Cyclical downturn in housing

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Housing construction is in a sharp decline. In the first quarter of this year, starts were down almost a third from the rate of mid-1979, adjusted for usual seasonal patterns. The decline continued in the second quarter. With very high mortgage rates as a major factor pushing the cost of ownership up much faster than income, many potential buyers have been forced to postpone or cancel intended purchases.

Despite the gloom in the near-term outlook, demographic factors in the basic demand for housing remain favorable. In time these factors will reverse the current decline and add impetus to the recovery that follows.

Housing cycles and GNP

The formation of new households—one or more people occupying a separate housing unit—combines with upgrading of housing by existing households to create demand for new units. The demand is highly volatile, however, as decisions to form new households or upgrade housing are usually slowed or stepped up by the prospects for income and employment, the cost and availability of credit, the availability of unoccupied housing units, and the price of existing homes.

The volatility of new housing—and its importance in business cycles—is reflected in GNP data. The past quarter century has seen four recessions, each preceded by a downturn in residential construction two or three quarters earlier. Twice, there was a housing recession with no corresponding "official" recession in business generally.

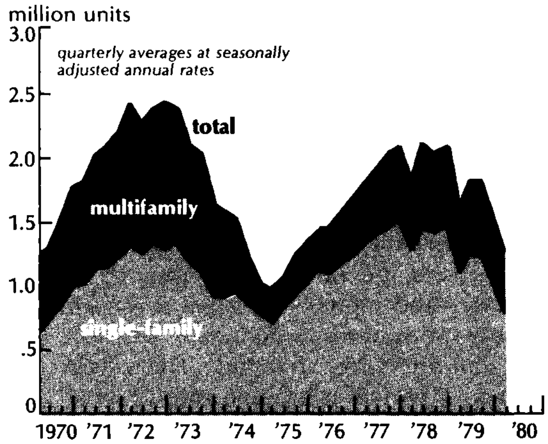
Measured by real GNP, adjusted for inflation, recessions have averaged 2.8 percent from peak quarter to trough quarter. Recessions in real residential fixed investment have averaged 22 percent, almost 8 times as great. In the steepest housing recession, from the first quarter of 1973 to the first quarter of 1975, real residential investment fell 44 percent. The most recent peak, in the second quarter of 1978, came with the snap-back from an unusually harsh winter. By the first quarter of 1980, real residential investment had declined 13 percent.

Decline hits Midwest

Housing construction turned down earlier this cycle in the North Central states, often called the Midwest, and it has fallen further than in the nation as a whole. From the high in 1978, housing starts nationwide fell 14 percent in 1979. But in the Midwest, the peak was in 1977. Starts fell 3 percent in 1978 and a further 23 percent in 1979. Another substantial decline is shaping up for 1980.

Several theories have been advanced to account for the comparative weakness of housing in the Midwest. The main factor, however, is probably net outmigration of

Housing starts decline sharply



Business cycles in GNP and housing construction
(dollars in billions)

	Real Gross National Product				Real Residential Fixed Investment			
			Decline				Decline	
	Quarter	1972 dollars	Length	Percent	Quarter	1972 dollars	Length	Percent
Peak	3Q '57	685.6			2Q '55	36.0		
Trough	1Q '58	663.4	2Q	3.2	1Q '58	28.7	11Q	20.3
Peak	1Q '60	740.7			2Q '59	39.2		
Trough	4Q '60	731.9	3Q	1.2	4Q '60	33.4	6Q	14.8
Peak	No concurrent GNP cycle				1Q '64	46.4		
Trough					4Q '64	41.9	3Q	9.7
Peak	No concurrent GNP cycle				2Q '65	44.1		
Trough					1Q '67	32.7	7Q	25.9
Peak	3Q '69	1,083.4			1Q '69	45.2		
Trough	4Q '70	1,071.4	5Q	1.1	2Q '70	38.3	5Q	15.3
Peak	4Q '73	1,242.6			1Q '73	64.4		
Trough	1Q '75	1,171.6	5Q	5.7	1Q '75	36.3	8Q	43.6
Peak?	1Q '80	1,444.2			2Q '78	60.9		

people and industry in recent years. The movement was given added impetus by three successive severe winters.

