New Vehicle Sales in Ontario as Influenced by Changes in Retail Regular Unleaded Gasoline Prices

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Abstract

This paper examines the dynamic relationship between changes in retail unleaded gasoline prices and demand for North American, Japanese, and Abroad vehicles sold in Ontario. Using monthly data for the period January 1990 to December 2007, I estimate a long-run equilibrium, immediate period, and a short-run demand models with error correction to measure the departure from long-run equilibrium. Elasticities in response to changes in gasoline prices are computed for the three broad continental brands as agents in the market form decisions on purchases. The empirical results support the conjecture that agents do not alter their demand for new vehicles if fluctuations in gasoline prices are perceived to be short term. Immediate period results are similar to short-run effects with slightly higher elasticity magnitudes. In the long-run however, demand for all three continental brands fall as gasoline prices increase. Furthermore, the North American brands collectively are less affected by long-run fluctuations in gasoline prices as they are among the leaders in offering purchase incentives to offset the shortfall incurred by rising gasoline prices.