

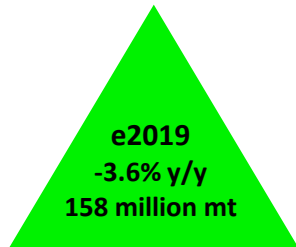
Weber US Product Trade Report

Q4 2019



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 third quarter 2019**. 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.

Exports



- Last quarter, we reported that US product export growth had stalled. This quarter, the market continues to underperform with our outlook little improved at -3.6% y/y in 2019, the first annual contraction since 2002. Although still gloomy, the market contracted by a less dramatic -1% in 3Q19 y/y compared with a contraction of -11.6% in 2Q19 y/y.

- Although overall trade stabilised, only 2 sectors, gasoil/diesel (+12% y/y) and kerosene/jet fuel (+15% y/y), bounced back in 3Q19. Undercut by the new IMO 2020 bunker regulation, which came into force at the start of the year, fuel oil export volumes have continued to contract sharply, while conversely gasoil/diesel has been the beneficiary of the new regulations.

- The US/China trade war has undoubtedly been a factor behind lacklustre product exports. Therefore, the signing of Phase 1 of a new US/China trade deal in January may prove the precursor to a rally in demand, with US energy product exports touted as one of the bigger winners of the accord. During 1-3Q19, US exports or crude oil were running 40% below corresponding 2018 levels.

- US product exports to China peaked at 1 million mt in 2017, but are expected to be less than half that in 2019, so there appears scope for a bounce in US product exports too. However, with China adding 1Mnbd of new refinery capacity 2018-19 and a further 1.5Mnbd of planned additions in 2020-21, hopes of a revival in US exports should be tempered, especially when considering China has emerged as an export force in its own right. In 2019, China's exports are estimated to have risen +8.2% y/y, building on growth of +12% y/y in 2018.

- The announcement of the deal led to a rally in crude oil prices, but prices are likely to be volatile until the details of the deal and compliance with the deal become clearer. Middle East risk is also a major wild card hanging over all markets in 2020. Risks from the coronavirus are also on the rise.

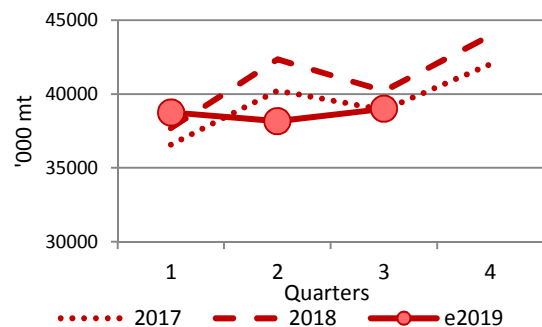
- During 2019, US product exports have become increasingly dependent on South America, and export growth, even here, is starting to falter. Having hit record levels in 4Q18 (31.5 million mt) and sustained strong growth in 1Q19 (+13% y/y), exports to this region went off the boil in 2Q19 (-2.6% y/y) before recovering somewhat in 3Q19 (+3.8% y/y). Nevertheless, it was the best performing market in 1-3Q19, apart from Non-OECD Europe (+16% y/y).

- The outlook for product exports to South America is improved in 2020, based on the assessment by the IMF (Oct '19 World Economic Outlook) that GDP in the region is expected to grow from 0.2% in 2019 to 1.8% in 2020.

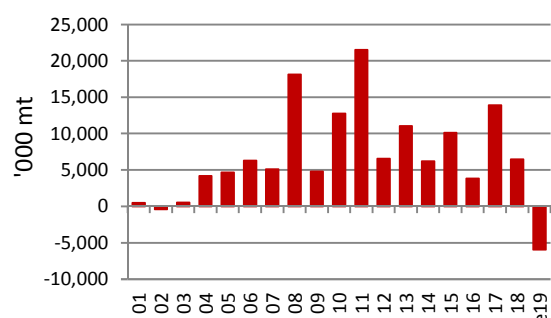
* ton-miles = US Customs total trade data x trade leg distance, where distance is a single estimated average distance for each trade leg.

