

Comments

The paper estimates the long-run equilibrium real effective exchange (ERER) and computes its misalignment with the actual REER, using annual data from FY78 to FY05 based on co-integration technique. As pointed out by the authors, a number of researchers have estimated the ERER, but none has quantified the degree of misalignment for Pakistan. Given that the potential cost of real exchange rate misalignment has escalated particularly with growing financial integration, this paper makes an important contribution to economic literature as well as provides input to policy discussions. Another important feature of this paper is that this uses the actual REER based on the basket and weights used by the central bank. Thus, the information content in this REER series is more appropriate for such analysis.

Considering the substantial difficulties in defining and estimating the long run ERER, efforts by these authors is appreciable. However, there are a few comments I would like to offer:

1. The paper estimates the degree of misalignment based on theoretical model of ERER developed by Edwards (1988). This model was later refined by Edward in 1989 and then again in 1994. This paper also draws upon the work of Elbadawi (1994), and Montiel (1997). Thus, the reduced form equation used by the authors is a modified form of the earlier work. But what is important is that the authors did not modify the models of earlier studies, instead they simply added variables in the final equation. Thus, in a sense the equation used by the author is single equation estimation, not a reduced form equation as claimed by authors. As a consequence, any policy inference could be misleading.
2. The real exchange rate is generally defined in two ways: (a) in terms of deviations from purchasing power parity, and (b) in terms of the ratio of domestic prices of non-tradeables to tradeables. In the literature, also termed as external and internal RER respectively in the literature. This paper uses definition based on deviation from purchasing power parity for computing RER. However, while describing the theoretical channels for the impact of different variables used in the model, the author uses two-good (tradeable and non-tradeable) framework. In other words, author is formulating hypotheses using one definition of RER and testing these hypotheses using another definition as an empirical proxy. But these two definitions will be equivalent only under certain restrictive conditions, which are not always met. Though there is some empirical work on the quantitative relationship between the two measures on RER, the relationship depends on the law of one price for tradeable goods. As pointed out by Hinkle and Montiel (1999) "*if the law of*

one price does not hold or holds only loosely as a long run tendency, then the effect of exchange rate movements on the internal RER will be muted, the internal and external RERs will diverge and the external RER will not be a reliable indicator of movements in domestic relative price.” Therefore, the authors should have tested the condition entailed by the law of one price for Pakistan before using external RER as a proxy for internal RER.

3. In order to compute the degree of misalignment, the authors have used ‘permanent’ values of economic fundamentals, which have been calculated by removing short run fluctuations in explanatory variables using Hodrick-Prescott (HP) filter. The misalignment is simply the difference between estimated RER (based on permanent values of explanatory variables) and actual RER. However, there are certain limitations of using HP filter. The literature shows that this mechanical detrending based on the HP filter can lead investigators to report spurious cyclical behavior. In view of drawbacks of the standard HP filter technique, it is suggested that other techniques to estimate long run estimates, such as fully modified OLS (FMOLS) may be used.

Syed Sajid Ali

Research Economist
Research Department
State Bank of Pakistan

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