

Rockets and Feathers Revisited: Asymmetric Retail Gasoline Pricing in the Era of Market Transparency

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Retail fuel pricing, in general, remains an area of significant interest for motorists, the media, and regulatory authorities in many countries. This is partly due to the widespread and persistent public perception that oil companies are quick to adjust retail prices and profit margins in response to input cost increases rather than decreases—a behavior characterized as the rockets and feathers phenomenon. With the market transparency unit becoming active in the German retail fuel market in 2014, the market has achieved full transparency with regards to consumer prices by providing a platform where prices can be compared in real-time via mobile apps or online portals.

Based on daily observations of gasoline retail price data for 12,804 fuel stations in Germany between 2014 and 2018, we assess whether, in the era of market transparency, input cost increases are still passed on to the customer more swiftly than input cost decreases. We use a pooled-panel asymmetric error correction model framework that allows for the direct comparison of the adjustment to input cost increases and decreases. Across different specifications, we test the robustness of the main findings to (i) the inclusion of controls for price changes of neighboring fuel stations, local weather conditions and demand shocks caused by public and school holidays, (ii) sample variation by areas of different population density, (iii) different pricing strategies across major brands, or (iv) the effect of spatial and temporal aggregation of the data set.

The results show that the pattern of rockets and feathers is the norm rather than the exception. We find evidence supporting the perception that input cost changes that squeeze the retail margin are passed on to consumers more swiftly than equivalent changes that stretch the margin. Ultimately, increased market transparency also works to the advantage of firms since they can effortlessly compare prices both within and outside their local markets and adjust prices accordingly, making tacit collusion or price coordination more likely. Finally, results further highlight substantial differences between the nature of adjustment exhibited by low- and high-frequency data—clearly, temporal aggregation of station-level data matters in appraising the prevailing adjustment mechanism.

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