## **Executive Summary**

Around 1990 Engle among others tried to investigate the impact of news on stock market volatility. This is important since financial markets are highly affected by news and the volatility level is crucial for many applications in the financial industry. However, in Engle's times there was no possibility to observe the impact of real news systematically, so he had to use a hypothetical approach where the arrival of news equals unexpected returns. This approach is known as the News Impact Curve. Although this concept is quite common for equities, its application to commodities has never been that popular. Since recent innovations in news analytics make the systematical investigation of the news impacts (based on sentiments generated by Thomson Reuters' automatic news scope engine) feasible, it is possible to enhance the traditional concept of News Impact Curves. The new approach is called Realized News Impact Curve and has never been used before.

After providing a brief overview of literature regarding commodities, information in context of the market and News Impact Curves, a non-parametric model, called realized volatility, is applied on high frequency data of several commodities to estimate their conditional ex post volatility. This realized volatility makes the application of the two mentioned approaches for modelling different News Impact Curves for several commodities possible.

Although the resulting curves are similar within one approach, they differ greatly when comparing the two methods. All the generated News Impact Curves using Engle's approach are consistent with current research findings. The Realized News Impact Curves provide absolutely different results compared to those computed based on Engle's approach. Nevertheless, the Realized News Impact Curve of gold appears to provide promising results showing a strong negative asymmetry while on the positive sentiment side there is almost no news impact on realized volatility. Comparing this curve with that resulting of Engle's approach, it is even more surprising, since a shift from positive to negative asymmetry is noticed. This suggests that gold is probably rather a financial asset than a commodity.

The results give surprising new insights into the analysis of news impacts and establishes the Realized News Impact Curve as a useful and revolutionizing tool to investigate real news impacts.