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# Why Attack on Saudi Boosts U.S. Crude Exports
## Opportunity to expand market share.

**Morningstar Commodities Research**
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**Data Sources for This Publication**
EIA
U.S. Census

To discover more about the data sources used, click here.

### Risk Premium

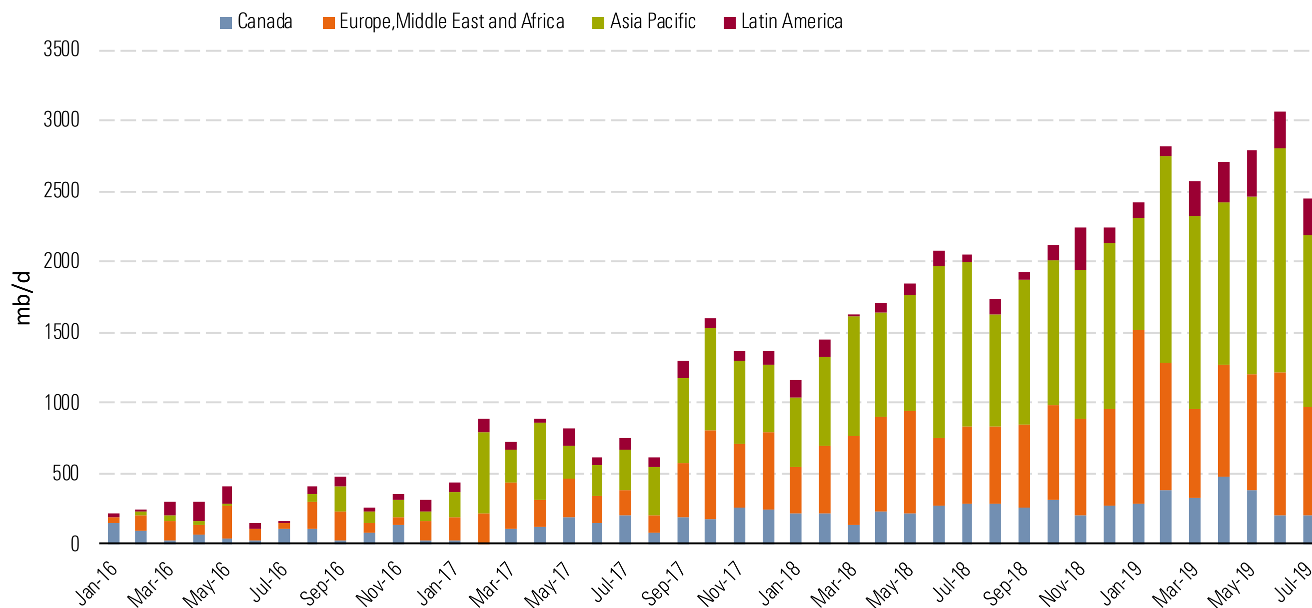
Last weekend's attack on Saudi Arabia's crude production infrastructure took 5.7 million barrel/day offline, leading to a 15% spike in Brent and West Texas Intermediate oil prices last Monday. It remains unclear how quickly the lost production can be restored—although the Saudis have promised a rapid recovery by the end of this month, and prices have retreated again. The threat of conflict escalation—a repeat of the attacks or retaliation by Saudi Arabia against its neighbors—leaves a risk premium in the market. In the aftermath, there are opportunities for U.S. crude exporters that had been feeling the pinch lately from tepid overseas demand. This note looks at the impact on U.S. crude exporters.

### Export Boom

Since the ban on most exports except to Canada was lifted in December 2015, U.S. overseas crude shipments have grown rapidly. That's because, while shale output has been increasing, domestic refineries mostly aren't configured to consume the light crude being produced by fracking. Thus, incremental shale production must find a market overseas. Most of the crude headed to export markets is first shipped by pipeline to the Gulf Coast region that boasts half the nation's refining capacity and marine docks to export surplus supplies.

