Economic Commentary
ISSN 0428-1276

Current Perspectives on Home Ownership

by Judy Z. Menich

Between 1970 and 1979, the median sales price of an existing single-family home rose roughly 170 percent, while the general price level increased 113 percent. The number of housing units also increased substantially: 17.8 million housing units were produced during the 1970s, or 24 percent more than in the previous decade.[1] As the 1970s advanced, the role of housing shifted from primarily a consumption item to an investment item, a role that was further enhanced by declines in real after-tax returns on such financial assets as stocks, bonds, and savings accounts.

Since late 1979, housing prices, adjusted for inflation, actually have declined. Moreover, the trend toward larger homes has reversed: the average size of a new house, which peaked in 1978 at 1650 square feet, has been decreasing since. Today's new home buyers are faced with paying more money for less living space, although the price per square foot has declined somewhat since 1979. This *Economic Commentary* examines the underlying causes of the rapid escalation and subsequent deceleration in home prices, focusing on the economic developments that were the major stimulus to home ownership in the 1970s.

Inflation and Housing Prices

Historically, an increase in the general price level has been accompanied by a proportionate increase in housing prices; from 1950 until the mid-1960s, housing prices advanced at roughly the same rate as the overall inflation rate. During this same period, median family income grew at a

1. See "Housing: Sacred Cow," *FRB SF Weekly Letter,* Federal Reserve Bank of San Francisco, November 28, 1980.

Judy Menich is an economic analyst with the Federal Reserve Bank of Cleveland.

The views stated herein are those of the author and not necessarily those of the Federal Reserve Bank of Cleveland or of the Board of Governors of the Federal Reserve System.

Table 2 Fixed-Rate, Level-Payment Mortgages at Various Interest Rates
Principal: $50,000 Term: 30 Years

Rate, percent	Monthly payment (principal and interest),[a] dollars	Total interest payment,[b] dollars	Interest as percent of total[b]	Total paid,[b] dollars
8	366.88	82,080	62	132,080
10	438.79	107,965	68	157,965
12	514.31	135,150	73	185,150
14	592.44	163,280	77	213,280
16	672.38	192,060	79	242,060
18	753.54	221,275	82	271,275
20	835.51	250,785	83	300,785

a. Excludes property taxes and insurance premiums.
b. Assumes mortgage is held to maturity.

their housing because of tax considerations. During inflationary periods, nominal incomes tend to rise, pushing individuals into higher tax brackets. The progressive nature of the U.S. tax system and the fact that interest deductions are concentrated in the early years of a mortgage may provide an incentive to sell and assume a new mortgage to maximize the tax-sheltering feature of housing. This is particularly true for individuals who have experienced substantial income growth, resulting in a significant decline in the portion of income allocated to housing expenditures.

The differential impact of housing price inflation also is evidenced by changes in the composition of participants in the home buying market. In one study of homes financed by savings and loans, first-time buyers accounted for 36 percent of all home buyers in 1977, but this percentage declined to 17 percent in 1979.[8] While repurchasers generally "trade up" to larger homes, first-time buyers are concentrated at the lower-priced end of the market. In 1977, the median purchase price paid by first-time buyers was $37,000, compared with $48,472 for repurchasers; in 1979, first-time buyers paid a median price of $48,950, compared with $60,600 for repurchasers.

Although rising housing prices have a differential impact at the down-payment stage, this is not necessarily the case in financing the balance of the purchase price unless the repurchaser applies a large portion of his accumulated equity to the down payment, thereby reducing the amount financed by a mortgage loan. As mortgage interest rates rise, the proportion of the total payment devoted to interest over the life of the loan also rises (see table 2).

To assess the impact of rising housing prices and interest rates on housing sales, the proportion of income devoted to housing may be considered on a yearly basis, using that year's median sales price of a new home, median household income, average effective mortgage interest rate, average down payment, and average loan maturity. By using the loan terms in effect for a specific year, it can be seen that the monthly payment burden has increased faster than income. Today's home buyer must allocate a substantially larger portion of current income to housing expenditures than was the case five years ago. In 1979, the median-income family purchasing a median-priced home allocated 27.1 percent of annual income to housing expenditures, compared with 16.4 percent in 1970 (see table 1). Moreover, these figures do not take into account the corresponding increases in property taxes, insurance premiums, and maintenance costs. On the other hand, the tax advantages of home ownership also have been excluded, although, as noted earlier, these may be a significant factor in the decision to purchase a home.