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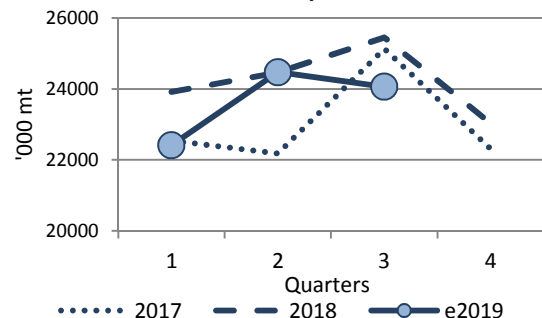
US Refined Product Exports 2017-2019



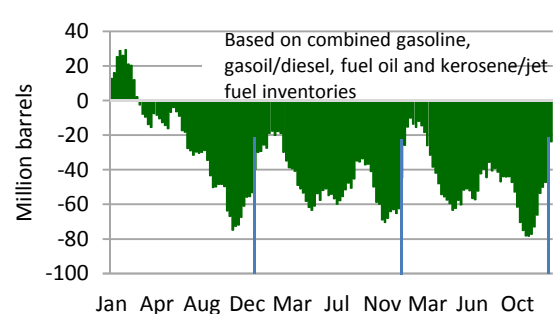
Growth US Refined Product Exports



US Refined Product Imports 2017-2019



US Refined Product Stock Chg 2017-19



Source: USITC

Fastest growing export commodities

3. Lubricating Oil

e.2019 5.6 million mt, -0.5% y/y

Flat 3Q19 after poor 2Q19

- 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% y/y in 2016 before stabilising in 2017.
- It accounts for just 3% of the US refined product export trade.

4. Gasoline

e.2019 40.4 million mt, -2.8% y/y

Second best performer in 2018 (+15% y/y), but weak start to 2019 continued

- Mexico (54% mkt share) dominates this trade and has been a major factor in gasoline growth in recent years, but trade contracted (-14% y/y) in 3Q19, offsetting strong gains by Brazil (+360% y/y in 3Q19), now its second largest market.
- The long term prospects for this trade are threatened by Mexico's prediction that it will become self-sufficient in gasoline by 2022 with the completion of a new Dos Bocas refinery.

1. Gasoil/Diesel

e.2019 64.0 million mt, +5.7% y/y

Positive start to 2019 continued underpinned by rising bunker demand

- The largest US product export with 40% of the market, it was the only product to register significant positive growth in 1-3Q19 + 3.7% y/y. However, exports are in recovery mode having declined by 4.3% in 2018, and with a record of fluctuating between positive and negative growth since 2014.
- This sector has benefitted from a ramping up of demand resulting from the IMO 2020 bunker regulations.

2. Kerosene/Jet Fuel

e.2019 10.8 million mt, +0.7% y/y

OECD Europe trade recovers 3Q19

- After underperforming the overall US export market in recent years, it had a breakthrough year in 2018 (+18.9% y/y). However, exports flagged in 2Q19 (-11% y/y) before recovering in 3Q19 (+15% y/y).
- It was hit by the collapse of Nigerian trade in 2015, and a fall in Canadian trade (-27% y/y) in 2016.
- In 3Q19, exports benefitted from a recovery in trade with key markets, such as UK and Netherlands.

x. Propane & Butane

e.2019 38.7 million mt, +12.5% y/y

Competing with naphtha in the petrochemical feedstock export market

- US NGLs exports continue to expand, which is in stark contrast to US product exports, which are on course to register negative annual growth for the first time since 2002.
- Unusually, propane +13.4% y/y, the significantly larger trade, out-performed Butane exports (+8.5% y/y) in 1-3Q19.
- The strong performance of Propane was in large part due to soaring trade with Japan, the largest export market for the US, which first started to accelerate dramatically in 2H18 and which was up +64% during 1-3Q19 y/y.
- LPG included here as its story overlaps with export growth in the product sector - both driven by shale.

5. Naphtha

e.2019 9.1 million mt, -11.9% y/y

Tough start to 2019 continued

- Up to 1H15, naphtha was a star (albeit small) growth trade, but thereafter growth was curtailed by competition from abundant cheap ethane and LPG as a petrochemical feedstock.
- However, having invested in new condensate crackers, naphtha producers had a strong incentive to fight back and have recaptured market share by marketing naphtha as a blending component for crude.

