

# Chaos in credit–constrained emerging economies with Leontief technology

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## Abstract

This work provides a framework to analyze the role of financial development as a source of endogenous instability in emerging economies subject to moral hazard problems. We study a piecewise linear dynamic model describing a small open economy with a tradable good produced by internationally mobile capital and a country specific production factor, using Leontief technology. We demonstrate that emerging markets could be endogenously unstable when large capital in–flows increase risk and exacerbate asymmetric information problems, according to empirical evidence. Using bifurcation and stability analysis we describe the properties of the system attractors, we assess the plausibility for complex dynamics and we find out that border collision bifurcations can emerge.

*Key words:* Endogenous instability, emerging economies, moral hazard, complex dynamics, border collision bifurcations, piecewise linear map.

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