Real Estate Bubbles, Local Property Tax Regimes, and City Development: Evidence from 1980s Japan

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Several countries in recent history have experienced real estate bubbles, characterized by extreme price volatility, short-term price change momentum, and long-run mean reversion in prices. Many authors have posited models of investor beliefs to explain such price dynamics. But from where do bubbly beliefs arise, and are they based on a rational trigger? This paper explores the role of local property tax regimes and city planning laws in promoting real estate bubbles. If lower property tax rates are capitalized into higher real estate prices, property tax reforms can positively influence investors' beliefs about the desirability of holding real estate in a locality. Similarly, city development laws which place constraints on property owners' ability to build on land influence both the supply and productivity of real estate, and thus may alter prices in local markets. I provide evidence of both of these channels by exploiting municipal property tax cuts and reforms which relaxed zoning constraints in 1980s Japan.

I first construct city-level land price indices dating back to 1975 using government land appraisal surveys covering all municipalities. I document three stylized facts about real estate prices in 1980s and early 1990s Japan: (i) consistent with folk narratives of this period, prices collapsed first in the greater Tokyo area before falling in other cities. (ii) Many cities did not experience a large boom-bust cycle, leading to substantial heterogeneity in price growth between 1985 and 1990. For instance, in Fukuoka, the 8th largest city, land prices grew by 74% over this five-year period, but in neighboring Kita-Kyushu, the 11th largest city, prices grew by a modest 11%. (iii) In all cities with population greater than 300,000, commercial and industrial real estate prices increased by far more than residential real estate prices. These features of the 1980s Japanese real estate market point to different and more localized sources of price volatility than the subprime lending mechanism emphasized in the literature on the mid-2000s housing crisis in the U.S.

I then turn to explanations for these empirical facts. While national laws determine marginal property tax rates, each municipality sets a scale factor that maps appraised property values into an effective tax rate. I exploit this institutional setting and variation from 1,500 local tax rate changes across the 300 largest cities using a non-parametric event study design that instruments for rate changes using measures of fiscal health from local government balance sheets. I find that land prices increase in response to a tax cut during the bubble period. The results are consistent with an accelerator channel for local bubbles: municipalities that can afford to cut taxes do so, increasing real estate prices, and relaxing the government's budget constraint even further to allow for more tax cuts in the future. Next, I analyze the impact of two national zoning reforms in 1983 and 1987 that relaxed restrictions on the height and shape of buildings. I show that commercial and industrial land appreciates in value after being rezoned to a less restrictive class, but the effect of rezoning on residential land prices is negligible. Cities with a greater share of structures that were close to the maximum height and area restrictions prior to each reform experienced a larger boom-bust cycle, and this is particularly true for commercial real estate. These findings suggest that property taxes and zoning laws may be an effective policy tool for controlling real estate prices.

Keywords: property taxation, real estate bubble, zoning law, land price indices

JEL classifications: H71, R0, R38, R52,

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