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INVENTION AND INNOVATION EXHIBITION (I-JaMCSIIIX) 2023

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Forecasting The Open Unemployment Rate in Central Sulawesi Province Using The Autoregressive Integrated Moving Average (ARIMA) Method

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Abstract— The Open Unemployment Rate (TPT) is one of the problems in Central Sulawesi Province. The higher the level of open unemployment, the more impact it will have on the economy and social welfare. The Open Unemployment Rate in Central Sulawesi Province according to BPS data for 2022, is 3,00%. Efforts are needed to overcome the increasing percentage of unemployment rates, namely by forecasting the Open Unemployment Rate in Central Sulawesi Province in the next few periods using time series forecasting analysis with the Autoregressive Integrated Moving Average (ARIMA) method. From the results of the forecasting analysis for the next 5 years from 2023-2028, the MAPE value was obtained at 11,82307%, which is in the range of 10%-20%, which means that the ability of the forecasting model for the open unemployment rate in Central Sulawesi Province in the next 5 years is good. The graph that is formed shows that the forecast percentage is increasing so that the growth of the workforce is not balanced with job opportunities and the limited job opportunities are influenced by economic growth. It is hoped that the results of this research can be used as a policy consideration and reference tool so that it can overcome the percentage of Open Unemployment Rate in Central Sulawesi Province.

Keywords—Central Sulawesi Province, Open Unemployment Rate, Autoregressive Integrated Moving Average (ARIMA)



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