

Weber US Product Trade Report

Q1 2021



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 fourth quarter 2020. 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

e2020
-11.3% y/y
137
million mt

- This report serves as a useful guide to understanding how trade developed through 4Q20. However, as Customs data is time lagged, it does not provide a clear insight into the COVID-19 fractured market during 1Q21. For an understanding of this market, we have utilised AIS analysis and the results can be seen on page 2.

- After a modest bounce back in 3Q20, the recovery in US exports stalled in 4Q20, with the result that the contraction in 2020 US exports was revised down to -11.3% y/y from -10.6% y/y in our last report. US product imports remained similarly lacklustre despite a modest uptick in 4Q20.

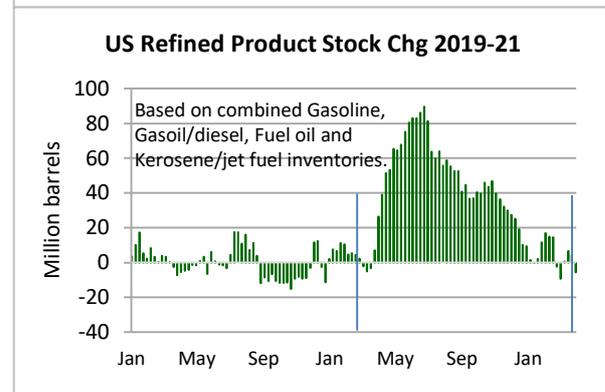
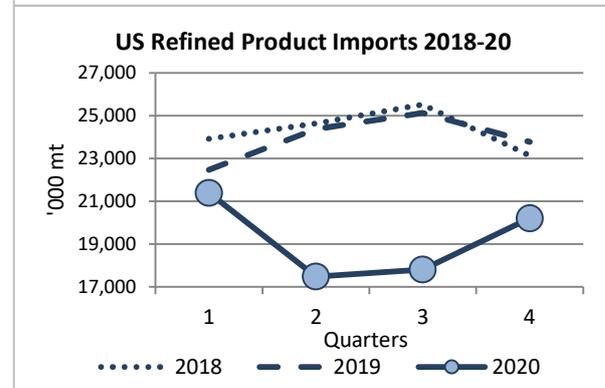
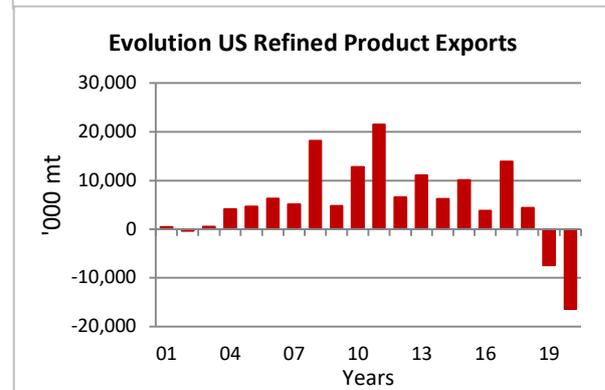
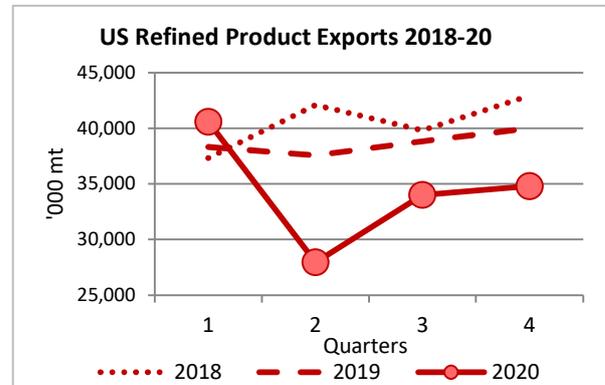
- Products at the lighter end of the spectrum e.g. Naphtha and Natural Gasoline were the only ones to register positive export growth last year, with previously irrepressible trades Gasoil/Diesel and Gasoline down 10.7% y/y and 11.4% y/y, respectively.

