Case Study: Drastic Price Shifts for Gasoline and Diesel

Benjamin Katzeff Silberstein
February 1, 2019

The following is a detailed look at a few pronounced price shifts in North Korean gasoline and diesel fuel prices. The first major spike of 2017, shown on graph 1, was reported for May 11, but in all likelihood happened several days or weeks earlier, sometime after April 21. Again, this coincided neatly with the timing for when CNPC said it was drawing down on deliveries to North Korea. This, in turn, happened around the same time as North Korea conducted three missile tests on April 4, 15, and 28.

Graph 1. Market prices for gasoline and diesel in North Korea, an average of Pyongyang, Sinuiju and Hyesan, showing April–May 2017 price hike. Data source: Daily NK’s market price index.

The next big jump was reported for June 25, and continued over July 5, one day after North Korea claimed to have tested an ICBM. Graph 2 shows these incremental price hikes. Most likely, North Korea authorities initially caused the price hike by hoarding fuel from the market in anticipation of international sanctions. This is particularly likely given that the increase began several days before North Korea’s claimed ICBM-test.
Prices stabilized somewhat but spiked again in several steps after North Korea’s nuclear test on September 3, both of which clearly track the cycle of events. The price data shows a small increase reported on September 5, but this was likely just a data point along the way towards greater increases. On September 13, the price spiked at over 20,000 won per kg, from 14,300 won per kg in the previous observation. After first stabilizing slightly, the price shot up once again to about 24,000 won/kg according to the observation published on October 18. Most likely, this was a reaction to Chinese tightening of trade, following UNSC resolution 2375 passed on September 11, introducing the aforementioned limit of oil and fuel sales and transfers to North Korea. Graph 3 illustrates both of these price spikes, first reported for September 13, and secondly, for October 18.
Prices later stabilized at levels between 15–17,000 won/kg, likely because the market shed some of the previous nerves and adjusted to the supply levels at hand. The next major movement came, as mentioned above, in early June. On June 19th, the day of Kim Jong Un’s third visit to China, Daily NK’s price data recorded a gasoline price of under 6,700 won/kg, shown on graph 4 below, lower than for January of 2017. Most likely, the drop began long before Kim’s visit to China, as supply from China increased as a signal of warmer ties. It once again stabilized to slightly higher levels, around 10,000 won/kg, more in line with the normal price level.

Graph 3. Market prices for gasoline and diesel in North Korea, an average of Pyongyang, Sinuiju and Hyesan, showing the September–October 2017 price spike. Data source: Daily NK’s market price index.

Graph 4. Market prices for gasoline and diesel in North Korea, an average of Pyongyang, Sinuiju and Hyesan, showing the price drop around June 19, 2017. Data source: Daily NK’s market price index.
With the data available, it is impossible to prove, beyond reasonable doubt, that China tightening and opening the tap accounts for all price movements on the North Korean market. Nevertheless, given the conditions of North Korea’s fuel supply, fuel prices are one of the clearest indicators to survey Chinese economic pressure on North Korea. Trade data is difficult to evaluate and take at face value, given the high political stakes for China in reporting data that shows an adherence to sanctions and monitoring.