

Column



**Jagmeet Makkar**

FICS, FIMarE (I)  
Vice President, KC Maritime;  
Education Officer, Institute of  
Chartered Shipbrokers,  
Hong Kong Branch

# Commercial aspects of shipping

# Market Dynamics

## Part 1

*(The views expressed here are solely those of the author, and do not necessarily reflect the views of the organization he represents.)*

**T**hanks to shipping that a whopping 95 per cent of the world trade (by volume) is made possible. The demand for shipping is the derived demand i.e. the ships do not exist for their own sake but they are built to serve the world trade. The demand for the goods that the ships carry results in the demand of the ships. Hence before proceeding to understand the demand and supply concept of the ships, it is necessary to grasp the underlying demand for the goods and how it is generated. Increasing trade resulting from globalization requires the goods to be transported thousands of miles. These goods could be raw materials, semi finished goods and finished goods or the final products. For the goods to be competitive, the elemental steps in the production of the goods and their transportation so as for them to reach the intermediate and the final users must be cost effective. In the case of transportation this means that the economies of scale must play an important role. Transportation by air, though quick, is very expensive as compared to the transportation by sea. With ULCCs, VLCCs, 9,000+ teu container vessels and large cape size vessels, the economies of scales and safe delivery can be achieved to sustain the world trade. This is especially true for

those goods where the freight cost is a significant portion of the final cost of the product and the transportation parcels are very large. Transportation by air does play an important part for some cargos that are expensive and the freight cost is a small percentage of the total cost. Just imagine transporting coal, cement, iron ore or such other bulk commodities by air!

### THEORY OF TRADE

For any trade to take place there has to be a seller and a buyer. When the trade takes place across the national boundaries, we can call these parties as exporter (or shipper or consignor) and importer (or consignee or receiver) respectively. It does not matter how we address them so far as we understand their role in the trade. However, an important question remains unanswered is why would a party sell and the other buy? Logically, the answer is that the buyer needs or wants what the seller has in its possession, either by virtue of its existence as a natural resource or a result of production (processing of natural resources or by using cheaper labour to make a product by using imported resources etc.). We all know that the resources across the world are unevenly distributed. Simply speaking, one country may be rich in minerals, the other may have dense forests and the third may have cheap labour. It could also be

possible that a country may have large reserves of minerals such as iron or copper ores but it is very expensive to mine these and thus making the process uneconomical at a particular point of time, when there are other countries where such minerals could be mined and transported cheaply. Depending upon many such factors, the trading patterns keep changing. An example of recent years could be Russia and ex-soviet states such as Ukraine that were once net importers of grain are now exporters. In the year 2003, when Canada and Australia were hit by draught, grain flows from Russia and Ukraine to far and remote areas reversed the trading patterns. Another example is a change in the drive force of economy. Earlier it was the group of OECD countries whose industrial production (IP) drove the world seaborne trade. However, sometime in mid 2000, the impact of the percentage change in OECD countries IP had markedly less impact in the percentage change in the world seaborne trade. This is apparent in the graph below where we can see the traditional relationship between the OECD countries' IP and the World Seaborne Trade has now changed. Even in the years when the OECD countries' IP had been in red (or negative) the World Seaborne trade remained in the black (or positive), thanks to the China Factor.

