Economic Impacts of A Potential Ban on U.S. Refined Product Exports

July 2022
1. Executive Summary
Executive Summary

- **The Export Ban Would Force U.S. Refinery Closures:** A ban on U.S. product exports would trap refinery production in the Gulf Coast region as capacity constraints on pipelines and the Jones Act-compliant vessel fleet limit the ability of Gulf Coast refiners to redistribute displaced exports to other U.S. markets. Given limited outlets for trapped exports, an estimated 1.3 million barrels per day of U.S. refining capacity (about 7% of the U.S. total) would need to be shuttered. The refinery closures would also create a surplus of crude oil in the Central U.S.

- **The Export Ban Would Result in Higher Product Prices for Most U.S. Fuel Consumers:** The loss of U.S. refinery supply would increase product prices in the global market as buyers of U.S. exports bid up the price of fuel from alternate sources. This would increase product prices for consumers in the East and West Coast regions where imports continue to set market prices as the “last barrel” of supply. More than two-thirds of U.S. consumers will see price increases, including average increases of more than 15 cents per gallon for gasoline and 45 cents per gallon for distillates over the second half of 2022.

- **The Export Ban Would Cause a Net Loss to U.S. GDP:** U.S. gross domestic product (GDP) would fall more than $44 billion in 2023 as losses to U.S. fuel consumers in the East and West Coast, refiners in the Gulf Coast, and oil producers in the Central U.S. more than offset benefits to consumers in the Gulf Coast and Midwest regions, refiners in the East and West Coast, and crude oil exporters in the Gulf Coast.

- **The Export Ban Would Cause Job Losses:** Refinery closures and reductions in upstream oil and gas drilling activity due to the export ban would cause 85,000 average job losses over the second half of 2022 and 35,000 average job losses in 2023, including direct, indirect, and induced job losses.
2. Introduction
# Overview of U.S. Product Exports

## U.S. Exports by Product (TBD)

<table>
<thead>
<tr>
<th>Year</th>
<th>Gasoline</th>
<th>Distillate</th>
<th>Jet</th>
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<tbody>
<tr>
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<td>1,380</td>
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<tr>
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<td>1,306</td>
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<tr>
<td>2018</td>
<td>1,187</td>
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<tr>
<td>2019</td>
<td>1,078</td>
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<tr>
<td>2020</td>
<td>824</td>
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<td>1,124</td>
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</tr>
<tr>
<td>2022</td>
<td>1,033</td>
<td>1,172</td>
<td>981</td>
</tr>
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## U.S. Exports by Destination (TBD)

<table>
<thead>
<tr>
<th>Year</th>
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<th>Europe</th>
<th>Central and South America</th>
<th>North America</th>
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<tr>
<td>2016</td>
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<td>929</td>
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<tr>
<td>2017</td>
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<tr>
<td>2018</td>
<td>240</td>
<td>1,072</td>
<td>967</td>
<td>1,306</td>
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<tr>
<td>2019</td>
<td>196</td>
<td>1,140</td>
<td>923</td>
<td>1,389</td>
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<tr>
<td>2020</td>
<td>176</td>
<td>981</td>
<td>763</td>
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<td>2021</td>
<td>62</td>
<td>1,033</td>
<td>851</td>
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<tr>
<td>2022</td>
<td>56</td>
<td>1,172</td>
<td>779</td>
<td>1,140</td>
</tr>
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## U.S. Exports by Origin PADD (TBD)

<table>
<thead>
<tr>
<th>Year</th>
<th>PADD 3</th>
<th>PADD 5</th>
<th>PADD 1</th>
<th>PADD 2</th>
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<tr>
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<td>188</td>
<td>183</td>
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<tr>
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<td>1,723</td>
<td>2,026</td>
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<tr>
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<td>2,064</td>
<td>1,854</td>
<td>1,881</td>
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<tr>
<td>2019</td>
<td>1,813</td>
<td>1,854</td>
<td>1,881</td>
<td>1,854</td>
</tr>
<tr>
<td>2020</td>
<td>1,881</td>
<td>1,854</td>
<td>1,881</td>
<td>1,854</td>
</tr>
<tr>
<td>2021</td>
<td>1,881</td>
<td>1,854</td>
<td>1,881</td>
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</tr>
<tr>
<td>2022</td>
<td>1,881</td>
<td>1,854</td>
<td>1,881</td>
<td>1,854</td>
</tr>
</tbody>
</table>

