Weber US Product Trade Report

Q4 2017

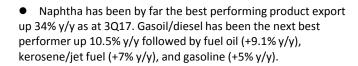
CHARLES R. WEBER

In this quarter's Charles R. Weber US product trade report we provide readers with the latest developments in the US seaborne products trade, based on trade data up to the end of the third quarter 2017. This includes identifying the fastest growing trades by commodity and country. The primary focus of the report is to allow market participants to keep up to date with changes in a rapidly developing, "oil and gas shale revolution" fuelled, export market.

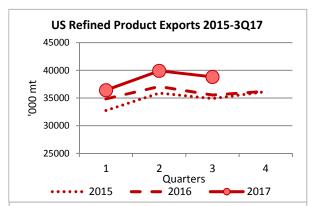




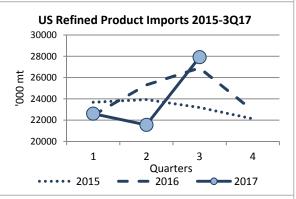
• After a weak 2H16 (+1% y/y), which curtailed 2016 growth to just 2.8% y/y, growth in US product exports accelerated through 2017 (+7.1% y/y based on trade statistics up to 3Q17). The momentum was maintained despite the damage caused by Hurricane Harvey in late August; indeed, 3Q17 growth (+9.2% y/y) was the highest since 2016.

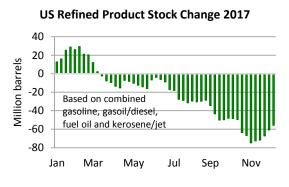


- Focusing on the top 30 largest trades of 2017 for the year to date, the most important growth trades include gasoil/diesel exports to Brazil (+200% y/y), fuel oil exports to Singapore (+80% y/y) and gasoil/diesel to Peru (+60% y/y).
- There are a number of factors underlying the strength of US product exports, including the discount of WTI to other international benchmarks like Brent, but the resurgence of US shale production against a background of improving oil prices has of course been a key factor. The latest US production figures for the second week of December hit a new all-time high of 9.78 million b/d, a sixth consecutive week when the record had been broken having initially surpassed the previous record set 5 June 2015 of 9.61 million b/d in early November.
- Strong domestic demand coupled with rising production has seen refinery throughputs hit record levels in 2017, notwithstanding the fall out from Hurricane Harvey. The strength of the recovery in refinery throughputs following Hurricane Harvey along with the continued growth in US production with the EIA predicting an increase of 700,000 b/d in US production next year suggests that the acceleration in US product export growth might have further to run.
- US crude oil stocks have been falling steadily from mid year, while the chart (right) shows that combined US fuel oil, gasoline, gasoil/diesel and kerosene/jet fuel inventories started falling a little earlier. Falling product stock levels will provide further encouragement for US refineries to keep throughputs strong.









Source: USITC

Fastest growing export commodities

3. Gasoil/diesel

1-3Q17 46.7 million mt, +10.5% v/v

Export growth gains further momentum

- The largest US refined product export with 41% of the market. Export growth has fluctuated between positive and negative territory since 2014. contracting by 1.2% in 2016. However, export growth has gained momentum through 2017, increasing by almost 12% y/y in 3Q17.
- Latin America accounts for 7 countries in the top 10 destination list. A failure to deliver refinery plants continues to underpin its import requirements.
- Mexico (1-3Q17 +38% y/y) and Brazil (+79% y/y) - the two most important export markets - remain among the best performing trades. Meanwhile European trades have disappointed.

4. Fuel Oil

1-3Q17 16.7 million mt, +9.1% y/y

Not seen as a long term growth prospect, but developing niche markets

- Singapore is by far the largest export trade with 18% market share. It has performed very well in 2017, up 49% y/y for the first nine months of the year.
- The next six largest trades have also expanded. Bahamas +124% y/y and Aruba +600% y/y have been star performers. Malta and Egypt are among trades going backwards.

2. Lubricating Oil

1-3Q17 5.2 million mt, +18.1% y/y

Revival in fortunes continues after a disappointing 2016

- More usually considered as part of the chemical rather than product family in terms of seaborne transportation.
- Having been the No.1 fastest growing trade in 2015, and second fastest in 2014, it declined by 26% last year.
- It accounts for just 5% of the US refined product export trade.

x. Propane & Butane

1-3Q17 22.5 million mt, +17.7% y/y

Competing with naphtha in the petrochemical feedstock export market

- Butane exports outshone Propane again in 3Q17, up 41% y/y for the year to date, while propane was up 15% y/y.
- LPG included here as its story overlaps with export growth in the product sector both driven by shale.
- Four of the top 5 largest trades are to Asian destinations. All four trades are growing rapidly: Japan +40% y/y, China +27% y/y, South Korea +18% y/y and Singapore +63% y/y.

