

An Economic Analysis of the FDA Mandated Name Change for Alaska Pollock

Harry M. Kaiser
Cornell University

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In January 2016, the U.S. Food and Drug Administration updated its list of acceptable market names for seafood to allow only pollock caught in Alaskan waters to be marketed as “Alaska Pollock.” Previously, Pollock harvested outside Alaskan waters in the U.S. exclusive economic zone were allowed to be labelled as Alaska Pollock even though they were not caught in Alaska water. Under the new name change, these fish can now be labelled only as “Pollock” with no reference to Alaska. This mandated name change by the FDA may have enhanced the demand for Alaska Pollock since companies selling Alaska Pollock and the Genuine Alaska Pollock Producers could now promote their products in the United States without concerns that product not produced from Pollock harvested outside U.S. waters could benefit from their promotions, which is consistent with the impact of other geographic labels such as those used for wines and food products.

The purpose of this study is to determine whether this name change enhanced the value of Wild Alaska Pollock relative to imported Pollock. Specifically, the research question addressed here is did the name change increase the value of Wild Alaska Pollock relative to imported Pollock? The results presented in this report indicate that the name change had a significant and positive impact on increasing the demand (measured in value terms as the price difference between Alaska Pollock and imported Pollock) for Alaska Pollock.

Methodology

To measure the impact of the FDA name change on the demand for Alaska Pollock, we focus on the price differential between the U.S. export price for Alaska Pollock fillets (a reasonable proxy for the U.S. price) and the U.S. import price for Pollock fillets coming from other countries. We want to determine whether this price differential increased due to the name change that occurred in 2016, and, if so, by how much?

To address this research question, an *econometric model* was developed to measure the impact of a variety of demand drivers, including the name change, on this price differential. Econometric models quantify economic relationships using statistical procedures with data. They are widely recognized as best science available for evaluating demand impacts such as the name change. The model can be used to assess how strongly various demand drivers are correlated with demand. The main benefit of these models is they enable simultaneous accounting of the impacts of other demand drivers impacting Wild Alaska Pollock demand. In this case, we collected data on the following demand drivers affecting the monthly price differential: seasonality, quantity of exports relative to imports (in percent), price differential in previous month(s), and the name change.

Monthly data on the price differential and demand drivers listed above were collected for the period 2014 through the first half of 2020 to be used to estimate the econometric model. Using multiple regression analysis, the model enables us to measure whether each of these demand drivers had a statistically significant impact on the monthly price differential.

Results

Table 1 presents the estimated coefficients for the price differential model. The estimated model has a reasonably good statistical fit with a coefficient of determination (R^2) of 0.37 indicating that the demand drivers in the model explained 37% of the variation in the monthly price differential over time. All of the estimated impacts are statistically significant at the 10%-level or better.

The results indicate that the price differential is higher in the first two quarters of the year compared with the entire year. The price differential is \$99.62 higher, on average, in the first quarter and \$70.25 higher in the second quarter of the year, on average, compared with the entire year when holding all other demand drivers constant. The price differential in the previous two months is significantly correlated with the current price differential. The results indicate that there is a 24% positive correlation between the price differential in the previous two months and the current price differential, again holding all other demand drivers constant. Not surprisingly, there is a positive association between the price differential and the percentage of exports relative to imports. Each one percentage point increase in Alaska Pollock exports relative to Pollack imports increased the price differential by \$5.15, on average, holding all other demand drivers constant.

Most importantly, the FDA mandated name change increased the price differential for Alaska Pollock fillets. Indeed, this was the most significant demand driver in the model. Specifically, after controlling for all other demand drivers, the price differential was \$212.38 higher after the name change was implemented. Clearly the name change increased the value of Alaska Pollock relative to regular imported Pollock.

Table 1. Econometric results.

Dependent variable: Export Price for Alaska Pollock Minus Import Price for Pollock	
Independent variables (demand driver):	Coefficient
Seasonality: First quarter of year	99.62
Seasonality: Second quarter of year	70.25
Price differential in previous 2 months	0.24
Percentage of US exports relative to volume of US imports	5.15
FDA mandated name change	212.38