2022 figures represent Q1 2022. Source: EIA Company Level Imports

Exports = ~15% of total U.S. refinery gasoline, distillate, and jet fuel output in 2022

N. America exports mostly to Mexico

PADD 3 Exports = ~25% of PADD 3 refinery gasoline, distillate, and jet fuel output in 2022

Source: ACCF.ORG
Study Overview

- **Purpose:** To assess the short-to-medium term logistics, pricing, and economic impacts of a complete ban on U.S. petroleum product exports.

- **Approach:** A base case U.S. petroleum product supply and demand balance was developed for the next 18 months and compared to a hypothetical case where U.S. product exports are not permitted. The comparison included an assessment of impacts to U.S. refinery production and logistics, impacts to global and U.S. product prices, and impacts to U.S. economic metrics.
Market Balancing – Key Assumptions

- **Refinery Production**: Starting point is U.S. refining capacity as of June 2022 with assumed utilizations of 92%. Product yields are adjusted after the Product Export Ban to meet demands subject to observed historical yields.

- **Logistics**:
  - Maximum pipeline and Jones Act-compliant vessel movements based on maximum observed 3-month averages.
  - No Jones Act waivers to allow the movement of U.S. products on foreign flagged vessels.
  - Rail movements of U.S. products are negligible due to loading and discharge capacity constraints.

- **Demands**: Align with demands from Q2 2021 through Q1 2022 with no projected demand increases for gasoline and distillates.

- **Inventories**: Stock builds and drawdowns are used to balance supply and demand between periods but must net to zero on an annual basis.

- **Imports**: Imports are used to balance supply and demand in the East and West Coast markets.

- **Crude Exports**: Product export ban does not apply to crude oil and U.S. crude can freely be exported after the Product Export Ban is in place.
3. Supply/Demand Analysis
Analysis – Overview of Key Supply Shifts

- Banned product exports create a surplus of gasoline and distillates in the U.S. Gulf Coast region.
- Shippers utilize available pipeline and Jones Act vessel fleet capacity to move as much of this surplus to the U.S. East Coast, Midwest, and West Coast regions but logistics constraints limit this movement.
- After all available outlets have been fully tapped, Gulf Coast refiners are forced to cut crude runs to balance the market, eventually resulting in refinery closures.
- East Coast and West Coast markets are not able to fully back out product imports so global product prices will continue to set the marginal price in those regions.

- Higher consumer fuel costs
- Loss of refiner and crude producer revenue.
- Lower consumer fuel costs

**US Product Export Ban**

**Gulf Coast Product Surplus**

**Incremental Shipments to East & West Coast**

**Gulf Coast Refinery Utilization Declines to Eliminate Surplus**

**Lower Imports into East & West Coast**

**Imports Still Set Price in East & West Coast**

**Gulf Coast Refiners Shut Capacity on Economics**

**East Coast and West Coast (PADDs 1 and 5)**

- Higher consumer fuel costs

**Net Global Supply Loss**

**Higher Global Prices**

**U.S. Exports Loss**

**US Product Export Ban**

**Gulf Coast (PADD 3)**

- Loss of refiner and crude producer revenue.
- Lower consumer fuel costs
Key U.S. Inter-Regional Supply Pathways

Source: U.S. Energy Information Administration with arrows added.
Shipments Out of Gulf Coast (PADD 3)

- Total PADD 3 outbound pipeline movements increase to 3,200 TBD and outbound waterborne movements to 740 TBD.
- Incremental pipeline volumes shift to distillate as surplus distillates seek markets outside the Gulf Coast.
- Outbound waterborne volumes primarily displace imports into the Lower Atlantic region (primarily Florida, Savannah, and Charleston). Jones Act fleet capacity limits prevent moving supply further north.