- The bright spark for exporters in 2020 was that the surge in Naphtha and other light products trade was most pronounced on long haul trades to North East Asia, with Japan (1.4 million mt, +54% y/y) and South Korea (1.4 million mt, +99% y/y) the star performing markets. Light product exports also gained traction in OECD Europe, while Gasoil/Diesel and Gasoline exports made inroads into South East Asia. Meanwhile, South America, which accounts for 71% export market share, was in the doldrums in 2020, down 13.8% y/y.

- Using AIS-based tracking, it is possible to bring the performance of US product exports more up to date than can be done with Customs data. Looking at the number of product tankers active in the USGulf in 1Q21, we have noted only a very modest increase in the number of vessels underway in the region compared with 4Q20, while the observed level of activity is well down on that seen in both 1Q18 and 1Q19.

- Looking for signs of life in other regions beyond the US markets is not that rewarding, with insipid 1Q21 growth the norm. If you really look hard, then increased MR activity from the Middle East to India to South East Asia and finally to China stands out, but it is too early to say if this improvement will be sustained.

- While looking for signs of recovery, developments in the refinery sector provide an indication that a fundamental shift in the structure of the market is taking place, with many of the new projects being mooted involving renewables. Examples of such projects include Marathon Petroleum's (MPC), Dickinson renewable fuels refinery in North Dakota, which is expected to produce 12kbd (0.6Mnta) of renewable diesel oil from corn and soybean oil, to be sold into the California market to comply with the California Low Carbon Fuel Standard.



Source: USITC

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Impact of COVID-19 on Product Fleet Activity

Only a weak recovery in US Product exports in 1Q21

● COVID-19 has upended shipping markets and comprehensive Customs data, which is between a few weeks and a few months out of date, is unable to provide a clear up-to-date insight into what is happening across regions and vessel sectors.

● In the analysis on this page, we have used AIS data to track some of the changes that are occurring in the product sector. The charts here distill some of our findings in order to provide an up-to-date picture of product seaborne trade up to March 2021.

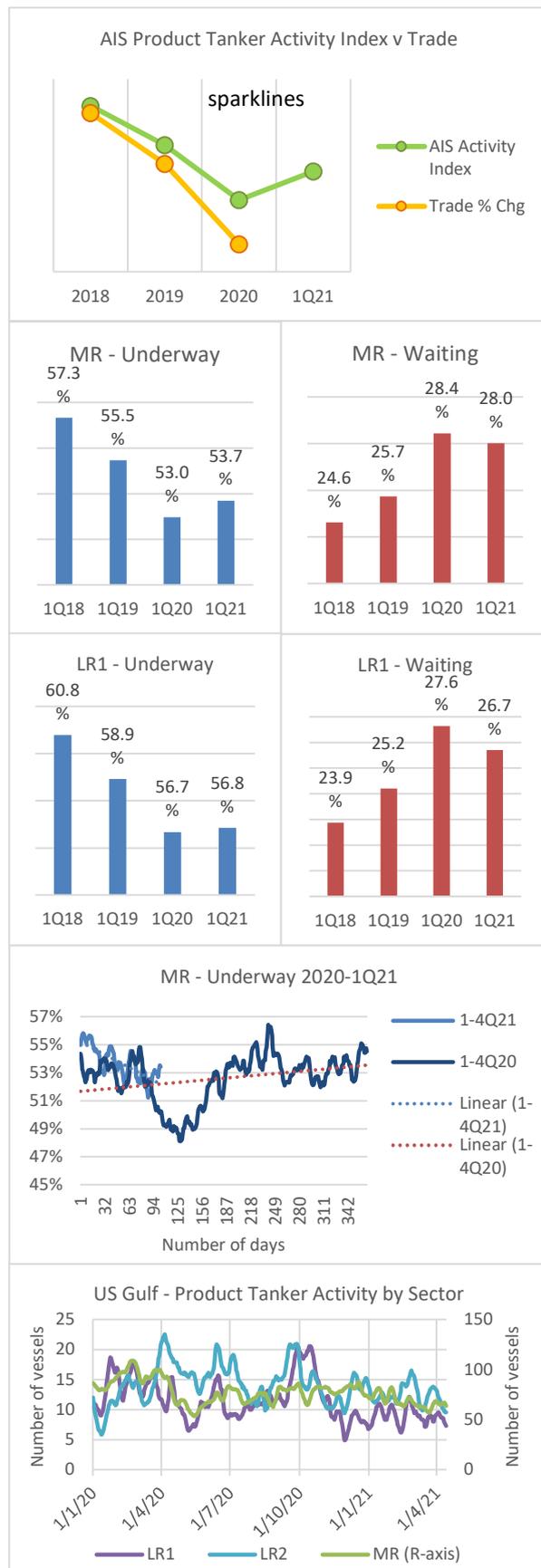
● In this edition, we focus on how AIS can inform a global view of AIS trade. The first chart compares our AIS-based index of Product tanker activity against percentage change in global seaborne trade. After 2018, the high-water mark, global trade contracted in 2019 by 2.5% y/y and a calamitous 9.6% y/y in 2020. Whilst being an imperfect proxy for trade, as it does not take into account fleet growth, our AIS activity index seems to track the profile of trade contraction quite well, while being an even better indicator of the pressure on rates. The modest bounce back in the index in 1Q21 suggests that the recovery in trade volumes at the start of 2021 has not been sparkling.

