Exchange rate volatilities and disaggregated bilateral exports of Malaysia to the United States: empirical evidence

Abstract

This study examines the impacts of exchange rate volatilities on real total export and all the subcategories of real total export by standard international trade code (SITC) from 0 to 9 of Malaysia to the United States (US). Exchange rate volatilities are computed by the moving standard deviation with order three [MSD(3)] and estimated by the generalized autoregressive conditional heteroscedasticity (GARCH) model, more specifically the GARCH(1,1) model. The results of the autoregressive distributed lag (ARDL) approach show insignificant impacts of exchange rate volatilities on real total export in the level but some significant impacts of exchange rate volatilities on the subcategories of real total export in the first differences. There are more cases when exchange rate volatility estimated by the GARCH(1,1) model are found to have significant impact on exports. The significant impacts of exchange rate volatilities are found for some sectors of exports and can be negative or positive. Exporters of Malaysia shall improve their products through innovation and high technology and also to further diversify their exports in order to reduce the impact of exchange rate volatility.