

ABSTRACT

LAUREL, R. F., AVELLANO, D. F., AND MIRANDA, A. P., Effect of Macroeconomic Variables on the Output of Key Manufacturing Enterprises in the Philippines. De La Salle University-Dasmariñas, Dasmariñas, Cavite, Bachelor of Science in Business Administration Major in Economics, March 2007. Adviser: Mr. Benjamin A. Usigan

A study was conducted to determine the effect of macroeconomic variables on the output of key manufacturing enterprises in the Philippines. Specifically, it aimed to achieve the following objectives; determine the trend of output of KME in the Philippines; determine the trend of selected macroeconomic variables such as inflation rate, investment expenditures, foreign exchange rate, real GDP (as a measure for domestic demand), international oil price, producer's price, wage rate and unemployment rate vis-à-vis output of KME; assess the effect of inflation rate, investment expenditures, foreign exchange rate, real GDP, international oil price, producer's price, wage rate and unemployment rate on the output of KME; and determine output elasticity of KME with respect to change in the macroeconomic variables;

Macroeconomic variables and output of KME from 1994 to 2005 were analyzed using trend analysis. To determine the effects of macroeconomic variables on the output of KME, multiple linear regression was employed. Granger causality test was used to determine the causation between the macroeconomic variables and the output of KME. Augmented Dickey-Fuller test was employed to determine the stationarity in the variables. Moreover, stepwise regression was utilized to obtain the

final regression model.

The result of the Augmented Dickey-Fuller test revealed that selected macroeconomic variables were nonstationary at levels except inflation rate, therefore, differencing the variables was performed to avoid spurious results. The result of Granger causality test revealed that by using two-lagged difference, it is the output of KME that granger caused inflation rate and not vice versa. This implies that inflation rate was affected by the output of KME. On the other hand, international oil price granger caused output of KME and vice versa which implies that output of KME was affected by international oil price and vice versa. At five-lagged difference, the study found that it is output of KME that granger caused real GDP (domestic demand) and not vice versa. This implies that changes in the real GDP can be predicted by the output of KME. The output elasticity of KME, with respect to changes in the macroeconomic variables, was inelastic which implies that output of KME response to changes in the macroeconomic variables was relatively weak.

It was found that foreign exchange rate, real GDP (domestic demand), and producer's price had a significant relationship to output of KME. Foreign exchange rate and real GDP have a positive effect on the output of KME while producer's price had a negative effect. The p value of the F stat was significant proving that the whole equation was valid. Moreover, it was found that fluctuations in the foreign exchange rate, real GDP, and producer's price could adversely or favorably affect manufacturing production. This, in turn, affects the contributions of the manufacturing sector to the development and sustainable growth of the economy. Manufacturing sector remained

relatively strong notwithstanding the repeated hike in oil prices, depreciation of the peso, and political instability.

The worthy performance of the manufacturing sector in the economy should be given further attention. It is recommended that the government, through deliberate and broad analysis, should formulate policies and strategies to further improve the performance manufacturing sector due to its worthy contribution to the economic growth of the country. Moreover, further studies are also recommended for the verification of the results obtained from this study.

