An Application of the Single Equation Regression Model

Authors : S. K. Ashiquer Rahman

Abstract : Recently, oil has become more influential in almost every economic sector as a key material. As can be seen from the news, when there are some changes in an oil price or OPEC announces a new strategy, its effect spreads to every part of the economy directly and indirectly. That's a reason why people always observe the oil price and try to forecast the changes of it. The most important factor affecting the price is its supply which is determined by the number of wildcats drilled. Therefore, a study about the number of wellheads and other economic variables may give us some understanding of the mechanism indicated by the amount of oil supplies. In this paper, we will consider a relationship between the number of wellheads and three key factors: the price of the wellhead, domestic output, and GNP constant dollars. We also add trend variables in the models because the consumption of oil varies from time to time. Moreover, this paper will use an econometrics method to estimate parameters in the model, apply some tests to verify the result we acquire, and then conclude the model.

Keywords : price, domestic output, GNP, trend variable, wildcat activity

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