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Crude Oil Exports and Related Provisions in P.L. 114-113: In Brief

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Summary

On December 18, 2015, Congress passed the Consolidated Appropriations Act, 2016 (H.R. 2029), which was signed by the President and became P.L. 114-113. Included in P.L. 114-113 is a provision that repeals Section 103 of the Energy Policy and Conservation Act of 1975 (EPCA; P.L. 94-163), which directs the President to promulgate a rule prohibiting crude oil exports. For nearly four decades, repeal of EPCA was generally not a policy issue since oil production was declining and imports were rising. However, increasing U.S. light oil production starting in the 2010/2011 timeframe, projected production increases, and domestic-to-international oil price differentials that were as large as $30 per barrel, motivated many companies and trade organizations to advocate removing the EPCA crude oil export prohibition. P.L. 114-113 also includes a "savings clause" and a list of exceptions that maintain and provide the President with authority to restrict exports under certain circumstances.

Enactment of P.L. 114-113 allows U.S. crude oil to be marketed and sold to international buyers and concludes a nearly two-year debate about the varied and multi-dimensional considerations associated with allowing the export of crude oil produced in the United States. Some oil producers may benefit from this policy change, when market conditions warrant, by potentially selling crude oil for a higher price to global buyers. Perhaps more important for all U.S. oil producers is that allowing crude oil exports may limit the domestic/international price differential in the future. Studies published during the debate estimated that crude oil exports might range between 0 and 2 million barrels per day, reflecting the uncertainty of future market conditions that might motivate exports. Exactly how much crude oil will be exported will depend on oil price differentials, which had narrowed to less than $1 per barrel in January 2016.

In addition to repealing EPCA Section 103, P.L. 114-113 also includes provisions that address two considerations discussed during the crude oil export debate. First, owners of U.S. flag ships advocated that crude oil exporters be required to use such ships for overseas transport. While this requirement was not included in P.L. 114-113, the law does include a provision that authorizes increasing the annual subsidy paid to U.S. flag cargo ships participating in the Maritime Security Program (MSP), which provides an operating subsidy in exchange for participating ships being subject to Department of Defense acquisition during times of war. The operating subsidy for each participating ship was increased from $3.1 million to around $5 million per year thru 2021.

Second, independent U.S. refiners were generally opposed to allowing unrestricted crude oil exports as many of them were benefiting from price discounts that might either be eliminated or limited as a result of removing export restrictions. Some refiners expressed concern that the cost of waterborne crude shipments from the Gulf coast may result in a competitive disadvantage and that the value of investments made in crude-by-rail infrastructure may be adversely affected should crude oil export restrictions be removed. P.L. 114-113 modified the Section 199 tax deduction for independent refiners by changing how independent refiners account for transportation costs when calculating the deduction, potentially allowing higher oil transportation costs to be associated with greater tax relief. Overall, the enhanced deduction for independent refiners may have fairly modest effects. For most independent refiners that are able to claim the enhanced deduction, the change has the potential to reduce tax liability by up to 1.575% of oil-related transportation costs.

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Background

In the wake of the 1973 Organization of Arab Petroleum Exporting Countries (OAPEC) embargo of oil shipments to the United States, and during an era of U.S. oil price controls, Congress passed the Energy Policy and Conservation Act of 1975 (EPCA; P.L. 94-163), which included a provision directing the President to promulgate a rule prohibiting the export of crude oil and natural gas.[1] For nearly four decades, total repeal of the crude oil export prohibition was not a major policy issue since U.S. oil production was declining and import volumes were increasing. However, circumstances changed around 2010/2011 with the successful application of horizontal drilling and hydraulic fracturing technologies to economically extract oil from tight/shale formations that were previously known but considered to be too difficult and expensive to produce.

From January 2010 to April 2015 U.S. crude oil production increased by approximately 4.3 million barrels per day, a nearly 80% increase.[2] Crude oil production in April 2015 was 9.7 million barrels per day.[3] While this production level did not exceed domestic crude oil consumption, infrastructure bottlenecks and limitations resulted in domestic oil prices that were discounted relative to international crude oil prices. During certain periods, these discounts were as large as $30 per barrel (see **Figure 1**). This price differential was primarily the result of changing oil production patterns and infrastructure constraints on the delivery of oil from new and growing production areas to U.S. refining locations. Nevertheless, this price differential was a principal factor that motivated the interest in marketing, selling, and exporting U.S. crude oil globally.