● This weak recovery is reflected in the four charts showing 1Q18-21 underway and waiting percentages for the MR and LR1 sectors respectively. As with the activity index both sectors see a significant contraction in the percentage of underway tonnage across 1Q18-20 and only a modest bounce back in 1Q21. The % waiting charts for both sectors show an inverse shape, reflecting the increase in idle tonnage across both sectors 1Q18-20. which is elevated only slightly in 1Q21.

● Turning to the shape of the recovery in seaborne product trade, the chart "MR- Underway 2020-1Q21" shows how, after the collapse in trade during 2Q20 - there was a strong rebound in 3Q20. However, the momentum of the recovery has stalled as COVID-19 continues to grip the world. At the start of 2021, there is yet no sign of significant revival in seaborne trade, with MR percentage underway actually trending down slightly after a positive start to the year. This early year trend is reflected across other Product vessel sectors.

● The final chart in the series looks at the number of Product vessels active in the USGulf by sector during the period 2020-1Q21. At times the three sectors shown have performed very differently. For example, in order to compensate for the collapse in demand from the key South American market, US exporters looked to boost long-haul exports, which helped underpin US exports during 2Q20. In terms of an indication of current trends, what is most telling is that activity during 4Q20 and 1Q21 has remained relatively flat.

● While the -11.3% y/y contraction in overall US 2020 exports was more severe than -9.5% y/y fall in total global trade, very few trades performed encouragingly in 1Q21. However, it was possible to detect increased MR activity from the Middle East to India to South East Asia and finally to China stands out, but it is too early to say if this improvement will be sustained.



Fastest growing export commodities

3. Lubricating Oil

2020 5.2 million mt, -4.3% y/y

Export commodity in decline

- 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. Gasoil/Diesel

2020 53.5 million mt, -10.7% y/y

1Q20 recovery proved short-lived

- The largest US product export with 39% of the market, it was the only product to register significant positive growth in 1-3Q19 +3.7% y/y. However, a -15% y/y 4Q19 slump left full year growth flat. The broad-based slide was led by Canada (-30% y/y) & Ecuador (-28% y/y).
- Prior to 4Q19, exports had been in recovery mode having declined by 4.3% in 2018, and with a record of fluctuating between positive and negative growth since 2014. In 2020, only a handful of trades produced positive growth, which included the long-haul trade to Singapore.

1. Naphtha

2020 10.5 million mt, +22.6% y/y

Leads drive to increase exports at the lighter end of the product spectrum

- 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.
- As the pandemic has crushed demand across the traditional product spectrum, US exporters have looked to lighter products like Naphtha with North East Asia and Europe becoming key markets.