Trends in the Midwest contrast sharply with those in the three leading Sunbelt states, California, Texas, and Florida. Together, these states accounted for 40 percent of the growth in the nation's population in the 1970s and almost as large a proportion of total housing starts.

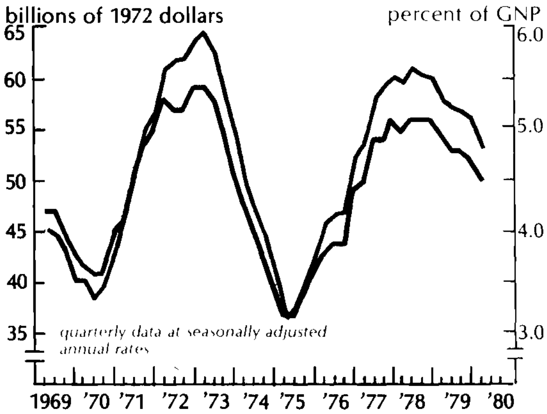
Credit costs soar

Because houses are nearly always bought on credit, the trend of home sales and construction is vulnerable to any change in the cost and availability of mortgage loans. Last year, mortgage rates began moving to unprecedented highs. This April some lenders were quoting rates as high as 17 percent, before conditions began to ease. That was in contrast to a typical mortgage rate of only 10.6 percent a year earlier.

Sharply higher rates and ever increasing home prices have forced many potential buyers to choose between unattractive alternatives: commiting much more of their income to housing, buying a much less expensive house than intended, or withdrawing from the market completely. Buying a $53,000 home, the national average in early 1979, required a monthly payment of $404. That assumed a 25-year, 80 percent loan at 10.6 percent interest. Buying a comparable house in 1980—at a price of $58,000 and at an interest rate of 16 percent—requires a monthly payment of $631 to amortize the mortgage. The monthly payment was up 56 percent in just over a year, about five times the percentage increase in average household income. Few borrowers were ready and able to assume such a burden. According to industry sources, mortgage demand virtually disappeared when rates passed 14 percent.

A sharp rise in mortgage rates affects more than first-time buyers. People that

Residential construction shows large cyclical swings



SOURCE: Bureau of Economic Analysis.

already own their homes become less able and willing to trade-up, even though large equities can be used as downpayments. They are less able, because fewer first-time buyers are eligible to buy their homes, and they are less willing, because they prefer to stay in their present homes covered by mortgages negotiated when interest rates were substantially lower than now.

The situation is illustrated by the incremental cost of credit to a household selling a house with a "cheap" 10 percent mortgage to buy another house at a mortgage rate of 16 percent. If the loan being paid off is $40,000 and the new loan is $60,000, the effective interest rate on the incremental $20,000 is 28 percent! Homeowners tend to stay put, upgrading their homes through additions and alterations.

Credit cost is also important to homebuilders. Home construction is usually financed with bank loans at 2 to 4 points over the prime rate. Carrying costs continue until a buyer is found. In April, some builders were paying 24 percent to carry finished homes. Prices would have to rise 2 percent per month to offset this cost.

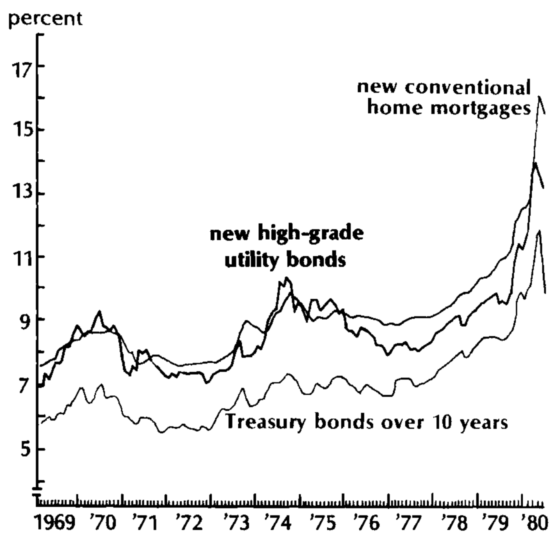
Availability at a price

In marked contrast with earlier downturns in housing, mortgage credit has remained generally available for borrowers willing and able to pay the price. The difference can be attributed largely to the greater freedom of S&Ls and other lenders to pay market rates for funds raised and charge market rates for funds advanced.

