

The Affordability of Home Ownership in the 1970s

By Glenn H. Miller

In recent years, many observers have expressed concern that home ownership is becoming less and less affordable for the people of the United States. Sharply rising prices of houses, along with rapidly escalating mortgage and utility costs, have been identified as primary contributors to a lessened affordability of home ownership. However, the production and sale of houses have been very strong during the 1970s despite the recessionary periods. Clearly, an analysis of the affordability of home ownership requires going beyond simply observing the prices of houses and the continuing costs of owning a house.

HOUSE PRICES AND FAMILY INCOME

A first step towards a better analysis of the affordability of home ownership is to compare changes in the price of houses to changes in people's incomes. House prices that have been rising much faster than the rate at which incomes have been growing would support the view that home ownership has been becoming less affordable.

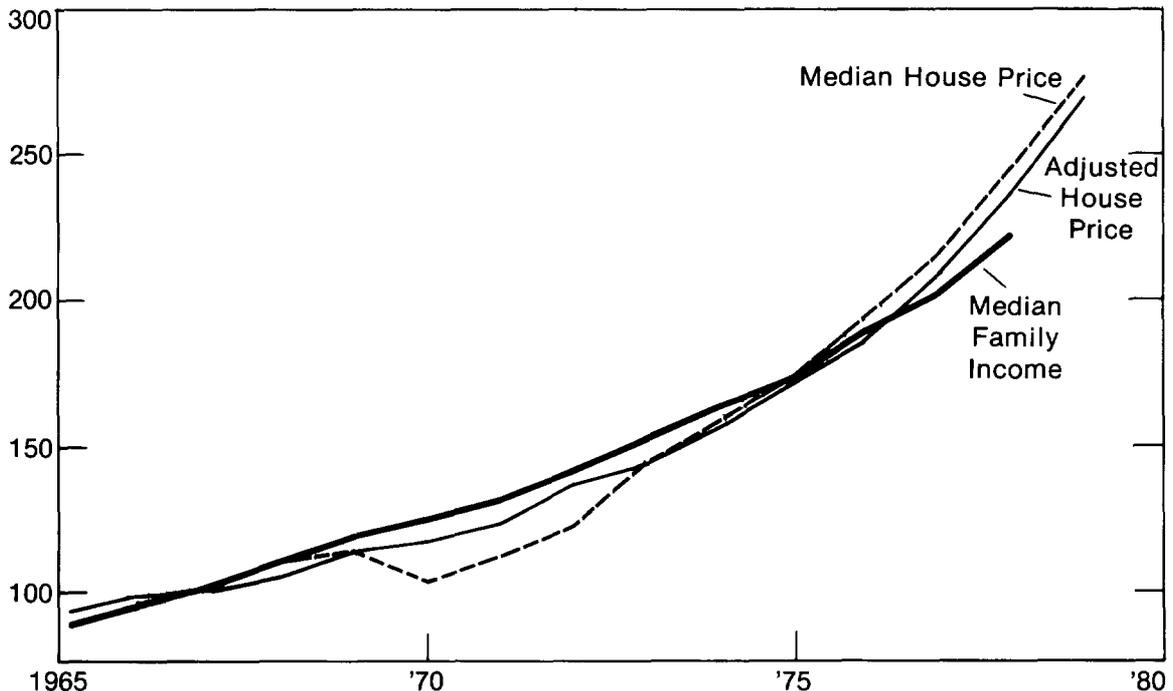
Chart 1 compares the median sales prices of new one-family houses actually sold from 1965 through 1978 with median family income in the United States in the same period. From 1965 to 1975, the two series move closely together, except for the early 1970s when the house price series was distorted by Federal subsidies for home ownership among low income families.¹ From 1975 through 1978, however, the median sales price of houses rose faster than median family income. In 1975, both house price and income were about 1.7 times their 1967 levels. In 1978, income was 2.2 times its 1967 level while the median house price was more than 2.4 times greater.