Although Congress had debated aspects of the crude oil export restrictions in the past, recent congressional debate about U.S. crude oil export policy started in earnest in January 2014 with calls from Members of Congress to remove the export prohibition as well as one of the first hearings on the topic.[4] Numerous analytical studies from government, industry, and non-profit organizations about the potential effects associated with removing crude oil export restrictions were published during 2014 and 2015.[5] Additionally, hearings within various congressional committees were held during this time to debate the many and varied aspects of this complex and multi-dimensional policy issue.[6] Topics covered in studies and hearings included price effects,

[1] Export restrictions were modified over the nearly 40 years following EPCA enactment to include exceptions such as crude oil from Alaska and a specific type and quantity of crude oil produced in California being made eligible for export, as well as crude oil exports to Canada being allowed. For additional background about the crude oil export policy debate, see CRS Report R43442, *U.S. Crude Oil Export Policy: Background and Considerations*, by (name re dacted) et al.

[2] Energy Information Administration, *Crude Oil Production*, available at http://www.eia.gov.

[3] Ibid.

[4] During the 113th Congress, on January 30, 2014, the Senate Committee on Energy and Natural Resources held a hearing to "Explore Opportunities and Challenges Associated with Lifting the Ban on U.S. Crude Oil Exports." According to the committee transcript, this was the first hearing in 25 years on the topic.

[5] CRS Report R43442, *U.S. Crude Oil Export Policy: Background and Considerations*, includes a comparison of a subset of the studies published. For a more comprehensive list of studies, please contact (name redacted), Specialist in Energy Policy.

[6] The House Committee on Energy and Commerce and the Senate Committee on Energy and Natural Resources were the two primary committees that held such hearings. However, other committees such as Senate Finance and House Foreign Affairs conducted hearings that explored aspects of the debate. It is beyond the scope of this report to document all crude oil export hearings conducted from January 2014 to December 2015.

impacts on the domestic refining industry, geopolitical considerations, economic impact, government revenues, and environmental concerns.

On December 18, 2015, Congress passed the Consolidated Appropriations Act, 2016 (H.R. 2029), which was signed by the President and became P.L. 114-113. The law includes a provision that repeals the EPCA crude oil export prohibition. U.S. producers and traders can now sell and export crude oil to international customers. In addition to repealing crude oil export restrictions, P.L. 114-113 also included provisions that addressed two topics that were part of the export restriction debate: (1) maritime transportation of crude oil from the United States to foreign destinations, and (2) the effects of policy changes on independent oil refiners.

Export Restrictions Repeal

Division O, Title I, Section 101 of P.L. 114-113 repeals Section 103 of the Energy Policy and Conservation Act (EPCA; P.L. 94-163), which provided the President authority to restrict the export of various hydrocarbon materials and directed the President to "promulgate a rule prohibiting the export of crude oil and natural gas produced in the United States." Additionally, P.L. 114-113 includes a National Policy on Oil Export Restrictions stating that "no official of the Federal Government shall impose or enforce any restriction on the export of crude oil." P.L. 114-113 essentially removes all existing crude oil export restrictions. However, the law does include a "Savings Clause" and exceptions that either maintain or provide the President with authority to restrict crude oil exports under certain circumstances such as national emergencies or demonstrable effects to prices and supply that might result from allowing crude oil exports.

Savings Clause

During the crude oil export debate, some Members of Congress expressed concern that the National Policy on Oil Export Restrictions language included in the bill might limit presidential authority to restrict crude oil exports during emergency or other circumstances. To address these concerns, a "Savings Clause" was included in the bill language affirming presidential authority to prohibit exports under the Constitution, the International Emergency Economic Powers Act or regulations issued under that act, the National Emergencies Act, part B of title II of EPCA, the Trading with the Enemy Act, or other laws that impose sanctions on a foreign person or foreign government.

Exceptions

P.L. 114-113 also provides the President with authority to impose crude oil export licensing requirements or other restrictions should conditions for a set of exceptions be met. Such licensing requirements and restrictions on the export of U.S. crude oil would be limited in duration to not more than one year, although they could be renewed for additional time periods up to one year each. Three exceptions under which the President can impose crude oil export restrictions are:

1. The President declares a national emergency and provides notice in the *Federal Register*;
2. In the event that sanctions or trade restrictions are imposed by the President or by Congress; or
3. The Secretary of Commerce determines and reports to the President that (i) U.S. crude oil exports have resulted in oil supply shortages or oil prices significantly

higher than global prices, and (ii) supply shortages and price increases have or will result in adverse employment effects in the United States.