In 1966, 1969, and 1973-74, the net inflow of savings at S&Ls was substantially reduced—sometimes to net outflows. Market rates of interest, for example Treasury bill rates, had risen above the rates S&Ls could pay on regular deposits. In July 1978, when it was clear that market rates were on the rise, federal regulators authorized thrift institutions and commercial banks to sell six-month money market certificates at rates equivalent to those paid on 26-week Treasury bills. As a result, mortgage lenders could compete for funds and make credit available to home buyers, although at a rising cost. This greatly moderated the housing downturn in 1978 and most of 1979.

Residential mortgage debt increased about $115 billion in 1978 and again in 1979. This was twice the increase in the mid-1970s and about five times the increase in the late 1960s. For the past three years, residential mortgages have accounted for about 30 per-

Unprecedented surge in interest rates reversed in April



Holders of home mortgages, one to four units

	1969		1971		1973		1975		1977		1979	
	(billion dollars, year-end)											
Total	282.7	100.0%	327.6	100.0%	416.2	100.0%	490.8	100.0%	656.6	100.0%	872.2	100.0%
Savings and loans	117.7	41.6	141.0	43.0	187.1	45.0	223.9	45.6	310.7	47.3	394.4	45.2
Mutual savings banks	41.1	14.5	43.4	13.2	48.8	11.7	50.0	10.2	57.6	8.8	64.7	7.4
Commercial banks	41.4	14.6	48.0	14.7	68.0	16.3	77.0	15.7	105.1	16.0	146.1	16.8
Life insurance companies	27.6	9.8	24.6	7.5	20.4	4.9	17.6	3.6	14.7	2.2	16.2	1.9
Government and related agencies[1]	19.1	6.8	25.2	7.7	29.7	7.1	42.1	8.6	40.7	6.2	64.9	7.4
Mortgage pools[2]	1.8	0.6	7.3	2.2	14.8	3.6	30.0	6.1	60.5	9.2	103.4	11.9
Individuals and others[3]	34.0	12.0	38.1	11.6	47.3	11.4	50.3	10.2	67.3	10.2	82.5	9.5

[1]Includes federal, state, and local governments and agencies, Federal National Mortgage Association (FNMA), Federal Home Loan Mortgage Corporation (FHLMC), and Federal Land Banks.

[2]Outstanding principal balances of mortgages backing securities guaranteed by Government National Mortgage Association (GNMA), FHLMC, or the Farmers Home Administration (FmHA).

[3]Others include mortgage companies, noninsured pension funds, state and local retirement funds, real estate investment trusts, and credit unions.

SOURCE: Federal Reserve Board.

Holders of multifamily mortgages, five or more units

	1969		1971		1973		1975		1977		1979	
	(billion dollars, year-end)											
Total	53.2	100.0%	70.0	100.0%	93.1	100.0%	100.6	100.0%	111.8	100.0%	130.7	100.0%
Savings and loans	11.7	22.0	17.5	25.0	22.8	24.5	25.5	25.3	32.5	29.1	37.6	28.8
Mutual savings banks	7.6	14.3	9.6	13.7	12.3	13.2	13.8	13.7	15.3	13.7	17.2	13.2
Commercial banks	3.2	6.0	4.0	5.7	6.9	7.4	5.9	5.9	9.2	8.2	12.6	9.6
Life insurance companies	14.2	26.7	16.7	23.8	18.5	19.9	19.6	19.5	18.8	16.8	19.2	14.7
Government and related agencies[1]	4.2	7.9	7.5	10.7	12.9	13.9	19.2	19.1	20.0	17.9	22.9	17.5
Mortgage pools[2]	0.0	0.0	0.1	0.1	0.6	0.6	1.3	1.3	3.1	2.7	7.0	5.4
Individuals and others[3]	12.2	22.9	14.5	20.7	19.3	20.7	15.3	15.2	12.9	11.5	14.1	10.8

[1]Includes federal, state, and local governments and agencies, Federal National Mortgage Association (FNMA), Federal Home Loan Mortgage Corporation (FHLMC), and Federal Land Banks.

