



CEPII

CENTRE
D'ÉTUDES PROSPECTIVES
ET D'INFORMATIONS
INTERNATIONALES

N° 2009 – 38

December

On Equilibrium Exchange Rates: Is Emerging Asia Different?

Antonia López-Villavicencio

Valérie Mignon

NON-TECHNICAL SUMMARY

Fixed exchange-rate regimes, and more specifically the Chinese exchange-rate regime, have often been blamed for being one major building block of global imbalances. In particular, Chinese authorities have been frequently accused of maintaining the value of the yuan against major currencies at a low level to foster China's spectacular growth, through the promotion of its exports. This export-led growth has generated surging Chinese current account surpluses, creating a major source of tension among trading partners who experienced important trade deficits with China (especially the United States and European Union). The persistent misalignment of the yuan—and more generally of other emerging Asian currencies—may thus be a key factor influencing global imbalances.

Within this current context of global imbalances, it is crucial for monetary authorities to have a means to assess long-run values for the real exchange rates that would be consistent with the realization of a long-run stable macroeconomic equilibrium. To this end, various approaches have been proposed in the literature, among which the Behavioral Equilibrium Exchange Rate (BEER) based on the existence of a long-run relationship between the real exchange rate and a set of economic fundamentals. The estimation of this relationship provides the equilibrium value of the considered real exchange rate, and the speed of the adjustment of the observed exchange rate towards its equilibrium level may be obtained from the estimation of the corresponding vector error correction model. Indeed, according to the standard view, the deviations of the observed exchange rate from its equilibrium value are transitory and the adjustment process exhibits a quick mean-reverting dynamics.

This common wisdom may however be challenged by the observation of long-lasting misalignments, especially over the last two decades, notably concerning emerging Asian currencies. In this paper, our aim is to investigate this slow dynamics of the adjustment process of the observed real exchange rates to their equilibrium values

within a nonlinear framework. To this end, we retain a smooth transition model, which can be thought as a reduced form of structural models of fundamental exchange rates accounting for various nonlinearities.

Relying upon a wide sample of countries, we show that the adjustment process of the real exchange rate towards its equilibrium value is nonlinear for emerging Asian countries, while it is linear for the G7 currencies. More especially, there exists an asymmetric behavior of the real exchange rate when facing an over or undervaluation in Asia: the adjustment speed is more important in case of undervaluation, a result that may be explained by the international pressure to limit undervaluations. However, this adjustment being long-lasting, undervaluations may persist over time, as observed since the beginning of the 1990s.

JEL Classification: F31, C23.

Key Words: Equilibrium exchange rates, misalignments, panel smooth transition models, emerging Asia.