Exceptions one and two are, to some degree, similar to the presidential authority that is expressly maintained by the Savings Clause. However, the third exception provides a two-part test that could result in the President restricting exports should data and analysis determine a direct relationship between crude oil exports, supply shortages, and prices above global levels as well as sustained adverse effects on U.S. employment. While this provision provides for a possible means of restricting crude oil exports in the future, determining a direct relationship that correlates the effects of U.S. crude oil exports on supply shortages, price increases, and U.S. employment may be difficult due to the numerous, and interrelated, factors that influence crude oil supplies and prices.

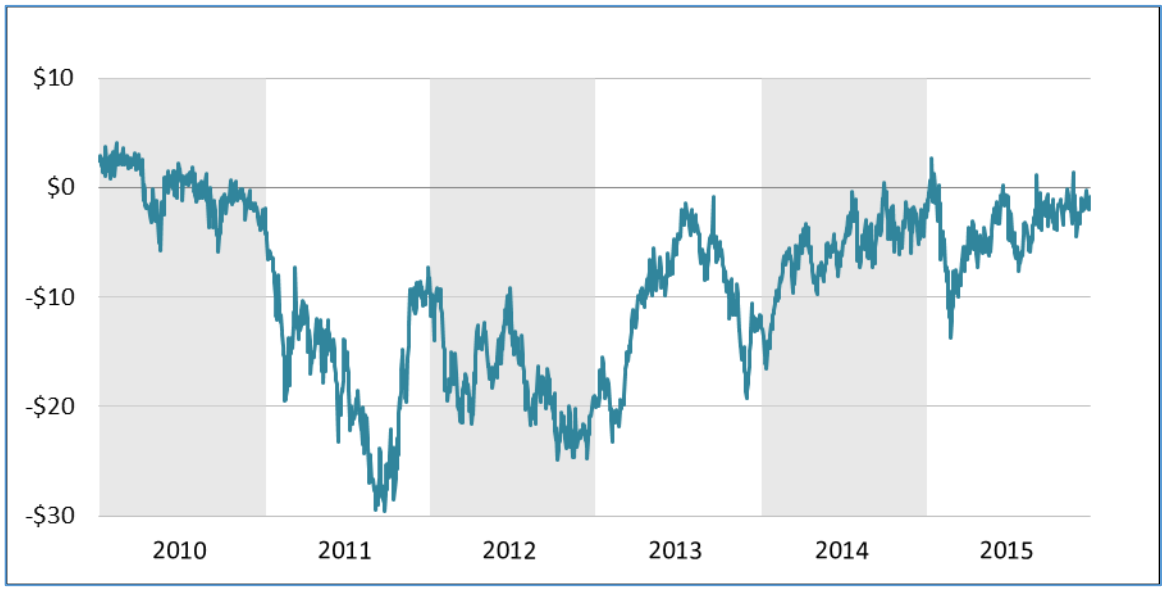
Potential Crude Oil Export Volumes

During the crude oil export debate, and since enactment of P.L. 114-113, understanding the potential volumes and oil market impacts that might result from removing export restrictions are areas that have received congressional interest. Areas of interest related to export volumes include potential economic impacts and environmental concerns, among others. Analytical studies published during the debate about the effects of removing crude oil export restrictions estimated that exports may range from 0 to approximately 2 million barrels per day.[7] This relatively large disparity is a result of the varied assumptions used to calculate the estimates. However, the motivation for companies to export crude oil is generally contingent on the existence of financial and market conditions that economically justify selling crude oil to international customers. One market condition monitored by crude oil producers and traders to determine if exports are economically justified is the price differential between domestic and international crude oil benchmark prices. Two price benchmarks that are closely monitored are West Texas Intermediate (WTI) and Brent (a combination of North Sea crudes priced in Europe), although Dubai is another important price benchmark for Asian markets. Domestic prices are typically represented by WTI and international prices are generally represented by Brent, two crude oils with similar quality characteristics. The WTI/Brent price differential has fluctuated over time and experienced a period of volatility, most recently during the years 2010 to 2015. See **Figure 1**.

