

Schumpeterian Innovation and Regional Mobility in Paraná: A Markov Chain Analysis (2006–2021)

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ABSTRACT

Innovation is unevenly distributed across regions, shaping long-term development trajectories. This article analyzes the evolution of innovation dynamics in Paraná from 2006 to 2021, with the objective of identifying persistence and mobility among municipalities. Using a first-order Markov chain applied to employment in knowledge-intensive activities and intellectual property registrations, the study reveals strong innovation persistence and limited upward mobility. High- and low-innovation groups remain largely stable, reinforcing technological disparities. The findings offer empirical evidence to support policies aimed at reducing territorial inequalities and strengthening local innovation capacity.

KEYWORDS: Innovation Dynamics; Markov Chains; Technological Mobility; Regional Development.

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