8. See "Homeownership: Coping with Inflation," United States Savings League.

Conclusion

In summary, home ownership costs have increased substantially in the past three years, both as a result of inflation and the increase in real mortgage interest rates. Although innovative financing techniques and the increase in two-wage-earner families have overcome the barriers to home ownership to some extent, they are unlikely to put housing within the reach of many potential first-time buyers. Single-family housing proved to be an excellent investment in the 1970s, when low real interest rates and accelerating inflation increased the demand for single-family housing. In the past three years, however, regulatory changes have integrated the mortgage markets with the capital markets, increasing the volatility and cost of mortgage credit. With the growing importance of variable-rate mortgage loans, home buyers also will face greater uncertainty with respect to their monthly housing expenditures. At the same time, government incentives to encourage investment in the nation's industrial sector are likely to reduce the attractiveness of housing as an investment. Given these factors, the climb of housing prices will likely be restrained in the 1980s.

NOTE: No issues of the *Economic Commentary* were published in October.

Federal Reserve Bank of Cleveland
Research Department
P.O. Box 6387
Cleveland, OH 44101

BULK RATE
U.S. Postage Paid
Cleveland, OH
Permit No. 385

Address correction requested
☐ Correct as shown
☐ Remove from mailing list

Please send mailing label to the Research Department,
Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, OH 44101.

faster rate than overall prices. During the 1970s, however, housing prices increased at a substantially faster rate than the prices of other goods. Between 1971 and 1975, existing home prices increased at an average annual rate of 9 percent; between 1976 and 1980, they increased 12 percent annually.[2] Existing home prices experienced their largest year-to-year gain between 1978 and 1979 (14.4 percent), but increased by only 11.7 percent from 1979 to 1980. The slowdown in the appreciation of home values since mid-1980 has been even more pronounced, with an increase of 6.8 percent in the 12 months ending in June 1981. The softening in housing markets illustrates the impact of escalating mortgage interest rates on housing demand.

The demand for housing is influenced by many factors, including population, household formations, income changes, and the desire to hedge against inflation. The maturation of the postwar "baby boom" has provided some underlying demand for single-family housing, thereby contributing to rising prices.[3] Although new households form the basis of housing demand, recent socioeconomic trends are adding to the demand. In particular, the rising divorce rate and growing tendency to postpone or forego marriage have contributed to growing numbers of singles in the overall population. In 1979, 22.4 percent of all home buyers were single, compared with 17.0 percent in 1977. At the same time, increasing numbers of unmarried couples are purchasing homes.

Economic developments have been the major stimulus to home ownership, particularly from 1975 to 1978. Accelerating inflation, together with the tax laws, distorted the after-tax returns on housing vis-à-vis other assets, providing households with a strong incentive to purchase more housing relative to other goods. In addition to enhancing the tax advantages of home ownership, inflation lowered real mortgage interest rates so that inflation-adjusted mortgage rates actually declined from 1974-77, making home ownership relatively inexpensive.

The introduction in mid-1978 of the six-month money-market certificate, with a near-market interest rate, enabled financial institutions to compete more effectively for deposits, thereby maintaining a stable flow of mortgage funds. However, the exposure of financial institutions to interest-rate risk also was increased, since the maturity structure of their deposits was shortened without a parallel reduction in the maturity of their assets (i.e., mortgage loans). Consequently, lenders became less willing to extend long-term fixed-rate mortgages unless a substantial risk premium was incorporated in the mortgage interest rate.[4] In fact, the real (inflation-adjusted) mortgage rate stood at 5.88 percent in December 1980, compared with 3.03 percent in December 1977. Real mortgage interest rates averaged below 3 percent between 1975 and 1978, making housing an especially inviting inflation hedge.

Several tax advantages accrue to home owners that decrease the after-tax costs of home ownership. Home owners can deduct all interest payments and property taxes from their taxable income and defer indefinitely the capital-gains taxes on any profit received from the sale of their homes. (This deferral assumes that the seller purchases another equally, or more, expensive home within 24 months.) In addition, a seller aged 55 or over can realize up to $125,000 in capital gains without paying any capital-gains taxes.[5] By comparison, owners of other assets, such as corporate equities, are taxed on any long-term capital gains received from the sale of stock, even though they may purchase additional stock within a short time period. Because federal tax policy has encouraged home ownership at the expense of investment in other assets, for many households a home represents the major investment as well as shelter.

2. Moreover, these figures do not take into account the impact of concessionary financing schemes, which are tantamount to lowering prices.
3. The 25-34 age group, the prime homebuying ages, increased by 22 percent between 1970 and 1975 and by 17 percent between 1975 and 1980, compared with overall population increases of 4.4 percent and 4.2 percent, respectively.

4. The real mortgage rate is calculated by subtracting the annual rate of inflation as measured by the implicit price deflator for personal consumption expenditures from the mortgage rate.

