

Regional House Price Dynamics in Japan

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Abstract

The purpose of this paper is to explore the dynamics of real house prices by estimating serial correlation and mean reversion coefficients from a panel data of 46 prefectures for 1980 to 2003 in Japan. We split the 46 prefectures into 6 regions and estimate the serial correlation and mean reversion parameters from a panel data in each region. The serial correlation and mean reversion parameters in each region are shown to vary cross-sectionally with population growth and real income growth. These parameters are also shown to vary cross-sectionally with changes in real user costs and real construction costs. Mean reversion is lower and serial correlation is positive in relatively more densely populated urban regions (Minami-Kanto, Kinki and Kyushu regions). Mean reversion is higher and serial correlation is negative in relatively less densely populated rural regions (Hokkaido & Tohoku, Chubu and Chugoku & Shikoku regions). The fitted values for mean reversion and serial correlation in all regions except in the Chubu region lie in the convergent non oscillatory ranges. The realizations in all regions lie in the convergent range.

Key Words

Regional house price dynamics, Panel data, Serial correlation, Mean reversion, Japan

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