[2]Outstanding principal balances of mortgages backing securities guaranteed by Government National Mortgage Association (GNMA), FHLMC, or the Farmers Home Administration (FmHA).

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SOURCE: Federal Reserve Board.

cent of the funds raised by all nonfinancial sectors of the economy. This was more than four times the funds raised through corporate bonds.

Usury ceilings, like ceilings on deposit rates, have also impaired the flow of funds into mortgage markets at times. As credit tightened in 1979, particularly after October, usury ceilings were below market mortgage rates in more than 20 states. Just before the end of the year, a federal law suspended usury ceilings nationwide for the first three months of 1980. In March, another federal law removed ceilings permanently.

When interest rates rose sharply this spring, the volume of mortgage lending plummeted. New mortgage loans consisted almost entirely of credit to borrowers with commitments secured earlier at lower rates. Lenders, however, insist that mortgage credit is available for qualified borrowers. The collapse in lending, therefore, suggests that mortgage borrowers are less able and willing to compete with other sectors when rates are very high. Many people willing to buy do not have the income to qualify. Others, with adequate incomes, may wish to postpone purchases until conditions improve. Other types of borrowers, such as governments and businesses, do not usually have this flexibility.

Mortgage credit sources

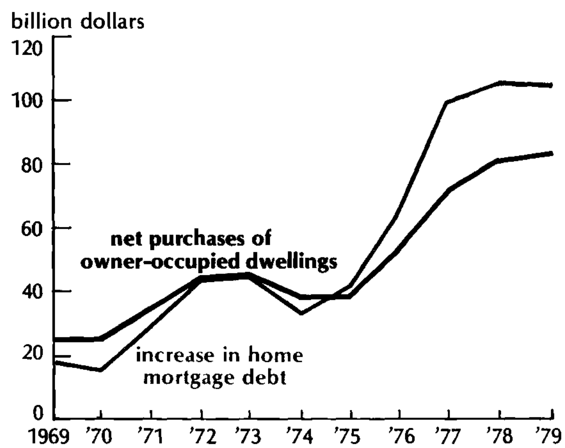
Outstanding residential mortgages totaled more than $1 trillion at year-end 1979. That compared with $559 billion five years earlier and $336 billion a decade earlier. Home mortgages, for properties with 1-4 living units, make up almost 90 percent of all residential mortgages.

Savings and loan associations have long been the main lenders for both homes and apartments. At the end of 1979, S&Ls held 45 percent of all home mortgages outstanding and 29 percent of apartment mortgages. These proportions would have been lower had S&Ls not been authorized to sell money market certificates. Regular passbook deposits at S&Ls fell $20 billion in 1979, but money market certificates rose $84 billion by year-end to account for 27 percent of all deposits at S&Ls. "Jumbo" CDs of $100,000 or more, also offered at money market rates, rose 13 billion, almost doubling the volume outstanding. S&Ls also made heavy use of Federal Home Loan Bank advances, which increased $8 billion to a total of $40 billion.

Commercial banks at year-end held 17 percent of the home mortgages and 10 percent of the apartment mortgages. Like S&Ls, banks have relied heavily on money market certificates and large CDs to raise funds. Residential mortgages made up less than 13 percent of all financial assets at commercial banks, compared with 75 percent at S&Ls.

The fastest growing source of residential mortgage credit is "mortgage pools." Lenders, usually mortgage bankers, assemble pools of mortgages to be sold as "mortgage-backed securities." The securities are guaranteed by one of three agencies: the Government National Mortgage Association (GNMA), the Farmers Home Administration (FmHA), or the Federal Home Loan Mortgage Corporation (FHLMC). Mortgage pools outstanding accounted for 12 percent of home mortgages at the end of last year and 5 percent of apartment mortgages. Ten years earlier mortgage pools had less than 1 percent of outstandings.

