Why are there always inconsistent answers to the relation between the PPI and CPI? Re-examination using Panel Data Analysis

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Abstract: To explore why empirical research on the relation between the PPI and CPI has always generated inconsistent answers, this research uses the Panel Data Analysis method and the Dumitrescu-Hurlin Panel Causality Tests to re-examine the causal relationship between the Producer Price Index (PPI) and the Consumer Price Index (CPI). Thus, by comparing the monthly data from January 1999 to August 2015 of the ASEAN countries and the G7 countries, we empirically prove the existence of a causal relationship between PPI and CPI in national industrial development patterns and regional economies. In addition, an advanced inference on the interaction in the aforementioned countries is performed using the industrial development pattern within the same industry. The empirical results demonstrate that the PPI of the ASEAN countries shows a significant one-way impact on CPI, while a two-way causality relationship exists between the PPI and CPI in the G7 countries. Considering national effects, a very significant two-way causality relationship exists between the PPI and the CPI of both the G7 countries and the ASEAN countries, fully supporting the contention that the innovative inferences proposed in this study are different from the existing literature.

Keywords: Producer Price Index, Consumer Price Index, Panel Data Analysis, Panel Granger Causality Test, G7, ASEAN

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