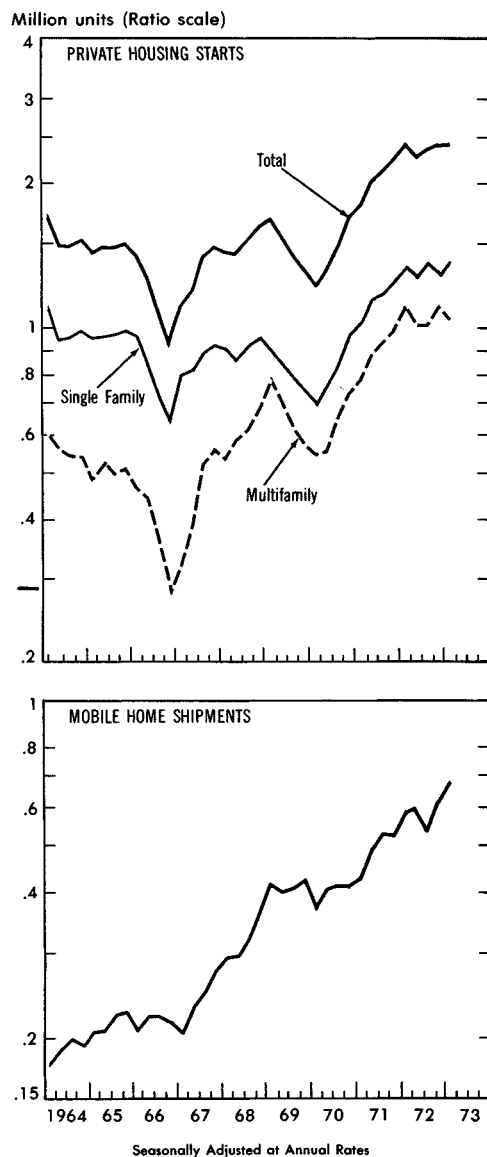


By BARBARA L. MILES and THOMAS R. ROBINSON

Residential Construction Boom, 1970-73

CHART 8

Residential Construction and Mobile Homes



Data: Census

73-5-8

U.S. Department of Commerce, Bureau of Economic Analysis

FOLLOWING a sharp contraction in 1969 and early 1970, residential construction began to recover in the spring of 1970. The recovery carried starts from 1.3 million units (seasonally adjusted annual rate) in the first quarter of 1970 to 2.4 million in the first quarter of 1972, a rate maintained through the first quarter of 1973. Residential construction spending doubled from the level of early 1970 to an annual rate of \$59½ billion in the first quarter of this year, and the flow of residential mortgage credit more than tripled, reaching an annual rate of \$53 billion in the fourth quarter of 1972 (the latest for which data are available).

The current outlook is that the record starts rate of the past year or so is not sustainable. In the opening months of this year, the monetary authorities have been tightening credit, short-term interest rates have been rising sharply, and flows of funds to the thrift institutions have been slowing even though they continue large by historical standards. Inventories of new one-family homes are quite high relative to sales, and the median time from start to sale has risen over the past few months. In the rental market, vacancy rates, while remaining fairly low by historical standards, have generally been on the rise, and the percentage of new apartments absorbed into the market within

3 months of completion has been on the decline. Moreover, softness in the rental market is likely to become more apparent when the large number of apartment units still under construction are completed.

In addition to these factors, the level of Government subsidy support to housing production is expected to be less in 1973 than last year because of the moratorium on new commitments. Also, the strong expansion in construction has put severe pressures on supplies of some essential building materials, particularly lumber, and in some areas authorities have refused building permits until builders plan construction of adequate sewage lines and meet other environmental standards.

This article describes the recovery of homebuilding activity which began in early 1970, and its distinguishing characteristics. These include the renewed strength in single-family homebuilding, the uneven regional pattern of starts that saw very strong growth in the South, the move toward condominiums, and unusually strong growth in mortgage lending. The article further describes the greatly expanded Federal involvement in housing production through subsidy programs and the enlarged Federal role in mortgage financing.