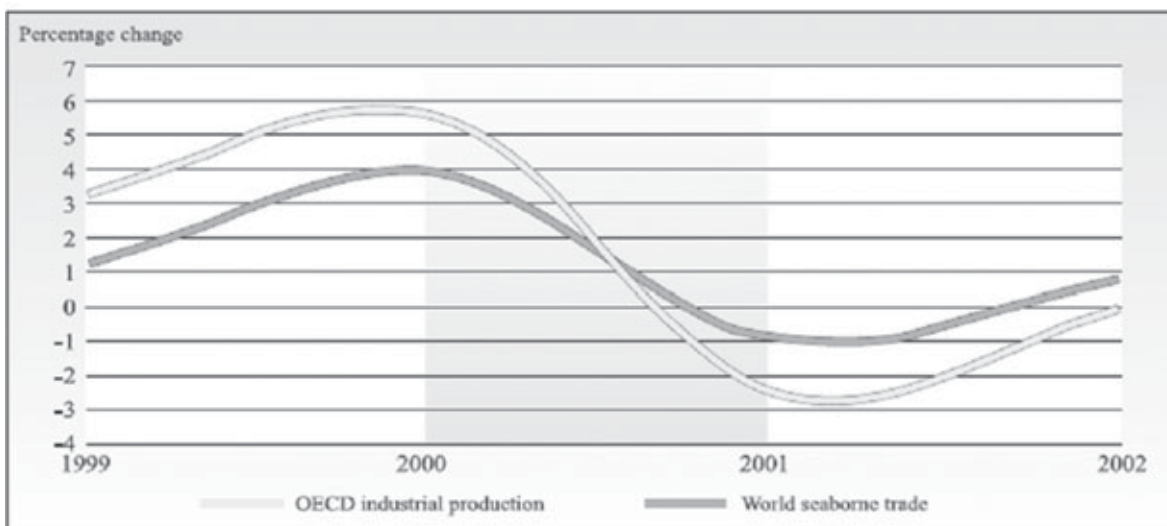
abundance of a resource or commodity that a country may have and is in a position to export where as another country may not have such an advantage. Some examples are bananas, rubber, coffee etc. where this absolute advantage is a result of climate or weather. Another example of absolute advantage may be by virtue of the minerals reserves that a country may have, e.g. gold, platinum, diamonds etc.

Very useful definitions and explanation is being reproduced here from the tutorial material of the "Institute of Chartered Shipbrokers for better understanding:

"...this is sometimes called Ricardian Trade, after David Ricardo, the first economist to develop the theory. The theory basically argues that a country will export those commodities which it produces more cheaply than any other country, and in exchange, import those products which it produces less cheaply than elsewhere. The obvious examples of 'absolute advantage' would be a country's natural endowments of raw materials and natural resources. In Saudi Arabia's case, as mentioned above, an absolute advantage exists in oil production, as it does in other Middle East economies which are

similarly blessed. Brazil and Australia are endowed with iron ore, Japan has none. A natural trade is for Japan to import these essential manufacturing raw materials as it has no such materials itself.

Annual change in OECD industrial production and world seaborne trade, 1999–2002



Source: OECD (2002), *Main Economic Indicators*, April.

**ABSOLUTE ADVANTAGE**

The underlying concept comes about from the

One question that arises in this theory is this. Suppose an economy say economy A, was abso-

lutely more efficient in production in all goods, compared to another economy (B). If Ricardo's doctrine is correct, it would appear that economy A should never trade with B, since it is capable of producing both products more cheaply than B. Since, in real life, it is often argued that Japan, say, or the US, is capable of producing all goods more cheaply than the UK say, then why should these two economies trade?

It turns out that Ricardo's theory is flawed. Absolute advantage is not required to generate trading opportunities. The major traditional theory of international trade is known as the theory of comparative advantage, which is discussed in detail below.

**COMPARATIVE ADVANTAGE**

The doctrine of comparative advantage is the most widely known theory of trade flows. The idea behind it is best understood with the aid of an example. Suppose that you are a computer whiz, and also good at decorating and painting. In fact, you are better at these two activities than your neighbour, Fred. Fred is not too good at computing, but very good at decorating and painting, though not as good as you.

