

Impact of Economic Indicators on Household Consumption in Algeria: A Principal Component Approach

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Abstract: This study focuses on key economic indicators that significantly influence household consumption, employing Principal Component Analysis (PCA) techniques in R Studio to identify and extract the most critical indicators contributing to household consumption. It also examines the relationships and correlations between these indicators and household consumption. The analysis explores temporal trends and changes in household consumption alongside economic indicators such as oil prices, inflation rate, unemployment rate, real effective exchange rate index, government expenditure, and disposable household income. Findings indicate a continuous increase in household consumption over time. Moreover, results reveal a positive relationship between household consumption and variables such as disposable household income, government expenditure, oil prices. Conversely, the analysis highlights a negative relationship between household consumption and variables such as inflation rate, unemployment rate, and the real effective exchange rate index.

Keywords: Household Consumption, Economic Indicators, Principal Component Analysis (PCA), Algeria

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