

Investigating the effect of electronic banking on selected macroeconomic variables in Iran with a system dynamics approach

Ahmad Salah Manesh

Abdul Majid Ahangari

Rassam Moshrefi

Ahmad Dehghani Ahmad Abad

Abstract

In recent years, electronic banking and the use of electronic payment tools have expanded, and this has led to changes in monetary variables that can have many economic effects. In this regard, in this study, the effect of electronic banking on selected economic variables in Iran has been investigated using modeling and simulation of system dynamics. The designed model includes two parts, monetary and real, which also includes electronic banking. After simulating and validating the model, in the form of designed scenarios, the effects of electronic banking on economic variables are investigated. The results of applying different scenarios showed that the increase of ATMs has reduced the volume of liquidity, price index, capital accumulation and production and the increase of sales terminals has increased the mentioned variables. Simultaneous increase in ATMs and sales terminals also increased liquidity and price index and had no effect on capital accumulation and production. The results also showed that in this case, increasing the volume of legal reserves as a control policy can neutralize some of the effects of these instruments on liquidity.

Keywords: *Liquidity, Inflation, GDP, Electronic Banking, System Dynamics Method*

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