

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

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## ***Abstract:***

Goods and services markets in Japan have stagnated since the 1990s. Prices have been sticky and output has grown negligibly. By contrast, financial market interest rates fell to zero. On 15 November 2012, a reflation policy was announced by Prime Minister Shinzo Abe. Then, for half a year, until 22 May 2013, the value of the Japanese yen fell and stock prices increased speculatively. The easy monetary policy added surplus money to the banks, but the financial market remains unstable. In this paper, we present a model to explain these facts. Keynes addressed the role of speculation in financial markets and formulated a speculative monetary motive, whereby we now establish a model of bonds, stocks, foreign exchange and money. In our research, we focus on speculative stock and foreign exchange transactions. Our time structure is an extension of Hicks' "day and week" economic model, where temporary, short- and long-run periods should be distinctive. This model of time structure clarifies the importance of expectation and speculation. In a sense, our model is an extension of Hicks' framework. We analyse the time movement of stock prices and foreign exchange rates to show stability conditions. In some conditions, financial markets become unstable, while stock prices and exchange rates move upwards continuously. In our model, real economy is both stagnant and stable, whereas hand monetary economy is both active and unstable.

**Keywords:** week and day, instability , financial market