

April 9, 2020

Q1 shrimp imports predicted to sit at record high

Shrimp imports for March 2020 will not be available until approximately one month from now. Yet, in our attempts to accelerate the availability of this data using current customs data and proprietary modeling, our estimates for March 2020 indicate that imports grew by 10.3% compared to March 2019, totaling 119 million lbs.

This would position shrimp imports at a record high during Q1 with 379.2 million lbs. in 2020, registering a 16.6% increase or 53.6 million lbs. more than Q1 2019. Therefore, it is no surprise that imports in January were also at a record high for that month. If our estimates are correct, March would also register a record high by +10.3%, surpassing the previous record registered last year. Imports in February 2020 ranked second for that month over the course of the last 22 years. (Chart 1)

Our model adjusts for seasonal monthly changes and tries to adapt potential volume misreporting for a particular month between *U.S. Census data (HS codes) and *Customs Data (weekly data available for 3rd party intelligence providers).

For instance, we noticed tight correlations of volume discrepancies between the U.S. Census data (HS codes) and Customs Data when prices fell under or over a certain threshold. For this we used Urner Barry's Shrimp Index, which is weighted using a 3-month moving average of imported volume. We then used regression to identify outliers. These were our results. (Chart 2)

Now, it is important to understand that all models will have a certain degree of error. While we tried to adjust for some of these variances and potential errors as previously mentioned, if we look more closely, the average accuracy since 2018 has been at 100.2% with a deviation of monthly pounds of 6% for 95% of the observations. (Chart 3)

This model will be updated in the coming months to test for accuracy, and has the potential to be adapted for machine learning implementation of time-series analysis.

In conclusion, this model, if accurate in the coming months, has the potential to provide weekly shrimp imports as close as a one-week lag. But for now, official data and this estimate suggest Q1 shrimp imports sit at a record high 379.3 million lbs., or 33.5 million lbs. more than the 2nd ranked quarter (Q1 2018), or a 10% increase.

**In theory, there should be no discrepancy between the U.S. Census and U.S. Customs data since the latter collects data by HS code; the problem lies in the fact that this data provided to 3rd party intelligence providers like Urner Barry do not contain clean HS code data. Therefore, we needed to adjust for these differences.*

