

Spatial Variation of Housing Prices and Its Drivers

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Abstract

Using housing transactions from 36 cities between 2020 and 2025, we estimate a hedonic price model of location, amenities and building age. A one-standard-deviation increase in rail-transit access raises the unit price by about 6.8%.

1 Introduction

Spatial differences in housing prices are a core question of urban research. Most studies rely on hedonic pricing^[1]; others discuss adjustment factors in the sales comparison approach^[2].

2 Model

Let P_i be the price of dwelling i and $\mathbf{x}_i$ its characteristics. We use the semi-log form

$$\ln P_i = \beta_0 + \sum_{k=1}^K \beta_k x_{ik} + \varepsilon_i \quad (1)$$

where β_k in Eq. (1) is the marginal effect of characteristic k .

3 Results

Table 1 Hedonic model estimates

Variable	Coef.	S.E.	Sig.
Rail-transit access	0.068	0.009	***
School quality	0.052	0.011	***
Building age (yrs)	-0.007	0.002	**
Floor-area ratio	-0.015	0.006	*

References

[1] SMITH J, DOE J. Hedonic pricing of residential property[J]. Journal of Real Estate Research, 2021, 43(2): 101-125.

[2] 张三, 李四. 房地产估价中比较法修正系数的确定方法研究 [J]. 中国房地产估价与经纪, 2024(3): 45-52.