Notes: Max pipeline and tanker/barge capacities reflect the highest 3-month average movement since 2015. Movements shown are for gasoline and distillate only assuming jet fuel volumes continue at current rates.

Source: Analysis of Movements by Pipeline between PAD Districts
Refinery Product Slates

- The export ban will lead to larger surplus for distillates compared to gasoline, pushing down distillate margins.
- PADD 1 and 2 refiners shift towards maximizing gasoline and jet fuel production at the expense of distillates.
- PADD 3 refiners both shift yields and cut crude runs to balance the market (see slide on summary of PADD 3 supply shifts).

Note: Gasoline yields are lower in the Gulf Coast region to production of petrochemical feedstocks. Estimated yield shifts align with yields observed over the past five years. Source: EIA Refinery Yields and projections of shifts under Export Ban Case.
East Coast (PADD 1) Supply-Demand Balance

Key Shifts:
- Net inbound pipeline and waterborne shipments increase from other regions (primarily PADD 3).
- Refinery yields shift away from distillate to gasoline and jet.
- Imports are reduced but are not eliminated.
Midwest (PADD 2) Supply-Demand Balance

Key Shifts:

- Refinery yields shift from away from distillate toward gasoline and jet.
- Overall net inbound pipeline shipments increase as shipments into the region from PADD 3 exceed outbound shipments to PADDs 1 and 4.
- Net inbound pipeline movements increase for distillate and decrease for gasoline.
Gulf Coast (PADD 3)
Supply-Demand Balance

Key Shifts:
- All exports and imports halt.
- Net outbound pipeline and waterborne shipments increase to other regions.
- Refinery production is reduced, and yields shift away from distillate toward gasoline and jet due to larger surplus of distillates from trapped exports.

<table>
<thead>
<tr>
<th>2023 PADD 3 Gasoline (TBD)</th>
<th>2023 PADD 3 Distillate (TBD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock Draw (+)/Build (-)</td>
<td>Stock Draw (+)/Build (-)</td>
</tr>
<tr>
<td>Exports</td>
<td>Exports</td>
</tr>
<tr>
<td>Imports</td>
<td>Imports</td>
</tr>
<tr>
<td>Net Waterborne</td>
<td>Net Waterborne</td>
</tr>
<tr>
<td>Net Pipeline</td>
<td>Net Pipeline</td>
</tr>
<tr>
<td>Refinery Production</td>
<td>Refinery Production</td>
</tr>
<tr>
<td>Ethanol</td>
<td>Ethanol</td>
</tr>
<tr>
<td>Product Supplied</td>
<td>Product Supplied</td>
</tr>
</tbody>
</table>

Base Case | Export Ban
--- | ---
4049 | 3607
-1681 | -1885
-433 | -570
-823 | -570

Base Case | Export Ban
--- | ---
2904 | 2125
-797 | -1208
-146 | -173
-1167 | -173

ACCF.ORG
Summary of PADD 3 Supply Shifts Under Export Ban

- Initially, ~2,000 TBD of gasoline and distillate exports are disrupted to global markets.
- U.S. product exports are redistributed to regional U.S. markets, eventually displacing U.S. imports and reducing U.S. oversupply to ~1,200 TBD.
- Finally, the remaining trapped exports are reduced by shifting region-wide refinery yields to push distillate oversupply into gasoline and jet fuel production.
- Remaining oversupply after these shifts must be reduced through cuts to refinery utilization or refinery capacity closures (See next slide).
U.S. Refinery Closures Needed to Reduce Surplus

- Reducing the gasoline and distillate surpluses requires a reduction in refinery gross inputs, which results in cuts to jet fuel and other products.
- Reduced gross inputs initially push down refinery utilizations but lower utilizations hurt refinery economics, eventually forcing refinery closures to rebalance the market.
- Most refining capacity cuts will take place in the Gulf Coast region though some may also take place in the Midwest.

