## KELLER CENTER RESEARCH REPORT

## **Probability of Sale**

by Chris Matcek, M.B.A./Masters of Engineering Candidate

Is there a way to tell ahead of time how likely a listing is to sell? In *The Probability of Sale for Residential Real Estate* (Journal of Housing Research) Ken H. Johnson, Justin D. Benefield, and Jonathan A. Wiley examine a set of 2,249 sold and unsold properties from a medium sized East Coast MLS. Their findings show that the commonly known positive relationship between property price and selling time has some inconsistencies and may require other variables to better understand the probability of a home selling. The probability of a home selling is most affected by factors like marketing time, seller motivation, certain property attributes, and location. The researchers compiled these variables to determine which ones most affected the probability of sale. The results of this research should not be applied blindly, but with serious thought as to how they might be relevant in your particular market.

1. "There is a third metric [other than property price and property marketing time] that has at least as much impact on sellers and real estate brokers. Specifically, the probability of successfully selling the property is of considerable importance to both parties."

**THINK:** Costs begin to rack up on both sides of the transaction if a house is not sold. The seller has the costs involved with keeping a house on the market and possible financial strain, while the broker will go uncompensated for their time. The probability of a home selling is an important metric to monitor.

2. "If sellers attempt to maximize their selling price by exploiting the positive relationship between property price and marketing time, as suggested by the majority of the modern pricing and time-on-market literature, there is a real cost to be borne: a reduced probability of selling the property."

**THINK:** The commonly known fact that as the price of the property increases the time on the market increases may be incorrect according to recent studies. If you try to find a maximized value for property price, it may not sell if the other factors, discussed below, are not properly considered.

3. "A higher degree of property overpricing (DOP), indicating a lower seller motivation, also reduces the probability of a successful marketing effort."

**THINK:** If the seller makes it appear that they have low motivation to sell by pricing the property over its market value, even if they change the price later, this may reduce the probability of selling within the listing time.

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4. "Turning to the specified proxies for quality, the results generally behave as expected, with SSHOWER, DOVEN, and NC all significantly increasing the likelihood of selling a property."

**THINK:** The probability of selling a home greatly increases with features like a separate shower, double oven, and a newly constructed home. By knowing these qualities, the agent and the seller can agree on a degree of overpricing and time on the market that maximizes the likelihood of selling.

5. "The results for property size and age are less intuitive. The model results indicate that larger properties have a lower probability of sale, while older properties actually enjoy a higher probability of sale."

**THINK:** While this may just be a pattern in this sampled market, or the current market conditions, pay attention to which homes are selling since the results may not necessarily be intuitive.

6. "Both parties need to be cognizant that overpricing and extending marketing time, perhaps by rejecting a viable offer, are costly strategies that can contribute to marketing failure."

**THINK:** When the seller sets a price or receives an offer, careful thought needs to be placed in whether the probability of sale is greatly affected.

## **About the Author:**

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