The after-tax cost of housing also is reduced, because financing costs are deducted from taxable income.[6] Inflation reduces the burden of a mortgage payment, provided that family income growth keeps approximate pace with the inflation rate. Because the mortgage payment is fixed over the life of the loan, and because income tends to rise during inflationary periods, the financial burden of home ownership is shifted to the early years of the mortgage. Yet, at the same time, a disproportionate share of the mortgage payment consists of tax-deductible interest during the early years of a mortgage loan.

An additional distorting element in the taxation of housing is the disparate treatment of owner-occupied and rental housing. The imputed rental income from owned housing is not taxed, even though nominal borrowing costs and property taxes are deductible from taxable income. On the other hand, nominal rental income from rental housing is taxable to the owner of the property. Inflation favors investment in owner-occupied housing by shifting the returns from home ownership to the year that the property is sold, thereby translating ordinary income into capital gains. During the ownership years, these gains are not taxable even though interest and property taxes, which increase at a rate roughly proportional to the price level, are fully tax deductible. Any tax advantages that accrue to owners of rental property are reduced by inflation, because depreciation allowances for rental property are based on historical costs and, therefore, do not rise over time with the general price level. Thus, the value of the depreciation allowance diminishes as inflation accelerates, reducing the attractiveness of rental housing as an investment. In addition, capital gains realized from the sale of rental housing are more likely to be taxed, while such gains can be deferred indefinitely in the case of owner-occupied housing. The exclusion of the imputed rental income of home owners from taxable income despite the tax deductibility of interest and property tax expenses lowers the user cost of owner-occupied housing vis-à-vis rental housing and provides home owners with a distinct tax advantage, thereby affecting the choice of owning versus renting.

5. At the present time, 60 percent of long-term capital gains are excluded from taxation. For an individual in the 50 percent bracket, the maximum long-term capital gains tax rate is 20 percent (40 percent of the 50 percent tax bracket). However, a large capital gain can trigger the alternative minimum tax, which is paid on a portion of the 60 percent of gains excluded from taxation.
6. In recent months, a wide variety of financing arrangements have surfaced in the housing markets, including variable rate, shared appreciation, reverse annuity, and rollover mortgages. Although these forms of "creative financing" may become more important in the future, until recently the majority of home purchases were financed by mortgage loans with fixed interest rates and 20-year to 30-year terms to maturity.

Table 1 Home Prices and Family Income: 1970-81

Year	Median sales price of new homes, dollars	Median family income, dollars	Ratio of sales price to income	Monthly payment as percent of median family income[a]
1970	23,400	9,867	2.4	16.4
1971	25,200	10,285	2.5	16.3
1972	27,600	11,116	2.5	16.2
1973	32,500	12,051	2.7	19.3
1974	35,900	12,902	2.8	21.2
1975	39,300	13,719	2.9	21.9
1976	44,200	14,958	3.0	22.5
1977	48,800	16,009	3.0	23.2
1978	55,700	17,640	3.2	24.6
1979	62,900	19,680	3.2	27.1
1980	64,500	21,398[b]	3.3	29.5
1981 (6 months)	68,800	22,977[b]	3.3	31.0

a. Monthly payment includes principal and interest only and assumes average loan terms for year listed—i.e., average effective loan rate on conventional mortgage, average term to maturity, and average down payment—on loan to purchase newly built home.
b. Figures are estimated.

SOURCES: U.S. Department of Commerce and Board of Governors of the Federal Reserve System.

Home Ownership Costs

Although investment in single-family homes has been viewed as an effective means of "coping with inflation," such investments are becoming less attractive as real home ownership costs continue to spiral. Rapidly escalating home prices and high mortgage interest rates have excluded many potential home buyers from the market (see table 1). First-time buyers in particular are finding it more difficult to meet down-payment terms and to secure mortgage financing. Mortgage instruments with fluctuating rates, which generally are linked to a financial institution's cost of funds, add uncertainty to the monthly mortgage payment and reduce the amount of mortgage debt a household prudently can acquire. High interest rates and the difficulty encountered in selling existing homes have eroded the liquidity of investment in housing for current owners.

An examination of the historical relationship between income growth and housing prices shows that income changes have not kept pace with the rise in housing prices. Over the past decade, the ratio of the median sales price of a new home to annual median family income averaged 2.58; from 1975 through 1979, this ratio was 3.06. During the latter period, the median sales price of an existing home increased by roughly 60 percent, while median family income grew by only 43 percent.

Although steep housing prices are a barrier to the first-time buyer, they can benefit present home owners. Appreciation in home values has enabled repurchasers to upgrade their housing by applying the equity accumulated in a previous home to a down payment on a new home.[7] Repurchasers may have an additional incentive to upgrade

7. In 1979 the typical repurchaser applied only one-third of the equity realized from the sale of a previous residence to the new purchase. See "Homeownership: Coping with Inflation," United States Savings League: Chicago, Illinois, 1980.