

TIME SERIES MODELING FOR 'PUSH-PULL' BEHAVIOUR OF ECONOMIC VARIABLES A FRONTIER REGRESSION APPROACH

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Abstract

Some economic variables such as price series often exhibit different rates for their upward or downward movements while oscillating over time interval. In this paper, an attempt has been made to model such push-pull behavior as a Frontier regression. The autoregressive process of order two provides a reasonable fit for the given series. On the basis of the third central moment of the residuals of the estimated model, the estimate of the push factor was found to be significant at five percent level of significance. Hence the push factor exists in the price series of beef in Botswana for the stipulated time period. Statistical issues involved are highlighted in the paper.

Keywords and phrases: econometrics, time series, regression.

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