Another way to express the same relationship is to look at changes during the period in the ratio of median house price to median income. That ratio was stable at about 2.9 from 1965 through 1968, after which it was 2.7 or below until 1974—due partly to the effect of the Federal subsidy program on house prices. After being restored in 1975 to the early 1960s level of 2.9, the ratio rose each year and reached 3.2 in 1978.

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¹ "Home Ownership: Affordable or Out of Reach?" *The Morgan Guaranty Survey*, April 1978, p. 5.

Chart 1
HOUSE PRICES AND FAMILY INCOME
 (1967 = 100)



The house price data discussed above are for houses actually sold during each year. Would the comparisons to income differ if some allowance were made for quality improvements in new houses from 1965 to 1978? Chart 1 also compares median family income to the estimated sales prices each year of houses which are the same with respect to ten important quality characteristics of houses sold in 1974.²

² The ten characteristics are floor area, number of stories, number of bathrooms, air conditioning, type of parking facility, type of foundation, geographic region, metropolitan area location, presence of fireplace, and size of lot. These adjustments do not attempt to estimate variations over time in the quality of workmanship, materials, and mechanical equipment.

This picture is not all that different from that of the first comparison. However, the Federal subsidy effects in the early 1970s are largely removed, and the increase in house prices from 1975 to 1978 is a little closer to the rise in income.

Using only a comparison of house prices and family incomes, it appears that a moderate affordability problem has existed only since 1975—as house prices have grown faster than income.

COSTS OF HOME OWNERSHIP

Down Payments and Monthly Payments

Typically, the purchase price of a house is divided into two parts—a downpayment and a balance generally financed by a mortgage loan.

Thus a buyer faces two separate kinds of financial obligation—an immediate lump sum payment and a continuing repayment of mortgage principal and interest over the life of the loan. The latter is usually accomplished in monthly installments. Real property taxes and hazard insurance premiums are generally paid monthly to the mortgagee along with the payments of principal and interest. These total payments to the mortgagee, along with expenditures for maintenance and repair of the house, make up a household's monthly cost of home ownership.

Approached in this way, the question of the affordability of home ownership may be divided into two questions. Can the potential buyer come up with the down payment required in order to acquire a house? And can the buyer provide the cash flow necessary to make the monthly payments to the mortgagee (principal and interest on the loan, taxes, and insurance) and to pay for any needed maintenance and repairs to the house? In seeking answers to these questions, several factors enter into consideration. For one thing, the question of making a down payment usually finds its answer in the wealth or net worth position of the potential buyer; the question of monthly cash flow is usually answered from information about the buyer's income. Furthermore, the questions of down payment and monthly costs are related. For a given purchase price for a house, the smaller the down payment, the larger is the balance to be financed with a mortgage. As a result, the larger are the required payments for principal and interest and the greater is the regular monthly claim of home ownership costs on the buyer's income.

Answers to questions about the affordability of home ownership may be quite different for repeat buyers and for first-time buyers. This is perhaps clearest in the case of down pay-

ments. Repeat buyers generally enter the housing market having in hand the equity value of their former houses to use for the down payment on their new houses. As a result, home ownership usually continues to be affordable for repeat buyers at the down payment stage. First-time buyers by definition do not have such equity funds available, and face considerably more difficult problems of affordability at the down payment stage.

The financial difficulty of making a down payment is not a new problem for first-time buyers.³ However, there are ways in which the difficulty may be lessened. For example, it may be possible for a potential buyer to borrow the money for a down payment. Such a move, though, simply shifts the affordability question from the down payment stage to the monthly cost stage by increasing the home ownership cash flow claim on income. It might also have implications for the buyer's ability to qualify for a first mortgage loan on the property.

