

THE EFFECT OF REAL ESTATE BROKERS ON SELLING PRICE

by James R. Webb

Real estate brokerages are frequently touted by past users as being “good” or “bad” for reasons often due to service and communication or a lack of them. Although these factors make the process of buying and selling in the real estate markets more enjoyable or endurable, the ultimate measure of a real estate broker’s worth would seem to be the brokerage’s effect on the selling price of the subject property.

If brokerage X obtains a better selling price than brokerage Y, then brokerage X would be “good” while brokerage Y would be “bad.” If neither brokerage positively affects the selling price, then selection must be based on other factors. If there are no other significant factors, then a brokerage may be chosen at random.

Standard Measures Of Brokerage Success

A brokerage may be extremely successful and obtain many listings and sell many properties without having a positive effect on selling price. The characteristics of successful brokerages and brokers mention nothing about selling price effects. A study by Lynn N. Woodward concludes that the more desire the major broker has to succeed, the more successful is the brokerage office¹, success being measured in terms of the number of sales and listings. Other truisms concerning sales success from the National Association of Realtors include:

1. Organizing one’s work, accepting new ideas and methods, making decisions based on all the

James R. Webb is assistant professor of finance at Kent State University in Kent, Ohio. His published articles include topics such as real estate investment evaluation, housing analysis, quantitative appraisal techniques and risk measurement in real estate.

The author acknowledges the computer assistance of Jack H. Rubens, a doctoral student in real estate in the department of finance at Kent State University.

facts, keeping current, establishing an area of expertise, doing follow-up work, keeping current with respect to the finance market and joining relevant associations.²

2. Having a “money personality,” that is, the desire to get ahead.³

3. Controlling one’s emotions, employees and information.⁴



4. Effectively planning, establishing priorities, keeping a good perspective, being punctual, being perceptive, having poise, avoiding procrastination, being prepared, adhering to one’s own principles and leaving time for play.⁵

5. Establishing a good follow-up program.⁶

6. Having a good self-image.⁷

7. Effectively communicating.⁸

8. Recognizing the trade-off between a good office location and the expenses involved, belonging to professional societies and having an adequate reference library.⁹

None of these suggestions includes selling price or

other brokerage user — that is, consumer — references that would seem important, such as selling time for the subject property.

Selling Price As Effectiveness Factor

Because selling price is a major concern of real property sellers, this study will focus on it as the determinant of brokerage desirability. To test the effect of brokers on the selling price of real property, a multiple regression model will be used. Listing brokers will be tested separately from selling brokers. Listing practices may also affect the ultimate selling price. The specific models are as follows:

$$SP = f(PGI, TOM, LB) \quad (1)$$

$$SP = g(PGI, TOM, SB) \quad (2)$$

where SP = Selling price in dollars
 PGI = Potential gross income in dollars
 TOM = Time on the market in days
 LB = A vector of dummy variables indicating the listing broker
 SB = A vector of dummy variables indicating the selling broker

The data used with these models consists of 366 multifamily residential sales within the city limits of Chicago between 2Q76 and 1Q78. Observations are from a contiguous area north of Madison Avenue. The data was obtained via MLS listings and results reports.

Because the properties are income-producing, that is, rentals, gross income was included as an independent variable. An income projection is a major determinant of investor motivation. Time on the market (TOM) was also included because of the trade-off between time and price often envisioned in financial literature.

Study Results

Table 1 contains the regression results for 25 listing brokers. Potential gross income (PGI) and TOM are significant at the 99 percent level of confidence. PGI has a positive sign while TOM has a negative sign. The TOM coefficient indicates a \$46 loss in selling price for each day the property is on the market.