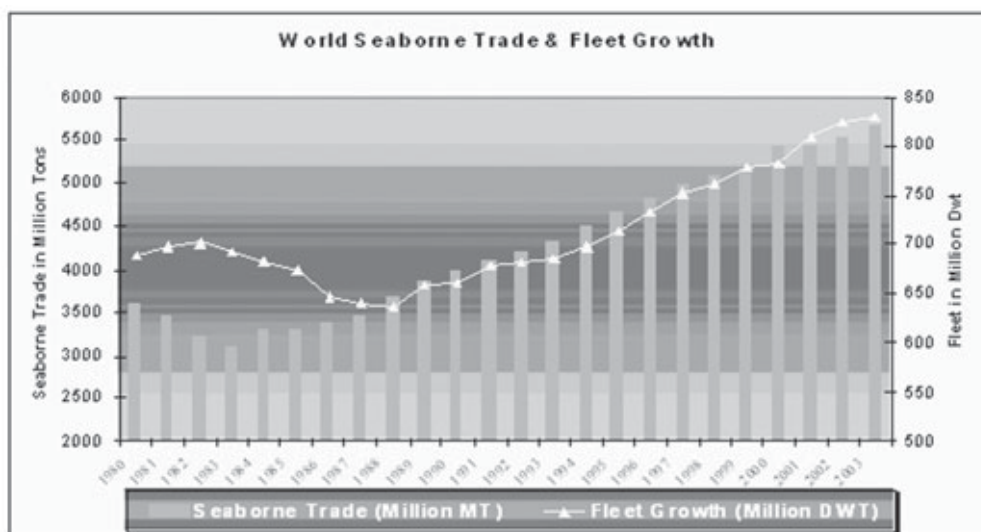
Initially, both you and Fred spend equal amounts of time in both activities. But if you trade, both can gain. This is because Fred is comparatively good at painting and decorating; if he concentrates on that activity, while you concentrate on computing, you can trade the service to each other and both would be better off. This gain arises from the fact that resources have been reallocated towards their most efficient uses; as a result, more total output (computer services and paint/decorating) is produced, to be reallocated between the two people. In reality, comparative advantage is nothing more than the extension of Adam Smith's principle of the division of labour to trade between countries. Each country will tend to

specialise in producing those products which it is relatively good at producing, and trade some of the increased output from the expanded sector for imports which replace the output lost from the shrinking, less productive sector....."<sup>1</sup>

**DEMAND FOR SHIPPING SERVICES**

"Over the years, the world seaborne trade and the supply of the ships have grown to cater for the increased movement of the finished, unfinished products and raw materials across the globe. In very simple terms, this increased trade is based on the comparative advantage theory. Going by the cause and effect relationship, an increase in trade, which increases at a faster rate than the GDP, helps a country's GDP to increase. The direct impact is then on the seaborne trade that accounts for a large part of this total trade.

The focus on the core competencies by the businesses and procurement of raw materials cost effectively from all over the world, cause the movement of goods. Reduction in trade barriers, thanks to the role of the WTO, has further helped. Global supply chains have evolved through fading away of the geographical and ideological barriers. In the economic context, if the differential between the prices of merchandise in two countries is larger than the total transaction cost, trade will take place. Shipping, as an important part of the supply chain, is one of the major components of this transaction and a cornerstone of globalization,



Source: Fleet Statistics – UNCTAD Maritime Review 1989, 1983; Lloyd's Statistical Tables 1995, Department of Transport (UK); Transport Statistics Report (Maritime Statistics 2002) Seaborne Trade – Maritime Transport Report (OECD) Annual Report.

playing an important role in maintaining the competitiveness of the firms in the business<sup>2</sup>.

This spectacular growth in world trade has generated a corresponding growth in the demand for transportation services, particularly shipping. The volume of cargoes moved, both in tonne mile and tons of cargo generated per year, has grown in line with the growth in world trade volumes.

