

NOTOS MARKET REPORT | GAS

LPG shipping companies are currently well supported by slower fleet growth, solid Asian demand and strong US supply. Chinese counter-tariffs on US LPG seem to be manageable. Therefore, the LPG fundamental as well as stock markets are apt to be in recovery mode.

VLGC FLEET AT ITS HIGH IN 2018

Very Large Gas Carriers (VLGCs) are used to transport propane and butane from the origination places in the Middle East and the Gulf of Mexico to the main importing countries India, China and Japan. Propane and butane are used mainly as a feedstock in the petrochemical industry but also for residential heating, especially in developing countries like China and India.

Between 2012 and 2018, the VLGC fleet nearly doubled in size from 11m cbm to 22m cbm, as depicted in the graph below.

This growth was driven by the expectation of a growing supply from the US shale oil industry that would need to be transported to its customer base in Asia. The ratio of orderbook to current fleet jumped to a huge 36% in 2016 as shown in the second graph below. Such development ended in an oversupply of vessels and a subsequent sharp reduction in freight- and charter-rates.

VLGC FLEET SHRINKING AGAIN



Source: Clarksons 08/2018

VLGC ORDERBOOK RATIO HAS HIT ITS BOTTOM



Source: Clarksons 08/2018

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FLEET GROWTH AT TURNING POINT

Latest data reveal that the fleet has begun to shrink. Furthermore, the orderbook to fleet ratio now stands at a more comfortable 15%. This development has contributed to reducing pressure on the market. Clarksons reported the first uptick in newbuilding prices for VLGCs last week, indicating that the market seems to have reached its bottom.

However, the recent upturn in ordering activity, mainly driven by trading houses, has come as a small downer. The old rule remains that the longer the ordering pause, the better the long-term development of charter rates and vessel prices.

SOLID ASIAN DEMAND EXPECTED

The biggest importers India and China have experienced a healthy increase in demand for propane and butane for some years. This is fostered by the local governments wanting to encourage domestic households to shift from wood fireplaces to more efficient and environment-friendly modern gas cookers.

According to Platts, China Gas Holdings, a Hong Kong-based investment holding company principally engaged in gas businesses, is expected to import around 10m metric tons p.a. of LPG over the next five years, up from currently 2.8m metric tons p.a. The company expects to increase its LPG sales to households by 11.6% this year,

followed by another 11.1% in the next. China Gas Holdings sources its LPG imports mainly from the Middle East area, namely Qatar and Kuwait, but also uses European sources. Platts also reported that China Gas has plans to build five additional LPG terminals on Chinese coastal regions.

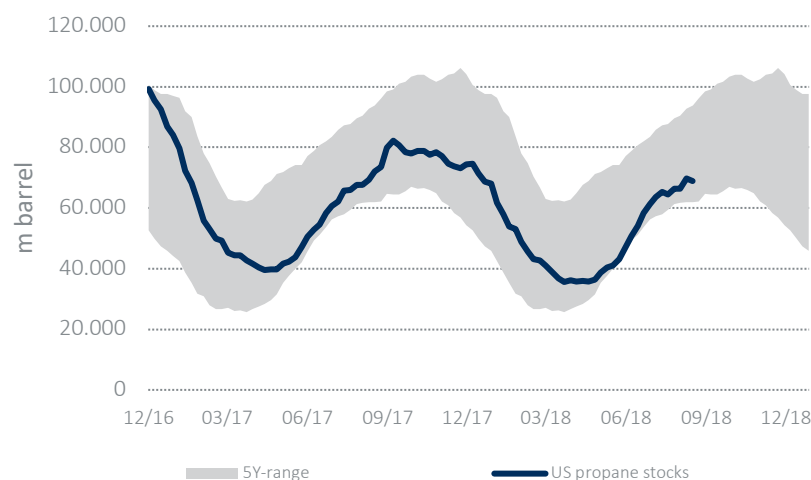
IMPACT FROM TARIFFS ALREADY PRICED-IN

China recently announced to impose a 25% trade tariff on US LPG. Currently, 19% of China’s total LPG imports originate from the United States. Pareto assumes that China had already reduced its imports from the United States significantly. We conclude that the negative effect to arise from such tariffs is already priced-in and any agreement to settle the trade barriers would have a positive impact on ton-miles.

US LPG PRODUCTION AND STOCKS ON THE RISE

While propane was hugely destocked in the United States due to the recent cold winter, we notice the stocks being ramped up this summer, as shown in the graph below. Latest data disclose a stock of 68.8m barrels, an increase of 4.35m barrels over the last four weeks. If the warm summer continues for some more time and exports keep their current (high) levels of 1.2m barrels per week, it would not be surprising to see the stocks reaching 80m barrels again in autumn which would bring it back to the middle of its five year corridor.

