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The Formation of Bubble Price in the Stock Market and Its effect on the Iran Business Cycles

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EXTENDED ABSTRACT

INTRODUCTION

Financing flow needed for production sector is allocated from various markets including stock market, therefore, it is expected, any fluctuations in this market effects on output. For this reason, the purpose of this paper is to analyze the relationship between fluctuations in stock market prices and business cycles, using a dynamic stochastic general equilibrium model for Iran economy. In this structure, along with wage income, the households have financial wealth that is effective on the current and future consumption. Moreover, the households divided into two categories: those households that already have accumulated wealth in financial market and are ready to leave the market and those households that has not any activity and accumulated wealth in this market, yet, and are ready to enter the market.

METHODOLOGY

at first, seasonal data are extracted from the time series databases of the Central Bank. Then, using Eviews software, the mentioned data are seasonally adjusted. In the following, in order to extract the cycle of the variables, at first, the long-term trend of the variables is extracted from the deseasonalized variables using the Hedrick- Prescott filter, and in the next step, the cycle of the variables is extracted using the logarithmic difference method. Finally, the cyclical data will be used for the required data.

at this stage, the system of linear equations is entered into the Diner software, and then the structural parameters of the model are estimated using the Bayesian method and the data prepared in the previous stage. Finally, using the estimated model and Bayesian inference, we will investigate the role of price bubble on Iran's business cycles and the fluctuation of other macroeconomic variables.

FINDINGS

Based on the model estimation results, the replacement rate among households in the capital market is estimated between 6% and 23%, which indicates the effective time horizon of 1.06 to 1.3 years of households' presence in the country's capital market. Also, according to the specified model, the central bank does not react to the fluctuations of the capital market.

The estimation results show that a positive stock price shock leads to an increase in production and economic growth, as a result of which the production gap has become somewhat positive. According to the consumption habit hypothesis in the model, the maximum reaction of the production gap to this shock is a few periods after its occurrence. With the increase in economic growth and the improvement of production compared to the potential level, the inflation rate will find a decreasing trend. Therefore, with the occurrence of a positive stock price shock, the inflation rate will have a downward trend and production will have an upward trend, which will increase it compared to the long-term potential level. Therefore, it can be said that the formation of price bubbles in the Iranian stock market has positive effects on business cycles.

But it should be kept in mind that although the price bubble can have positive effects on production and economic growth in some periods of time, because these bubbles are considered non-basic factors of the economy, they cannot be considered as a stable and continuous long-term factor. Also, the existence of a bubble in the prices shows that at some point in the future, the prices will break, and in this case, the fear of economic stagnation and a decrease in the level of economic activities is not far from expected.

CONCLUSION

The structural parameters of model is estimated using Bayesian method and data during 1383 – 139^q, where we derive three important implications: firstly, data meaningfully reveals that stock prices are effective on real sector and business cycles. Secondly, the assumption of no-reaction of central bank to economic volatilities such as stock market, output and inflation is verified. Thirdly, the model endogenously includes a variable related to financial slackness, where is the stock price gap and is used in order to improving measuring model dynamics. This variable is capable to depict volatilities in stock market. At last, the results from simulations show that volatilities in stock market prices have positive effect on output and business cycles in Iran.

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