Phosphate Fertilizer: Effects of an Import Tariff and State of the Market

Testimony by Scott M. Swinton, Michigan State University College of Agriculture and Natural Resources, to Michigan House Agriculture Committee, May 18, 2022

My name is Scott Swinton. I work at Michigan State University, where I am a University Distinguished Professor and chairperson of the Department of Agricultural, Food, and Resource Economics in the College of Agriculture and Natural Resources. I have been invited to testify in relation to a proposed resolution to enable farmers and coalitions to petition for a waiver of the countervailing duty (tariff) that the U.S. International Trade Commission (ITC) imposed on phosphate fertilizers imported from Morocco in March 2021. (Note that the ITC decision covered imports from both Morocco and Russia, but the proposed resolution refers only to fertilizer imports from Morocco.)

The ITC tariff decision

In March 2021, the ITC released its decision that imports of phosphate fertilizer from Morocco and Russia had "materially injured" domestic fertilizer producers. The ITC imposed "countervailing duties" to offset what it found to be subsidies from the governments of Morocco and Russia. The countervailing tariffs on U.S. imports of phosphate fertilizer from Morocco were set at 19.97% and those from Russia at 47.05% for the EuroChem Co. and 9.19% for the Apatit Co. The ITC made its ruling by a 4-1 majority vote.

The ITC investigation began June 2020, in response to a complaint by the Mosaic Co. of Plymouth, MN. The study focused on a "period of investigation" from January 2017 through September 2020. The case was complicated, because two domestic phosphate fertilizer producers closed plants during that period (Mosaic in 2017 and Nutrien in 2019). Morocco and Russia increased U.S. sales of phosphate fertilizer in 2017 and 2018 to compensate for the supply shortfall that resulted from the plant closings, but they did not reduce sales commensurate with the drop in fertilizer demand in 2019 that occurred due to poor weather that reduced U.S. crop area that year.

The ITC decision affects all major forms of phosphate fertilizers, monoammonium phosphate (MAP), diammonium phosphate (DAP), normal superphosphate (NSP), and triple superphosphate (TSP). Of these, DAP and MAP are the biggest quantities.

Tariffs and their impacts

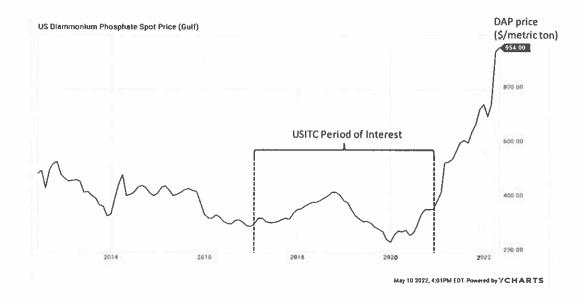
A countervailing duty is a punitive import tariff. It is paid by importers of the product, who pass on that cost to their buyers—ultimately agribusinesses and farmers—through higher prices.

The countervailing duties in this case are called "ad valorem" tariffs, because they are levied as a percentage of the imported good price. They function like a sales tax. Hence, if a ton of DAP from Morocco sells for \$300 when imported at the Port of New Orleans, the 19.97% tariff will cost the importer \$59.91 per ton. If the price of a ton of DAP rises to \$900 per ton, then the 19.97% tariff becomes three times as much, or \$179.73 per ton.

An import tariff affects the welfare of different groups in different ways. The tariff harms the economic welfare of consumers of the imported item (US farmers, in this case), who pay a higher price. The import tariff also harms producers in the exporting countries (Morocco and Russia, in this case), because their product becomes more expensive to consumers, who buy less of it. An import tariff benefits domestic producers as well as exporters from countries to which the tariff does not apply (Saudi Arabia, in this case), because they can sell their product at a higher price. The tariff also benefits the U.S. government, which gains income.

Phosphate fertilizer prices before and since the ITC period of investigation

The prices of the major phosphate fertilizers tend to move roughly in parallel. The graph below shows prices of DAP over the past ten years (to May 9, 2022), measured in dollars per metric ton at the Port of New Orleans, where nearly all phosphate fertilizer imports enter the United States. Note that Mosaic made its initial complaint in June 2020, when prices had fallen over the previous 18 months to record lows—under \$300/mt. Today, DAP at New Orleans sells for over \$950 per metric ton.



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¹ U.S. International Trade Commission, "Phosphate Fertilizers from Morocco and Russia: Investigation Nos. TA 650-651 (Final)." Publication 5172. March 2021.