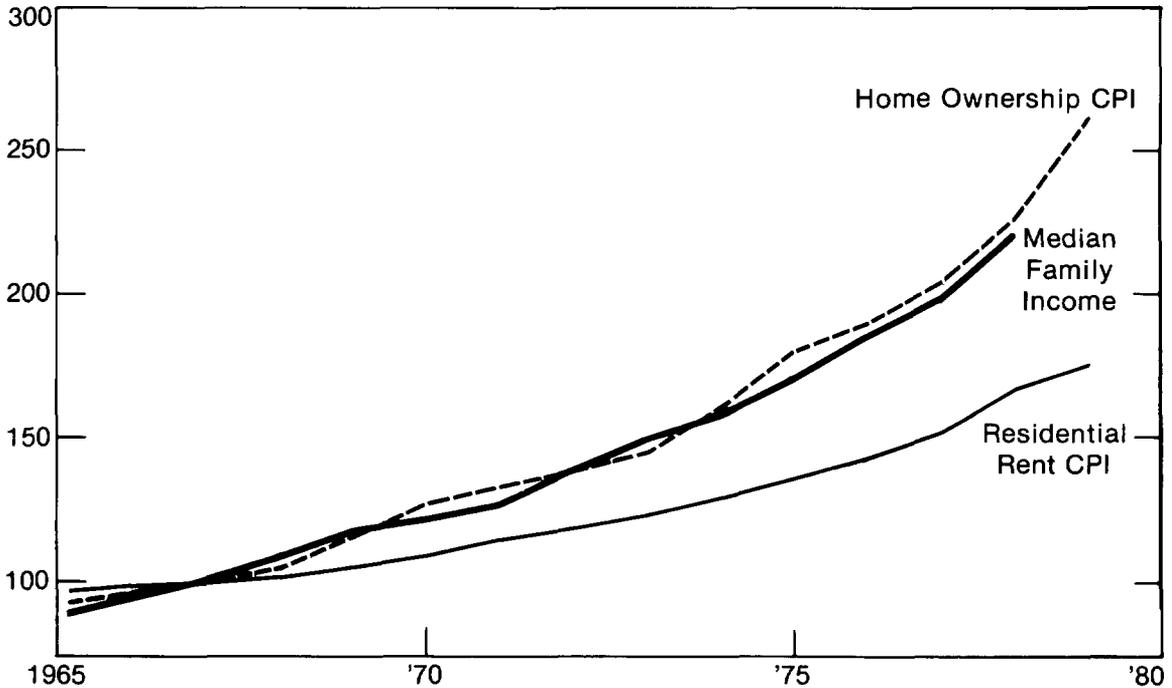
In sample surveys of homebuyers in 1977 and in 1979, the U.S. League of Savings Associations discovered a tendency for down payments to decline as a percentage of purchase price, both for repeat buyers and for first-time buyers. The survey results indicate that the proportion of repeat buyers making down payments of less than 20 per cent of purchase price rose from 24 per cent in 1977 to 39 per cent in 1979.⁴ A much larger share of first-time buyers—62 per cent—made down payments of less than 20 per cent of the purchase price in 1979, up from 47 per cent in 1977. On the other hand, data compiled by the Federal Home Loan Bank Board show an increase since the early 1970s in the average ratio of down payment to purchase price,

³ "Home Ownership: Affordable or Out of Reach?", p. 5.

⁴ *Homeownership: Coping With Inflation*, United States League of Savings Associations, Chicago, Illinois, 1980.

Chart 2
HOME OWNERSHIP COSTS, RESIDENTIAL RENT,
AND FAMILY INCOME

(1967 = 100)



especially for newly built homes.

These conflicting data permit no clear-cut conclusion about the influence on affordability of changes in the proportion of purchase price included in the down payment. Yet home ownership generally appears to continue to be affordable at the down payment stage for repeat buyers, while first-time buyers continue to face some difficulty at the down payment stage.

