A Multifactor Prediction Model for Estimating the Cost of Living and Measuring the Disparity with the Minimum Wage in the Philippines

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ABSTRACT

In this study, socio-economic factors influencing the wage standards were identified. Using historical data composed of a 64 year period from reliable sources such as the Philippine Statistics Authority (PSA) and premier business and investment research platforms, the relationship, significance, and the influence of the factors to the standard cost of living were determined. Findings reveal that there are five significant factors: GDP, GDP per Capita Income, Inflation Rate, Labor Force Participation Rate (LFPR), and the

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Working Population. Among the significant factors, GDP per Capita Income and the Working Population have strong influence; GDP and inflation rate have moderate influence while the LFPR has weak influence on the cost of living. Further, by employing multiple linear regression analysis, a prediction model was developed to estimate the standard cost of living. Populating the model with the past 10 year data, the cost of living was predicted and the disparity with the minimum wage was measured at P240.7 which is 42% of the P570 minimum wage at the time of this study. With the proposed wage legislation improvements, fair minimum wages for the next 10 years were estimated using Yellen's Efficiency formula.