

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Housing Markets and Racial Discrimination: A Microeconomic Analysis

Volume Author/Editor: John F. Kain and John M. Quigley

Volume Publisher: NBER

Volume ISBN: 0-870-14270-4

Volume URL: <http://www.nber.org/books/kain75-1>

Publication Date: 1975

Chapter Title: Appendix C: Owning and Saving Versus Renting and Consuming

Chapter Author: John F. Kain, John M. Quigley

Chapter URL: <http://www.nber.org/chapters/c3724>

Chapter pages in book: (p. 320 - 323)

C

Owning and Saving Versus Renting and Consuming

In an analysis of the relative costs of owning and renting a home, J. P. Shelton concludes that owning is usually cheaper than renting, as long as the household expects to live at the same location for more than three and one-half years.¹ The three and one-half year cutoff is obtained by dividing a 2 percent per year annual savings into a nonrecurring transfer cost for owner-occupied units of about 7 percent of their value.

The nonrecurring transfer cost consists of realtor commissions plus an allowance for certain fixed costs. The annual savings from home ownership include tax differences, management costs, vacancy allowances, and savings in annual maintenance expenditures for homeowners (who are assumed able to maintain the same level of quality for about 1/2 percent of market value less per year). For homeowners, the total annual housing costs include: maintenance, obsolescence, property taxes, interest on mortgage, opportunity cost of money plus (discounted) transfer cost. For renters, annual rent equals landlord costs plus return on investment.

Much of the savings from home ownership results from favorable tax provisions, i.e., the ability to deduct interest payments and property taxes and, especially, the absence of any tax on imputed rent. Therefore, the magnitude of the savings in monthly housing costs varies somewhat according to family circumstances, to the size of the mortgage and the amount amortized, and to the assumed opportunity costs of the family's equity.

Shelton develops an example which suggests the magnitude of the yearly savings in housing costs obtained through ownership.² This example assumes that a family may choose to buy its dwelling for

¹John P. Shelton, "The Costs of Renting Versus Owning a Home," *Land Economics* 44, no. 1 (Feb. 1968): 59-72.

²Ibid.

\$20,000 or to rent it for \$167 per month. (This represents a gross rent of \$2,000 per year, based on a widely used gross-rent/value ratio.) To purchase the unit, the prospective homeowner invests \$4,000 as a down payment on the house and assumes a 6 percent mortgage.

As compared to the \$2,000 yearly rental costs, Shelton estimates that purchase would mean yearly expenses before taxes of \$1,590. Property tax and interest payments create tax shields that reduce the true costs of these two items by an amount which depends on the homeowner's tax bracket. He concludes that a conservative estimate of the tax savings created by home ownership would be \$200, yielding yearly, after tax, costs of ownership of \$1,390. This represents a saving of \$610 or a 15.2 percent return (after taxes) on the \$4,000 invested in home ownership, as compared to an assumed stock-market return of 9 percent before taxes. Since stock-market earnings are taxable, the comparable before-tax return on home ownership is 18 percent. The relative return on a home-ownership investment declines as the mortgage is amortized. The investment return is larger, however, if down payments are smaller, or if the opportunity cost of equity capital is lower. Thus, 18 percent is likely to be a low estimate.

The savings from home ownership can also be expressed as a percentage of the cost of renting. From this viewpoint, a limitation on home ownership would increase housing costs beyond three and one-half years by 30 percent, assuming no price appreciation (\$610 savings divided by \$2,000 annual rent). As with the rate-of-return analysis, the savings are larger if a smaller down payment or a lower opportunity cost of capital is assumed.

Henry Aaron obtains even larger estimates of the tax subsidy to homeowners.³ He presents an example, similar to the one just discussed but with a more valuable home (\$25,000) and a larger equity (\$10,000), which yields a \$342 tax saving (as contrasted to the \$200 saving computed by Shelton) and an after-tax return on a \$10,000 equity of 7.4 percent (as contrasted with a before-tax return of 4 percent on other assets). However, Aaron implicitly assumes that the real price of owner- and renter-occupied housing is the same. Shelton, in contrast, contends that excluding tax differences, there is an equilibrium-price difference favoring owner-occupied housing of 1.4 percent of value. If Shelton's analysis of the comparative costs of home ownership and renting is correct in this respect the savings to home ownership based on Aaron's example would amount to 28 percent of monthly rent ($\$342 + .014 (\$25,000)$ for housing value / $\$2,500$ annual rent).

