

ECONOMETRIC ANALYSIS OF QUEUING PROBLEMS IN NIGERIA PETROL STATIONS: A CASE STUDY ON KETO PETROL STATION AND CONOIL PETROL STATION.

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ABSTRACT

This paper examines the econometric analysis of queuing problems in petrol stations with particular reference to Conoil petrol station and Keto Petrol Station, both in Nigeria. This paper captures the classification of queuing system, types of queuing stations and various queuing discipline. The Data for this study was carried out by direct observational method one of the widely used methods of gathering primary data for research purposes. Two multiple regression functions were used to model queuing in the two petrol stations. The parameters of the regression models are estimated using the estimation method of ordinary least squares. The usage of OLS is based on its property of BLUE (in the class of linear unbiased estimators, the OLS estimator has the minimum variance). From this study, we are able to find out that people spend more time on the queue on Friday than any other day of the week and people also spend more time evening than any other time of the day in the Conoil petrol station, while in the Keto petrol station, people tend to spend more time in the queue on Thursday than any other day of the week, and queuing occurs most in the night, than any other time of the day. It is also observed that sales volume and number of customers which causes queues in petrol station are as a result of internal factors such as poor staffing of petrol station, number and inefficiency of fuel pumps, location of the petrol station and economic status of the costumers.

Keywords: *Nigeria, Oil, Keto Petrol*