
Long-run validity of purchasing power parity and rank tests for cointegration for Central Asian countries

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This study finds that Purchasing Power Parity (PPP) holds in the long-run for Azerbaijan, Kazakhstan and Kyrgyzstan, based on Breitung's (2001) rank tests for cointegration. Results from further analysis indicates that nominal exchange rates and relative prices are nonlinearly interrelated. Trade barriers, transportation costs and government intervention in the pricing system in these countries may have resulted in the establishment of the above-mentioned nonlinear relationship.

I. Introduction

The existence of long-run relationship between nominal exchange rate and relative price, as postulated by the Purchasing Power Parity (PPP) hypothesis, has been extensively investigated over the past three decades. The attractiveness of testing this hypothesis is that it may provide useful guidelines for economic agents. For instance, the validity of PPP hypothesis reflects well-integrated goods markets and henceforth suggesting the nonexistence of arbitraging opportunity between the domestic and foreign countries. Besides, the validity of PPP enables the prediction of long-run exchange rate movement via PPP model or its extended monetary models.

Previously, most studies are conducted using data from a substantially large range of developed

and developing countries; see Taylor (2003), Taylor and Taylor (2004) and Taylor (2006). Recently, Doğanlar (2006) for the first time in the literature, contributes to the discussion by examining the various versions of PPP formulations for Central Asian countries (Azerbaijan, Kazakhstan and Kyrgyzstan), which have undergone transitional economy system and thereby trade structure since the broke up of the Soviet Union in 1991. Based on various well-accepted methodologies including the Engle and Granger's (1987) test, Johansen's (1988, 1991) multivariate cointegration test, Fully Modified Ordinary Least Squares (FOLS) procedure of Phillips and Hansen (1990), as well as the more recently available Autoregressive Distributed Lag (ARDL) technique of Pesaran and Shin (1999), the author was unable to reject the null hypothesis of no cointegration (implying no long-run

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