World Academy of Science, Engineering and Technology International Journal of Economics and Management Engineering Vol:18, No:05, 2024

The Relationship Between Hourly Compensation and Unemployment Rate Using the Panel Data Regression Analysis

Authors: S. K. Ashiquer Rahman

Abstract : the paper concentrations on the importance of hourly compensation, emphasizing the significance of the unemployment rate. There are the two most important factors of a nation these are its unemployment rate and hourly compensation. These are not merely statistics but they have profound effects on individual, families, and the economy. They are inversely related to one another. When we consider the unemployment rate that will probably decline as hourly compensations in manufacturing rise. But when we reduced the unemployment rates and increased job prospects could result from higher compensation. That's why, the increased hourly compensation in the manufacturing sector that could have a favorable effect on job changing issues. Moreover, the relationship between hourly compensation and unemployment is complex and influenced by broader economic factors. In this paper, we use panel data regression models to evaluate the expected link between hourly compensation and unemployment rate in order to determine the effect of hourly compensation on unemployment rate. We estimate the fixed effects model, evaluate the error components, and determine which model (the FEM or ECM) is better by pooling all 60 observations. We then analysis and review the data by comparing 3 several countries (United States, Canada and the United Kingdom) using panel data regression models. Finally, we provide result, analysis and a summary of the extensive research on how the hourly compensation effects on the unemployment rate. Additionally, this paper offers relevant and useful informational to help the government and academic community use an econometrics and social approach to lessen on the effect of the hourly compensation on Unemployment rate to eliminate the problem.

Keywords: hourly compensation, Unemployment rate, panel data regression models, dummy variables, random effects model, fixed effects model, the linear regression model

Conference Title: ICEE 2024: International Conference on Economics and Econometrics

Conference Location : Sydney, Australia **Conference Dates :** May 16-17, 2024