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## Housing Characteristics and Home Values

## THE VALUE OF HOUSING CHARACTERISTICS: A META ANALYSIS

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- *Researchers have analyzed the effects of housing characteristics on selling price using data from many time periods and for numerous locations.*
  - *This study compares the results of many prior studies to determine how generalizable earlier results are to the broader housing market.*
  - *The results of this analysis show that the value of housing characteristics sometimes vary due to location- or time-specific attributes of the analysis but not as markedly as analysts had assumed.*
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Researchers have examined how various housing characteristics, such as the number of bedrooms and square footage affect the value of a home. A long literature on this subject has examined data across a number of geographic areas and time periods. Because of this fragmented record of analysis, it has been difficult to draw any general conclusions about the effects of various housing characteristics on home values.

### THE STUDY

This analysis focuses on a subset of nine housing characteristics that have been analyzed most frequently for their influence on housing prices. These characteristics are 1) square footage, 2) lot size, 3) age, 4) number of bedrooms, 5) number of bathrooms, 6) presence of a garage, 7) presence of a swimming pool, 8) number of fireplaces, and (9) whether a home has air conditioning. A statistical technique called meta-analysis is employed to assess whether specific characteristics of the analysis, such as time period or geographic location, affect the results. For example, do homes in the South with a swimming pool sell for a premium compared with similar homes in the Northeast which also have a swimming pool?

### FINDINGS

The findings of this study suggest that the value of several housing characteristics sometimes vary across geographic locations, household income levels and different time periods. The main conclusions include:

- Additional square footage positively affects selling price by more in the Southeast and Southwest than in other regions;

- Lot size has a larger positive effect on home prices in the Midwest than elsewhere;
- The age of a house negatively influences selling price most in the South. Furthermore, the negative influence of age on home prices has increased over time. Today, the negative effect of age on the selling price of a 50-year old home is greater than the age effect on a 50-year old home 20 years ago, for example.
- The number of bedrooms has a stronger positive effect on prices in the Southwest. Controlling for the square footage of the home reduces the impact of more bedrooms on the sale price. That is, the positive effects of other amenities in a larger home overwhelm the effects of more bedrooms on the sale price;
- Additional bathrooms add less to home prices in the West compared with other regions of the country;
- A garage has a greater positive impact on home prices in the South than elsewhere;
- A swimming pool increases selling prices by a larger margin in the Southwest compared to other areas of the country;
- The presence of a fireplace affects home prices the same across all regions of the country; and
- Air conditioning has a larger positive influence on selling price in the South than anywhere else. Also, higher income households place a smaller premium on air conditioning partly because higher priced homes are more like to include air conditioning. That is, other characteristics of a home influence the selling price more than air conditioning among higher priced homes.

### CONCLUSION

Because the study of how housing characteristics affect sale price has been fragmented over both time and geography, it has been difficult to draw conclusions about whether the reported contribution of various housing characteristics are specific to particular locations and time periods or if the effects are more general. This study shows that there are some meaningful differences in how housing characteristics affect selling price—homebuyers in the South value a swimming pool more than buyers in the Northeast, for example. However, many characteristics also seem to have very similar effects across different regions and time periods suggesting that there is an underlying level of consistency in how several characteristics of a home affect its value.