

Quantitative Analysis of Influence of China's Urbanization on its Economy Based on ECM and SVAR Model

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Abstract

At present, the Chinese Government is upgrading its new urbanization to stimulate economic development. What will be the effects of urbanization? Using the Augmented Dickey-Fuller unit root test, the stability of data series of impact factors are tested. According to Granger Causality Tests, the causality between impact factors is confirmed. By means of the method of Error Correct Model and SVAR model, this paper found that there exist causality between urban population and the primary and secondary industry, the wholesale and retail trades of the tertiary industry; there is causality between area of built district and the secondary industry, the hotels and catering services of the tertiary industry. However, it was also found that An increase in urban population will lead to increase the demand for the products from the primary industry in the long run, An increase in urban population will result in a small increase in the value-added of the secondary industry in the first two years and rapidly decrease to the lowest point in the fifth year; In the long run, an increase in the value-added of the secondary industry will bring the increase in urban population in seven or eight years.; the expansion of area of built district will lead to an increase in the value-added of hotels and catering services in four years or so; an increase in urban population will arouse a very small fluctuation in the value-added of wholesale and retail trades in seven years and a bigger increase in the next seven or eight years. Hence, if China intends to push a large scale of urbanization forward, suitable city planning such as land-use control, population control, employment, social security and environment protection will be vital for economic development.

Keywords: *New Urbanization; Industry; SVAR model; Error Correct Model; Wholesale and Retail Trades; Hotels and Catering Services*