

Shortage of reserve funds for major repairs among multi-owned condominiums: Evidence from individual data of a nationwide survey of condominium associations in Japan

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Abstract

Condominiums are a form of multi-owned housing governed by a mix of communal and individual property rights. While condominiums play a significant role in urban housing worldwide, their multi-owned nature poses a challenge to their long-term sustainability. Specifically, although repair reserve funds collected from each owner are intended for major condominium renovations, reaching a consensus on the level of reserve collection is difficult because owners have different intentions regarding whether to continue living in or sell the property.

This problem is becoming more prominent in Japan, where the number of condominiums over 40 years old is rapidly increasing. This study uses individual data from a nationwide survey targeting condominium management associations—the Comprehensive Condominium Survey in 2018 (Ministry of Land, Infrastructure, Transport and Tourism)—to investigate the characteristics of condominiums in which repair reserve funds cannot be appropriately collected. While the collective action problems of condominium management have been documented in general, this paper focuses on the long-term outcome of failure to conduct major renovations due to a shortage of reserve funds several decades after construction.

First, we document that, after around 20 years, more than 25% of condominiums face a shortage in accumulated repair reserve funds to conduct major repairs. Second, regression analyses reveal that variations in residents' intentions to remain living in the condominiums, as reflected by the rentalization of previously owner-occupied units, high vacancy rates, and the emergence of unknown ownership, often result in insufficient repair reserve funds. Third, variations in residents' intentions often lead to delinquent reserve payments and situations in which reserve amounts cannot be increased using the step-increase method. Even under the equal-installment method, reserve amounts tend to fall short of the required amount unless they are initially set at the level required by the maintenance plan.

The results show that current practices require an increase in repair reserve funds as major repairs approach, but some owners oppose this. Thus, the results suggest the need for preventive measures to avoid future management failures, specifically a dynamic plan at the construction stage for collecting the required amount of repair reserve funds over time.

Keywords

Housing stock, Condominium, Renewal, Sustainability, Microdata