[7] For example, see Energy Information Administration, "Effects of Removing Restrictions on U.S. Crude Oil Exports," September 1, 2015.

Figure 1. Crude Oil Spot Price Differential: WTI Minus Brent

$ per barrel



Source: CRS using data from the Energy Information Administration. EIA, *Spot Prices*, available at http://www.eia.gov.

As indicated in **Figure 1**, WTI spot prices were as much as $30 per barrel below Brent spot prices in 2011 and were consistently more than $10 below Brent during most of 2011 and 2012. When the WTI/Brent price differential is large enough to compensate for the costs associated with exporting crude oil (e.g., pipeline transportation from the WTI price point in Cushing, OK, to a port facility, storage fees, loading fees, shipping fees, offloading fees, insurance fees) then the economic incentive exists to market, sell, and deliver crude oil to international markets. Total costs associated with exporting crude oil vary by destination, although as a general rule the closer the destination the lower the transportation cost. Taking into account this consideration, Atlantic basin countries in Europe and the Americas are likely to be the preferred destinations for U.S. oil exports.[8]

Analysis by the Energy Information Administration suggests that total export costs can range from $6 to $8 per barrel.[9] Based on this cost range, the economic incentive to export crude oil existed at some point during each of the years 2011 to 2015. However, price differentials have since narrowed and have been in the $1 or less per barrel range since the start of 2016.[10] WTI sold at a premium to Brent on certain days in January 2016.[11] While the WTI/Brent price relationship provides some indication of the economic attractiveness of exporting crude oil, there are other price and non-price considerations that may motivate crude oil exports. Logistics, storage, and localized price relationships could potentially influence export decisions even when the WTI/Brent differential may not economically justify exports. For example, oil producers in the Eagle Ford and Permian Basin areas in Texas have direct pipeline routes to the Gulf Coast and

[8] Turner, Mason & Company, "U.S. Light Crude Oil Exports: Likely Destinations," September 8, 2015.

[9] Energy Information Administration, "Effects of Removing Restrictions on U.S. Crude Oil Exports," September 1, 2015.

[10] Energy Information Administration, *Spot Prices*, available at http://www.eia.gov.

[11] Ibid.

may be subject to pricing dynamics that are not reflected in the WTI/Brent price differential. When considering pipeline capacity constraints to Cushing, OK, along with local storage limits, there could be instances when an oil producer in Texas might choose to pursue exports to global markets regardless of the WTI/Brent differential.

According to an industry database of crude oil cargoes, during the period from December 19, 2015, to February 19, 2016, three crude oil shipments totaling approximately 1.7 million barrels—roughly 27,000 barrels per day—of crude oil have been exported to destinations that were prohibited prior to enactment of P.L. 114-113.[12] Two of the shipments were delivered to France and the Netherland Antilles. One shipment is projected to be delivered in the Mediterranean region.[13] This level of exports is somewhat small, compared to total U.S. crude oil production of approximately 9.3 million barrels per day, and reflects the narrow WTI/Brent price differential that has existed since crude oil export restrictions were removed. Additionally, preliminary EIA information indicates that total crude oil exports—including those to Canada—declined by approximately 100,000 barrels per day in mid-January 2016 compared to December 2015.[14]

While current market conditions may not economically support large volumes of U.S. crude oil exports, market conditions tend to change over time. Should U.S. oil production increase, it is possible that the price differential could widen in the future to reflect an oversupply of light/sweet crude oil in the Gulf Coast where many refineries are currently configured to process heavier crude oil types.[15] A widening price differential could result in an increase in export volumes. Nevertheless, the elimination of crude oil export restrictions provides two relevant benefits to U.S. oil producers. First, should domestic/international crude price differentials return to levels observed in 2011, some producers and traders can now sell crude oil to international buyers for potentially higher prices. Second, and perhaps more important for all U.S. oil producers, domestic/international price differentials will likely be moderated by the ability to export crude oil on an unrestricted basis. Should price differentials in the future be large enough to motivate international sales, the resulting exports will likely limit the differential value to the total costs—$6 to $8 per barrel based on EIA analysis referenced above—associated with exporting crude oil to non-U.S. destinations. Allowing exports reduces the likelihood that domestic prices will be severely discounted in the future, which benefits all U.S. producers, even those that do not export crude oil. However, U.S. refiners may not be able to financially benefit from large price differentials in the future should crude oil exports have the anticipated effect of eliminating or limiting the domestic/international price differential.

