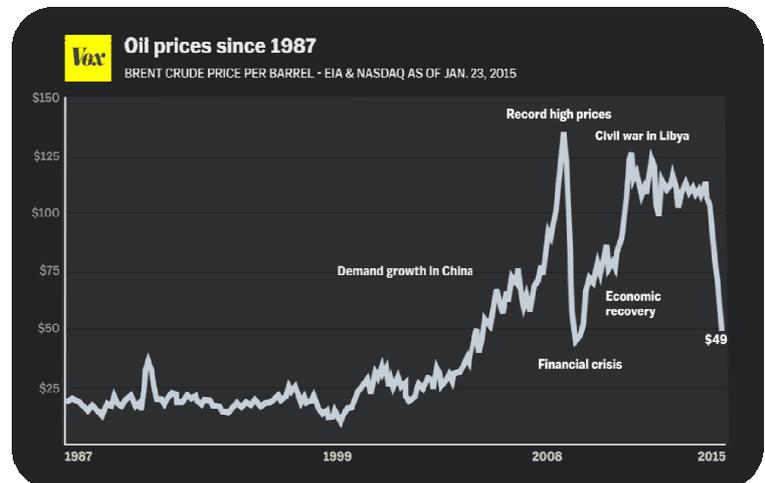


## CORRELATION OF FREIGHT RATES AND OIL PRICE DROP: A BRIEF ANALYSIS

Over the last months, there has been a noticeable vertical fall in global oil prices, which certainly affected not only the shipping industry, but also the economy in general. From a peak of \$115 a barrel in June 2014, oil prices have dropped to around -and even below- \$50 a barrel in recent times. The right-side illustration shows the fluctuations in the oil price over the years and the main factors that led to those changes. Such low prices have been indisputably beneficial to the shipping companies in more ways than one.



Firstly, bunkering costs are considered to be one of the major operating expenses for ship operators. This is due to the fact that the biggest part of money required to run a ship is spent on bunker fuel. So in the short term, ocean shipping companies stand to benefit from nearly halving of bunkering cost, lower operating expenses and higher margins.

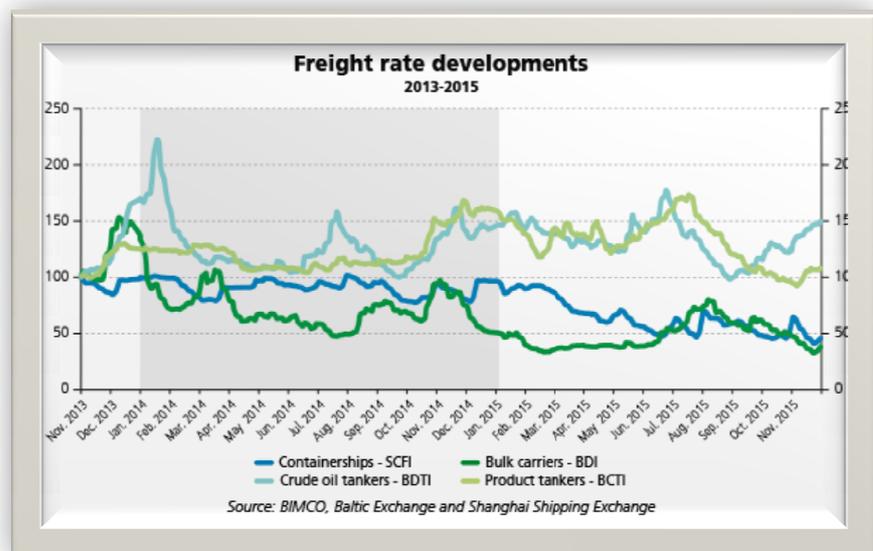
Furthermore, low oil prices could also be proved beneficial for “Contango”, which refers to a situation where the current or spot price is below the future price. In this case, companies purchase oil in the spot market and store the oil to sell it at a later date. As a result of the above, the demand for tankers and ships has picked up, as oil importing countries are trying to take advantage of current low prices. Countries such as China, one of the largest importer of crude oil, is stockpiling huge quantities of cheap oil so that it can benefit later when the prices of crude rise. Many other countries, as well as companies, are also following the same strategy as the market anticipates a recovery in the future oil price. This has resulted in a sharp increase in demand of super large oil tankers and a great positive effect on the shipping industry.

In the longer term, lower fuel prices may also expand the number and variety of fleet vessels. Typically, greater fuel burn per pound of cargo is associated with older, faster, and smaller vessels. When oil spiked in 2008, MTS Logistics reported a significant focus on reducing fuel costs through the deployment of newer, more efficient ships; reduction of travel speeds (slow steaming); and consolidation into larger vessels to amortize fuel costs across more shipment units. With shipping companies shoring up their bottom lines and revenues, the next step is to increase productivity. In the shipping world, this is achieved by buying more vessels and upgrading the existing fleet.

Likewise, in order to maintain or increase profitability, a large focus is dedicated on the design part. Shipping companies order bigger vessels, with greater capacity and smaller fuel consumption compared to the current fleet. Investments in newbuildings are estimated to have a very short period of payback time due to cost efficiency on fuel. Another advantage of the new ships is that they will be 100% recyclable when they retire after 25 years of service.

