

A speculation model of money, bond, stock and foreign exchange: an extension of Hick's framework to analyze Japanese economy

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Abstract:

In Japan, on 15 November 2012, a reflation policy was announced by Prime Minister Shinzo Abe. After then until 22 May 2013, for half a year, Japanese yen moved cheaper and stock prices have increased speculatively. Goods and services markets in Japan have stagnated for a long time since 1990s. Prices have been sticky and output has not grown almost at all. In contrast, in the financial markets, rates of interest fell to zero level. The easy monetary policy has made surplus money in the banks and the financial market has been unstable. In this paper we explore a model to explain these facts. Keynes(1936) noticed a role of speculation in the financial markets and formulated speculative motive for money. We set up a model of bonds, stocks, foreign exchange and money. We focus on speculative transactions on stocks and foreign exchange. Our time structure is an extension of Hicks' concept of week and day. Temporary, short-run and long-run period should be distinctive. This assumption of time structure makes clear an importance of expectation and speculation. In a sense our model is an extension of Hick's frame work (IS-LM,1937, and Value and Capital, 1939). We analyze the time movement of stock price and exchange rate and show stability conditions. In some conditions, financial market became unstable and stock price and exchange rate move up-wards continuously. In our model, real economy is stagnated and stable and money economy is active and unstable.

Key words: speculation, foreign exchange, stock price, expectation, week and da, temporary y equilibrium, short-run equilibrium, dynamics, instability of financial market