## DRY BULK MARKET: RECENT DEVELOPMENTS & FORECASTS

The Baltic Dry Index (BDI), which is issued by the Baltic Exchange on a daily basis, evaluates the price for shipping services and it results from the interplay between supply and demand. The demand varies with the amount of cargo that is being traded or moved by sea while the supply depends on the tonnage capacity which enters the market and exits it. Since the supply is generally inelastic (i.e. it takes about 1.50 - 2 years to build a new ship, and the laying-up cost is high), the market is more drastically affected by the demand dynamics in the short term, while both supply and demand influence the long term prospects.

# Recent market developments

On February 2016 the BDI hit a record low by reaching 290 points which was about 50% lower than the BDI during the same period of 2015. After this record low, the index experienced some improvement during the second and third quarters however It still remains at low levels with the latest (August 2016) being at 636 points which is again about 30% lower than the levels of August-September 2015. This continuous collapse of the dry bulk market is related both with the increased growth of the world fleet as well as the softening of the world economy and seaborne trade. Specifically, the dry bulk fleet grew by more than 10% each year between 2008 and 2012 and about 5.7%, 4.4% and 2% during 2013, 2014 and 2015 accordingly while the growth of demand (world seaborne trade) estimated at about -3% in 2009, 12% in 2010, 7% in both 2011 and 2012 and 5.7%, 5.1% and -0.1% each year between 2013 and 2015. This continuous surplus of the supply growth over the demand growth has kept the market under pressure and dropped it to the lowest levels ever.

### How can we make safe forecasts?

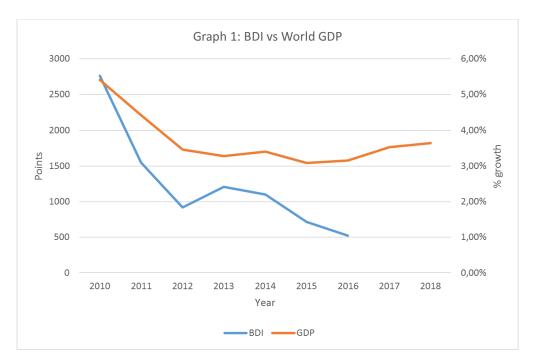
It seems very difficult to make safe forecasts in shipping, even in the short term, and major industry players or famous economists have failed in their past opinions or market decisions. Not only a lot of exogenous parameters influence the market, but also decision makers usually take decisions which are behavioral rather than rational and subsequently these decisions may change the market equilibrium in the long term. However, we can take a clearer picture of the forward expectations by looking on the prospects of the world imports and exports as well as the imports and exports of China. These data which seem to have a high correlation with BDI, along with the development of the dry bulk fleet may give a clearer picture of where the market stands and where it is going.

# Fleet growth: The prospects look positive

The very poor market conditions of 2015 & 2016 with the vessels' earnings not covering their operating expenses, has resulted in a big increase of the demolition activity as well as a high decrease of the newbuilding orders. During the first 7 months of 2016 about 22.20 million dwt of bulkers were scrapped. This volume is very close to the all-year demolition levels of 2013 (23.1 million dwt), much higher than the all-year levels of 2014 (16.30 million dwt) and approaching the all-year levels of 2015 (30.50 million dwt). If the demolition activity continues the rest of the year, we expect a record high demolition activity despite the fact that the scrap prices remain lower than the earlier years (about \$250 per long ton vs about \$420 in 2014 and about \$290 in 2015). On the other hand, the orderbook is highly decreasing and today is estimated at about 14.60% of the active bulkers' fleet, much healthier than the orderbook of previous years' which exceeded even the 25% of the active fleet at some time during the 2008-2013 period. Most of the dry bulk carriers currently on order are expected to hit the market during the rest of 2016 and 2017 while only about the 20% of them are expected to be delivered in 2018 or later. Therefore, for the time being, the supply indicators look guite promising since it is the first time after a period of about 8 years that the growth of supply is expected to be almost zero since the tonnage capacity during 2016 is expected to grow with about 2 million dwt only, much lower than the 15 million increase of 2015.