Housing Costs in the Consumer Price Index

Perhaps the most widely recognized measure of change in the total cost of owning a house is the home ownership component of the Consumer Price Index, which includes house

purchase price, financing, taxes and insurance, and maintenance and repairs. The house purchase component of the CPI uses price data from the Federal Housing Administration on prices for new and existing housing purchased under FHA commitment. Housing financing costs in the CPI reflect both the size of the mortgage (changes in which reflect changes in purchase price and in size of down payment) and the interest rate contracted for when the mortgage was made.⁵

Chart 2 shows that the cost of home

⁵ "The Consumer Price Index: Concepts and Content Over the Years," Report 517, U.S. Department of Labor, Bureau of Labor Statistics, May 1978 (Revised), p. 13.

ownership as measured in the CPI tracks with the growth in median family income since 1965 even better than did the price of new single-family houses. Even from 1975 to 1978, growth in family income has approximately kept pace with the rising cost of home ownership in the CPI.

The residential rent component of the CPI, also shown in Chart 2, provides an interesting comparison in that renting is the alternative means of acquiring shelter. It is also the simplest-to-grasp form of the flow-of-services approach to the cost of home ownership, which contrasts with the asset approach of the home ownership component of the CPI. The asset approach assumes that house buyers consume the total value of the house—purchase price as well as total financing cost—in the year of purchase. The flow-of-services approach says that a home owner consumes shelter and other living accommodations provided by his house over the years he lives there—just as a renter consumes housing services while residing in a rented house or apartment. The rental equivalence approach to flow-of-services pricing for home ownership says that the cost of owning a house is indicated by the rent the owner would have to pay to reside there.

The CPI residential rent series has a number of weaknesses as a proxy measure of home ownership costs. Its greatest weakness is that the sample used is not representative of most owner-occupied housing units—it is heavily influenced by multi-family structures, and cannot be expected to match the quality and geographic distribution of owner-occupied homes. In addition, the CPI rent index may have a downward bias.

An alternative flow-of-services approach to estimating the cost of owner-occupied housing—the user-cost method—is considerably more complicated both conceptually and operationally than the rental equivalence

method. User cost may be briefly defined as the opportunity cost of holding the house less the increase in the house's value. Operationally, an estimate of user cost requires determining what the owner's equity would earn elsewhere, as well as mortgage costs and other costs such as taxes, insurance, and maintenance and repair—then subtracting the appreciation in the value of the house.⁶

As a rental equivalence form of the flow-of-services approach to the cost of owner-occupied housing, the residential rent component of the CPI is a measure of the cost of housing services per se. While there are weaknesses in the CPI rent component as a proxy measure for the cost of owner-occupied housing, it may still be cautiously used in a consideration of the affordability of home ownership. It is clear from Chart 2 that residential rent has risen more slowly during the period charted than the cost of home ownership. Something besides the cost of housing services must be included in the cost of home ownership series.

In recent years significant gains have accrued to the owners of houses as house prices have risen faster than the rate of inflation. While both the home owner and the landlord are gaining from the appreciation in value of the residential structures that they own, only the home ownership series directly reflects that appreciation. The purchase price component makes up about two-fifths of the total home ownership category in the CPI, and has risen

⁶ The Bureau of Labor Statistics—producer of the CPI—has found the development of an operational user cost index to be very complex, but does currently publish two experimental user cost measures of home ownership costs within the CPI. At the same time, in spite of the conceptual and operational advantages of the rental equivalence approach, the present CPI rent component is not entirely appropriate as a measure of shelter costs for home owners. See Robert Gillingham, "Estimating the User Cost of Owner-Occupied Housing," *Monthly Labor Review*, February 1980, pp. 31-35.

considerably faster than residential rent since 1968. Thus, part of the rising cost of home ownership is properly viewed as being paid to purchase an investment in equity appreciation, not to buy housing services. Furthermore, the value of that investment is increased by the income tax deductibility to the home owner of interest payments and property taxes, which reduces significantly the after-tax cost of home ownership.⁷

The above discussion of home ownership costs and residential rent within the CPI suggests that if one adopts a flow-of-services approach and uses residential rent as the indicator, the cost of housing services has risen significantly more slowly than median family income since 1967. Furthermore, median family income kept up with rising house prices until 1975, and with the total cost of home ownership as measured in the CPI through 1978.⁸ And with house prices rising faster than the rate of inflation, home owners have benefited from their investment in equity appreciation. Finally, when it is recognized that the CPI home ownership cost includes interest payments and property taxes that are income tax deductible, the relationship of home ownership costs to after-tax income appears even more favorable. These results suggest that the affordability of home ownership has not been a severe problem in the aggregate.