Homebuilding Activity and Mortgage Lending

AT the start of the homebuilding boom, there was substantial potential demand for housing. The annual increase in the number of households had accelerated

sharply in the late 1960's, as the children born in the baby boom after World War II formed their own families. Net household formation in the late 1960's

averaged $1\frac{1}{4}$ million yearly, an increase of about 50 percent from the average of the early and mid-1960's. However, housing production was weak, largely because credit stringency in 1966 and again in 1969 curtailed mortgage lending and raised mortgage interest rates. The spurt of homebuilding between those two periods was much too short and far too small to meet the housing needs of the expanding population. For example, in 1968, a good year for homebuilding, total starts were only a little over $1\frac{1}{2}$ million and the net addition to the housing stock was significantly less because of normal attrition from demolitions, fires, and other causes. With production weak and family formation strong, vacancy rates declined; by 1970 the rental vacancy rate was $5\frac{1}{4}$ percent, well below the $8\frac{1}{2}$ to 9 percent rates of the first half of the 1960's. Thus, the stage was set for a big expansion in homebuilding when mortgage credit became more available and mortgage interest rates declined.

Housing starts since 1970

Housing starts began to rise in early 1970 and rose steadily for the rest of that year and throughout 1971. Starts totaled just under 1.5 million in 1970, 2.1 million in 1971, and a record 2.4 million in 1972 (chart 1). By the spring of 1973, the boom was nearly 3 years old and the strongest on record. In addition to starts of conventional housing units, there was a strong and steady rise in shipments of mobile homes, which totaled 400,000 in 1970, 500,000 in 1971, and a record 570,000 last year. It is uncertain just how many of these units are actually used for housing purposes, but because of their relatively low purchase price (averaging about \$7,000 in 1972), they are an important source of low-cost housing. If all new mobile homes are thought of as single-family units, they accounted for about 30 percent of the new supply of single-family homes in 1971 and 1972.

The increase in starts since 1970 has been strong in all four major regions of the country, but for the 3-year period as a whole the most vigorous growth has been in the South. In 1971, when the recovery was gathering momentum, the most rapid growth was in

the West, where starts increased 56 percent to 490,000 units. They increased 46 percent to 440,000 units in the North Central region, 41 percent in the South to 880,000 units, and 21 percent in the Northeast to 270,000. In the West and North Central regions, starts peaked in early 1972, leveled off, and then declined slightly; for the year as a whole these two regions showed very little increase. In the South, starts increased 21 percent from 1971 to 1972 but leveled off by yearend; in the Northeast starts increased 23 percent, about the same as in 1971, and also peaked at yearend.

The South has for many years accounted for the biggest share of starts. During the recent expansion, its share increased sharply, from about 40 percent in the late 1960's to 45 percent in 1972 (table 1). This is in contrast to the late 1960's when the West accounted for most of the growth and sharply increased its share of homebuilding. The strong starts rate in the South reflected rapid economic growth in the past few years and the attendant need to house an expanding population. Within the South, homebuilding was particularly strong in Florida and Texas; Florida accounted for more homebuilding in 1972 than any other State, and Texas, which had about half the activity of Florida, ranked third. The second-ranking State was California; these three States accounted for nearly one-third of the total in 1972 compared to about one-fourth in 1971 and 1970.