1. Naphtha

1-3Q17 6.8 million mt, +34% y/y Finding a way to compete with other feedstocks

- Up to 1H15, Naphtha was a star growth trade, but therafter growth was curtailed by competition from abundant cheap ethane and LPG as a petrochemical feedstock.
- However, having invested in new condensate crackers, naphtha producers have a strong incentive to fight back and have started to recapture market share with exports breaking through the 2 million mt barrier for the first time in each of the first three quarters of 2017. It is also the case, that condensate is finding its way into the export market as a blending component for crude
- Canada, Colombia and Venezula are the larget export markets, but emerging trades to Chile, Peru, Panama and Guatemala are among the fastest growing.

Figures based on US exports up to third quarter 2017

17.7%

5.2%

9.1% 10.5%

6. Gasoline

1-3Q17 24.7 million mt, +5.2% y/y

Star performing trade in 2016 +22%, but less impressive in 2017

- Exports hit record levels in 4Q16, but grew by only 3% y/y 1H17 before recovering somewhat in 3Q17 +10% y/y.
- The performance of Mexico (38% market share) is a fundamental driver. Exports to this market were up 9.3% y/y in 1-3Q17.
- Guatemala +14% y/y, Brazil +43% y/y, Colombia +7% y/y and Peru +87% y/y were the most impressive growth makets in 1-3Q17. By contrast, a new long-haul trade to Singapore that emerged in 2016 has failed to develop so far this year.

5. Kerosene/jet fuel

1-3Q17 6.9 million mt, +7.0% y/y Smaller trades gaining strength

- It had been one of the fastest growing export trades up until 1Q15, but is now towards the back of the pack.
- It is still recovering from the collapse of Nigerian trade in 2015, and washit by a fall in Canadian exports (-27%) in 2016. Nevertheless, the second largest trade to Mexico (1-3Q17 +24% y/y) continues to grow, and exporters have seen two trades that were almost non-existent in 2016 enter the top 10: Peru and Cayman Islands.

How to read the chart: Size of sphere for each commodity indicates total export volume Ytd, while percentage number within sphere indicates % change y/y

7. Other Products

1-3Q17 8.2 million mt, -22.4% y/y Dominated by trade to Canada

- Having posted a record 1H16, exports fell by 13% y/y in 2H16, and have fallen even further in 1-3Q17.
- Dominated by natural gasoline (plant condensate as diluent).

If you have questions or comments, please contact Charles R Weber Research John M Kulukundis: jmk@crweber.com, George P Los: gpl@crweber.com, www.crweber.com

Fastest growing export regional destinations

Established regional markets (NAmr, LAmr, Europe), 90% Mkt Share, +5.7% y/y (16-17)

South America

104 million mt, +18% y/y (16-17)

South America accounted for 68% of total US product exports in 1-3Q17. This is up from 61% in 2016 and 58% in 2015.

Kerosene and Fuel oil are relatively minor components of the US/South America trade, accounting for 15% market share, but both were star performers 1-3Q17.

Gasoline and Gasoil/diesel remain the dominant export commodities with 76% market share and both performed strongly during 1-3Q17 - up a combined 17% y/y

Europe

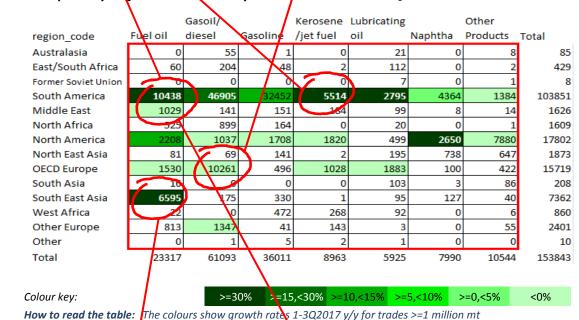
OECD Europe: 15.7 million mt, -17% y/y Non-OECD Europe: 2.4 million mt, -34% y/y

OECD Europe's share of total US product exports fell to 10% in 1-3Q17 from 13% in 2016 and 16% in 2015.

Gasoil/diesel accounts for 65% of products imports from the US. This trade struggled in 1-3Q17 (-9% y/y, -1 million mt). The contraction compounded an even sharper fall (-24% y/y) in 2016. France, UK and Gibraltar all saw falls 1-3Q17, while Netherlands posted a small gain +3.8% y/y.