Annual average exports from the Gulf Coast more than tripled from 298 thousand barrels/day in 2016 to 944 mb/d in 2017 and then doubled again to 1848 mb/d in 2018 according to U.S. Census data (Exhibit 1). Between January and July this year, Gulf Coast crude exports increased again by 46% over 2018 to a monthly average 2690 mb/d, although they weakened in July. The crude export boom accelerated in 2017 after world markets recovered from high inventory levels and a price crash in 2015—a recovery prompted by OPEC and Russia's November 2016 agreement to cut production. Since then, export growth has been powered by Asian buyers that took delivery of 44% of shipments in 2017 and 49% in 2018—falling to 37% between January and June of this year in part due to the tariff war with China. Exports to Europe, the Middle East, and Africa—the second largest market region—have remained steady at 32% since 2017. The rapid growth in U.S. exports was interrupted this summer as a tepid demand outlook reduced July and August shipments 20% compared with June, according to Energy Information Administration weekly data.

**Exhibit 1** U.S.Gulf Coast Exports by Destination Region

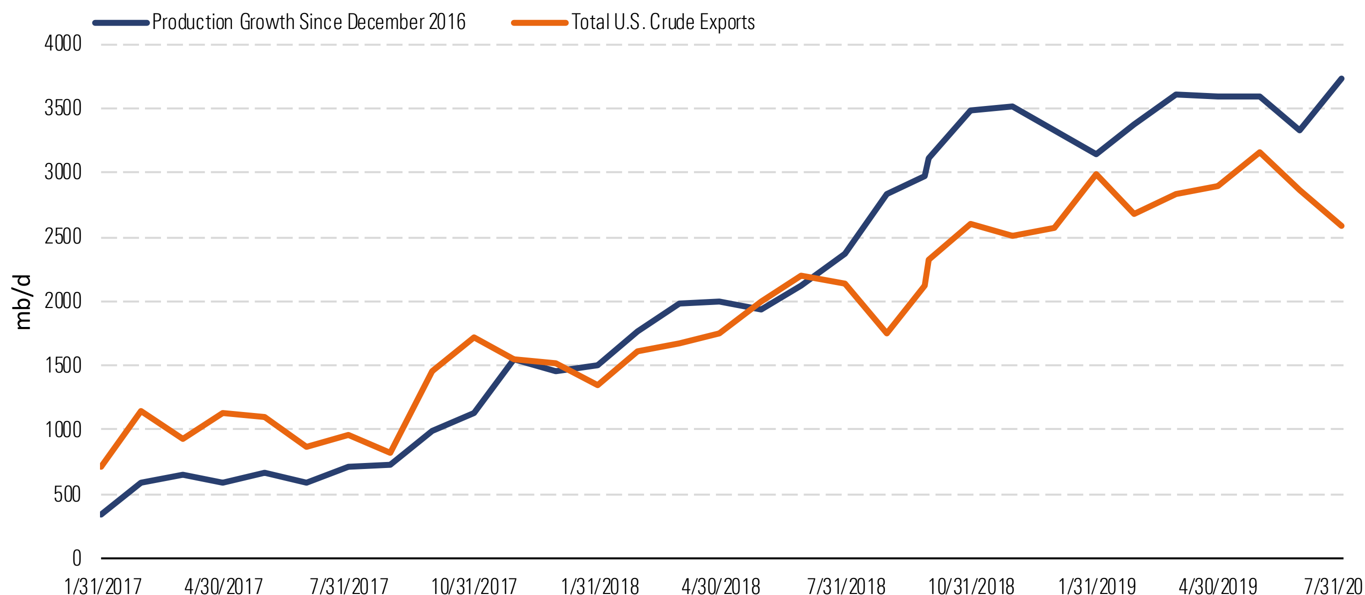



Source: U.S. Census, Morningstar.

## Gloomy Outlook

Encouraged by higher prices and the lifting of the export ban, domestic crude output surged by 3.4 mmb/d between January 2017 and August 2019. Over the same period, export volumes increased at only a slightly slower pace (Exhibit 2). Drilling and productivity in the shale basins, led by the West Texas Permian, spearheaded production increases. However, the rapid increase in output left infrastructure behind—particularly in the Permian—creating congestion and price discounting during the latter half of 2018 (see our February 2018 note, "Will New Permian Crude Capacity Overshoot?"). Although infrastructure issues are now being addressed by new pipelines opening up from the Permian, first to Corpus Christi and next year into Houston, a gloomy economic outlook this summer, based on deteriorating trade relations between the U.S. and China, slowed world crude demand growth and weakened prices just as new pipelines promised to allow U.S. exporters to unleash more supplies onto the world market (see our August note, "Is the Second Shale Crude Boom Ending?").