6. Fuel Oil

e.2019 18.4 million mt, -16.2% y/y

The new IMO 2020 bunker fuel regulations are contributing to a collapse in the fuel oil trade

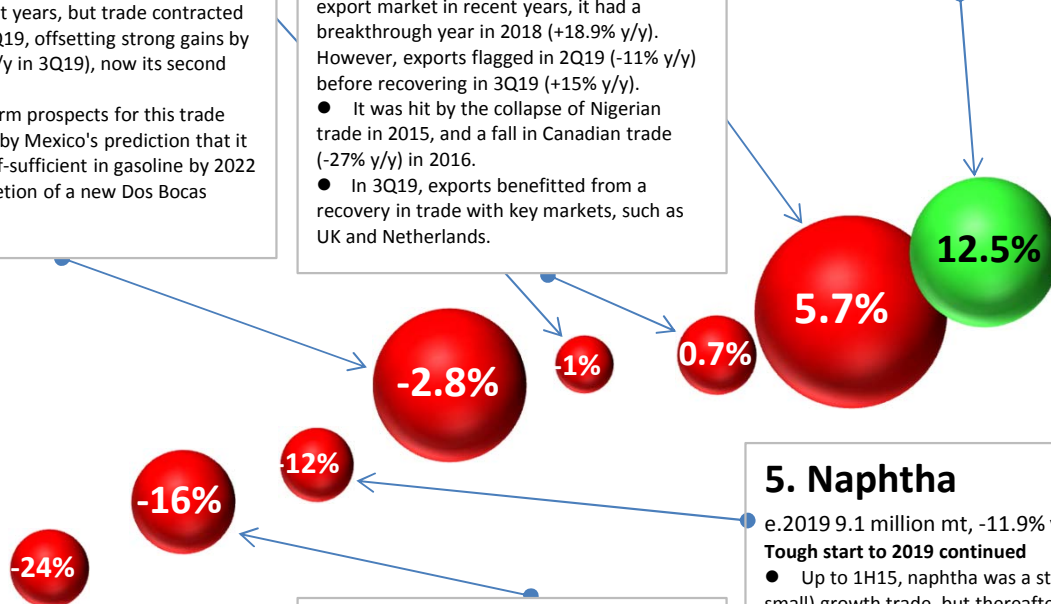
- The fuel oil trade is not viewed as a long term growth prospect, in part due the IMO 2020 bunker fuel regulations, which came into force in January.
- Trade with Singapore (down 2.8 million mt) was particularly badly affected in 1-3Q19, swamping gains in other trades e.g. Panama (+32% y/y), which has now replaced Singapore as the largest export destination.

7. Other Products

e.2019 10.3 million mt, -24% y/y

Canada dominates, but emerging trades to Brazil, Taiwan & Netherlands

- "Other products" is mostly the commodity hs code 2710124500 defined as: *Mixtures Of (light) Hydrocarbons Containing By Weight Not Over 50 Percent Of Any Single Hydrocarbon Compound*.
- This code is commonly called natural gasoline (plant condensate as diluent). Diluent can be used to facilitate the pumping of heavy crudes produced by Canada, Venezuela and China (offshore).



Figures based on US exports up to 3Q2019

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

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Fastest growing export regional destinations

Established regional markets (NAMr, LAMr, Europe), **94%** Mkt Share, **-0.1%** y/y (18-19)

South America

est 116 million mt, +2.9% y/y (18-19)

Having hit record levels in 4Q18 (31.5 million mt) and sustained strong growth in 1Q19 (+13% y/y), exports to this region went off the boil in 2Q19 (-2.6% y/y) before recovering somewhat in 3Q19 (+3.8% y/y). Nevertheless, it was the best performing market in 1-3Q19, apart from Non-OECD Europe.

Gasoline and gasoil/diesel remain the dominant US export commodities with 76% market share. In 1-3Q19, Gasoil/diesel (+7.5% y/y) outperformed gasoline (+0.1% y/y).

Kerosene/jet fuel (+13% 1-3Q19 y/y) has been the best performing regional growth trade so far this year.

Europe

OECD Europe: est 14.4 million mt, -5.9% y/y

Non-OECD Europe: est 2.2 million mt, +16% y/y

After a strong performance in 1Q19, exports to OECD Europe slipped back in 2Q19 (-10% y/y) and again in 3Q19 (-13% y/y), while exports from the region started to rise. By contrast, Non-OECD Europe has proved a strong growth market.

Gasoil/diesel (+5% 1-3Q19 y/y) accounted for 59% of US products exports to Europe compared with 53% in 2018. The sustainability of this performance has yet to be tested, coming after a period of significant and sustained decline, 2018 (-19% y/y), 2017 (-9% y/y), and 2016 (-24% y/y).

