

Abstract

This paper aims to investigate the correlation between the output cycle and the business cycle of the Czech Republic's core industry, the automotive industry. The paper begins by analysing the volatility of each variable, and finds that the trends of the automotive industry output cycle and the business cycle align, while the automotive industry output cycle keeps lagging behind the business cycle. Secondly, this paper adopts the VAR model to examine the relationship between the Czech automotive output and its macroeconomic indicators, using the real GDP and the Gross Value added (GVA) to represent the macroeconomic situation. The results show that there is a correlation between Czech automotive industry output and the macroeconomy, but the correlation is asymmetric, which means the automotive industry is more sensitive to macroeconomic shocks but has weaker impact on the macroeconomy. Finally, this paper also measures the correlation between the automotive industry and monetary policy (M2) and finds that the monetary policy shows strong stability and independence, which can affect the progress of the automotive industry, but no reverse effect has been observed.