**Exhibit 2** Growth in U.S. Crude Production and Total Exports, January 2017 to August 2019




Source: EIA, Morningstar.

### Competitive Pressures

With world demand tepid and increasing supplies headed to coastal ports on new pipelines, the challenge for exporters changed this summer. Instead of grappling with the logistics of getting crude out of the producing regions, they faced a well-supplied competitive international market with buyers in the driving seat. These competitive pressures as well as the need to sell ever-larger volumes arriving at Gulf Coast docks have required exporters to pay attention to crude quality and more recently to provide favorable shipping options for buyers.

Demand for consistent crude quality has resulted in most export transactions for WTI crude requiring the seller to assure buyers that their barrels came directly from the Permian producing region. That means only barrels shipped to Corpus Christi or Houston docks on pipelines operated by Enterprise, Plains All American, or Magellan Midstream. In addition export, WTI has to meet tighter API Gravity and sulfur specifications than domestic equivalents delivered to Cushing (see our November 2018 note, "Quality and Location Count for WTI Contracts").

Regular sellers at the Gulf Coast have also begun to offer delivered barrels to customers in Europe and Asia. This isn’t typical in crude markets where most international cargoes are purchased free-on-board, meaning the buyer arranges a vessel and bears the cost of freight and insurance. But picking up a cargo in Houston or Corpus is complicated by the lack of deepwater docks. That requires shippers to frequently load crude onto smaller vessels and transfer it to larger tankers out in the Gulf of Mexico — especially for voyages to Asia where very large crude carriers that hold 2 million barrels are preferred to minimize freight costs (see our May 2019 note, "Gulf Coast Crude Exporters Navigate Port Limitations"). That

process adds logistical hoops, time, and cost to the purchase. Selling on a delivered basis — into Europe or Asia — allows shippers to compete directly with local barrels in the destination markets as well as to offer regional pricing. That means instead of a cargo sold based on Houston WTI prices at the time of loading, sellers offer a Brent-related price in Europe or a Dubai-related price in Asia at the time of delivery and absorb the shipping cost, in hopes of realizing a higher price at the destination.

**More Attractive**

These more sophisticated selling options — quality assurance and free shipping — are designed to make U.S. crude more attractive in a competitive buyers' market. Although it isn't clear how long the attacks on Saudi installations will impact world markets, we believe that as a result of the disruption and a consequent increase in the risk associated with Saudi crude, U.S. exporters won't have to work so hard to find buyers for at least the remainder of the year for the following reasons:

- Absent Saudi supplies, the world market will be net short crude, meaning sellers will have more market power than buyers.
- Buyers will favor U.S. crudes because of perceived political and economic stability compared with Saudi Arabia. Those countries with a heavy reliance on Saudi crude will seek to diversify their purchases to reduce exposure to further disruption.
- Light sweet shale crude will be more valuable to buyers in Asia this fall for two reasons.
    - First, Saudi Arabia is temporarily replacing production at its damaged infrastructure that is mostly Arab Light with supplies of less attractive Arab Medium or Arab Heavy. The latter two have higher fuel oil and sulfur levels, and refiners used to Arab Light will want to blend them with lighter grades like WTI or other shale crudes to achieve similar refining yields.
    - Second, the International Maritime Organization 2020 mandate to lower sulfur levels in bunker fuel makes higher sulfur crude less attractive in Asia next year — increasing demand for lighter shale grades for blending — a problem that will be exaggerated if the Saudis continue to offer heavier replacement crudes to customers.

**Knocking at the Door**

These changes to market dynamics flip U.S. exporters from the position of anxious sellers bending over backwards to find buyers in a stagnant market to a position of strength with buyers knocking at their door. That means they won't be obliged to offer crude on a delivered basis to find buyers. And if shortages persist, even quality concerns could be allayed in a dash for crude at any price. The net effect will be increased export volumes in coming months based on new demand from Asian customers.

That new demand won't avert concerns about dock congestion that we discussed recently at Corpus Christi (see "Corpus Christi Constraints Threaten Exports") and will be covering in an upcoming note on Houston. Rather, dock congestion will be the next barrier to increased exports until plans for offshore deepwater terminals are realized. That prospect is still some years away, but the likelihood of more than one of the eight offshore terminal projects currently planned to be built should improve with stronger export demand. M

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