Rise in mortgage debt has outpaced new investment in housing



Most mortgage-backed securities are bought by pension funds, trusts, mutual funds, and other investors who usually do not lend directly in the mortgage market. Their participation has increased liquidity in the mortgage market, particularly in times of tight credit.

Another important factor in the residential mortgage market is the Federal National Mortgage Association (FNMA), which auctions commitments to buy mortgages. It raises funds by selling its own securities. At year-end 1979, FNMA held about 5 percent of home mortgages and 4 percent of apartment mortgages.

Mutual savings banks held 7 percent of the home mortgages and 13 percent of the apartment mortgages. Located almost exclusively in the northeastern states, their share of the home mortgage market has fallen over the years. They held 14 percent of home mortgages in 1969.

The proportion of residential mortgages held by life insurance companies has also fallen in the past decade. At year-end 1979, life insurance companies held 2 percent of the home mortgages and 15 percent of the apartment mortgages. Ten years earlier, they held 10 percent of the home mortgages and 27 percent of the mortgages on apartments. Part of the decline has been offset by purchases of mortgage-backed securities, particularly GNMAs.

Demographic trends favorable

A bullish factor in the long-run outlook for housing demand is the high rate of net household formation. The number of households has increased an average of 1.6 million a year for the past ten years. This compares with annual averages of 1.2 million in the last half of the 1960s and about 900,000 in the 1950-65 period. Projections by the Census Bureau show net household formation averaging more than 1.7 million a year in the first half of the 1980s.

This high rate is largely the result of rapid growth in population aged 14 to 34, the years most people become independent of their parents and establish separate living quarters. In the last ten years, the population that age increased 16 million. It accounted for about 90 percent of the increase in total population.

Changes in the age structure of the population account for only part of the increase in households, however. While the population aged 14 to 34 increased 24 percent in the 1970s, the number of households headed by people in that age group increased 54 percent, or more than twice as fast.

The same pattern can be seen in nearly all age groups. With the growing ability to maintain separate households, the number of households has increased faster than the population.

A fifth of all households consist of only one person. Single people accounted for more than half the increase in households in the 1970s. Contributing to the high rate of single-person household formation are delayed marriages, higher divorce rates, and increased longevity.

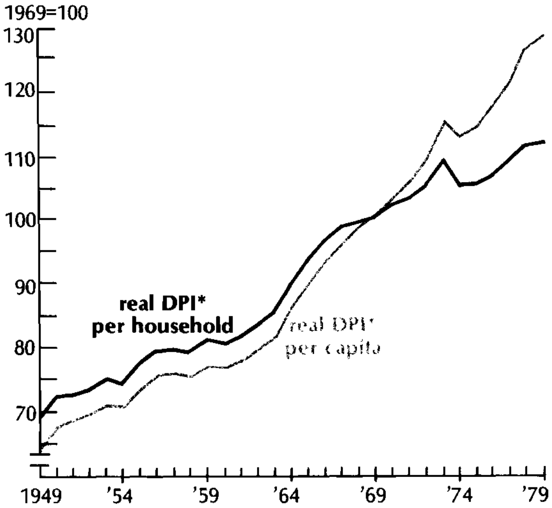
Income and independence

Closely associated with demographic trends are changes in disposable income and its distribution. Higher income, including subsidies, sustains many independent households of people who would otherwise be forced to double up or live in institutions.

Despite temporary interruptions, real household income has trended upward for the past three decades. Adjusted for inflation, disposable personal income per household in 1979 was up 12 percent from 1969, 39 percent from 1959, and 61 percent from 1949. On a per capita basis, the rise was even steeper, up 28 percent over ten years, 67 percent over 20 years, and 100 percent over 30 years.

The faster growth in per capita income, relative to income per household, reflects the rise in the proportion of women working and the related decline in childbearing. Last year, 51 percent of the women aged 16 and over were in the labor force. That compared with 43 percent in 1969 and 37 percent in 1959. The total fertility rate (an estimate of expected lifetime births per woman) fell to 1.8 in the

Income per capita has increased faster than income per household



*Disposable personal income, adjusted for inflation.

late 1970s. That compared wth 2.5 births per woman in the late 1960s and 3.7 at the peak of the baby boom in the late 1950s.

