

Alternative Land Price Indexes for Commercial Properties in Tokyo

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The SNA (System of National Accounts) requires separate estimates for the land and structure components of a commercial property. Using transactions data for the sales of office buildings in Tokyo, a hedonic regression model (the Builder fs Model) was estimated and this model generated an overall property price index as well as subindexes for the land and structure components of the office buildings. The Builder fs Model was also estimated using appraisal data on office building REITs for Tokyo. These hedonic regression models also generate estimates for net depreciation rates which can be compared. Finally, the Japanese Ministry of Land, Infrastructure, Transport and Tourism constructs annual official land prices for commercial properties based on appraised values. The paper compares these official land prices with the land prices generated by the hedonic regression models based on transactions data and on REIT data. The results show that the Builder fs Model using transactions data can be used to estimate Tokyo office market indexes with a reasonable level of precision. The results also revealed that commercial property indexes based on appraisal and assessment prices lag behind the indexes based on transaction prices.