US Exports by Region and Commodity e2019

Figures in '000 mt

region_code	Fuel oil	Gasoil/ diesel	Gasoline	Kerosene /jet fuel	Lubricating oil	Naphtha	Other Products	Total
Australasia	6	1	326	0	34	0	1	367
East/South Africa	0	42	61	0	84	0	1	188
Former Soviet Union	0	0	0	0	6	0	1	8
South America	10765	50761	36574	7068	3380	5095	2058	115702
Middle East	978	91	8	124	146	34	105	1485
North Africa	40	1138	39	0	16	0	1	1233
North America	1435	1029	2269	2466	454	1877	6638	16168
North East Asia	231	69	65	0	76	1459	783	2685
OECD Europe	2208	8508	568	1007	1052	730	370	14432
South Asia	1	88	0	0	103	29	174	395
South East Asia	1929	90	204	0	54	100	103	2479
West Africa	109	341	212	69	195	0	1	928
Other Europe	562	1599	38	0	1	7	0	2208
Other	0		8		1		0	9
Total	18266	63756	40373	10735	5600	9322	10237	158287

Colour key:

>=30% >=15,<30% >=10,<15% >=5,<10% >=0,<5% <0%

How to read the table: The colours show growth rates 1-3Q18/1-3Q19 y/y for trades >=1 million mt

Emerging regional markets

6% Mkt Share, **-37%** y/y (18-19)

South East Asia

est 2.5 million mt, -62% y/y (18-19)

After a strong year in 2017 (+27% y/y), this trade, which is largely dependent on fuel oil, started to unravel in 2018 before collapsing at the start of 2019.

Fuel oil - This trade has been underpinned by exports to Singapore, but it has been severely impacted by the decline in fuel oil demand triggered by the impending new IMO 2020 bunker regulations and compounded by increased competition from North East Asia, South East Asia and the Middle East.

North East Asia

est 2.7 million mt, -13% y/y (18-19)

Naphtha and natural gasoline exports were behind growth in trade with NEAsia in 2018, but have weakened in 1-3Q19.

Naphtha - Although exports to South Korea (0.25 million mt, +50% y/y) increased significantly in 1-3Q19, exports on the largest trade to Japan (0.5 million mt, -8% y/y) contracted.

Natural gasoline - is used as a diluent to facilitate the pumping of heavy crude oil grades. In 1Q18, Chinese imports surged, but they tailed off in the remainder of the year.

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Fastest growing export country destinations

1. Brazil +51%

Trade 1-3Q19: 11.7 million mt

Gasoi/diesel (7.4 million mt, -39% y/y)

Gasoline (2.0 million mt, >=+100% y/y)

Brazil - the 3rd largest US export trade after Mexico and Canada. Brazil has good relations with the US, but more important, in terms of trade growth, is the switch in Brazil's focus from refining to deepwater oil exploration.

2. Gibraltar +51%

Trade 1-3Q19: 1.8 million mt

Gasoi/diesel (1.4 million mt, +64% y/y)

Fuel Oil (0.4 million mt, +31% y/y)

The gasoi/diesel trade took off in 2015, when low prices & full land-based storage encouraged the rise of floating storage. Thereafter, the trade declined, but bounced back in 2Q19 driven in part by its function as a bunker hub for scrubber-fitted ships.

3. Colombia +47%

Trade 1-3Q19: 3.8 million mt

Gasoi/diesel (1.4 million mt, >=100% y/y)

Naphtha (1.4 million mt, +19% y/y)

Trade growth may in part reflect the ongoing support given by the US to Colombia in negotiating (since 2012) a peace treaty with FARC - Colombia's largest guerilla group, and for supporting US policy in Venezuela*.

