TESTING THE PURCHASING POWER PARITY:
EVIDENCE OF THAILAND AND
TRADE PARTNERS

by

Thanyporn Reunrojrung

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Faculty of Economics, Thammasat University
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ABSTRACT

This study attempts to examine the validity of PPP between Thailand and two groups of trade partners, i.e. FTA partners and Southeast Asian (SEA) neighbors. Three forms of PPP, i.e. relative PPP, weak PPP and strong PPP, are investigated by applying both traditional time series approach and recently developed panel approach. Thai bath is used as the numeraire in constructing the real exchange rate.

Employing time series approach, no evidence in favor of relative PPP can be found by univariate unit root tests of real exchange rates. Engle-Granger and Johansen cointegration tests yield little support weak PPP for Japan while results of other countries provide no credible indicator of PPP.

Panel unit root tests are also conducted, the outcomes fail to reject the non-stationarity in the panel of real exchange rates of FTA partners, but provide strong evidence for PPP among Thailand and SEA neighbors. Although PPP is expected to hold in the group of FTA partners than the SEA partners due to the lower trade barriers resulting from FTA, this finding can be explained by other reasons. 1) FTA does not always reduce trade barriers 2) The period of FTA may not be long enough 3) Trade between SEA countries (including Thailand) are considerable. By the way, cointegration relationships between the exchange rate and the price ratio are found for both groups with stronger evidences in the group of SEA neighbors, but no evidence in favor of strong PPP can be observed.

Due to the issue of cross-sectional dependence, tests based on the US dollar numeraire are also carried out in order to inspect the impact of the numeraire currency on the outcomes and to assure the results. The major change is that panel unit root tests of the first generation fail to reject the unit root in the panel of SEA countries’ real exchange rate. However, tests accounting for cross-sectional dependence can overcome this problem and confirm relative PPP between Thailand and SEA neighbors. Common countries’ characteristics and lower transaction cost can explain why Thai baht numeraire provides more convincing evidence compared to the US dollar numeraire.