 2009 and came to the same level of 2005 in last of 2009.

In 2009 freight rates of vessels were down as it was like in 2005 and it affected the whole tanker vessels. 2009 was a crucial year for the VLCC tankers and these tankers suffered from heavy loss. The average freight rate peaked in the middle of 2008 by giving some expectations but before getting in to the high level it again collapsed. Even though the tanker freight rates were up in 2008 when compared to previous years freight rates the comparison made between 2008 December and 2007 December were the same.

Source Gibson Tanker Report July 2010

VLCC market was reportedly oversupplied in July 2010, with a long list of tankers available for loadings. This is to some extent due to a gradual reduction in the number of VLCCs engaged on storage duties. In addition, spot tanker demand was further raised by the presence of a few Asian relets. (Gibson, 2010)

VLCC Tanker Pricing

Along with decrease in oil demand the vessels were also facing a market decline. From the graph the average VLCC price stood at US$ 97 million, it shows that the average VLCC new building price was decreased by 33% during 2009. In the periods between September 2009 to March 2010 there was further fall in new building price of US$ 12 million (11%)

Freight Mechanism

Freight Mechanism for tankers mainly depends on demand and supply and hence equilibrium between them defines the freight rate. it is practical to

assume that any changes in factors determining the supply and demand like crude oil price can change the equilibrium point and hence the freight rate.

Considering the imperfect competition in tanker market, if tanker supply is greater than tanker demand freight rates will fall and existence of a surplus in tanker demand will move freight rates upwards. It is also presumed that crude tanker supply is slow in its response to changes in tanker demand, since tanker vessel supply is difficult to adjust to such rapid alterations, whereas demand for shipping services can change overnight.

Modeling Demand and Supply in the Short-run

As tanker services demand increases from D0 to D1, tanker freights will increase from P1 to P2 and a great increase in tanker demand results in a smaller increase in the level of freight rates. That asymmetric response of the tanker freights is attributed to the great spare capacity and availability of tankers at the beginning of the process. But as demand for tankers increases (D1 to D2 and D2 to D3), the availability of tankers is reduced and that entails greater shifts in tanker freights (P2 to P3 and P3 to P4). In the long run, the process will be reversed, as supply for tanker services will start rising. The supply curve will move down and to the right and, given demand, freight rates will decrease again (Grammenos, 2010)

Conclusion

The VLCC tanker shipping market is said to assume a perfect competitive structure, where the price of oil is set by the global oil market but the descent of oil majors, ascendancy of OPEC state-owned oil companies, increasing predominance of short and medium-haul crude oil movements,

ongoing attempts to create pools of tanker owners and other developments such as horizontal and vertical mergers is changing the market into an oligopolistic structure

At present there is a game of tug war played by VLCC owners in the spot market with each side wanting to take control of what direction rates move in and there is always a chance that, VLCC market will remain under pressure in the fore coming years..

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