³Henry Aaron, "Income Taxes and Housing," *American Economic Review* 60, no. 5 (Dec. 1970): 789-806.

The substantial divergence in housing costs noted above is in addition to any discriminatory pricing which may exist. Moreover, it must still be regarded as a lower-bound estimate of the economic cost of an effective limitation on home ownership during the postwar period, since it fails to incorporate the effects of inflation on housing costs and does not allude to the special position of home ownership in the savings behavior and capital accumulation of low- and middle-income households.

A spending unit's equity in its home can be divided into three components: the initial equity or down payment, the amortization of the mortgage (savings), and any appreciation or depreciation of the property as a result of general or particular price changes (capital gains or losses). The last two items form the important link between home ownership and capital accumulation.

Although it is technically correct to view an increase in the value of an owned home as an increase in the household's wealth, and to consider the opportunity cost of the equity capital as part of the spending unit's monthly housing costs, there are indications that many households do not view the matter in precisely this way. Out-of-pocket costs appear to be more important considerations for many low- and middle-income families, and it seems that many view the savings in the home as a bonus to home ownership. Thus, it is of considerable interest to compare the current out-of-pocket costs of a St. Louis family who purchased an \$8,000 Federal Housing Authority or Veteran's Administration home on a twenty-year mortgage in 1949 with an otherwise identical family who rented throughout the entire period.

Assuming a conservative capital appreciation of 100 percent over the twenty-year period, the value of this house in 1969 would be \$16,000. Since the mortgage has been paid off, the homeowner has only insurance, real estate taxes, heating and utilities, and maintenance and repairs as out-of-pocket costs. These would total roughly \$64 per month for a St. Louis home of this value in 1969.⁴ By comparison, a renter would have to pay somewhat more than twice this amount (\$133-\$160 per month) to rent a dwelling unit of this value.⁵

⁴The \$64 per month out-of-pocket costs are based on estimated home ownership costs for existing (used) FHA-insured homes in St. Louis, Missouri, in 1967. These totaled \$58.02 for the median home in 1967 (valued at the difference in median value, \$14,597 versus \$16,000) plus increases in costs between 1967 and 1969. If the homeowner still itemizes his tax return (less likely without interest payments), he can deduct \$26 per month of these expenses. This would produce tax savings of between \$5 and \$10 per month depending on his tax bracket. These expense data were obtained from the U.S. Federal Housing Administration.

⁵The \$133 (\$160) per month rent is again based on the widely used rent to value ratio, 1:120 (1:100). There is reason to believe that the above calculations understate the extent of

The preceding comparisons may help to explain the recent findings of the Survey of Economic Opportunity which indicate that at every level of current income, black families have fewer assets than whites, but that housing equity represents a larger proportion of the net worth of black households than of white households.⁶

asset accumulation by the average homeowner. Many homeowners increase the value of their structures by improvements and additions. These outlays, of course, represent further savings and capital accumulation. Others trade up by using their accumulated equity as a down payment on a larger or better quality house, thus maintaining an even higher savings rate.

⁶Recent tabulations from the Survey of Economic Opportunity on the asset and liability position of black and white families by income group show that home equities account for an even greater share of black than white wealth. For example, these data indicate that white families with incomes between \$5,000 and \$7,499 have a net worth of \$12,556, as compared with a net worth of \$3,636 for black families in the same income class. Despite the fact that blacks at each income level are less likely to be homeowners, housing equity represents 67 percent of this smaller black net worth, as compared with 40 percent of that of white families.

Although the mean housing equity of black homeowners is smaller than that of white homeowners, \$7,344 versus \$11,753, the difference in black net worth is not to any significant degree attributable to this difference. Rather, it results from the fact that at each income level a smaller proportion of blacks than whites are homeowners; and even more important, from the fact that the discrepancy in black and white ownership of other assets is even larger than the discrepancy in home ownership. Thus, if the Survey of Economic Opportunity data on assets are to be believed, blacks in the income class \$5,000–\$7,499 have net worth in nonhousing assets equal to only 16 percent of that of white households in the same income level, and all blacks have net worth in nonhousing assets equal to only 9 percent of that of all whites. Of course these results can be considered as suggestive only. The weaknesses of savings and wealth data are notorious, and the interpretation of these differences, if real, would require a complete theory of black and white savings behavior, encompassing the manner in which discrimination or lack of opportunity in the various markets affects the savings behavior of black households. The authors wish to thank Andrew Brimmer and Henry S. Terrell for making these unpublished tabulations available to them.