

# ***OIL MARKET STABILIZATION: THE PERFORMANCE OF OPEC+***

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## **Overview**

We examine the influence of OPEC+ on the level and volatility of oil prices. We extend the work of Pierru et al. (2018, 2020) by incorporating the participation of Allies in the OPEC+ group. Using monthly data from September 2001 through August 2021, we examine four successive regimes (Commodity Boom, Market Share Campaign, Pre-Pandemic OPEC+, Pandemic OPEC+). Based on the estimated model, we construct three counterfactual scenarios that distinguish the stabilizing impact of OPEC's own production decisions from that of its Allies. Like Pierru et al. (2018, 2020), we find that OPEC substantially reduced oil price volatility during the Commodity Boom period but did not attempt to mitigate volatility during the Market Share Campaign. When looking at the January 2017-August 2021 period, we find that OPEC+'s efforts to stabilize the market reduced price volatility by up to one half, both before and during the pandemic. We attribute most of that reduction to OPEC's own actions.

## **Methods**

Using monthly data (September 2001 – August 2021), we fit a structural model to the behaviour of OPEC's spare capacity. The model also represents the impact of the Allies' shut-in capacity on OPEC's own production decisions, and ultimately on the market price. In the model, OPEC's ability to dampen price volatility is limited by the difficulty to precisely estimate the size of shocks to demand and supply, as well as potential execution errors in implementing production decisions. We use the model to calculate several counterfactual pricing scenarios that show the implications if OPEC, or the Allies, or both, had failed to participate in the effort to stabilize the market at various times.

## **Results**

Despite extending the data by almost 7 years, introducing new market regimes and the impact of Allies' support, our estimates remain close to those previously obtained, which shows that the underlying model remains remarkably stable. Our counterfactual analysis corroborates our earlier results regarding the impact of OPEC's management of spare capacity prior to 2017. In addition, we find that OPEC+'s efforts to stabilize the market reduced price volatility by up to one half, both before and during the pandemic. We provide a sensitivity analysis of OPEC+'s impact on volatility with respect to the assumed elasticities of demand and supply. Our results remain directionally true in all cases considered.

## **Conclusions**

Our analysis shows that OPEC+'s efforts to stabilize the market reduced price volatility by up to one half, both before and during the pandemic. We attribute most of that reduction to OPEC's own actions whereas the impact of the Allies' support was mostly to support the price level. In that vein, OPEC+'s management of spare capacity barely impacted the average price over the pre-pandemic period, but, by countering the price collapse caused by the pandemic demand shock, lifted the average price by \$35.70 from May 2020 through August 2021.

## **References**

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