#### The world GDP remains stable

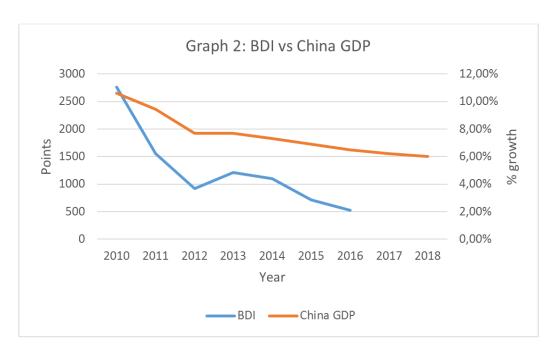
The world GDP has shown a slowdown since 2010 and its growth decreased from 5.4% in 2010 to about 3.4% in 2014 and 3.1% in 2015. As we can see from the following diagram, the BDI is influenced by the world GDP especially during periods of big slowdown or a high while it seems that its influence is less when the GDP remains stable and this is because in these case BDI may be affected from other parameters.



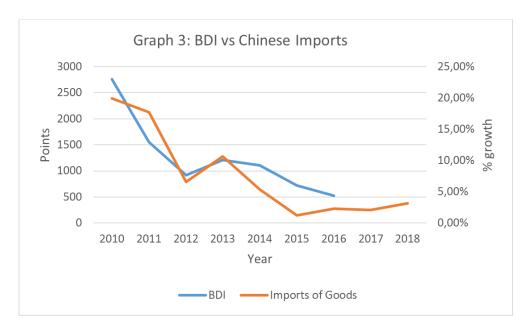
For example, despite the fact that the GDP remains stable for the period after 2013 with some slight improvement, this is not reflected in the BDI since during these period the newbuilding bulkers entered the market and the new supply could not be absorbed. Going forward, according to the IMF, the world GDP is expected to remain at about those levels with some small improvement at about 3.2% for 2016, 3.5% during 2017 and 3.6% during 2017 mainly led by the US economic growth which is expected to accelerate, the Eurozone's economy which is expected to be improved due to the monetary stimulus and the higher performance of the emerging economies.

# The Chinese slowdown hits the market

China has played an important role in the development of the dry bulk industry being a major importing and exporting country and its recent slowdown is very alarming. Specifically, China has been the biggest importer of iron ore and coal, which are the two major dry bulk commodities, and as of 2014 it was importing about 70% of world iron ore and about 20% of world coal.



Chinese GDP growth which was even higher than 10% between 2003 and 2007 has dropped from almost 7.70% in 2013 to about 6.70% during the Q1 2016. This 6.70% is the second lowest GDP growth rate for the Chinese economy since the 3.93% of 1990 and it also seems to be declining with forecasts to speak for 6.50% by the end of 2016 and around 6.00 - 6.20% in 2017 and 2018.

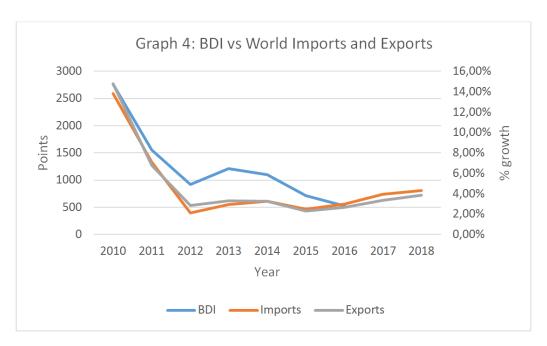


Due to the fact that China is the largest buyer of the two major dry bulk commodities it seems there is very high dependence of the dry bulk market on the Chinese GDP and Chinese imports. Especially as far as the Chinese imports are concerned, it seems the BDI does have a very high correlation (see diagram 3) in such a way to believe that the growth of the Chinese imports lead

the dry bulk market. Since the growth of Chinese imports seem to remain stable at around 3% with Chinese economy being transformed from an investment-lead to a service-lead economy, we expect that the dry bulk market will not be a demand-driven market for the following years.