Note: Loss of 1,228 TBD of gross inputs would reduce PADD 3 refinery utilization to 79% vs. a Base Case utilization of 92%. In 2020, annual average PADD 3 utilization was 80%, the lowest rate since 1985.
Export Ban: Key Supply & Demand Impacts

- **Export Ban Creates Product Surplus in Gulf Coast Region:** Nearly all U.S. product exports originate in the U.S. Gulf Coast and a ban on U.S. exports would initially fill storage in the Gulf Coast region. 60% of U.S. exports are distillates and distillate surpluses will build faster than gasoline and jet fuel.

- **The Gulf Coast Product Surplus Seeks Other U.S. Markets on All Available Pathways:** Shippers would work to move surplus products to other regions via pipeline and Jones Act-compliant waterborne vessels.

- **East Coast and Midwest Refiners Shift Away from Distillate Production:** A surge in inbound shipments of distillate fuel forces East Coast and Midwest refiners to shift yields to maximize gasoline and jet fuel at the expense of distillates. This shift will allow incrementally more distillate to escape the Gulf Coast.

- **Logistics Constraints Limit Product Distribution Out of the Gulf Coast:** Capacity constraints for pipelines and Jones Act-compliant vessels limit how much product surplus from the Gulf Coast can be redistributed to other U.S. markets, leaving some oversupply trapped in the Gulf Coast.

- **Gulf Coast Refiners Shift Yields, Cut Runs to Eliminate Surplus:** Refiners will initially shift product yields and reduce utilizations to bring the Gulf Coast market into balance. The economics of running at lower utilizations will force weaker refineries to shutter capacity to rebalance the market.

- **East and West Coast Markets Continue to Rely on Imports:** Meanwhile, logistics constraints prevent East Coast and West Coast markets from eliminating imported fuel and consumers in these regions will still pay the global price.
Jones Act Waiver Considerations

- If a U.S. petroleum product export ban were paired with a waiver of the Jones Act, it would allow Gulf Coast refiners to utilize foreign-flagged, foreign-built, and foreign-crewed vessels to distribute surplus refinery production to other U.S. regions.
- The waiver would remove some of the logistics constraints for moving products from the Gulf Coast to the East and West Coasts, reducing the volume of products trapped in the Gulf Coast and potentially reducing the necessary refinery closures.
- The waiver would also spread the refinery closures to other regions rather than concentrating them in the Gulf Coast. Gulf Coast refineries tend to be more efficient than older refineries in the East and West Coast regions, potentially allowing them to out-compete these refineries.
- Overall, a Jones Act waiver would likely reduce but not eliminate the production and logistics impacts of a Product Export Ban.
4. Pricing Analysis
Sensitivity of Global Crack Spreads to Supply Loss

- Loss of refined product supply leads to increases in refinery crack spreads—the difference between individual wholesale product prices and benchmark crude oil prices.
- Recent refinery outage events (Hurricane Harvey, Hurricane Ida, and the February 2021 Texas Cold Weather Event) provide insight into the sensitivity of refinery crack spreads to refined product supply disruptions. Crack spreads are calculated for New York Harbor (NYH), which represents the Atlantic Basin product market.

<table>
<thead>
<tr>
<th>Event</th>
<th>Hurricane Harvey</th>
<th>Hurricane Ida</th>
<th>TX Cold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>Gasoline</td>
<td>Distillate</td>
<td>Gasoline</td>
</tr>
<tr>
<td>Year</td>
<td>2017</td>
<td>2017</td>
<td>2021</td>
</tr>
<tr>
<td>Global Consumption (TBD)</td>
<td>25,900</td>
<td>28,200</td>
<td>24,500</td>
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<tr>
<td>PADD 3 Avg. Production Loss (TBD)</td>
<td>-1,132</td>
<td>-913</td>
<td>-566</td>
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<tr>
<td>Product Loss / Global Demand (%)</td>
<td>-4.4%</td>
<td>-3.2%</td>
<td>-2.3%</td>
</tr>
<tr>
<td>Pre-Event NYH Crack Spread ($/bbl)</td>
<td>$17.56</td>
<td>$15.42</td>
<td>$21.04</td>
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<tr>
<td>Change in NYH Crack Spread ($/bbl)</td>
<td>+$10.96</td>
<td>+$4.16</td>
<td>+$3.33</td>
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<tr>
<td>Change in Refinery Crack Spread (%)</td>
<td>+62.4%</td>
<td>+27.0%</td>
<td>+15.9%</td>
</tr>
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</table>

