主 論 文 要 旨

No.1

報告番号 甲 乙 第 号 氏 名 三河 直斗

主論文題名:

Essays on the Real Estate Market and Natural Experiments in Japan

(内容の要旨)

This dissertation is structured by three independent empirical studies based on Japanese real estate data. Each chapter addresses different exogenous shocks. In Chapter 2, I focus on the effect of the 2015 inheritance taxation reform on the rental housing market in Japan. This reform substantially increased the amount of tax levied on large inheritances. This potentially incentivized people to build inexpensive low-rise apartments to save on taxes, which increased the number of low-quality apartments and severely distorted the rental market. This chapter investigates the effect of the inheritance tax reform on housing rents. Using the difference-in-differences method, I reveal that the housing rents for wood or light steel-framed apartments decreased by 1.3% after the taxation reform. Moreover, the results indicate that while the housing rents of slightly older housing belonging to the treatment group decreased, the housing rents of new housing belonging to the treatment group did not change.

Chapter 3 investigates the COVID-19 outbreak. The outbreak has changed people's behavior, with people in Japan being encouraged to avoid unnecessarily outings and shift toward teleworking. Consequently, train congestion during commuting hours significantly reduced. This shift to teleworking may have reduced demand for proximity to urban centers and increased demand for housing in the suburbs. This shift to teleworking may have also been accompanied by a change in residential amenity preferences. This chapter uses rental apartment data to analyze whether demand for proximity to city centers and demand for floor space changed before and after the COVID-19 pandemic. We found that housing rents in the center of the Tokyo Metropolitan Area decreased, and increased in suburban areas, consistent with the theoretical predictions by the canonical closed-city monocentric city models. Additionally, rents increased for properties with larger private spaces after the COVID-19 pandemic, due to increased teleworking and longer time spent at

home.

Finally, Chapter 4 examine the Great East Japan Earthquake of 2011. This earthquake significantly changed seismic activity across Japan. This change has affected people's response to earthquakes, even outside the affected area. This change might be heterogeneous and may depend on the seismic risk of the area where they live. To capture the variation in seismic risk, this chapter uses a new measure: ground classification, which assesses the strength of the ground. By using ground classification, I examine how variations in ground strength influence land prices after a catastrophe. Employing real estate transaction data and the hedonic approach, this study investigates the heterogeneous impact of the Great East Japan Earthquake on the real estate market in undamaged areas. Focusing on ground classification, it was found that land prices in the soft ground areas in Tokyo experienced a decline after the earthquake.