More than 3 million households live in housing units directly susidized by the federal government. Millions more receive subsidies that allow them to spend more on housing—for food, medical care, transportation, heating, education, old age, and general welfare.

Higher real income has facilitated not only the formation of more separate households but also substantial upgrading over the years. The proportion of households without complete indoor plumbing is less than 2 percent, compared with 6 percent in 1970 and 15 percent in 1960. Houses built in recent years are larger, have more bedrooms and bathrooms, and are more likely to have central air conditioning and fireplaces than the typical new house in 1970.

Although real income per household has trended upward since World War II, it could fall in 1980. That, with the higher mortgage rates, would tend to reduce demand for new housing.

Homeownership and home prices

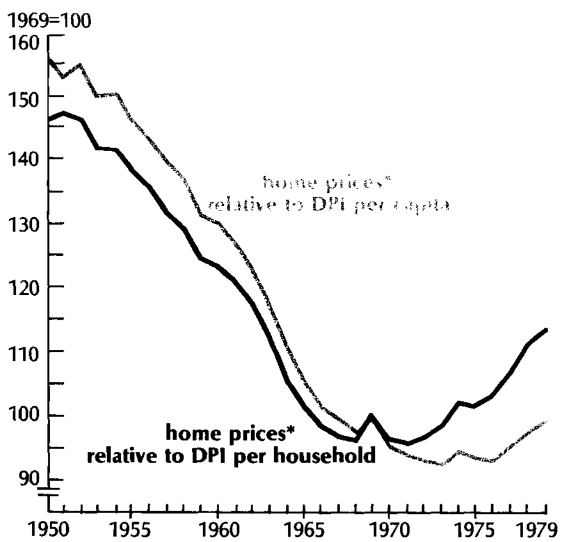
Two out of three households own their own homes. And homeowners accounted for three-quarters of the increase in the number of households in the 1970s.

Changes in the composition of households throw into question the validity of comparisons of home prices with household incomes. Many households with two incomes and no children can commit more of their income to mortgage payments without over-extending themselves. A better measure of the affordability of houses may be a comparison of home prices and per capita income.

Measured by the deflator for residential structures, new home prices rose 136 percent between 1969 and 1979. During that time, disposable personal income per household rose 107 percent, but disposable income per capita rose 137 percent, about the same as the rise in home prices.

Prior to 1969 income, however measured, had been rising faster than the cost of con-

Long decline in home prices relative to income reversed in the 1970s



*Deflator for nonfarm residential structures.

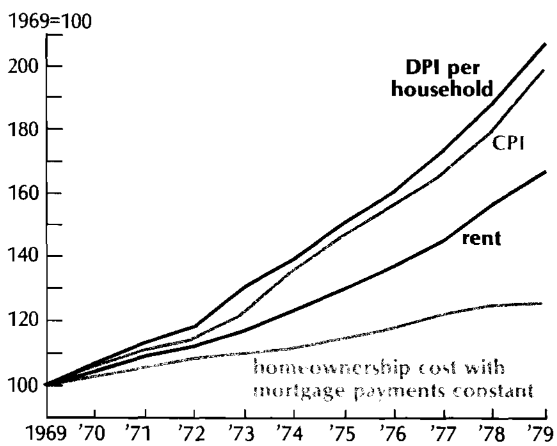
structing new homes. From 1949 to 1969 income per household rose 128 percent, income per capita rose 148 percent, while home prices rose only 50 percent. Despite the recent run-up in home prices, in 1979 these prices were still lower relative to income than in 1959 or 1949.

Nearly all mortgage contracts call for equal monthly amortization payments. With this outlay fixed, the total cost of homeownership to a typical household has risen much slower than rent, prices generally, and income.