Notes: Refinery production losses and price increases averaged over multi-week periods after the initial event. Refinery crack spreads calculated as the spot price of RBOB and ULSD in New York Harbor minus the spot price for Brent crude oil (Dated Brent). Distillate not analyzed for Texas Cold event due to the effect of warming weather on distillate heating oil demand and prices. Sources: Global demand estimates from IEA, refinery production from EIA, NYH product prices from Bloomberg.
Impact on Global Prices

- **Initial Disruption:** Disruptions to global supply are initially equal to the total volume of U.S. exports.
- **6m Disruption:** In 6 months, the U.S. fuel market rebalances allowing trapped U.S. exports to displace some U.S. imports, eventually reducing the net impact to global supply.
- The difference in overall product prices between the two cases initially widens before narrowing over a 6-month period due to rebalancing.

Note: RBOB is the primary component of reformulated gasoline.
Source: Base Case futures strips from CME Group and ICE as of June 27, 2022.
Impact on Gulf Coast Prices

- PADD 3 product prices are equal to the estimated WTI crude oil price plus product crack spreads, which initially fall to minimums of $6/bbl for gasoline and $4/bbl for distillate with the Export Ban in place. After 6 months, crack spreads recover to $12/bbl and $8/bbl, respectively, as refineries shut down and product markets rebalance.

- WTI oil prices will fall due to the surplus of crude created by refinery closures. Of the 1230 TBD of displaced refinery crude oil inputs, about 920 TBD (75%) are estimated to be domestic crude, of which ~300 TBD could be exported given existing export capacity. The remaining 620 TBD would begin to fill storage, ultimately initiating a WTI price collapse in Q4 2022.

- An analysis was conducted to estimate the price decline needed to reduce Central U.S. rig activity and oil production by an average of 620 TBD over a 12-month period. After this crude market rebalancing, prices settle at a 4-5% discount to the Base Case.
Regional Gasoline Prices by Case

- Base Case prices for each region follow the NYH futures strip with average 2021 percentage differentials.
- Export Ban Case prices bi-furcate between regions.
  - PADD 1, 4, and 5 prices follow the higher NYH futures strip upwards.
  - PADD 2 and 3 prices fall due to crude price collapse. PADD 3 product margins collapse while PADD 2 margins remain healthy.
Regional Distillate Prices by Case

- Base Case prices for each region follow the NYH futures strip with average 2021 percentage differentials.
- Export Ban Case prices bi-furcate between regions.
  - PADD 1, 4, and 5 prices follow the higher NYH futures strip upwards.
  - PADD 2 and 3 prices fall due to crude price collapse. PADD 3 product margins collapse while PADD 2 margins remain healthy.
Export Ban Price Change Summary

**Avg. Price Change (CPG) vs. Base Case**

<table>
<thead>
<tr>
<th></th>
<th>Gasoline</th>
<th>Distillate</th>
</tr>
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<tbody>
<tr>
<td><strong>2H 2022</strong></td>
<td><strong>2022</strong></td>
<td><strong>2022</strong></td>
</tr>
<tr>
<td><strong>PADD 1</strong></td>
<td>+15</td>
<td>+45</td>
</tr>
<tr>
<td><strong>PADD 2</strong></td>
<td>-72</td>
<td>-72</td>
</tr>
<tr>
<td><strong>PADD 3</strong></td>
<td>-139</td>
<td>-196</td>
</tr>
<tr>
<td><strong>PADD 4</strong></td>
<td>+17</td>
<td>+51</td>
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<tr>
<td><strong>PADD 5</strong></td>
<td>+19</td>
<td>+50</td>
</tr>
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<td><strong>2H 2023</strong></td>
<td>+6</td>
<td>+18</td>
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<td><strong>2H 2022</strong></td>
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<td>-14</td>
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<tr>
<td><strong>2H 2022</strong></td>
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<tr>
<td><strong>2H 2023</strong></td>
<td>+8</td>
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</table>
Export Ban: Key Price Impacts

- **Export Ban Increases Global Refinery Crack Spreads:** The loss of U.S. product exports results in a net decrease in global product supply resulting in an increase global refinery crack spreads (the difference between refinery product price outputs and crude oil inputs). Net supply losses and crack spreads are reduced over time as the U.S. product market rebalances, displacing some U.S. product imports.

