

Validation of the Linear Trend Estimation Technique for Prediction of Average Water and Sewerage Charge Rate Prices in the Czech Republic

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Abstract : The article deals with the issue of water and sewerage charge rate prices in the Czech Republic. The research is specifically focused on the analysis of the development of the average prices of water and sewerage charge rate in the Czech Republic in the years 1994-2021 and on the validation of the chosen methodology relevant for the prediction of the development of the average prices of water and sewerage charge rate in the Czech Republic. The research is based on data collection. The data for this research was obtained from the Czech Statistical Office. The aim of the paper is to validate the relevance of the mathematical linear trend estimate technique for the calculation of the predicted average prices of water and sewerage charge rates. The real values of the average prices of water and sewerage charge rates in the Czech Republic in the years 1994-2018 were obtained from the Czech Statistical Office and were converted into a mathematical equation. The same type of real data was obtained from the Czech Statistical Office for the years 2019-2021. Prediction of the average prices of water and sewerage charge rates in the Czech Republic in the years 2019-2021 were also calculated using a chosen method -a linear trend estimation technique. The values obtained from the Czech Statistical Office and the values calculated using the chosen methodology were subsequently compared. The research result is a validation of the chosen mathematical technique to be a suitable technique for this research.

Keywords : Czech Republic, linear trend estimation, price prediction, water and sewerage charge rate

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