



## POTEN TANKER OPINION

### How Products Ebb And Flow

#### Changes in Product Demand Drive Trade Flows

Since the global financial crisis, when product trades declined as a result of a sudden pull-back in oil demand, the oil trades (both crude and products) have made a comeback. However, the individual products that are driving the expansion of oil demand are not all growing at the same rate. Also, product demand is growing at different rates in different regions of the world. In this week's Tanker Opinion we want to highlight some of the recent trends in product demand and their possible implication for product flows and tanker demand.

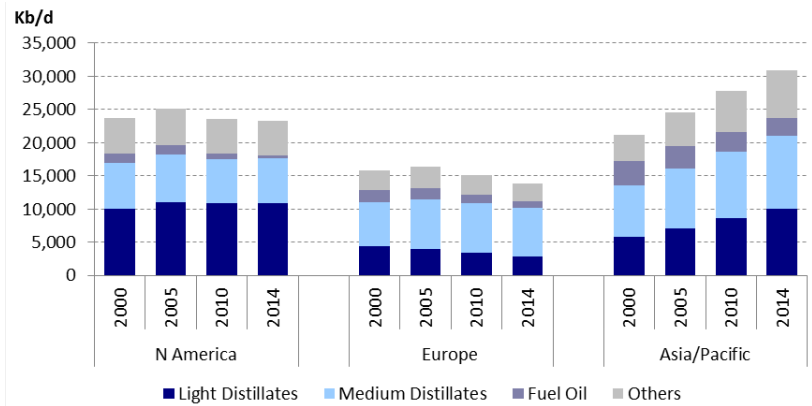
Global demand for refined products has shown an increasing trend for gasoil/diesel as well as gasoline, which are the largest product groups. Products with a smaller share of the refining barrel, such as LPG, naphtha and jet fuel/kerosene are growing as well, but at a slower pace. The only main product for which demand has been reducing over the last 10-15 years is residual fuel oil. These general trends are set to continue for the foreseeable future as economic growth in Asia will continue to improve living standards and drive gasoline demand worldwide, despite improvements in vehicle efficiency. The same developments will support demand for diesel fuel, although the penetration of diesel powered cars in Europe may have peaked and the growth potential in the United States has been dealt a severe blow after a recent emissions scandal involving a major German car manufacturer.

Future demand for gasoil/diesel will likely receive a boost from the shipping industry as it switches from heavy fuel oil to marine diesel to comply with legislation to curb global sulphur emissions as early as 2020. This switch is the main reason for the accelerated decline in residual fuel oil demand.

If we look at the import statistics for motor and aviation gasoline from the Joint Organizations Data Initiative (JODI), it shows stable global import volumes from 2008 to 2013 at around 3.4 – 3.5 million barrels per day (mbd), before picking up in 2014 (3.7 mbd) and 2015 (4.0 mbd). The bulk of this growth can be attributed to a few geographical areas: the Caribbean/Latin America (in particular Brazil, Mexico and Colombia), the Middle East (Saudi Arabia) and Australia. After years of declines, gasoline imports into the U.S. also picked up in 2014 and 2015. On the other side of the trade equation, exports also picked up over the same time period. The main export growth took place in the Middle East (2014 & 2015), the Far East (China and Korea), the Mediterranean and the UK Continent area. Given the diversity of the gasoline trade flows, all product tanker segments have benefited from the increased trade in this commodity.

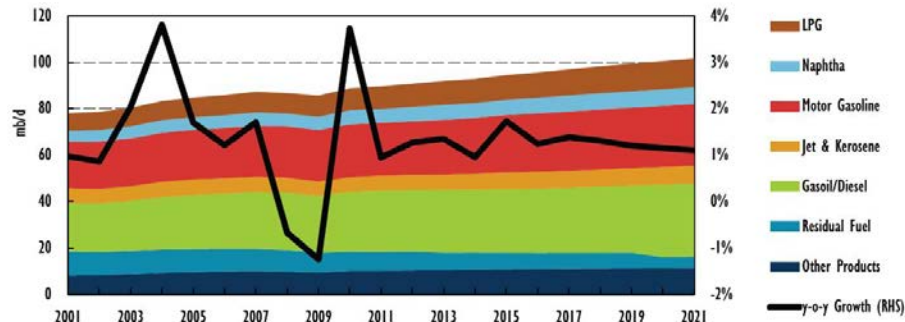
JODI data for gasoil/diesel shows continued steady growth in imports from 2008 through 2013. After a small dip in 2014,

Fig. 1: Oil Product Demand By Region



Source: BP

Fig. 2: Global Product Demand History and Outlook



Source: IEA

growth picked up again in 2015. Europe is by far the largest import region for diesel with most of the volumes going to France, Germany, the UK and the Netherlands. Other key import areas are the Mediterranean and South East Asia, although these two regions have not shown much growth in recent years. Some of the key import regions for diesel, like the Mediterranean and the UK Continent, are also on the list of important export areas, illustrating that there are active arbitrage trades for this commodity, in particular in the Atlantic Basin. Saudi Arabia is also a growing participant in the diesel export market, which is not surprising, given the significant growth in export-oriented refining capacity in the Kingdom.

As mentioned, worldwide fuel oil demand has been in gradual decline for many years, although trade has remained strong. In 2015, total imports of Fuel Oil reached more than 3.9 mb/d, with Singapore by far the largest importer with 1.4 mb/d (35%) ending up in the largest bunkering port in the world. Another significant destination for fuel oil is the Netherlands (Rotterdam). The largest fuel oil export regions are the UK Continent and the Mediterranean. Changes in sulphur regulations for marine bunker fuel are expected to significantly reduce the demand for (and trade in) fuel oil by 2020. However, since this is a dirty petroleum product, this will mostly impact the crude oil tanker fleet rather than the product tankers.