The sign for listing brokers is negative in 13 cases and positive in 11 cases. A negative sign indicates the listing broker negatively influenced the selling price relative to listing broker number 25 (LB25). However, only eight of the coefficients for listing brokers are significant at the 90 percent or better level of confidence. Four are positive and four are negative, that is, four brokerages positively affected the selling

TABLE 1
Regression Results With Listing Broker

| Variables | Coefficient | Standard-Error | t-statistic |
|------------------------------|-------------|----------------|-------------|
| PGI | 4.616 | .146 | 31.526† |
| TOM | -45.927 | 25.170 | 1.825§ |
| LB1 | -2,224.216 | 11,549.998 | .192 |
| LB2 | -9,815.668 | 16,067.381 | .611 |
| LB3 | 14,248.490 | 8,923.227 | 1.597* |
| LB4 | -2,583.498 | 9,979.483 | .259 |
| LB5 | 17,528.800 | 9,013.553 | 1.945§ |
| LB6 | -13,979.870 | 7,565.105 | 1.848§ |
| LB7 | 49,316.880 | 10,653.284 | 4.629† |
| LB8 | -15,090.450 | 4,632.583 | 3.257† |
| LB9 | 5,861.935 | 5,666.465 | 1.034 |
| LB10 | -13,397.160 | 13,910.127 | .963 |
| LB11 | -4,354.770 | 27,540.255 | .158 |
| LB12 | 3,601.727 | 9,280.202 | .389 |
| LB13 | -1,092.554 | 8,243.470 | .134 |
| LB14 | 2,790.668 | 7,639.071 | .365 |
| LB15 | -3,113.533 | 15,995.744 | .195 |
| LB16 | 19,351.550 | 16,086.567 | 1.203 |
| LB17 | -13,137.250 | 11,002.652 | 1.194 |
| LB18 | -7,449.121 | 5,249.990 | 1.419* |
| LB19 | 8,393.011 | 10,464.475 | .802 |
| LB20 | -15,408.770 | 6,007.176 | 2.565† |
| LB21 | 13,311.570 | 8,339.737 | 1.596* |
| LB22 | 18,061.160 | 19,086.538 | .946 |
| LB23 | -586.774 | 5,294.535 | .110 |
| LB24 | 8,027.374 | 8,841.004 | .908 |
| R ² | .760 | | |
| n | 366. | | |
| F | 43.767 | | |
| Standard Error of Regression | 27,410.883 | | |

*Significant at the 90 percent level of confidence.

§Significant at the 95 percent level of confidence.

†Significant at the 99 percent level of confidence.

price while four negatively affected it. The other 16 had no significant effect either way on LB25.

Table 2 contains the regression results for 25 selling brokers. Fifteen of the coefficients for the selling brokers are negative while only nine are positive. However, only nine selling broker coefficients are significant at the 90 percent or better level of confidence. Of these nine, six are negative and three are positive, that is, out of 25 selling brokers on 366 properties, 15 did not affect significantly the selling price, six negatively affected the selling price and only three positively affected the selling price relative to selling broker number 25 (SB25).

Six of the subject brokerages had significant results at the 90 percent or better level of confidence for both their listing and selling functions. Four of the six negatively affected the selling price and only two brokerages positively affected the selling price for both their listing and selling functions.

