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# Stochastic Convergence in Latin America Countries: Panel Stationary Test with Smooth and Sharp Breaks/ Latin Amerika Ülkelerinde Stokastik Yakınsama: Yumuşak Değişmeli ve Keskin Kırılmalı Panel Durağanlık Yaklaşımı

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## A B S T R A C T

This study investigates the stochastic convergence of 17 Latin American countries to the US economy for the period 1950 to 2017. Unit root tests are used to test stochastic convergence hypothesis for individual Latin American countries. These methods include the possibility of sharp and smooth structural changes by using the estimation of a trend function advanced by Li et al. (2015). The results show that when endogenous sharp and smooth structural changes are considered several Latin American countries exhibit stochastic convergence except Barbados, Bolivia, Brazil, Peru, and Uruguay. Additionally, using recently developed Fourier-type tests, we find evidence that stochastic convergence in almost all Latin American countries is greater power than a linear method.

**KEYWORDS** Stochastic Convergence; Latin American Countries; Stationary Test; Trend function; Sharp and Smooth Breaks; Fourier Function

**JEL** C32, O40, O54