Phillips Curve Estimation in an Emerging Economy: Evidence from Sub-National Data of Indonesia

Authors : Harry Aginta

Abstract : Using Phillips curve framework, this paper seeks for new empirical evidence on the relationship between inflation and output in a major emerging economy. By exploiting sub-national data, the contribution of this paper is threefold. First, it resolves the issue of using on-target national inflation rates that potentially causes weakening inflation-output nexus. This is very relevant for Indonesia as its central bank has been adopting inflation targeting framework based on national consumer price index (CPI) inflation. Second, the study tests the relevance of mining sector in output gap estimation. The test for mining sector is important to control for the effects of mining regulation and nominal effects of coal prices on real economic activities. Third, the paper applies panel econometric method by incorporating regional variation that help to improve model estimation. The results from this paper confirm the strong presence of Phillips curve in Indonesia. Positive output gap that reflects excess demand condition gives rise to the inflation rates. In addition, the elasticity of output gap is higher if the mining sector is excluded from output gap estimation. In addition to inflation adaptation, the dynamics of exchange rate and international commodity price are also found to affect inflation significantly. The results are robust to the alternative measurement of output gap

Keywords : Phillips curve, inflation, Indonesia, panel data
Conference Title : ICDCM 2022 : International Conference on Developing Countries and Macroeconomics
Conference Location : Paris, France
Conference Dates : August 30-31, 2022