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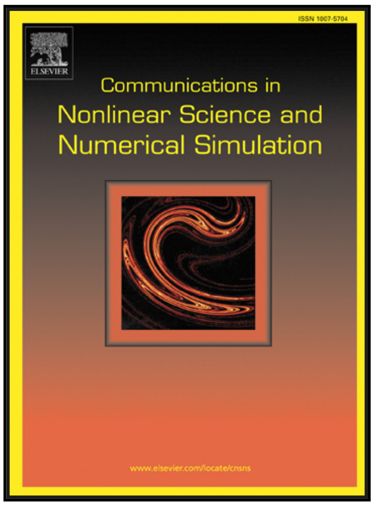

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On Dynamics in a Keynesian Model of Monetary Stabilization Policy with Debt Effect

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Abstract.

In this paper, a four-dimensional model of flexible prices with the central bank´s stabilization policy, describing the development of the firms´ private debt, the output, the expected rate of inflation and the rate of interest is analyzed. Questions concerning the existence of limit cycles around its normal equilibrium point are investigated. The bifurcation equation is found. The formulae for the calculation of its coefficients are gained. A numerical example is presented by means of numerical simulations.

Keywords. Macroeconomic dynamic model, Equilibrium, Bifurcation equation, Limit cycle, Monetary stabilization policy.

1. Introduction

In recent times, the credibility of Minsky's [1,2] financial instability hypothesis (that a financially dominated capitalist economy is inherently unstable), is rapidly increasing. It seems that the recent turbulence of the world economy has proved it. For example, the Japanese economy experienced the serious deflationary depression in the 1990s and the 2000s, and the serious financial crisis that began in the USA with the 2008 mortgage crisis rapidly spread to other parts of the world such as European and Asian countries.[1] But Minsky did not think that such inherent instability is uncontrollable by the government and the central bank. He emphasized that it is important to "stabilize an unstable economy" by means of the proper macroeconomic stabilization policies implemented by the government and the central bank. In this respect, Minsky inherits Keynes' spirit [5].

[1] See Krugman [3] and Wolf [4] as for the detailed descriptions of such phenomena.

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