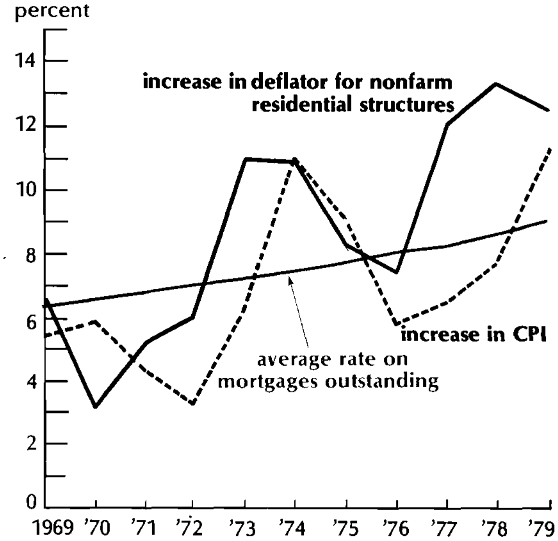
According to the National Association of Homebuilders, the cost of owning a new home was about $2,340 in 1969. That included property taxes, insurance, and repairs (all of which have increased sharply), as well as mortgage payments. Keeping the mortgage payment constant, while escalating other ownership costs in line with CPI components, ownership cost of the same home was $3,130 in 1979. This was an increase of 34 percent over the ten years, compared with increases of 67 percent in rent, 98 percent in the CPI, and 107 percent in household income.

The rise in home prices has increased the net worth of most homeowners. In six of the last seven years, the appreciation in home prices exceeded the average interest rate on all outstanding home mortgages held by S&Ls.

Homeownership has proved to be a bargain



Home prices have outrun both the price level and mortgage rates

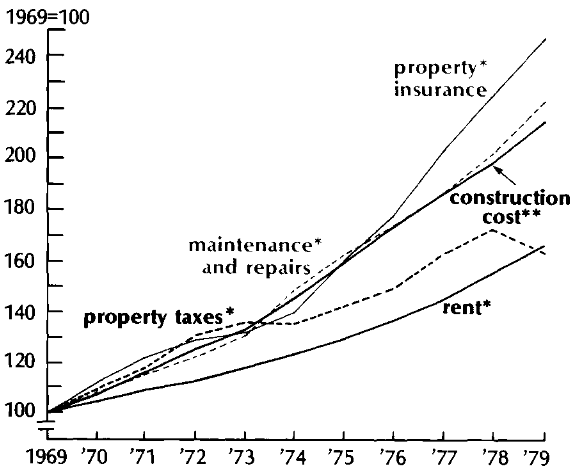


Over the ten years ended in 1979, home prices appreciated an average of 9 percent a year. The rate on outstanding mortgages averaged 7.6 percent.

After taxes, the advantages of homeownership were even greater. Interest and property taxes, the major expenses of ownership, are tax deductible. Income and capital gains from ownership are essentially tax exempt. The tax-free imputed income a homeowner receives is the equivalent of the rent he would pay if someone else owned his house. Most owners, after sale of their homes, can avoid capital gains taxes indefinitely—through the rollover privilege when another home is bought and through the $100,000 exemption for sellers over 55. Because the estate tax exempts $160,000, most capital gains on homes escape taxation on the death of the owner.

These tax advantages are magnified by inflation, which has pushed households into progressively higher tax brackets. For some homeowners, the rise in home prices exceeded the after-tax cost of borrowing, even when mortgage rates reached record levels.

Rents have lagged landlord costs



*As measured in the CPI.
**Boeckh Index for apartments, hotels and office buildings.

Apartment construction slides

Multifamily starts accounted for only 28 percent of all housing starts in the second half of the 1970s, compared with 43 percent in the first half. The slowdown was concentrated in large apartment buildings intended for unsubsidized tenants. Probably less than 300,000 such units were built last year. The stock of unsubsidized apartment units probably fell in 1979, as the number of new units was more than offset by abandonments and conversions to condominiums.

One reason for the slowdown in apartment construction is that rents have not kept up with either construction costs or operating costs. Rents increased 67 percent in the 1970s. But the cost of building apartments (measured by the Boeckh index) rose 114 percent. Property taxes rose 63 percent, maintenance and repairs 123 percent, and property insurance 148 percent.