X. Propane & Butane

2020 48.2 million mt, +23.1% y/y

Competing with Naphtha in the petrochemical feedstock export market

- US NGLs exports surged in 2020, building on average annual growth of 13% over the last three years.
- Butane +55% y/y, the significantly smaller of the two main NGLs, out-performed Propane exports (+16% y/y) in 2020.
- The strong performance of Propane and Butane was in part due to soaring trade with North East Asia, the largest export region for the US, which first started to accelerate dramatically in 2H18 and was up +26% during 2020 y/y.
- LPG included here as its story overlaps with export growth in the product sector - both driven by shale.

2. Other Products

2020 13.2 million mt, +10.6% y/y

Emerging trades to South America

- "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

5. Gasoline

2020 35.1 million mt, -11.4% y/y

Growth stagnated in 2019, before collapsing in 2020

- Mexico (50% mkt share) dominates this trade and has been a major factor in Gasoline growth in recent years, but trade contracted (-3% y/y) in 2019. There were also steep losses for Canada, Netherlands and Chile, which offset strong gains by Brazil (+79% y/y in 2019), now its second largest market.
- The pandemic has hit transportation demand hard and, despite the gradual reopening of economies around the world, Gasoline demand remained in negative territory in 2020.

6. Fuel Oil

2020 14.8 million mt, -19.4% y/y

The new IMO 2020 bunker fuel regulations have contributed to a collapse in the Fuel oil trade

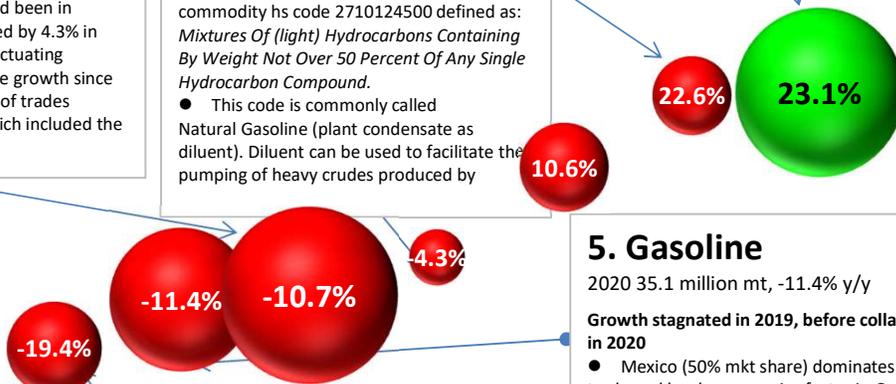
- The Fuel oil trade is not viewed as a long term growth prospect, in part due the IMO January 2020 bunker fuel regulations.
- While overall trade was down in 2020, there were a few bright spots for trade in Latin America e.g. Bahamas, Chile and Honduras.

7. Kerosene/Jet Fuel

2020 4.9 million mt, -54.6% y/y

Hit hard by pandemic as air travel collapses

- After underperforming the overall US export market in recent years, it had a breakthrough year in 2018 (+18.2% y/y) before stagnating in 2019.
- The pandemic has expunged all positivity, as the destruction of airline passenger demand caused Jet fuel demand to collapse from 2Q20.



Figures based on US exports up to 4Q2020

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), **91%** Mkt Share, **-13%** y/y (19-20)

South America

est 96.8 million mt, -13.8% y/y (19-20)

The extended period of export growth to the region was interrupted by the stagnation in trade in 2019. However, this set back was nothing compared with the pandemic-hit market of 2020, which caused significant falls across most sectors. However, export volumes were up for the second consecutive quarter in 4Q20 (26.8 million mt) from 24.2 million mt in 3Q20 and 17.1 million mt in 2Q20, although still more than 1.7 million mt lower y/y.

Gasoil/diesel and Gasoline remain the dominant US export commodities, with 77% market share. However, these trades crumbled in 2020, with both Gasoline and Gasoil/diesel down 13%

Europe

OECD Europe: est 11.2 million mt, -6.6% y/y

Non-OECD Europe: est 1.5 million mt, -11.6% y/y

Exports to OECD Europe have been in steady decline since 2016, and were down yet again in 2020 (-6.6% y/y). After a strong 1Q20, Non-OECD imports from the US fell away in the rest of the year.

