Dynamics of Continuous, Discrete and Impulsive Systems
Series **B:** *Applications & Algorithms* **25 (2018)** 409-426

A POST KEYNESIAN FRAMEWORK OF EXCHANGE RATE DETERMINATION: A DYNAMICAL APPROACH

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Abstract. This article presents a mathematical approach to exchange rates dynamics. Following a post Keynesian approach for exchange rate determination, we develop a model where the dynamics are driven by expectations. The model is capable of producing a rich variety of dynamic behaviors, whose complexity is characterized by using the entropy measure. It is important to note that this analysis does not use random shocks to introduce irregular fluctuations; these arise because of the presence of intrinsic forces associated with nonlinear relations. This work also introduces the notion of "economic regime" or "regime of performance" and shows how it can be used to analyze exchange rates under the post Keynesian framework. This approach contributes to the debate upon these issues, since literature has not provided a comprehensive explanation regarding the volatility of exchange rates in emerging peripheral economies.

Keywords. Exchange rate; Regime Dynamics; Symbolic Dynamics; Entropy

AMS (MOS) subject classification: 91B55; 91B64

1 Introduction

One of the most striking phenomena in the international arena is the transformation of the geography of money (i.e. the global currency space), which is characterized by complex networks of political and commercial relationships between nations [13, 18]. This geography of money reflects the distribution of political and economic power, which results in an asymmetrical use of different currencies. This explains why Latin American countries are unable to borrow abroad in their own currencies. This fact is not only relevant because of its economic implications but also because it is strongly related to national sovereignty and political stability. Thus, if we want to understand the