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Title of thesis The role of housing company loans in apartment price determination - Empirical evidence from largest cities in Finland

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Abstract

Use of housing company loans as means of financing for new construction has amplified in the Finnish residential real estate market in the past decade, and large relative portions of housing company loan have become established in transactions of newly-built apartments. The required down payment for an apartment decreases with the relative share of housing company loan involved in the transaction. The purpose of this thesis is to examine by means of hedonic regression, whether the magnitude of relative debt portion affects debt-free transaction prices.

Using data on apartment transactions completed in the largest Finnish cities from 2003 through 2018, I find no strong main-effects based evidence that debt-free transaction prices on secondary transactions involving a young apartment unit would have been affected by housing company loan portions or that any effects would have intensified over time to a statistically significant extent. The findings are robust to changes in the set of control covariates employed.

However, statistically significant positive marginal effects emerge for one-room and two-room apartments by interaction. Given the considerate investor saturation in the submarket of small apartments, one-room apartments in particular, these premia are likely to reflect at least in part the tax benefits related to housing company loans that only apply to investor-acquirers when applicable. Quantile estimation of these interactions shows that the differences in debt effects between room setups documented using OLS regression persist across the conditional price distribution, providing some evidence for the interpretation that also owner-occupant-acquirers of small apartments are likely to end up paying a premium for housing company loans.

The most levered secondary transactions trade at a discount to unlevered transactions – a vast majority of these transactions take place within the first five years after construction, thus coinciding with the regulated maximum timespan of instalment-free periods characterizing initial transactions of new dwellings. The finding is potentially reflective of so called ‘fire sales’ in the sense that looming financial distress would be likely to motivate sellers to compromise holding period returns and dispose of their holdings at sub-optimal prices in secondary transactions.

I find weak evidence that the relative portion of housing company loan gives rise to premium in case the transaction does not include the apartment's respective ownership share of the lot upon which the building is situated. However, this documented effect diminishes in the presence of more allowing spatio-temporal fixed effects, and therefore only weakly reverberates public concerns highlighting the complexity of price appraisal in the presence of a variety of contractual options that may obscure the buyers' perception of price.

Any marginal price effects of housing company loan proportions in initial apartment transactions (i.e. transactions involving new apartments) cannot be distinguished from the overall price appreciation of new apartments relative to used apartments credibly enough in the statistical sense, owing to issues of collinearity and insufficient intra-year level variation in the relative portion of housing company loan.

Keywords Residential real estate, Apartments, Housing company loans, Real estate appraisal, Hedonic regression, Ordinary least squares, Quantile regression