- **East and West Coast Consumers Pay Higher Product Prices:** The increase in global refinery crack spreads leads to an increase in global product prices. Because East and West Coast markets would still require imported fuels to meet demand, the higher global prices will set the regional prices in these markets. In the second half of 2022, prices in these markets would increase by more than 15 cents per gallon for gasoline and 45 cents per gallon for distillates.

- **Central U.S. Crude Oil Prices Will Fall:** The shutdown of U.S. refining capacity would lead to an oversupply of crude oil in the Central U.S. Although some of this oversupply will be managed by backing out U.S. crude imports and increasing U.S. crude exports, much of the volume will fill storage eventually precipitating a sharp price decline until the market is brought back into balance. Prices recover over time as reduced rig activity lowers U.S. production and U.S. export capacity is expanded.

- **Gulf Coast and Midwest Consumers Pay Lower Product Prices:** Lower Central U.S. crude oil prices and lower crack spreads drive lower product prices in the Gulf Coast and Midwest regions. Even after refinery closures, Gulf Coast crack spreads will remain lower than other regions, resulting in lower prices within the region.
5. Economic Impact Analysis
U.S. Fuel Consumer Expenditures

- On a net basis, the Export Ban lowers total U.S. consumer fuel expenditures in both 2H 2022 and 2023.
- Lower prices are concentrated in the PADDs 2 and 3 with all other regions seeing price increases.
- Overall, approximately two-thirds of U.S. consumers will pay higher product prices while one-third will pay lower prices.

Source: State Population from U.S. Census, 2022
U.S. Refinery Margins

- Refineries lose revenue on product export volumes.
- Refineries see a benefit from lower crude costs in the Central U.S.
- U.S. domestic sales revenue is mixed due to lower product prices in the Gulf Coast and Midwest regions offset by higher overall domestic sales volumes and higher prices on East and West Coast sales.
- Overall, the U.S. refining sector sees a net improvement in 2H 2022 margins but a net reduction in 2023 margins.

Note: Product revenues include changes in sales revenue for gasoline, diesel, and jet fuel
Producers losses include both output volume losses and lower prices on all Central U.S. oil production (including shale and non-shale output).

Production volume losses occur over time as new drilling slows in response to lower prices and as output from existing wells decline.

In 2H 2022, revenue losses are primarily driven by lower prices while in 2023 revenue losses are more driven by output losses.
US GDP Impacts by Sector

- A ban on exports of petroleum products would cause a net reduction in total U.S. GDP.
- GDP losses primarily stem from U.S. upstream crude oil producers who experience lower prices and volumes, while gains accrue to U.S. fuel consumers (though these benefits are concentrated entirely in the Gulf Coast and Midwest regions) and U.S. crude exporters that buy discounted crude in the Central U.S. and sell at the global price.
- Refinery sector impacts are mixed as losses from export sales and lower Gulf Coast prices are offset by higher domestic sales volumes and higher East and West Coast prices.

Note: GDP impacts derived on previous slides and adjusted to account for portion of benefits spent on foreign goods and services.
Employment Impacts

- Downstream employment impacts include local refinery workers and contractors impacted by refinery closures.
- Upstream employment impacts—due to the oil price declines and subsequent impact on drilling rig activity—include oil derrick operators, rotary drill operators, roustabouts, service unit operators, etc.
- Indirect upstream jobs include frac sand suppliers, truckers and other suppliers of material and services for drilling operations.
- Job impacts are higher in 2H 2022 than 2023 as they are primarily driven by the impact to upstream drilling caused by the initial oil price fall.