US Exports by Region and Commodity est. 2017

Figures in '000 mt



Emerging regional markets

10% Mkt Share, +26% y/y (16-17)

South East Asia

Figures based on US exports up to third quarter 2017



7.4 million mt, +27% y/y (16-17)

South East Asia recoverd strongly in 1-3Q17 with its share of total US exports increasing to 4.8% from 4.0% in 2016 and 4.3% in 2015.

Fuel oil - The US refined product export trade to South East Asia is almost entirely dependent on fuel oil, with a market share of 90%. Singaporean imports are responsible for most of the trade. The fortunes of this market fluctuated in 2016, but in 1-3Q17 it was up 1.4 million mt, +49% y/y.

Middle East

1.6 million mt, -24% y/y (16-17)

Middle East remains a peripheral market for US exporters.

Fuel oil - US exports of fuel oil into the region expanded by 27% y/y in 2016. However, this 1.0 million mt trade weakened at the start of 2017. There are no other significant US product volumes into this region. Like North East Asia, it seems the Middle East will never be more than a peripheral market for US exporters.

Fastest growing export country destinations

1. Brazil +66%

Trade 1-3Q17: 9.3 million mt

Gasoil/diesel (7.3 million mt, +79% y/y)
Gasoline (0.0 million mt, +43%

Gasoline (0.9 million mt, +43% v/v)

This trade - the 3rd largest US export trade after Mexico and Canada - grew strongly in 1-3Q17. Gasoil/diesel, which has a 78% market share, grew by 79% y/y in 1-3Q17. Almost all other trades also expanded strongly.

2. Singapore +44%

Trade 1-3Q17: 5.1 million mt

Fuel Oil (4.3 million mt, +49% y/y)

Gasoil/diesel (0.6 million mt, >+100% y/y)

Estimated annual growth for trade with Singapore has been revised up from 38% y/y to 44% y/y this quarter. Fuel oil continues to dominate the trade, but gasoil/diesel is an emergent, rapidly growing trade.

3. Guatemala +41%

Trade 1-3Q17: 3.7 million mt

Gasoil/diesel (2.0 million mt, +72% y/y)

Gasoline (1.3 million mt, +14% y/y)

Guatemala has moved up from 6th to 3rd fastest growing US export trade this quarter. Its economy remains buoyant with the latest IMF WEO report forecasting GDP growth of +3.4% in 2018 up from 3.2% in 2017.

4. Peru +40%

Trade 1-3Q17: 4.1 million mt

Gasoil/diesel (3.1 million mt, +31% y/y) Gasoline (0.6 million mt, +87%

A key US partner in South America. This has been a onelegged trade, dependent on gasoil/diesel - which continued to perform well during 1-3Q17. Gasoline and Kerosene/jet fuel are emerging trades.



How to read the map: The map highlights the 8 best performing US export trades 1-3Q17 y/y based on the top 17 countries

5. Mexico +20%

Trade 1-3Q17: 27.1 million mt

Gasoline (13.8 million mt, +9% y/y)

Gasoil/diesel (7.7 million mt, +38% y/y)

Despite somewhat rocky
Mexico/US relations, exports
remain buoyant across the
board. Gasoil/diesel was the star
performer in 1-3Q17. The latest
IMF WEO report forecasts a cut
in GDP growth in 2018 to +1.9%.

6. Venezuela +12%

Trade 1-3Q17: 2.9 million mt

Naphtha (0.9 million mt, +20% y/y)

Gasoline (0.6 million mt +30% y/y)

Venezuela's struggles continue with the IMF forecasting a 6% fall in GDP growth in 2018 on top of a 12% contraction in 2017. One by product of this struggle is an increasing dependence on US imports.

7. Panama +7%

Trade 1-3Q17: 3.9 million mt

Gasoil/diesel (1.5 million mt, -4% y/y)

Fuel oil (0.9 million mt, +24% y/y)

A key growth economy in Central America. It imports a wide range of products from the US. Performance has been mixed with fuel oil and kerosene/jet fuel up in 1-3Q17, while gasoil/diesel and gasoline have contracted.

8. Costa Rica +5%

Trade 1-3Q17: 1.8 million mt

Gasoil/diesel (0.8 million mt, +6% y/y) Gasoline (0.7 million mt, +9%

Costa Rica is a relative newcomer to this list. Export trade is dependent on gasoline and gasoil/diesel where trade growth continues to be consistent but unspectacular.

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