



ECONOMETRICS RESEARCH SEMINAR

- January 14, 2010, 2pm
- HSII (lecture room II, groundfloor)
Institut für Höhere Studien
Stumpergasse 56, 1060 Wien

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“Gasoline and diesel pricing: A cointegration analysis of the Austrian mineral oil market with a daily data set”

ABSTRACT

This paper analyzes the transmission of international crude oil prices to Austrian gasoline and diesel consumer prices. We employ a daily data set covering a period of nearly 10 years from the main mineral oil company in Austria. Using a 5-dimensional VECM with gross retail prices for diesel and gasoline, the corresponding mineral oil taxes and the Rotterdam crude oil price, we find two cointegration vectors. The hypothesis of long-run separation between gasoline and diesel price decisions is significantly rejected.

This non-separation result is expected taking into account the technical relationship between the two products in the refining process. Nevertheless, it is contradictory to assumptions in literature. Normally, only one product price is estimated at a time, often in a non-linear single equation framework. Under this assumption of a separate calculation of the two retail prices, we estimate the long-run equilibrium relationship between retail prices, taxes, and international crude oil prices. We find that an increase (decrease) of the crude oil price will be transmitted to the gross gasoline price around 100 percent and to the gross diesel retail prices by more than 100 percent. This may reflect different market power in both product markets. Obviously, the Austrian diesel market is tighter than the one for gasoline.