Reviewing Buy-Rent Decision

By Ted C. Jones and Lana J. Killian

During the mid-1980s when housing values were stagnant or declining, deciding to rent rather than own was easy. However, because the average Texas home price increased in 1989 to $88,800 from $84,200 after three successive years of decline and rental rates are once again increasing, it is timely for potential homebuyers to analyze the buy-versus-rent decision.

The personal decision to purchase or rent cannot be quantified solely in dollars; property ownership includes nonpecuniary benefits. The table assists prospective homebuyers in the mathematics of the complex buy-versus-rent decision. This method ignores the inherent illiquidity of real property noncash benefits and the risk of deviations from projected expenses and values.

How to Use the Table

To use the table, the prospective homebuyer(s) should divide the monthly rental rate by the value of the property under consideration. The two residences should be similar. A $90,000 residence that rents for $720 indicates a monthly rental rate of .8 percent ($720 divided by $90,000). If the prospective home is purchased rather than rented, the annual after-tax return on investment in the property varies with respect to changes in property value and rents.

In this example, (.8 percent monthly rent) the individuals would be better off renting if property values are anticipated to decline or remain constant. If property values and rents rise at only 2 percent per year, however, the homebuyer would earn 5.1 percent annually on the investment after considering all tax ramifications. A modest 4 percent property increase per year results in 12.6 percent annual return on equity. The increase results directly from the leverage used by the buyer via the mortgage loan.

The annual return on equity investment varies positively with rents; the higher the rent as a percentage of value, the greater the return. Likewise, the greater the annual increase in rents and property values, the greater the return.

Shorter holding periods may alter the decision. Because substantial closing costs are paid by the buyer, fewer years to amortize such costs results in lower returns. In the example used here, if the ownership period declines to three years, a positive return on equity is achieved, starting at 4 percent annual property and rental appreciation rates (with the 4 percent increase in property resulting in an annual return of 4.02 percent versus 12.6 percent for the seven-year holding period). At 6 percent annual property appreciation, the three-year annual return is 12.03 percent versus 18.7 percent for seven years.

No single rule exists for making the buy-versus-rent decision. Most factors, however, in the current recovering Texas housing market indicate thatbuying rather than renting once again may be an attractive consideration.

Table Assumptions

- Seven-year planning horizon
- Effective household marginal income tax rate of 33 percent
- Property values and rental rates are assumed to move together, i.e., a 4 percent increase in home value corresponds to a 4 percent rise in rents
- Buyer-paid closing costs total 5.054 percent of the value of the house on a pretax basis and 4.262 percent on a posttax basis (the decline results from the immediate tax deductibility of prepaid interest)
- Terms include 20 percent down with the balance financed via a conventional, fixed-rate mortgage loan for 30 years at 10 percent interest
- Three loan discount points are paid by the buyer
- Initial property taxes are 1.35 percent of the value of the property; will increase annually by 3 percent
- When sold at the end of the seventh year, selling expenses (from all sources) paid by the seller total 7 percent of the value of the property
- Tax implications of capital gains or losses are ignored: they are assumed to be rolled over into another residence or are voided by using the one-time $125,000 exclusion
- Annual maintenance expense for homeownership is 1.5 percent of the purchase price and remains static
- If a household rented, then the 20 percent down payment otherwise invested in a home could yield 8.78 percent on a pretax basis, or 5.8826 percent posttax.

Residential Buy-Versus-Rent Decision

Compound Annual Property and Rental Rate Changes (percent)	Annual Return on Equity Investment — Monthly Rent as a Percentage of Value: 0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20
-4.0	rent	rent	rent	rent	rent	rent	rent	rent
-2.0	rent	rent	rent	rent	rent	rent	rent	6.8
0.0	rent	rent	rent	rent	0.2	5.8	11.3	16.8
2.0	rent	rent	0.5	5.1	9.8	14.4	19.1	23.9
4.0	0.6	5.2	8.6	12.6	16.8	21.0	25.3	29.7
6.0	7.6	11.2	14.9	18.7	22.6	26.6	30.6	34.7
8.0	13.4	16.9	20.4	24.0	27.7	31.4	35.3	39.2
10.0	18.5	21.8	25.2	28.7	32.2	35.9	39.6	43.4
12.0	23.1	26.3	29.6	28.7	36.4	40.0	43.6	46.9

Source: Real Estate Center at Texas A&M University

Dr. Jones is senior research economist and Killian a graduate research assistant for the Real Estate Center at Texas A&M University.

REAL ESTATE CENTER

©1995, Real Estate Center. All rights reserved.

Director, Dr. R. Malcolm Richards; **Associate Director**, Gary Maler; **Chief Economist**, Dr. Ted C. Jones; **Senior Editor**, David S. Jones; **Associate Editor**, Dr. Shirley E. Bovey; **Assistant Editor**, Kammy Senter; **Art Director**, Robert P. Beals II; **Circulation Manager**, Gary Earle; **Production Assistant**, Emma Kubin; **Typography**, Real Estate Center; **Lithography**, Williamson Printing Corporation, Dallas.

Advisory Committee: Don Ellis, Del Rio, chairman; Conrad Bering, Jr., Houston, vice chairman; Michael M. Beal, College Station; Patsy Bohannan, The Woodlands; Dr. Donald S. Longworth, Lubbock; Andrea Lopes Moore, Houston; Richard S. Seline, Alexandria, VA; Jack W. Tumlinson, Cameron; John P. Schneider, Jr., Austin; and Pete Cantu, San Antonio, ex-officio representing the Texas Real Estate Commission.

Tierra Grande (ISSN 1070-0234), formerly *Real Estate Center Journal*, is published quarterly by the Real Estate Center at Texas A&M University, College Station, Texas 77843-2115.

Subscriptions are free to real estate brokers who provide their name, address, telephone, and license numbers to Department JS at the address given. Other subscribers, $25 per year. **Views expressed** are those of the authors and do not imply endorsement by the Real Estate Center, the College of Business Administration and Graduate School of Business, or Texas A&M University.