After a sustained period of decline, US exports of Gasoil/diesel to OECD Europe, which accounts for 62% market share, posted a modest uptick in trade in 2020. However, the only real bright spark was the emergence of a fledgling trade in products at the lighter end of the spectrum e.g. Naphtha.

US Exports by Region and Commodity e2020

Figures in '000 mt

Figures based on US exports up to 4Q2020

region_code	Fuel oil	Gasoil/ diesel	Gasoline	Kerosene /jet fuel	Lubricating oil	Naphtha	Other Products	Total
Australasia	42	235	1	5	15	35	1	333
East/South Africa	0	0	76	0	82	0	0	159
Former Soviet Union	0	0	0	0	10	0	1	12
South America	9174	42826	31833	3238	3026	3846	2836	96780
Middle East	823	21	7	193	204	60	4	1312
North Africa	109	562	0	0	2	1	0	673
North America	1153	717	2042	1009	445	1675	0	15730
North East Asia	6	44	107	1	87	3336	1280	4860
OECD Europe	1185	6948	226	414	871	1249	346	11239
South Asia	2	3	0	0	190	0	13	208
South East Asia	2074	693	649	26	176	268	45	3932
West Africa	0	242	190	0	92	0	3	528
Other Europe	270	0	0	0	1	0	0	1518
Other	0	0	7	0	2	0	0	10
Total	14838	53537	35137	4887	5205	10470	13221	137295

Colour key:

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

How to read the table: The colours show growth rates 1-4Q19/1-4Q20 y/y for trades >=1 million mt

Emerging regional markets

9% Mkt Share, **+12.5%** y/y (19-20)

South East Asia

est 3.9 million mt, +55% y/y (19-20)

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 in 2019. However, there was a significant bounce back in 2020, albeit from a low base, in part due to efforts by US exporters to find new markets for Gasoil/diesel and Gasoline.

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 run in to the introduction of the IMO 2020 bunker regulations, and compounded by increased competition from North East Asia, South East Asia and the Middle East.

North East Asia

est 4.9 million mt, +43% y/y (19-20)

Naphtha and Natural Gasoline exports were behind growth in trade with North East Asia in 2018, and this has been a highlight for US exports in 2019, and particularly into 2020.

Naphtha - Japan (1.4 million mt, +54% y/y) and South Korea (1.4 million mt, +99 y/y) have been the star performing trades, while Taiwan (0.4 million mt, +133% y/y) also added strength.

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 subsequently, with Japan emerging as a small but fast growing market in 2020 (0.4 million mt, +91%).

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Fastest growing export country destinations

1. Singapore +67%

Trade 1-4Q20: 3.3 million mt

Fuel oil (1.7 million mt, +13% y/y)
Gasoil/diesel (0.7 million mt, >+100% y/y)

Singapore's high ranking is somewhat artificial as 2020 trade was underpinned by a surge in Fuel oil, Gasoil/Diesel and Gasoline exports in 2Q20, with less than 1 million mt shipped in 2H20.

2. Japan +58%

Trade 1-4Q20: 1.9 million mt

Naphtha (1.4 million mt, +54% y/y)
Other Products (0.4 million mt, +91% y/y)

Japan has only recently appeared in this league table and, although volumes are small, this trade symbolises US exporters efforts to expand their export of products at the lighter end of the spectrum e.g. Naphtha.

3. South Korea +57%

Trade 1-4Q20: 1.8 million mt

Naphtha (1.4 million mt, +99% y/y)
Other Products (0.4 million mt, +4% y/y)

