

The Study of Relationship Between Macroeconomic Variables and the Yield Curve in Iran: Dynamic Stochastic General Equilibrium Approach

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Abstract

This study evaluated a relationship between macroeconomic variables and the yield curve in Iran between years 1994:q1-2016:q4 using a dynamic stochastic general equilibrium model. The model consists of the household, the firm, the finance, the oil, the government, and the central bank. Both households and firms have the exclusive power to supply their labor and their products to adder, which makes it possible to stipulate nominal rigidity in wages and prices. After optimizing and obtaining the first order conditions of the brokers, using Uhlig method, the linear - log shape of the equations were obtained. The results of the impulse response functions indicates that the preliminary effect of the technology, monetary, and oil shocks on the slope of the Islamic treasury bills yield curve is positive, the preliminary effect of the technology, government expenditure, and cost push on the curvature of the yield curve is negative, and the preliminary effect of the technology, government expenditure, and cost push on the level of the yield curve is positive. The comparison of the moments of the model variables and the moments of the actual data of the Iranian economy reveals the success of the model in simulating the realities of the Iranian economy.

Keywords: Dynamic Stochastic General Equilibrium; Risk Premium; Latent Factors; yield Curve.

JEL Classification: E31, G15, E44, E43.

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