US PROPANE STOCKS EXPECTED TO MOVE UP FURTHER



Source: EIA, Notos Group 08/2018

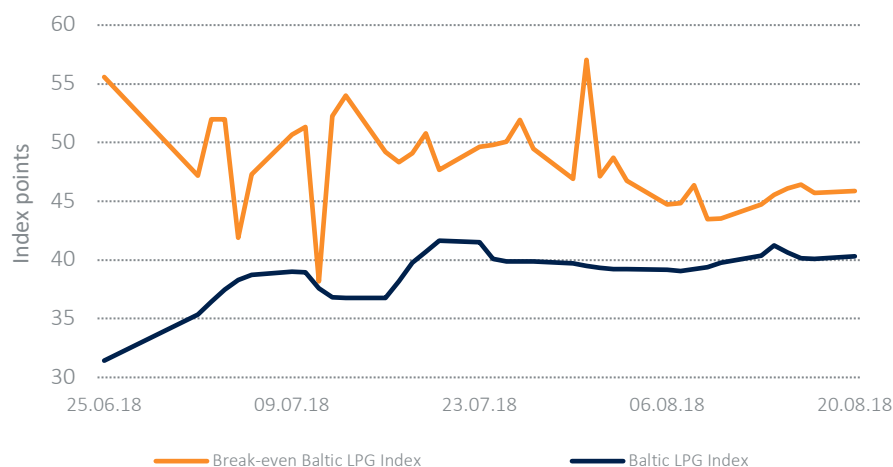
LPG STOCKS MAKE UP PRICE DIFFERENTIALS

The United States are currently the ‘swing producer’ in the LPG market. As long as the US production is high enough to surpass domestic demand, excess stock of propane and butane is available for the export market. This additional supply keeps a ceiling on the LPG price in Texas. If at the same time the demand for LPG in Asia remains high, the price differential will widen, thereby rendering the option of exporting the excess stock attractive. In short, higher stocks mean lower prices in the United States which increases the price differentials, making it more appealing to sail the commodity to Asia.

ARBITRAGE WINDOW WIDE OPEN

Currently, the price differential between US and Asian LPG is USD 74 per tonne which yields a slight positive arbitrage gain for traders at current freight rates. Given this

BALITC LPG INDEX ABOVE BREAK-EVEN LEVEL



Source: Clarksons, Notos Group 08/2018

connection, one can derive the break-even freight rate that would eliminate any such arbitrage gain.

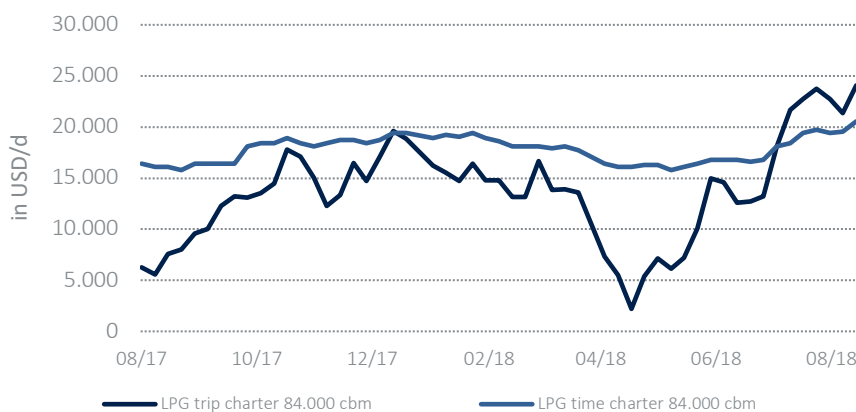
The graph on the upper right shows the development of the Baltic LPG benchmark index in comparison to a ‘break-even’ Baltic LPG Index that would close such arbitrage window. Currently, we estimate such break-even level at 45.9 index points, slightly higher than the index itself.

The Baltic LPG Index is still below its ‘break-even’ level which indicates that the arbitrage window has opened in June. Consequently, more vessels should sail from the United States to Asia which in turn, would have a positive impact on freight- and charter-rates.

PRICE DIFFERENTIALS DRIVE FREIGHT RATES

To piece it all together - various factors like slower fleet growth, solid Asian demand, and strong US supply have led to a steady rise in the charter rates, both spot and time, since May this year, as indicated in the graph on the lower left side.

RISING VLGC CHARTER RATES

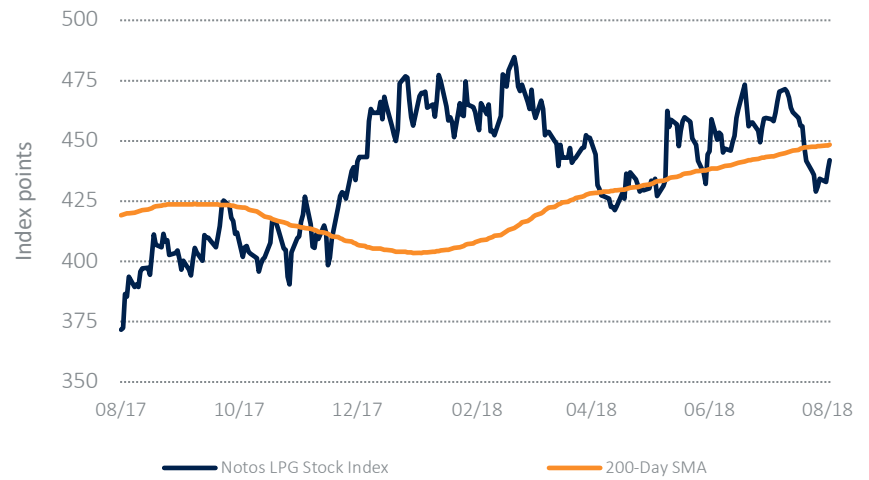


Source: Clarksons 08/2018

LPG SHIPPING COMPANIES IN RECOVERY MODE

Given this improved fundamental environment, we note that LPG shipping companies like BW LPG, Dorian LPG, Stealthgas or Avance Gas are recovering slowly but steadily. Our index for LPG stocks currently stands at 438 index points, having increased by 18% compared to a year ago. Due to its relative strength against the broad shipping stock market, the LPG sector was ‘picked’ by our factor model already end of last year and has since been included in the Notos Maritime Strategy Index.

NOTOS LPG STOCK INDEX GAINED YEAR-ON-YEAR



Source: Notos Group 08/2018

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