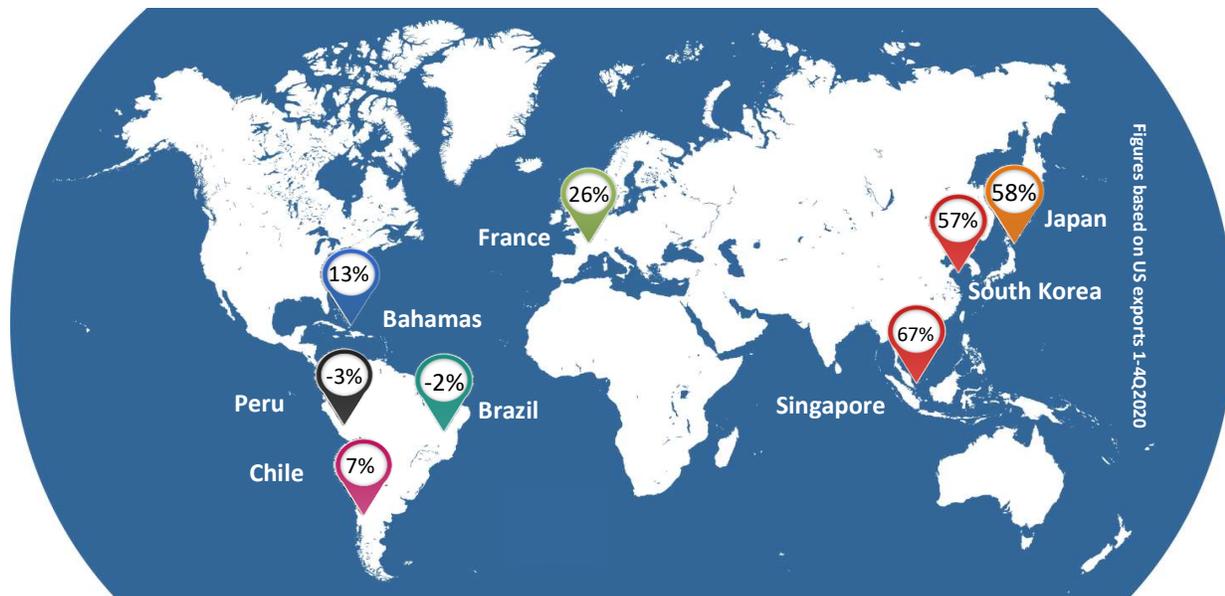
South Korea appears on the leaderboard for the first time. Its import profile mirrors that for Japan. Similarly, it is also a top target for US exporters looking to export products at the lighter end of the spectrum.

4. France +26%

Trade 1-4Q20: 1.8 million mt

Gasoil/diesel (1.7 million mt, +34% y/y)

US exports to France have been in steady decline since 2014, but it has been ever present in this table during 2020, propelled by resurgent Gasoil/diesel imports. Of the other major European markets, only the smaller Belgium and Italian trades enjoyed positive growth.



How to read the map: The map highlights the 8 best performing US export trades 1-4Q20 y/y based on the top 17 countries

5. Bahamas +13%

Trade 1-4Q20: 2.9 million mt

Fuel oil (1.7 million mt, +21% y/y)
Gasoil/diesel (0.8 million mt, -15% y/y)

Bahamas is now the fourth largest market for US Fuel oil exports behind Panama, Mexico and Singapore. It has benefitted from its position as a bunker hub.

6. Chile +7%

Trade 1-4Q20: 6.1 million mt

Gasoil/diesel (5.1 million mt, +5% y/y)
Gasoline (0.4 million mt, +18% y/y)

An important export market, but contracted by 14% in 2019, so bounce back is mainly about making up for lost ground. Trade dominated by Gasoil/diesel, but Gasoline emerged as a significant market for first time in 1Q20.

7. Brazil -2.1%

Trade 1-4Q20: 15.2 million mt

Gasoil/diesel (8.7 million mt, -10% y/y)
Gasoline (2.8 million mt, -3% y/y)

Brazil is the 3rd largest US export trade after Mexico and Canada. Its switch away from refining has helped underpin trade. Traditional product imports are weakening, while lighter product imports are on the rise.

8. Peru -2.5%

Trade 1-4Q20: 4.4 million mt

Gasoil/diesel (3.1 million mt, -6% y/y)
Gasoline (0.9 million mt, +21% y/y)

One of South America's stronger economies, it holds on to its position on the leaderboard despite negative growth, with strong Gasoline imports not quite offsetting declining Gasoil/diesel imports.

Note: 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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