

The Costs Reduction Effects of Ending the U.S. Crude Oil Export Ban

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ABSTRACT

In reaction to the oil crisis of the mid-1970s, the U.S. government imposed a ban on crude oil exports. This ban was largely symbolic until the “shale revolution” essentially doubled U.S. production of crude oil after 2010. However, this new U.S. light crude oil production growth was not well matched with the existing capacities of domestic refineries, many of which were configured to process heavier crude oil slates. Once the crude oil export ban was lifted in 2015, U.S. light crude oil could be processed by non-U.S. refineries, and in turn this better enabled U.S. refineries to optimize their operations using a diverse crude slate. Examining the attributes of “crack spreads”, which are a proxy for the amount that refiners receive to refine crude oil into finished petroleum products, we examine the impacts of ending the ban on both light and heavy crude oil value chains. We find that the end of the export ban reduced the crack spread on light crude oil by nearly \$8.00 per barrel, while also reducing the crack spread on heavy crude oil by nearly \$9.00 per barrel. Together these generated average annual savings of nearly \$50 billion per year between 2016 and 2021. Notably, the results are consistent with the hypothesis that ending the crude oil export ban reduced refinery costs, rather than creating a more competitive market that lowered refining profits.