

A Proposal New Dynamic Disequilibrium Model

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Abstract

This paper studies a dynamic disequilibrium model that integrates the New IS-LM model and the Iwai model. This model is consisted of 4 equations. Adjusted Dynamic IS Curve, Disequilibrium Inflation AS Curve, Disequilibrium Phillips Curve and the Talyor Rule.

1) Adjusted Dynamic IS Curve

$$\ln y_t = E_t \ln y_{t+1} + (E_t \ln g^*_{t+1} - \ln g^*_t) + \frac{r_t - \rho}{\sigma}$$

2)Disequilibrium Inflation AS Curve

$$\pi_t = E_t \pi_{t+1} + \alpha \left(\frac{c_t}{y_t} - g^* \right) = E_t \pi_{t+1} + \alpha g^* \int_0^1 \left(\frac{p_{it} y_{it}}{p_t y_t} \right) \left[\frac{a_{it}}{\hat{E}(a_{it}; \delta_{it})} - 1 \right] di$$

3)Disequilibrium Phillips Curve

$$\pi_t^w = E_t \pi_{t+1}^w + \beta \left(\frac{h_t}{n_t} - f^* \right) = E_t \pi_{t+1}^w + \beta f^* \int_0^1 \frac{n_{it}}{n_t} \left[\frac{b_{it}}{\hat{E}(b_{it}; \delta_{it})} - 1 \right] di$$

4) Taylor Rule

$$i_t = q_1 y_t + q_2 \pi_t + v_t$$

This model is an expanded edition of the New IS-LM model by using the concept of normal demand-supply ratio and fundamental equations of Product and Labor markets. This model suggests that prices are given by rational expectation and noises. We expand this dynamic disequilibrium model to Hybrid model and Open Economy model.

Keywords: Disequilibrium, New IS-LM, Noise, and the Iwai Model

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