



# LIFTING THE OIL EXPORT BAN

## *What Would It Mean for US Gasoline Prices?*

**Stephen P.A. Brown** and **Charles F. Mason** explain how, despite fears to the contrary, lifting the US ban on oil exports would bring down prices at the pump.

Earlier this year, the US Senate Committee on Energy and Natural Resources requested a comprehensive review of what would happen to energy prices, consumer prices, and more if the United States were to lift its 40-year ban on oil exports.

Until recently, the possibility of exporting US crude oil was not an issue because the United States was importing so much oil from the rest of the world and forecasts of US oil production were showing a decline. All this changed with the fracking revolution, which quickly opened up vast resources of “tight” oil to exploitation—primarily in North Dakota (the Bakken play) and Texas (the Eagle Ford play and the Permian plays)—and reduced US oil imports to new lows.

Combined with limited pipeline and rail transport capacity, this increase in oil production in the United States has led to bottlenecked oil supplies in the Midwest and much lower crude prices there. The situation has been exacerbated by the inability of most US refineries to efficiently

process the light crude oil coming from these fields.

The reaction to these developments has been predictable. Most of the oil and gas industry wants the export ban lifted. The additional demand for US light crude oil will increase industry profits, although probably not prices because oil is priced in a world market. However, some refiners are benefiting from the bottlenecked supplies because they can process the discounted light crude and sell refined products—gasoline primarily—that generally have prices tied to world markets. They oppose lifting the ban.

Environmental groups also oppose lifting the ban. They see increased consumption of fossil fuels as contributing to greenhouse gas emissions worldwide and are concerned about other environmental risks, such as spills.

But the area of greatest and most specific disagreement concerns the effect of lifting the export ban on US gasoline prices. Commenters span the full range,

variously finding that gasoline prices will increase, decrease, or remain unchanged. In new research to inform this debate, we find that lifting the ban would boost crude oil production and improve the efficiency of global refinery operations. Accordingly, gasoline production would go up and its price in the United States would fall—anywhere from 2 to 5 cents per gallon once the market fully adjusted to lifting the ban.

### **The Ban on Crude Oil Exports**

The US ban on oil exports began as a reaction to the oil embargo in the early 1970s and later was codified in law and Department of Commerce rules for granting export permits. Currently, crude oil can be exported to Canada, but only for use there; from Alaska if it comes through the Trans-Alaska pipeline or from Cook Inlet; if it is foreign oil; if it is in conjunction with operation of the Strategic Petroleum Reserve; and for a few other small exceptions.

Prior to the fracking revolution, world oil production had been shifting toward heavier crudes. US refiners reacted by investing in facilities (known as “cracking” facilities) that could convert the heavier crudes to the lighter products most valued in the market, such as gasoline, jet fuel, and diesel. Other refiners outside of the United States did not invest as heavily in such facilities, and their operations remained more dependent on working with lighter crude oils.

The fracking revolution brought considerably more light crude oil onto the US market and created excess supply. The ban on US exports of crude oil means that the excess supply of light crude oil in the United States cannot be sent to refiners elsewhere in the world, and this surfeit keeps the heavier crudes produced elsewhere from being refined in the United States. The efficiency of global refinery

operations would be improved considerably if the ban on US exports of crude oil were to be lifted—but how would lifting the ban affect prices for crude oil and refined products in the United States?

### **Crude Oil Markets**

Because the ban on US exports of crude oil has created a situation in which light crude oil is bottlenecked in the Midwest, lifting the ban would cause the price of light crude oil there—currently about \$6.34 per barrel below the price for comparable crude oil elsewhere—to rise toward world prices. In addition, the increased supply of crude oil reaching the international market would put some downward pressure on international crude oil prices, assuming the Organization of the Petroleum Exporting Countries (OPEC) does not respond with matching cutbacks in its output.

Moreover, the improved efficiency of refinery operations and competitive pressure would slightly reduce what is known as the crack spread—the difference between prices for refined products and crude oil. A reduced crack spread would slightly boost the international demand for crude oil, putting upward pressure on international crude oil prices. Whether international crude oil prices would rise or fall on net would depend on the relative increases in supply and demand.

Assuming no OPEC response, our estimated net effect is an increase in the world price of crude oil of about \$0.15 per barrel.

### **OPEC’s Likely Response**

With changes in world oil demand and non-OPEC supply, many would look to OPEC for a possible response. With the relatively small changes in global market conditions that would result from lifting the US export ban, OPEC may do relatively little. Nonetheless, if OPEC acts to hold global crude

oil prices firm, oil prices may not drop as described above.

Would OPEC seek to push oil prices even higher? Those modeling OPEC behavior have not reached a consensus about how OPEC responds to changes in world oil market conditions. Some argue that OPEC targets market share, and others argue that elements within OPEC behave more like a cartel that pursues monopoly pricing.

If OPEC acts to maintain market share, its response to increased oil production from Canada and the United States will be to increase its own production, which will add to downward pressure on the price of oil.

If OPEC exerts some form of monopoly power, its actions will be affected by the demand for its oil production. Lifting the ban would increase the supply of non-OPEC oil, which would reduce the refineries' demand for OPEC oil and likely increase the price sensitivity of the demand for OPEC oil. OPEC would produce less, but the net effect would be increased global supplies. In such an event, the market price would fall.

On the other hand, if the primary effect of lifting the ban is to increase the efficiency of refinery operations and increase their demand for oil, the demand for OPEC oil will increase and become less sensitive to price. OPEC would have an incentive to increase its output, but not by enough to prevent an increase in world oil prices. Either way, the changes in oil market conditions will be sufficiently small that the effect of OPEC activity on world oil prices will be slight.

### **US Refined Product Prices**

With the increased efficiency of Western Hemisphere refinery operations that would come from lifting the ban, US prices for refined products will be reduced—even if world oil prices increase. Because consum-

ers in the Midwest do not appear to be seeing any price reductions for refined products as a result of the depressed crude oil prices in that part of the country, we conclude refined product prices in the Midwest move with prices in the rest of the country. Consequently, we expect the Midwest will see declines in prices for refined products that are comparable to those in the rest of the country.

Given our projections for the change in crude oil prices and increased efficiency in refinery operations, we estimate US gasoline prices would be reduced by 1.7 to 4.5 cents per gallon. This range reflects two assumptions. The lower bound counts only the oil production increase, not a change in the mix of refinery outputs. The upper bound represents the oil production increase and change in the mix of refinery outputs. Realization of this price decline may take a few years—depending on how quickly additional oil is produced in the United States and Canada and how quickly the industry is able to shift its crude oil supplies among refineries.

These results are driven by the increase in refinery efficiency made possible by lifting the ban and a nuanced consideration of OPEC behavior. Even if we found more equivocal results, we believe that the economic arguments for lifting the ban are strong, based primarily on the gains from free trade and the example set when we live by our market principles. ●

#### **FURTHER READING**

Brown, Stephen P.A., Charles Mason, Alan Krupnick, and Jan Mares. 2014. *Crude Behavior: How Lifting the Export Ban Reduces Gasoline Prices in the United States*. Issue brief 14-03-REV. Washington, DC: RFF.