# Dry Bulk Seaborne Trade & World Import/ Exports

The dry-bulk seaborne trade in 2016 is expected to remain at about the same levels as in 2015 maybe with a slight growth of about 0.50% only and experience a slight rebound with a growth of about 2.4% and 3.3% during 2017 and 2018 accordingly. Also the world imports & exports, which have recently experienced a heavy slowdown (growth of about 3% in 2016 vs about 14% growth in 2010) have shown some signals for improvement especially from 2018 onwards with the forecasts of IMF to talk for growth at levels of around 4.50%. Since it seems that there is high correlation between the world imports/ exports and BDI (see graph 4 below), the effects of such a higher growth on imports and exports during 2017-2018 may have a positive effect on the dry bulk market.



Especially 2017 is expected to be an important year for the dry bulk market since, the growth of the dry bulk seaborne trade is expected to be higher than the growth of supply while the growth of supply is expected to be negative, something which has not happened for at least a decade now, creating promises for a healthier 2018.

## So what is next?

With the world economies remaining in weak condition and the financial crisis still affecting various aspects of the world trade, if we assume that the growth of supply will remain at current levels, the market is expected to remain depressed during the second part of 2016 maybe with a slight improvement due to seasonal demand and stockpiling before the end of the year. In case China's slowdown continues in 2017 and imports do not materially increase, there are not positive signs that the demand will assist the recovery of the dry bulk shipping. Taking into consideration that there are not positive signs from the demand side, we need to see a much higher increase of the demolition activity, cancellation of new orders and delay of expected deliveries in order for the supply side to assist the market come into equilibrium and become healthier from the second half of 2017 onwards. Therefore, the main future scenarios as follows:

## 1st scenario: Optimistic

# Supply:

Demolition is further increased, new deliveries are delayed and new orders are not placed. The supply is expected to be decreased (negative growth) by about 1.50% in 2017.

#### Demand:

Dry bulk seaborne trade is improved during 2017 with a growth of about 2.50%, world exports and imports are grown with about 4% slightly above the current forecasts due to higher growth of the emerging economies and China increase its spending and investments with some recovery on its GDP and its imports at levels higher than the current forecasts of IMF.

### Result:

The above will improve BDI from the 2nd half of 2017 at levels similar to 2014 with the prospects being even more positive for 2018.

## 2nd Scenario: Pessimistic

## Supply:

Due to the low scrap prices and the lower average age of the fleet, demolition is decreased, while due to the very low prices for newbuildings, shipowers keep on placing new orders. In this case the supply will remain stable in 2017 or maybe slightly increase with a growth of about 0.50%-1%.

### Demand:

Chinese economy continues the slowdown with the GDP breaking the 6% point, the growth of Chinese imports remaining at today's levels or slightly less following the slowdown of its overall

economy, US elections bring uncertainty which does not help the US economy to accelerate, as expected, and a further crisis in Italy, Spain or Portugal slowdown's the Eurozone's economy. Due to this market uncertainty, the emerging countries do not proceed with new investments. Further to this, the demand will not grow and remain at levels similar with 2016.

#### Result:

In this case, BDI is expected to remain in 2017 at historical low levels similar to 2016 with high volatility due to seasonal factors, congestion or maybe laying-up trend. In this case, some recovery will not be expected earlier than the second half of 2018.

## 3rd Scenario: The base scenario

## Supply:

Demolition remains stable during the second half of 2016 and 2017, new deliveries are facing some slippage and the orderbook is slightly increased from Shipowners who seek investment opportunities. The tonnage supply will experience a small decrease of about 0.50%-1% in 2017, while it will start increasing again from 2018 at low levels, though, of about 1.50-2.00%.

#### Demand:

Chinese economy remains at about the same levels maybe with some small increase on the growth of its imports while the global imports and exports to be slightly improved at about 3.50%, almost 1% higher than today's figures. The bulk seaborne trade to be slightly improved during 2017 with about 1% - 1.50%, slightly better than 2016.

#### Result:

In this case, the demand will be higher than supply and it will improve BDI from the 2nd half of 2017 at levels similar to 2015, though still at low levels. In this case the prospects will look more positive for 2018 provided that the orderbook will not materially increase again, China will not experience a further slowdown and the world economy will not face any new shock.