First Mover Advantage of Korea Apartment Sales Market

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1. Introduction

The idea of First Mover Advantage, or FMA is similar to the old adage, "the early bird gets the worm." In business, being the first company to sell a new product may provide long-lasting benefits or competitive advantages[1][2]. FMA is popular in sales and marketing area of pharmacy, online book market, electronics, and so on. There have been many researches and studies especially in United States.

In real estate market apartment sales ratio is an important factor in marketing policy and housing development projects[3]. By the way we have often heard first supplier in apartment development and sales surrounding area records higher sales ratio and there is a strong competition between rivalries. But FMA researches have rarely been executed in real estate market. We tried to find the FMA of real estate market in Korea.

2. Theory and Experiments

Most researchers use the term, "first mover" to refer to the first significant company to enter a market, not the first company to develop a product (the inventor). It is important to note the first significant company. For example, Amazon.com may not have been the first seller of books online, but Amazon.com was the first significant company to make an entrance into the online book market.

But in this paper, we cannot use a usual term, "first significant company" bur "first company", because of real estate market attributes, that is, immobility and heterogeneity. We would consider the first supplier as the first significant one. The lead-days mean first supplier's strategy and is defined the days between first supplier's start-up date and second (or later) supplier's start-up date. Actually the lead-days are substituted for lagged-days to evade negative form. So, Lagged-days (= later supplier's start-up date – first supplier's start-up date) are used in analysis.

3. Results and Discussion

We observe 113 apartment development projects in Korea and get the evidence of FMA in real estate market. Whether the lead-days could raise apartment sales ratio is our concerns. So dependent variable is an apartment sales ratio and independent variables are 8 ones including lead-days (or lagged-day). Many previous papers have dealt with price, size, price change rate, attributes of apartment sales, and so forth as independent variables[4],[5],[6]. This paper also adapts 7 variables well known. They are price per $3.3m^2$, 1st-order competition rate, size of apartment site, price change rate, and the other 3 variables-prosperity value, scale of city, and convenience of facilities- which are scored by apartment sales promoter.

Lagged-days have a significant influence on sales ratio. The earlier the higher and the later the lower. Under Model 1(1 month after start-up), the parameter is -.247 and significant at the 1% confidence level and adj_R^2 is .401. Under Model 2(3 month after start-up), it is -.195 and significant at the 5% confidence level and adj_R^2 is .380. Under Model 2, only scale of city is insignificant at a significance level.

On the other hand, another model excluding Lagged-days, adj_R^2 under Model 1 is .356 (.354 under Model 2) and the significance of some parameters is less significant than models including Lagged-days.

[Table 1] Main parameters (standardized)

		Model 1	Model 2
Dependent var.	Apartment sales ratio	sales ratio_1 month	Sales ratio_ 3 month
Independent variables	Lagged-days	-.247***	-.195**
	Price (per 3.3m[2)])	-.269***	-.290***
	1st-order competition rate	.223***	.209**
	Size of apartment site	-.146*	-.173**
	Prosperity value	.283***	.229***
	Scale of city	-.197*	-.175
	Convenience of Facilities	.189**	.167*
	Price change rate	.200*	.237**
	(constant)	-	-
D-W		1.053	1.142
R^2		.446	.427
adj_R^2		.401	.380
n		113	113

*** $p< 1\%$,   ** $p<5\%$,   * $p<10\%$

4. Conclusion

FMA researches have rarely been executed in real estate market. We investigate the relation between lead-days (or lagged-days) and apartment sales ratio by analyzing 113 apartment development projects in Korea.

Supposed that there be the advantage of first supplier at the surrounding area in real estate market, we verify that assumption. We found that the lead-days is a significant factor on enhancing sales ratio and especially in earlier period of project the result is clear.

Therefore the effort to be first in apartment supply at surrounding area is meaningful and can make the achievements better.

5. Acknowledgement

6. Reference

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