TABLE 2
Regression Results With Selling Broker

| Variables | Coefficient | Standard-Error | t-statistic |
|------------------------------|-------------|----------------|-------------|
| PGI | 4.572 | .144 | 31.670† |
| TOM | -58.412 | 25.166 | 2.331† |
| SB1 | -7,195.960 | 12,820.880 | .561 |
| SB2 | -11,980.740 | 12,466.256 | .961 |
| SB3 | 21,898.370 | 8,758.347 | 2.500† |
| SB4 | -5,664.961 | 7,956.564 | .712 |
| SB5 | 6,417.394 | 11,408.634 | .562 |
| SB6 | -20,032.160 | 9,155.896 | 2.188§ |
| SB7 | 9,690.444 | 3,744.688 | 2.588† |
| SB8 | -17,580.760 | 5,626.648 | 3.125† |
| SB9 | 3,085.896 | 6,972.242 | .443 |
| SB10 | -11,771.080 | 9,903.810 | 1.184 |
| SB11 | -9,579.828 | 10,349.378 | .926 |
| SB12 | -10,119.980 | 9,354.758 | 1.082 |
| SB13 | 10,951.790 | 13,468.350 | .813 |
| SB14 | -13,478.550 | 6,963.988 | 1.935§ |
| SB15 | 6,328.177 | 10,543.842 | .600 |
| SB16 | 2,080.505 | 8,109.709 | .257 |
| SB17 | -13,212.980 | 12,413.809 | 1.064 |
| SB18 | -7,297.004 | 4,756.217 | 1.534* |
| SB19 | 5,324.391 | 7,740.970 | .688 |
| SB20 | -21,318.840 | 5,984.251 | 3.562† |
| SB21 | -3,302.326 | 5,242.986 | .630 |
| SB22 | -6,974.324 | 11,101.231 | .628 |
| SB23 | -12,442.550 | 5,900.824 | 2.109§ |
| SB24 | 19,868.340 | 9,559.126 | 2.078§ |
| R ² | .761 | | |
| n | 366 | | |
| F | 45.820 | | |
| Standard Error of Regression | 27,315.710 | | |

*Significant at the 90 percent level of confidence.
§Significant at the 95 percent level of confidence.
†Significant at the 99 percent level of confidence.

Conclusions

Twenty-five brokers and 366 income property transactions were used to test brokerage effects on selling price. Selling price was used as a quantitative proxy of "good" versus "bad," where a "good" brokerage would positively affect the selling price while a "bad" brokerage would negatively affect the selling price.

Brokerages having neither a significant negative nor positive effect would be considered neutral.

Results indicate that more than half the brokerages studied do not have any significant effect on the selling price. Of those that do have a significant effect, about half have a negative effect. Results also indicate that both a "good" broker and a "bad" broker are hard to find. The probability implied is approximately .75 of either a "good" or a "neutral" brokerage.

Further research should perhaps concentrate on how to identify "good," "bad" and "neutral" brokerages before the sales transaction is completed. This would enable the consumer of brokerage services to make the best choice and also encourage "bad" brokerages to go out of business because of a lack of customers.

NOTES

1. Lynn N. Woodward, "A Cause of Brokerage Failure," *Real Estate Today* (May/June 1978), 12-15.
2. "Brainstorms for Salespeople," *Real Estate Today* (August 1978), 57.
3. "Brainstorms for Salespeople," *Real Estate Today* (May 1980), 60-61.
4. "Brainstorms for Salespeople," *Real Estate Today* (July 1980), 74.
5. "Brainstorms for Salespeople," *Real Estate Today* (September 1980), 75.
6. "Brainstorms for Salespeople," *Real Estate Today* (April 1980), 70-71.
7. "Brainstorms for Salespeople," *Real Estate Today* (October 1980), 54.
8. "Brainstorms for Salespeople," *Real Estate Today* (February 1980), 58.
9. Harry G. Atkinson and Percy E. Wagner, *Modern Real Estate Practice* (Homewood, Illinois, Dow Jones-Irwin, Inc., 1974), 69-74.

BIBLIOGRAPHY

1. Frederick E. Case, *Real Estate Brokerage*, Englewood Cliffs, New Jersey, Prentice-Hall, 1965.
2. Donald W. Hackett and John R. Darling, "A Comparison of Consumer and Realtor Attitudes Regarding Consumer Issues Affecting the Housing Industry," *AREUEA Journal*, Vol. 4, No. 2 (Fall 1976), 91-99.
3. Howard R. Watrous, "An Analysis of the Causes of Small Business Discontinuances: Real Estate Brokerage Failures in the State of Oregon," PhD dissertation, Columbus, Ohio, The Ohio State University, 1969.