National Defense Sealift Enhancement

The debate over allowing crude oil exports proceeded in tandem with a debate over providing cargoes for the U.S.-flag merchant fleet. U.S.-flag international vessels, which must have U.S. ownership and be crewed by U.S. citizens, are guaranteed a large share of government-impelled

[12] ClipperData, *Global Crude Weekly*, accessed February 19, 2016. The 1.7 million barrels number only reflects crude oil shipments to international destinations that were previously prohibited. The number does not include either condensate exports or crude oil exports to Canada, both of which were allowed prior to enactment of P.L. 114-113.

[13] These projections are preliminary and it is possible that this shipment could go to another region/destination.

[14] Energy Information Administration, *Petroleum and Other Liquids: Weekly Imports and Exports*, http://www.eia.gov, accessed February 22, 2016.

[15] For additional background, see CRS Report R43442, *U.S. Crude Oil Export Policy: Background and Considerations*, by (name redacted) et al.

cargoes, such as military shipments and food aid.[16] However, U.S.-flag international vessels carry almost no commercial cargo, because their daily operating costs are estimated to be nearly three times those of similar foreign-flag ships.[17] In a 2015 hearing, Paul Jaenichen, head of the U.S. Maritime Administration (MARAD), said that the lack of cargo has contributed to a decline in the number of ships participating in the Maritime Security Program (MSP), under which vessels receive operating subsidies in return for being made available to the Department of Defense in time of war or national emergency.[18] A requirement that some portion of crude oil exports be carried by U.S. flag ships was advanced as a means of ensuring additional cargoes for U.S.-flag tankers, but encountered opposition due to concerns that the cost of U.S.-flag shipping could make U.S. oil uncompetitive in foreign markets.[19]

P.L. 114-113 does not require U.S. crude oil be exported on U.S.-flag vessels, but it does increase the annual operating subsidies for MSP vessels for FY2017 through FY2021.[20] The increase is intended to encourage ship operators to keep their vessels in the MSP fleet. The annual subsidy increases from $3.1 million per ship to around $5 million per ship[21] through FY2020 and then $5.2 million per ship in 2021. In 2022, the annual subsidy is to revert back to $3.1 million per ship.

This subsidy increase further offsets the cost of employing U.S. merchant mariners aboard ship and complying with other requirements to operate under the U.S. flag. Higher subsidies potentially could assist these ships in competing with foreign-flag ships to carry private-sector imports and exports. However, the increased subsidy could also encourage U.S. seafarers and ship supply vendors to negotiate higher compensation for services provided to U.S.-flag operators. It was out of concern for rising U.S. crew costs that Congress changed the operating subsidy program from a fluctuating amount based on the cost differential between U.S.- and foreign-flag ships, to a fixed amount in 1996, the intent being that a fixed payment would create better incentives for U.S. flag operators to constrain costs.[22]

At the end of 2015, 57 ships were enrolled in MSP; 60 ships are authorized. The MSP fleet includes 33 container ships, 16 roll-on/roll-off ships (ships with ramps for transporting vehicles), and two tankers.[23] These ships employ about 2,500 U.S. mariners. About 75% of the fleet is owned by U.S. entities affiliated with a foreign shipping line.

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[16] The Military Transportation Act of 1904 (P.L. 58-198) requires that all military cargo be shipped in U.S. vessels. Under the Cargo Preference Act of 1954 (P.L. 83-644), at least half of military cargo and half of food-aid cargo must be shipped in *privately owned* (i.e., commercial not government owned) U.S. vessels. For further information on these acts, see CRS Report R44254, *Cargo Preferences for U.S.-Flag Shipping*, by (name redacted)

[17] MARAD, *Comparison of U.S. and Foreign-Flag Operating Costs*, September 2011.

[18] House Committee on Agriculture, Subcommittee on Livestock and Foreign Agriculture, House Committee on Transportation and Infrastructure, Subcommittee on Coast Guard and Maritime Transportation, Joint Hearing on International Food Programs, November 17, 2015, p. 15; House Committee on Transportation and Infrastructure, Subcommittee on Coast Guard and Maritime Transportation, Hearing on Merchant Marine Status, September 10, 2014. See also H.R. 5270, The Growing American Shipping Act, 113th Congress.

