ANALYSIS AND PREDICTION OF THE ELECTRICAL CONSUMPTION IN TUNISIA

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Abstract

The control of energy consumption, in particular the consumption of electricity, is one of the pillars mentioned by the public authorities for the implementation of the energy transition. Therefore, it is necessary to adopt a policy aiming at reducing the consumption of energy in our society. In this article, an empirical study, on the consumption of electricity to customers of the low tariff voltage, is conducted to determine the relationship between the consumption of electricity, economic growth and the demographic evolution in Tunisia. We concentrated on the short-term forecast of the consumption of electricity to customers of the low tariff voltage. The explanatory variables keys of the model of consumption of Tunisia are real GDP per capita, the global GDP, the rate of urbanization and the population. Using the method of PLS (Partial Least Squares regression). It is an approach to the analysis of the data; it allows achieving a principal components analysis with missing data, even when the number of variables is high. The entire analysis is made using the SIMCA-P statistical software.

Keywords: PLS regression, consumption of electricity.

JEL classification: A19, C10