A CENTURY AND A HALF OF PURCHASING POWER PARITY IN BRAZIL – 1861-2011: A COINTEGRATION ANALYSIS WITH STRUCTURAL BREAKS*

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Abstract

This work tests the validity of the purchasing power parity hypothesis in its absolute and relative versions for the Brazilian case through the period 1861-2011. For this purpose, after testing for the existence of unit root under the occurrence of structural breaks, cointegration tests have been carried out, with the inclusion of dummy variables to account for it. The results so obtained might imply, in one hand, the rejection of the absolute version of the purchasing power parity hypothesis, and at the other, the non rejection of its relative version.

Keywords: PPP, cointegration, structural break

1. Introduction

Since the pioneering study by Cassel (1916, 1918), the doctrine, theory or hypothesis of the Purchasing Parity Power (PPP) has been the target of countless empirical studies. Among them, it is worth mentioning Abuaf and Jorian (1990), Adler and Lehmann (1983), Cheung and Lai (1993), Diebold, Husted and Rush (1991), Dutton and Strauss (1997), Edison, Gagnon and Melick (1997), Frenkel (1981) and Lothian (1997).

The absolute version of the PPP defines a long term equilibrium relation between the nominal exchange rate (E) and the levels of domestic (P) and international prices (P*):

$$P_t = E_t P_t^* \tag{1}$$

That is to say, in equilibrium, the rate of real exchange rate $Q_t = E_t P_t^* / P_t$ must be equal to the unity.

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