[19] The GAO analyzed the cost implications of imposing a U.S.-flag requirement on LNG exports, *Maritime Transportation: Implications of Using U.S. Liquefied-Natural-Gas Carriers for Exports*, GAO-16-104, December 2015.

[20] The increase in the MSP operating subsidy was also contained in the House-passed version of H.R. 702, An Act to Adapt to Changing Crude Oil Market Conditions.

[21] Beginning in FY2017, the exact amount depends on the fiscal year up to FY2021.

[22] House Committee on National Security, *Maritime Security Act of 1995*, August 3, 1995, H.Rept. 104-229, p. 9.

[23] U.S. Maritime Administration, MARAD Open Data Portal Maritime Data & Statistics. http://www.marad.dot.gov/resources/data-statistics/.

Enhanced Section 199 Tax Deduction for Independent Refiners

Division P, Section 305 of P.L. 114-113 enhanced the Section 199 domestic production activities deduction for refiners that are not a major integrated oil company.[24]

Motivation for Tax Relief for Independent Refiners

The provision was designed to address concerns that some U.S. refiners would be disadvantaged should there be a change in crude export policy. Domestic and international price differentials that motivated oil producers to advocate for allowing exports (see **Figure 1**) were a benefit to U.S. refiners and contributed to an increase in refinery profit margins.[25] Allowing crude oil exports will likely cap price differentials in the future, thus potentially reducing opportunities for refineries to realize these margins.

Refinery advocates presented two oil transportation-related concerns that would result in a competitive disadvantage should crude oil export restrictions be removed. First, the Jones Act[26] cost premium[27] associated with moving crude oil from the Gulf Coast to the Northeast would result in East Coast refineries being at a competitive disadvantage vis-a-vis European refineries.[28] It was suggested by the American Fuels and Petrochemicals Manufacturers (AFPM) that the Jones Act might need to be modified in conjunction with any change to crude export policy.[29] Second, some refineries invested in rail transportation, one of the most expensive crude oil transportation modes.[30] These infrastructure investments were motivated by the large price differentials observed periodically since 2010. To the extent that a change in crude oil export

[24] Section 167(h)(5)(B) of the Internal Revenue Code of 1986 provides the definition of a major integrated oil company that is used to determine eligibility of the Section 199 modification.

[25] Refined petroleum products (e.g., gasoline and diesel fuel) were not subject to export restrictions and prices for those products are connected to global prices through U.S. imports and exports. The ability to acquire crude oil at a discounted domestic price and sell products based on global prices results in increased refinery margins when domestic crude oil prices are discounted.

[26] The Jones Act requires cargo transported by vessel between any two U.S. points to be carried in U.S. built, U.S. owned, and U.S. crewed vessels. Jones Act vessels are used for U.S. domestic shipping whereas the MSP vessel fleet discussed in the previous section is used for international cargo deliveries. For additional information, see CRS Report R43653, *Shipping U.S. Crude Oil by Water: Vessel Flag Requirements and Safety Issues*, by (name redacted)

[27] The per barrel cost of shipping crude oil using a Jones Act vessel is not reported in the trade press. However, some estimates indicate that crude oil shipping costs from the gulf coast to the Northeast would range between $6 to $8 per barrel on a Jones Act vessel versus $2 per barrel or less on a non-Jones Act vessel. For additional information, see CRS Report R43653, *Shipping U.S. Crude Oil by Water: Vessel Flag Requirements and Safety Issues*, by (name redacted)

[28] Senate Hearing 114-17, Committee on Energy and Natural Resources, "U.S. Crude Oil Export Policy," March 19, 2015. Charlie Drevna, representing the American Fuel and Petrochemical Manufacturers, testified that should crude oil exports be allowed it would be less costly to ship crude oil from the Gulf Coast to Europe, refine the oil, and ship the refined products to the east coast than ship crude oil from the Gulf Coast to the Northeast.

[29] Ibid. Exactly how the Jones Act should have been changed was not specified. However, if the Jones Act were completely repealed the Northeast refiners would be in direct competition with Gulf Coast refiners and this could potentially result in competitive pressure for refined petroleum products in the Northeast region.

