<u>Abstract</u>

In the case of using classical linear regression models for time series, researchers usually deal with equal frequencies for all the variables. They cannot directly apply such models to a mixed-frequency dataset. The Mixed Data Sampling (MIDAS) regression models deal with this type of data; typically the economic indicators from those observed daily, monthly, quarterly to those yearly. In this study, we introduce MIDAS regression approach which is relatively assumed as a new area. We will explain its ability of dealing with mixed frequency data, and its efficiency of improving parameters estimation and forecasting performance in the presence of extreme observations. To the best of author's knowledge, this is the first research that examines the relationship between the real GDP in Palestine and other indicators using MIDAS regressions. The classical temporal aggregation method is compared to the two types of MIDAS regressions; the restricted and the unrestricted, to build both long-run and short-run relationships. The study results exhibited that both U-MIDAS and R-MIDAS were better than the classical Time-Averaging method in reducing forecasting errors.

The results exhibited that the quarterly Palestinian GDP in the long-run affected by its cost of imports in the second month computed in each quarter, also, the quarterly GDP has increasing general trend and affected by its first lag and the quarterly Employment Rate In Israel and Settlements, and all these variables have significant positive relationship with GDP. In the short-run, the results showed that the quarterly Palestinian GDP is affecting by the second-month and the third-month of the cost of imports of Palestine.