

Real Option Analysis of Kanshi Kuiki Regulation in Japanese Real Estate Market

Yamaguchi, Hiroshi ^É

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^ÉThe Graduate School of Systems Management, The University of Tsukuba, and The Nippon Fire & Marine Insurance Co., Ltd.

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In this paper, we examine the effectiveness of a price limit policy implemented in Japanese real estate market in 1980s. At that time, the Japanese government tried to counter a real estate boom by introducing a non-compulsory limit on transaction prices of land in designated areas, Kanshi Kuiki ("surveillance area"). However, the regulation was found to be ineffective in suppressing the appreciation of real estate price. In this paper we employ a real option approach to analyze the policy. The failure of Kanshi Kuiki regulation is explained as a result of dynamic optimization of landowners and/or developers under uncertainty, focusing on their flexibility to choose the timing of real estate development or sale, modeled as real options. The analysis reveals that, imposing a price limit not only provides with a "floor" on land price but also enhances an incentive of a developer toward a speculative purchase of land.