⁷ DeLeeuw and Ozanne conclude from recent research that, under current tax law and in the recent inflationary environment, investment in owner-occupied housing is treated more favorably than it was in the mid-1960s and is also treated more favorably than is investment in rental housing. Frank DeLeeuw and Larry Ozanne, "The Impact of the Federal Income Tax on Investment in Housing," *Survey of Current Business*, December 1979, pp. 50-61.

⁸ It may be, of course, that median family income is not the appropriate measure of income to use in such comparisons. It does seem to be better, however, than common alternatives such as per capita personal income, especially with the increasing importance of two-earner families in meeting the costs of home ownership.

Meeting the Squeeze on Family Budgets

Part of the perception of the increasing cost of home ownership doubtless revolves around the obvious increases in energy costs in the 1970s, as reflected in rising prices for household fuels. Indeed, the cost of fuels in the CPI was 2.4 times greater in 1979 than in 1967, with much the largest share of the rise coming since 1973. But these rising costs affected tenants as well as home owners and, while having a real effect on living costs generally, cannot be pointed to as an increase in the cost of home ownership relative to the cost of renting an equivalent amount and type of shelter.

It remains true, however, that the rising purchase price of houses, along with higher mortgage interest rates and higher rates of general inflation, have increased the monthly claims of home ownership on family income. If, as a result, there has been an identifiable squeeze on the budget position of home owning families, then the affordability of home ownership may still be in question. Data from the surveys conducted by the U.S. League of Savings Associations show that home buyers have indeed been rearranging their budgets in the late 1970s in order to afford the regular expenses associated with home ownership. In 1979, about 46 per cent of home buyers nationwide spent more than one-fourth of their household income on housing expenses, up from 38 per cent only two years earlier. The increase was almost identical for both repeat buyers and first-time purchasers.

One important adaptation to the rising cost of housing is found in the increasing appearance of two-earner households. According to data collected by the U.S. Department of Labor, the per cent of all U.S. married couple families in which both persons were income earners at some time during the year has increased from 45 per cent in 1968 to 51 per

cent in 1978. The USLSA survey shows that, for all home buyers, the second income provided more than 30 per cent of total household income in 48 per cent of such households in 1979—up from 42 per cent in 1977. First-time home buying households, as might be expected, were even more dependent on a second income. In 1979, 61 per cent of such households received more than 30 per cent of total household income from the second income—fully one-third more than in 1977. Coping with all inflation, not just rising housing costs, has of course been part of the explanation for the increasing importance of the second income. But it seems clear that the second income has made it possible to accommodate rising housing costs as a higher proportion of the total household budget, while minimizing sacrifices elsewhere. Thus, the growing importance of the second earner is a major factor in the continued affordability of home ownership.

SUMMARY

House prices, which have risen more rapidly than the rate of inflation, have also risen more rapidly than family income in recent years. But the total cost of home ownership as measured

in the CPI has grown at about the same pace as family income. The cost of housing services, as represented by residential rent in the CPI, has grown more slowly than either family income or the cost of home ownership. This suggests that the cost of housing services has not become less affordable recently, and that home owners—aided by the income tax deductability of interest payments and property taxes—have been making an investment in equity appreciation. In order to do so, however, they have found it necessary to make some adjustment in their budgets, increasing the proportion of income spent on housing expenses. The presence of a second income earner is an important factor in making such adjustments possible, while minimizing sacrifices elsewhere.

It appears that home ownership has continued to be generally affordable, although with some difficulty especially for first-time buyers. That difficulty has often been met by the contribution of a second earner to family income, and by some rearrangement of family spending patterns. Such modifications in family earning and spending patterns have made possible not only a continued flow of housing services, but also capital gains from an investment in equity appreciation.