A Panel Cointegration Analysis for Macroeconomic Determinants of International Housing Market

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Abstract : The main purpose of this paper is to investigate the long-run equilibrium and short-run dynamics of international housing prices when macroeconomic variables change. We apply the Pedroni's, panel cointegration, using the unbalanced panel data analysis of 33 countries over the period from 1980Q1 to 2013Q1, to examine the relationships among house prices and macroeconomic variables. Our empirical results of panel data cointegration tests support the existence of a cointegration among these macroeconomic variables and house prices. Besides, the empirical results of panel DOLS further present that a 1% increase in economic activity, long-term interest rates, and construction costs cause house prices to respectively change 2.16%, -0.04%, and 0.22% in the long run. Furthermore, the increasing economic activity and the construction cost would cause stronger impacts on the house prices for lower income countries than higher income countries. The results lead to the conclusion that policy of house prices growth can be regarded as economic growth for lower income countries. Finally, in America region, the coefficient of economic activity is the highest, which displays that increasing economic activity causes a faster rise in house prices there than in other regions. There are some special cases whereby the coefficients of interest rates are significantly positive in America and Asia regions.

Keywords : house prices, macroeconomic variables, panel cointegration, dynamic OLS

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