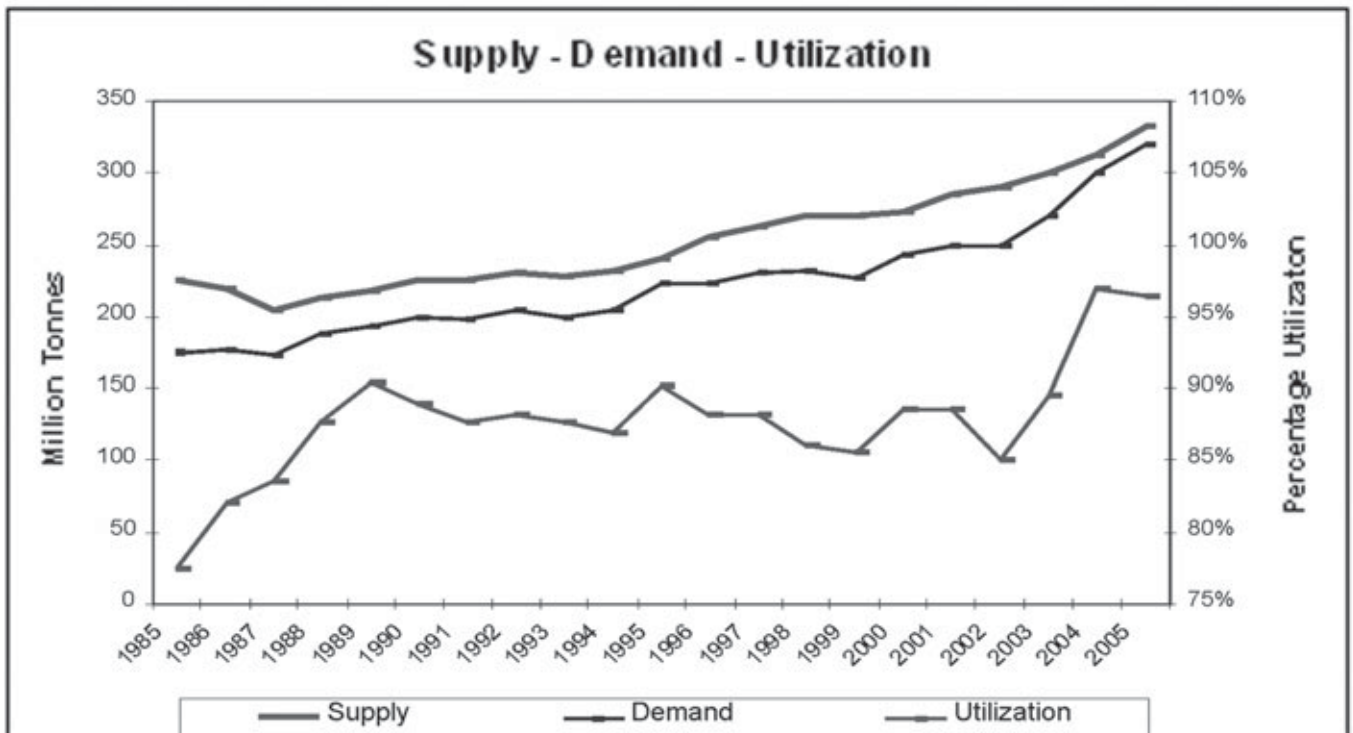
**MARKET DYNAMICS**

While we will closely look at the supply and demand models in the next issue (October 2005) of Sailor Today, it would be interesting to note the interaction of the supply and demand in the following graphs. The first graph shows the resulting fleet utilization<sup>3</sup> from the supply of ships and the demand or seaborne trade for the dry bulk. The second graph depicts the correlation between the fleet utilization and the BDI (Baltic Dry Index).

some time in end 2002, the fleet utilization percentage started to increase and by end of 2004, it reached a peak.

This raises a question as to what happened to the charter or freight market during corresponding period? In the graph below, we can see a strong correlation between the fleet utilization and the BDI.

