Maxwell’s Economic Demon Hypothesis and the Impossibility of Economic Convergence of Developing Economies

Authors: Firano Zakaria, Filali Adib Fatine

Abstract: The issue of convergence in theoretical models (classical or Keynesian) has been widely discussed. The results of the work affirm that most countries are seeking to get as close as possible to a steady state in order to catch up with developed countries. In this paper, we have retested this question whether it is absolute or conditional. The results affirm that the degree of convergence of countries like Morocco is very low and income is still far from its equilibrium state. Moreover, the analysis of financial convergence, of the countries in our panel, states that the pace in this sector is more intense: countries are converging more rapidly in financial terms. The question arises as to why, with a fairly convergent financial system, growth does not respond, yet the financial system should facilitate this economic convergence. Our results confirm that the degree of information exchange between the financial system and the economic system did not change significantly between 1985 and 2017. This leads to the hypothesis that the financial system is failing to serve its role as a creator of information in developing countries despite all the reforms undertaken, thus making the existence of an economic demon in the Maxwell prevail.

Keywords: economic convergence, financial convergence, financial system, entropy

Conference Title: ICFBR 2023: International Conference on Finance, Banking and Regulation
Conference Location: Amsterdam, Netherlands
Conference Dates: August 03-04, 2023