[30] Crude oil transportation costs by rail can vary and depend on factors such as distance, congestion, etc. According to Platt's *Oilgram Price Report*, transporting crude by rail from the Bakken in North Dakota to East Coast refineries costs approximately $12 per barrel. As a comparison, pipeline transportation is estimated to cost in the range of $2 to $4 per barrel. However, pipeline transportation from North Dakota to the Northeast does not currently exist.

policy either eliminates or limits future price differentials, this effect could potentially adversely affect the value of these rail transportation investments.

Modification to Section 199 for Independent Refiners

Broadly, the Section 199 deduction serves to reduce effective tax rates on domestic manufacturing activities.[31] Section 305 of Division P of P.L. 114-113 changed how independent refiners account for transportation costs when calculating the deduction, potentially allowing higher oil transportation costs to be associated with greater tax relief.

The Section 199 production activities deduction allows taxpayers to deduct a fixed percentage of either income derived from qualified production activities (qualified production activity income; QPAI) or taxable income, the lesser of the two.[32] A taxpayer's QPAI is equal to the taxpayer's domestic production gross receipts (DPGR), reduced by (1) the cost of goods sold that is allocable to those receipts; and (2) other deductions, expenses, and losses that are properly allocable to those receipts. The Section 199 deduction is 6% for oil-related activities, and 9% for other domestic production activities.[33]

The change to Section 199 in P.L. 114-113 for independent refiners allows qualifying entities to reduce oil transportation costs accounted for when calculating QPAI.[34] Specifically, the provision states that "costs related to the transportation of oil shall be 25 percent of the amount properly allocable."[35] Thus, independent refiners are allowed to exclude 75% of oil transportation costs when calculating income for the purposes of determining their Section 199 deduction. Assuming that refiners incur oil-related transportation costs, the effect of this change is an increase in QPAI and thus an increase of the deduction amount. The modified treatment for transportation costs became available starting in 2016, and is scheduled to expire at the end of 2021. The Joint Committee on Taxation estimates that the provision will reduce federal revenues by $1.9 billion between 2016 and 2025.[36]

A simplified and stylized hypothetical example of how this deduction is calculated appears in **Table 1**. Receipts, expenses, and subsequent calculations are illustrative only and actual receipts and expenses for a specific refiner will likely be different. In this example, an independent refiner is assumed to have $80 million in oil-related receipts, $40 million in oil-related expenses, and an additional $10 million in oil transportation expenses.[37] Without the Section 199 deduction, at a

[31] For a general overview of the provision and background, see CRS Report R41988, *The Section 199 Production Activities Deduction: Background and Analysis*, by (name redacted) .

[32] For non-corporate taxpayers (taxpayers filing individual income tax returns as opposed to corporate returns), the deduction is limited to the lesser of QPAI or adjusted gross income (AGI).

[33] The Section 199 deduction is limited to 50% of the taxpayer's W-2 wages attributable to the taxpayer's DPGR.

[34] Qualifying entities are taxpayers in the trade or business of refining crude oil who are not a major integrated oil company.

[35] Costs related to the transportation of oil might include pipeline tariffs, rail costs, or tanker fees, for example.

[36] Since the provision is set to expire at the end of calendar year 2021, the JCT estimates that all revenue losses associated with the provision will have occurred by the end of FY2022. U.S. Congress, Joint Committee on Taxation, *Estimated Budget Effects of Division P of Amendment #1 to the Senate Amendment to* H.R. 2029 *(Rules Committee Print 114-39)*, committee print, 114th Cong., December 16, 2015, JCX-142-15.

[37] Companies that have oil-related qualified manufacturing activities may have other manufacturing activities that qualify for the Section 199 deduction. In the case where a manufacturer has both oil-related and other qualified manufacturing activities, the deduction is calculated as 9% of the lesser of taxable income or QPAI, minus 3% of the lesser of taxable income, QPAI, or oil-related QPAI. If oil-related QPAI is less than QPAI, the deduction for these companies with both oil-related and other qualified manufacturing activities will be somewhere between 6% and 9%.

35% tax rate, the tax on this income would be $10.5 million in this example. If the taxpayer were allowed to claim the Section 199 deduction, the deduction would be $1.8 million, or 6% of QPAI.[38] The deduction reduces taxable income by $1.8 million. Thus, assuming a 35% tax rate, tax liability would be reduced by $630,000 (tax liability is reduced from $10.5 million to $9.87 million).