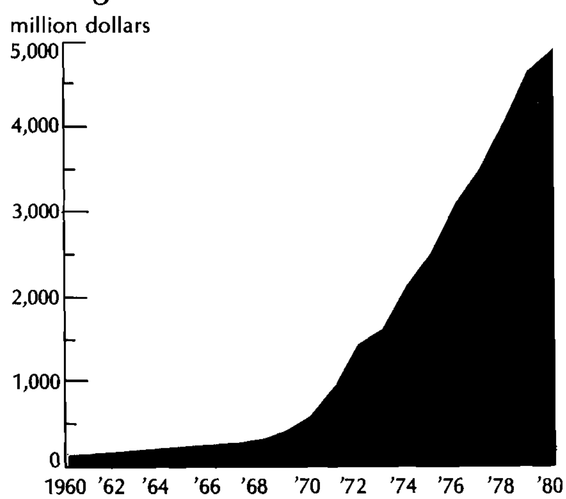
Like homeowners, investors in apartment buildings have benefited from price appreciation. Unlike homeowners, however, these investors must pay taxes on income from rental property and they usually have to pay capital gains taxes. Legislation in the past decade has reduced some of the tax privileges that investors in rental properties once had. These include the immediate write-off of construction-period interest and taxes, and accelerated depreciation.

Some potential investment in rental property has been prevented by rent control or the threat of rent control. New York City still controls rents, as it has in modified form since World War II. Other metropolitan areas with a substantial proportion of the population under rent controls include Boston, San Francisco, Los Angeles, and Washington, D.C. Investors fear they will lose the prerogative of adjusting rents as market conditions change. Under rent controls, repairs and maintenance are often deferred. Buildings deteriorate from neglect.

Construction of small apartment buildings has fared better than large buildings. More than 120,000 two to four-unit buildings have been started every year for the past three years. These were three of the best years on record. One reason for continued construction of these buildings is that the owners usually occupy one unit. Another is that rent controls and other regulations usually are not enforced as vigorously for small apartment buildings.

Because eligibility rules permit up to 40 percent of all households to qualify for sub-

Federal housing subsidies surged during the 1970s



*Estimated.
SOURCE: Bureau of Economic Analysis.

sidized housing, the number of subsidized units constructed is determined by the amount of money authorized by Congress. Federal housing subsidies will approach $5 billion this year, compared with $4 billion in 1978 and $1 billion in 1971. For the past two years, starts have totaled about 150,000 a year, more than a fourth of all multifamily starts. Under Section 8, the principal subsidy program, lower-income tenants pay a maximum of 25 percent of their admitted income in rent. Owners receive an additional payment from the government which guarantees them a "fair market rent." Most Section 8 tenants occupy units that were not covered under this program when they were built.

Condominiums have become an important part of the multifamily market in recent years, largely because they give owners the same tax advantages as owner-occupied single-family houses. More than 160,000 units for sale as condos or co-ops were started in 1979. That compared with 135,000 in 1978, and 108,000 in 1977. Other new apartment structures are built with the intention of converting them to condos in a few years, when the depreciation that could be allowed becomes small relative to income from rent. Advance Mortgage Corporation estimates that 145,000 units were converted to condominiums in 1979, against 85,000 in 1978 and 45,000 in 1977.

Conclusion

Builders, lenders, and many potential home buyers are under severe financial pressure and will remain so for at least the remainder of 1980. Although credit conditions began to ease in May, lending rates remained very high by historical standards. The general economy appears to be in recession. Until these conditions are reversed, continued weakness in new housing seems unavoidable. Starts could be less than 1 million this year.

Beyond the current downturn, prospects for housing are promising. New household formation is expected to average 1.7 million a year for the next five years. And households will probably continue upgrading their standards of housing, with the result that abandonments could average 500,000 units a year, mostly in inner cities. An average of about 200,000 units a year will be added to the stock of second homes. These factors combined create a basic demand for 2.4 million new units a year. With manufactured home shipments providing about 300,000 new housing units annually, starts must average more than 2 million units a year over the next five years to avoid a serious housing shortage. This compares with annual averages of 1.8 million in the 1970s and 1.4 million in the 1960s.