Moreover, assuming lower oil prices are sustained in the long term, operators can profitably differentiate their services by moving back in the other direction, such as investments in port terminal operations, supply chain management, offshore oil development, marine maintenance services etc. Finally, reduced fuel costs also create opportunities for investments in passenger traffic. Operators of ferries and cruise lines would have lower costs associated with the “dead weight” of moving empty fleets globally in order to chase seasonal demand. They would also be able to redeploy smaller vessels on specialized routes that previously did not have sufficient demand in order to justify operation.

Apart from the sharp slide in oil prices, the progressive shift down of freight rates is another remarkable trend that shipping industry is featuring nowadays. Global shipping rates are currently astonishingly low; it has possibly never been cheaper to ship goods around the world. According to updated records, shipping rates are barely sufficient to cover bunker costs, handling or canal fees etc., and as a



result, it is getting even harder and harder for ocean carriers to earn returns above their cost of capital at these price levels. Factors like sharp slowdown in global demand, a very real downturn in Chinese exports and China’s economic transition from investment to consumption, together with a shift towards locally sourced cleaner energy, overinvestment in shipping capacity by ocean carriers etc, have definitely contributed to this price collapse. The current situation brings into question whether the advantages that accrue from low oil prices are eliminated by the difficulties that dropping freight rates create. How can the ocean carriers hope to sustain themselves in a world where supply outstrips demand, driving prices to levels where no company can earn returns?

On the one hand the sharp decline in freight rates has led ship owners to decrease vessels’ speed at the most optimum level in order to eliminate their expenses. On the other hand, with the oil prices

dropping, no longer we see vessels “super low steaming” as often we used to. A further collapse in bunkers has supported an increase in vessels’ speed despite greatly reduced earnings. More specifically, shippers in response to the sharp drop in oil prices are constantly pushing shipping lines to increase speed of the ships, thus losing the advantage of slow steaming. Bunker price rather than charter rate is considered to be the key determinant of voyage speed and as a result, has a dramatic effect on supply of tonnage. The shift up and down of vessels’ speed could increase or shrink the global fleet, overriding in spades the fundamental tightening or weakening of the supply-demand balance. It is estimated that a speed increase by one knot, will increase available capacity by 4%, which in effect will push freight rates to even lower levels, which are already at historic lows. In previous years when ship capacity was in low levels and oil prices were soaring, vessels used to adjust their speed scale and sail on low speeds in order to reduce their costs. Nowadays, the speed increase will exacerbate the serious problem of excess capacity, reducing freight rates and sending even more ships to lay up or scrap. At \$600 per ton for bunker fuel, the savings from slow-steaming are clear, but as the price falls the advantage dismisses, especially because of the already chronic overcapacity, which would be exacerbated by a surplus in tonnage.

Another significant difficulty ship owners have to face is the absence of funding sources. Low freight rates lead to low revenues for shipping companies. As a result, banks lending regime becomes increasingly tight and funds more strict.

Moreover, low oil prices could possibly affect the charter markets, by reducing the floor of the market and limiting the ability of fuel-inefficient ships. On the bright side, should the oil price recover, the market would receive an unexpected boost.

Furthermore, newest generations of megaships are larger and much more efficient than previous ones, therefore global ocean shipping companies have invested in upgrading their fleets. Unfortunately, despite of owners’ optimistic expectations of high freight prices and quick growth of global trading, the expected profits from more efficient ships have never come true. To make matters worse, carriers are not only facing low or nonexistent profits but also huge loads of debt and anemic rates of return. The situation is likely to get worse due to oversupply, barring some unforeseen economic miracle and a growth in global economy. Shipping companies that have already diversified into higher- margin industries, as mentioned before, may have higher chances to survive and eliminate their losses. But for those that haven’t diversified their portfolio, it may already be too late now.

Due to the above situation, leading megacarriers are constantly trying to coordinate their efforts to maintain prices at a level where they can earn profits. However, the recent race to invest in capacity has driven supply to such a level that such coordination has become difficult and is intensifying pressure on smaller companies.



To conclude, the purpose of subject analysis is to represent, compare and contrast the effects of two significant trends that are currently featuring global economy and shipping industry. Despite the fact that there is some level of debate, to which extent the above effects are positive or negative, we deliberately chose to focus on the pleasant side of low oil prices and the negative aspect of the declining shipping freight rates' especially for ship owners and ship operators. The reason is not only because subjective views reflect more our point of view - without ignoring and discrediting the opposite opinions- but also because we wished to promote the interaction of these specific effects. There is no doubt that reality is much more complicated and immense, but in a somewhat simplistic point of view the slump in fuel prices offer to shipping industry a variety of great advantages. However, despite these benefits, it is getting increasingly harder for shipping companies to survive as low freight rates -created mainly by global crisis, oversupply in fleet capacity and low trade flows- are bringing into existence considerable difficulties. Ship owners are expected to continue to charge low charter rates, faced with the risk of leaving their vessels idle over long periods. This compounds the impact of lower fuel prices, resulting in a period of cheap freight rates that are set to persist weak for the rest of the decade or, unfortunately, even longer. Current situation is expected to remain unchanged, unless older vessels are scrapped in sufficient numbers to balance the market. This will in turn affect global growth to recover forces and bring back balance worldwide.