With the enhanced deduction, for the purposes of calculating the Section 199 deduction, only 25% of oil transportation expenses are included when calculating QPAI. Thus, QPAI is $37.5 million, and the Section 199 deduction is $2.25 million. At a tax rate of 35%, the additional deduction results in a further reduction in tax liability of $157,500 (tax liability is reduced from $9.87 million to $9.71 million).

Table 1. Hypothetical Example of Section 199 Deduction Calculations

(millions of dollars)

		No Section 199 Deduction	Before 2016 (With Section 199 Deduction)	2016 – 2021 (With Enhanced Section 199 Deduction)
A	Oil-Related Receipts	$ 80.00	$ 80.00	$ 80.00
B	Oil-Related Expenses	$ 40.00	$ 40.00	$ 40.00
C	Oil Transportation Expenses	$ 10.00	$ 10.00	$ 10.00
D	Oil-Related Qualified Production Activities Income (QPAI) [A – B – C]	N/A	$ 30.00	$ 37.50[a]
E	Domestic Production Activity Deduction (6%) [D x 6%]	N/A	$ 1.80	$ 2.25
F	Income to be Taxed (after Domestic Production Activity Deduction)[b] [A – B – C – E]	$ 30.00	$ 28.20	$ 27.75
G	Tax Liability (35% Tax Rate) [F x 35%]	$ 10.50	$ 9.87	$ 9.71

Source: CRS analysis.

Notes: All figures are rounded to two decimal places.

a. Since oil transportation expenses are reduced by 75% under the modified provision, oil transportation expenses are treated as $2.5 million for the purposes of calculating QPAI. Thus, QPAI is $80 million less $40 million for oil related expenses, less $2.5 million in oil transportation expenses.

b. The example assumes that a taxpayer's taxable income (not shown in the table) is greater than QPAI. If taxable income is less than QPAI, the deduction is calculated as a percentage of taxable income, rather than as a percentage of QPAI. For taxpayers with zero taxable income, the Section 199 deduction does not

[38] This assumes that QPAI is less than taxable income. If taxable income were less than QPAI, the deduction would be calculated using taxable income as the base.

provide additional tax benefit and for those that have a taxable income that is less than QPAI, the modification in P.L. 114-113 provides no additional tax relief.

Overall, the enhanced deduction for independent refiners has the potential to reduce tax liability by up to 1.575% of oil transportation costs.[39] Thus, in the above example, if oil transportation expenses were $5 million, instead of $10 million, the enhanced tax benefit would result in a tax liability reduction of $78,750, instead of $157,500.

It is possible that certain independent refineries will not receive any reduction in tax liability from this provision, even if they have substantial oil transportation costs. For taxpayers where taxable income is less than QPAI, the modification of how oil transportation costs are accounted for does not change tax liability since the Section 199 deduction is calculated from taxable income, not QPAI.[40]

If the purpose of the provision was to provide relief for independent refineries, particularly those with high transportation costs, the modifications to Section 199 in P.L. 114-113 have several notable limitations. Independent refiners with zero taxable income, or with taxable income that is less than QPAI, will not receive additional tax relief from the modifications of Section 199's treatment of transportation expenses in P.L. 114-113. Additionally, for independent refiners that are able to claim the enhanced deduction, the reduction in tax liability will generally be worth, at most, 1.575% of oil transportation costs. Finally, as a temporary provision, it may provide some relief during a period of transition, but could also contribute to uncertainty as the modified treatment of transportation expenses is scheduled to expire at the end of 2021.[41] Tax provisions enacted with an expiration date are often extended. Since temporary tax provisions may or may not be extended, expiration dates on tax provisions may be associated with uncertainty.[42]

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[39] This assumes a tax rate of 35%, and that all transportation costs are able to be deducted qualify for the 6% domestic production activities deduction for oil-related activities and are eligible for the special treatment for oil transportation costs.

[40] Taxable income may be less than QPAI if a taxpayer has a net operating loss carryforward, for example.

[41] For a general economic analysis of the Section 199, including resource allocation and economic efficiency issues, see CRS Report R41988, *The Section 199 Production Activities Deduction: Background and Analysis*, by (name redacted) .

[42] For background on temporary tax provisions and "tax extenders," see CRS Report R43898, *Tax Provisions that Expired in 2014 ("Tax Extenders")*, by (name redacted) .