Source: Base Case rig counts through April 2022 from EIA Drilling Productivity Report. Base Case rig counts after April 2022 estimated based on crude oil spot or futures price. Export Ban rig counts estimated based on number of rigs needed to balance crude market after refinery crude runs decline.
Export Ban: Key Economic Impacts

- **Most U.S. Consumers Pay More for Petroleum Products:** Because logistics constraints prevent supply and prices from equalizing between regions, the result is a bifurcated market with East and West Coast consumers paying more for fuel and Gulf Coast and Midwest consumers paying less. Overall, nearly two-thirds of U.S. consumers will pay more for fuel after the export ban.

- **U.S. Refinery Results are Mixed:** Refiners in the East Coast and West Coast benefit from higher refined product prices, while refiners in the Gulf Coast experience losses due to loss of export revenues and narrowed in-region refinery margins.

- **GDP Losses are $44 billion in 2023:** Losses to fuel consumers in the East and West Coast regions, refiners in the Gulf Coast, and oil producers in the Central U.S. more than offset benefits to fuel consumers in the Gulf Coast and Midwest regions, refiners in the East and West Coast regions, and crude exporters in the Gulf Coast.

- **Job losses average 85,000 in 2022 and 35,000 in 2023:** Job losses are driven by refinery closures and reductions in upstream oil and gas drilling activity.
6. Geopolitical Considerations
## Destinations for U.S. Product Exports

<table>
<thead>
<tr>
<th>Distillate</th>
<th>Gasoline</th>
<th>Jet Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>Mexico</td>
<td>Mexico</td>
</tr>
<tr>
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Source: U.S. DOE EIA,
[https://www.eia.gov/dnav/pet/pet_move_expc_a_EPP0_EEX_mbblpd_a.htm](https://www.eia.gov/dnav/pet/pet_move_expc_a_EPP0_EEX_mbblpd_a.htm)
Possible Impacts of Ban to the Americas

- The U.S. was the top refined product exporter in the world in 2021, representing 12.1% of refined oil exports globally. It is followed by Russia and India, 9.9% and 7.7% of the world share, respectively.
- The majority of U.S. product exports are sent to the Americas.
- Mexico is the leading destination for U.S. exports of distillate, gasoline and jet fuel products.
- For the majority of the countries in the Americas, the U.S. is the number one trading partner for refined product imports.
- Banning U.S. exports of refined petroleum products would hit the countries in Americas first (particularly Mexico), leading them to search for alternatives.
- Some buyers of U.S. exports may turn to Russian products, or products refined from Russian crude oil, for alternative supply, counteracting Western boycotts intended to place economic pressure on Russia.
  - A few developing countries that rely on oil and refined petroleum product imports refuse to impose economic sanctions on Russia and one of these countries is Mexico.
  - India, the world’s third-ranked product exporter, has dramatically increased crude purchases from Russia for state owned refineries in 2022.
Geopolitical Impacts on Global Prices

- The search for alternatives to U.S. products will make the global markets even tighter leading to further price spikes.
- Even if Russian export volumes do not increase as a result of the U.S. product export ban, higher global product prices will increase Russian export revenues.
- The ultimate impact of a U.S. export ban could not only increase global prices in the short term, thus increasing domestic prices in the east and west coasts, but it could also impact global supply chains in the long run, shifting refinery production out of the U.S.
Economic Uncertainty Could Follow Export Ban

- The majority of the countries receiving U.S. petroleum products are developing countries with low to middle incomes, highly sensitive to the energy price increases.
- Energy price increases put more pressure on already high inflation rates, creating pressure on governments to diffuse the impact of increasing prices by providing subsidies:
  - In Ecuador, Administration cut gasoline and diesel prices by 10 cents a gallon, to end anti-government protests that resulted in fatalities.
  - Mexico subsidizing 35 percent of fuel costs through funds from its oil windfall.
  - In June, Chile announced $1 billion in emergency subsidies to ease the impact of increasing oil prices.
  - The other Latin American countries like Peru and Brazil are also either providing or contemplating providing subsidies for high prices.
- The new subsidies are likely to put more pressure on government budgets, that are already strained around the world, fueling a potential economic crisis and political instability.