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Chaotic dynamics in credit constrained emerging economies

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Abstract

This paper analyzes the role of financial development as a source of endogenous instability in small open economies. By assuming that firms face credit constraints, our model displays a complex dynamic behavior (with high-period cycles or even chaotic dynamic patterns) for intermediate values of the parameter representing the level of financial development of the economy. We derive sufficient conditions for global stability and we prove that chaos appears via a border collision bifurcation. The basic implication of our model is that economies experiencing a process of financial development are more unstable than both very underdeveloped and very developed economies.

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1. Introduction

This paper considers a model where the process of financial development could be a source of endogenous instability in small open economies. Our basic macroeconomic

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