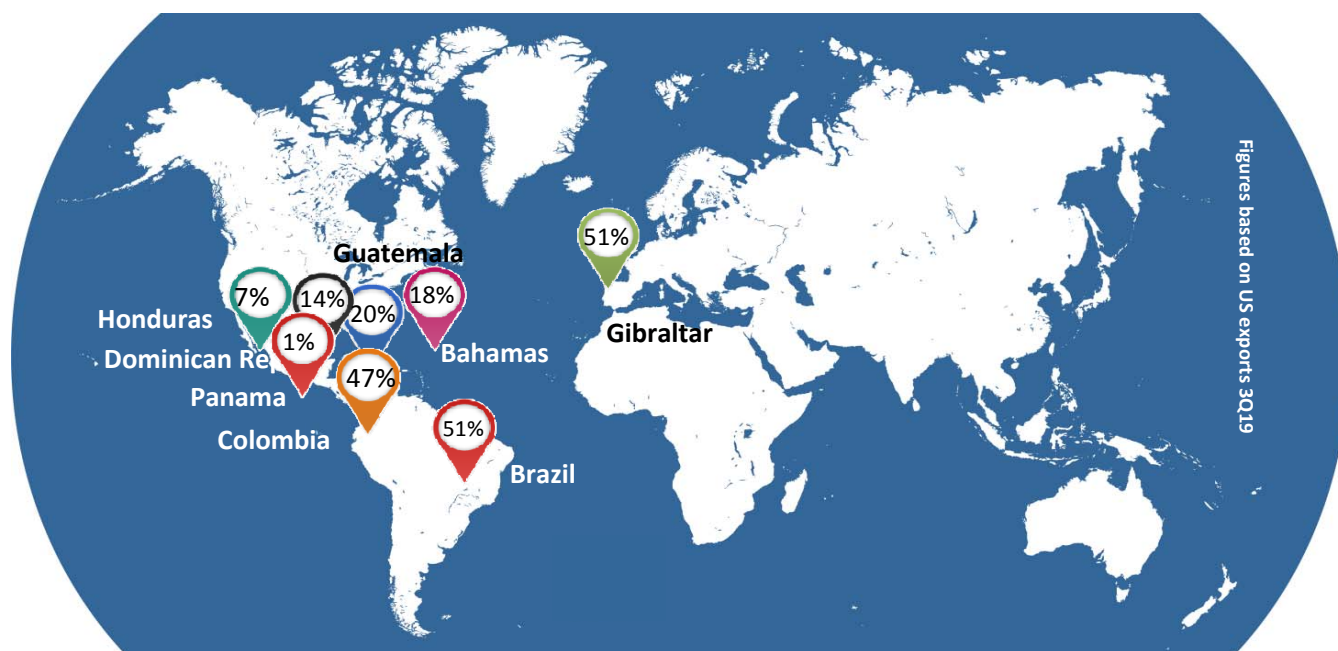
4. Guatemala +20%

Trade 1-3Q19: 3.1 million mt

Gasoi/diesel (1.5 million mt, +11% y/y)

Gasoline (1.4 million mt, +23% y/y)

Trade growth may in part reflect, Guatemala's positive relations with US*, which were reinforced when it recently agreed (along with Honduras and El Salvador) to cooperate with the US policy on managing migrant flows.



How to read the map: The map highlights the 8 best performing US export trades 1-3Q19 y/y based on the top 17 countries

5. Bahamas +18%

Trade 1-3Q19: 1.9 million mt

Fuel oil (1.0 million mt, +9% y/y)

Gasoi/diesel (0.7 million mt, +39% y/y)

Supportive of the US policy towards Venezuela, it is now the fifth largest market for US fuel oil exports. With its oil infrastructure escaping the worst ravages of Hurricane Dorian, it is (like Gibraltar) benefitting from its position as a bunker hub.

6. Dom Rep +14%

Trade 1-3Q19: 2.3 million mt

Gasoi/diesel (1.0 million mt, +42% y/y)

In May '18, it moved closer to China by cutting ties with Taiwan (like Panama and El Salvador). In March, high level meetings with China exacerbated political tensions with the US, but it gained favour by supporting the US policy towards Venezuela.

7. Honduras +7%

Trade 1-3Q19: 1.7 million mt

Gasoline (0.6 million mt, +12% y/y)

Fuel oil (0.4 million mt, +16%)

A traditional ally of the US, like other countries in the region, it looked towards China as a partner, with the result that the US cut aid payments in March 2019. Nevertheless, it continues to see strong import growth led by gasoi/diesel and gasoline.

8. Panama +1%

Trade 1-3Q19: 4.3 million mt

Fuel oil (1.5 million mt, +32% y/y)

Gasoline (0.7 million mt, +2%)

Another bunker hub, but with growth of just 1% y/y, Panama's presence in the top 8 reflects the weakness of US product exports in 2019, especially because it has aligned itself with China, following the signing of political, economic and cultural agreements.

**While no direct evidence exists that good relations with the US government has a positive impact on trade, there is circumstantial evidence that those countries that are leaning towards China (and are less receptive to US policy in the region) have seen poor trade growth performance in recent months and vice versa.*

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