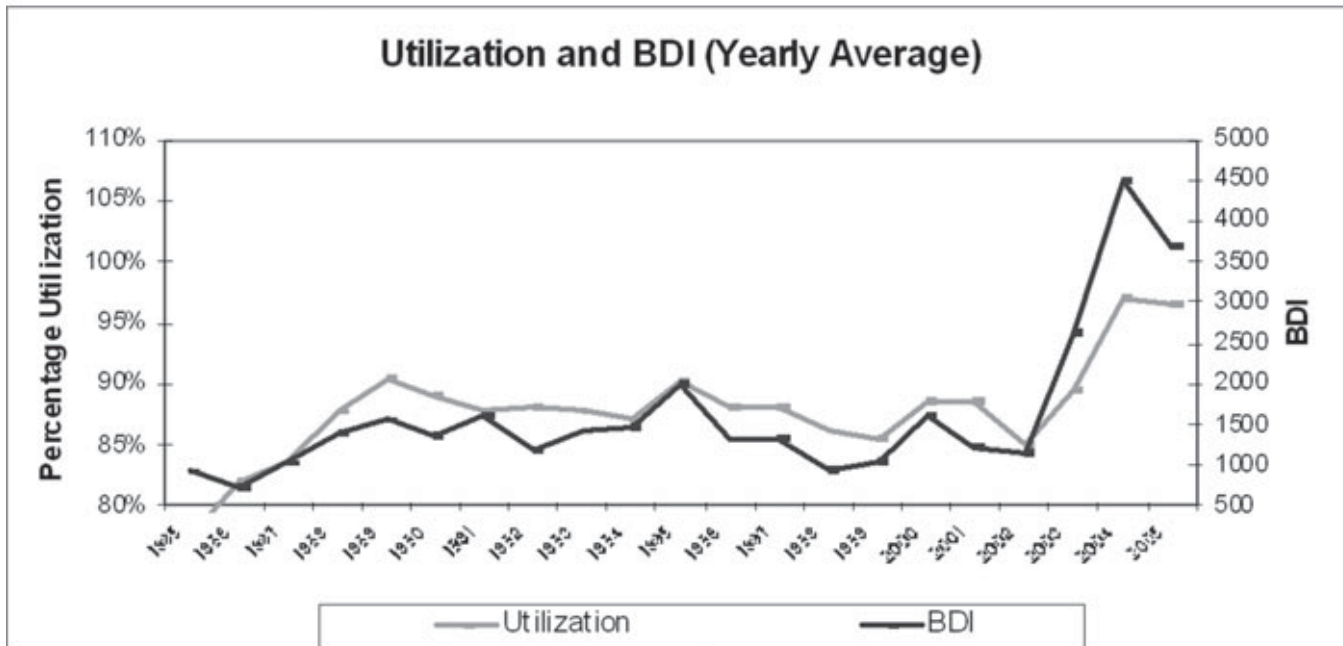
The BDI closely kept pace with the utilization, as expected and when the utilization broke above 90%, the freight markets did show signs of improving or having mini peaks. In 2004, fleet utilization first time in many years reached levels more than 94% and the result is reflected in the memorable mother of booms with BDI rising above all time historical barriers. Going by this simplistic and fundamental principle, what does this mean for the future? While it is difficult to predict accurately, the



Some of the readers may find this quite interesting and possibly find an answer to the question posed in the August issue with regards to the market conditions from 2002 onwards, till date.

Translating the Supply (Fleet Growth) and Demand (Seaborne Trade) into ship or fleet "Utilization" gives an interesting perspective of market dynamics. In the first graph for dry bulk trade, we notice that

supply and demand equation and the utilization do indicate that considering the large number of ships entering the market in the next two years and with scrapping rates historically low, unless the demand continues to increase at a phenomenal rate, the chances of utilization slipping back into the sub 90% range are high and this may bring the high rates seen in the recent past closer to the histori-



cal averages. While in general, ship owners may not like the changed scenario, yet for some, this could be another window of opportunities !

Continued in October issue of Sailor Today where we will review the demand and supply models in shipping –

**References:**

<sup>1</sup>Tutorship Material, as necessary, adapted from the Tutorship Material with kind permission from Director General, ICS, UK for promoting Shipping

*Education and the Institute of Chartered Shipbrokers.*

<sup>2</sup> *Globalisation and the shipping business – a shipowner’s perspective (BIMCO REVIEW 2004) – By Sham Chellaram, Chairman KC Maritime Ltd.*

<sup>3</sup> *Thanks to RS Platou for the historical statistical data on the fleet and demand growth.*

For feedback and comments, please contact: [shiplearn@yahoo.com](mailto:shiplearn@yahoo.com)

## Direct Logistics opens branch office in China

Mumbai-based Direct Logistics has announced the opening of Direct Logistics China Ltd, its branch office in China.

The new company is headquartered in Hong Kong and will have branches in mainland China. The first branch office in mainland China has been established in Shenzhen.

According to Wilfred Menezes, General Manager of Direct Logistics, commencing an office in China is the company’s attempt to offer its customers in India and China a more personalised and increased level of service by being closer to their suppliers and buyers and, in the process, complementing the supply chain links.

This, he explained, was a logical step considering that Direct Logistics imports over 5,000 TEUs from the

Far East into India per year.

The opening of Direct Logistics China Ltd is also recognition of the ever-increasing trade volumes between India and China, Menezes pointed out. “Having our own office in China will help us meet the demanding schedules that our customers expect from us. The Shenzhen office can control all the inland locations in the Pearl River Delta as well as act as a coordination point for all other Chinese ports, ensuring a faster, reliable and efficient handling of shipments”.

Direct Logistics China Ltd will be headed by Ms Allyna Lee, who is well versed with the South China market, with support from a team of experienced professionals having thorough knowledge of the shipping and freight forwarding industry in China.