Starts by structure size

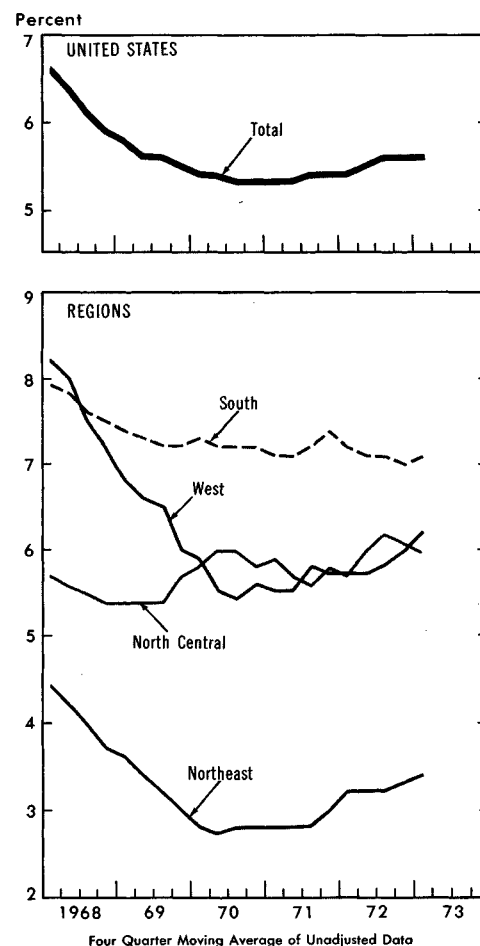
Starts of both single-family homes and units in multiunit structures increased about 60 percent in the current boom. This represents a departure from the trend toward greater emphasis on multiunit housing construction relative to single-family homebuilding, and is in sharp contrast to the recovery following the 1966 slump. In the 2 years of that recovery, starts in multiunit structures increased 55 percent while starts of single-family homes increased only 15 percent.

Starts in multiunit buildings increased from 650,000 units in 1970 to 1.1 million units in 1972. Throughout the recovery, demand for new rental

units increased about as rapidly as supply. Rental vacancy rates, which had been on a downtrend during most of the 1960's, leveled off in late 1970 and began to rise only slightly in late 1971 (chart 2). The rate inched up throughout 1972, but at yearend it was still well below the rates of the early and mid-1960's in spite of the unusually high rate of completions. There was little change in the characteristics of apartment buildings constructed during the boom. Nearly all of the apartment buildings started (97 percent) had one to three floors, and those low-rise buildings accounted for about 80 percent of all new units.

Starts in single-family homes increased from 815,000 units in 1970 to 1.3 million in 1972. The strength of demand for single-family homes is also apparent in the data on new home sales.

CHART 9
Rental Vacancy Rates



Data: Census

U.S. Department of Commerce, Bureau of Economic Analysis

73-59

Table 1.—Regional Distribution of Starts by Type of Structure

[Percent of U.S. total of units started in each type of structure]

	Northeast			North Central			South			West		
	All units	In structures with:		All units	In structures with:		All units	In structures with:		All units	In structures with:	
		1 unit	5 or more		1 unit	5 or more		1 unit	5 or more		1 unit	5 or more
1965	18.3	16.9	21.0	24.6	23.5	27.9	39.0	43.1	32.0	18.1	16.5	19.0
1966	17.7	16.3	20.2	24.7	24.3	26.0	40.5	42.8	37.5	17.0	16.7	16.3
1967	16.6	15.0	19.4	26.1	25.3	27.9	40.2	43.2	35.6	17.0	16.4	17.2
1968	15.0	14.9	15.1	24.5	24.8	24.0	41.0	41.6	41.6	19.5	18.9	19.4
1969	14.0	15.1	12.2	23.8	22.6	25.8	40.1	42.2	38.7	22.1	20.1	23.3
1970	15.2	13.9	17.3	20.5	20.5	20.7	42.7	46.4	38.6	21.7	19.3	23.5
1971	12.9	12.6	13.2	21.2	20.7	22.2	42.3	45.7	30.0	23.7	21.1	25.6
1972	14.0	13.0	15.4	18.8	19.6	17.8	44.9	46.8	44.3	22.4	20.8	22.5

Source: Census

Just before the recovery began in early 1970, the new home sales rate was low; inventories were also low, but they nevertheless averaged nearly 6½ months of sales. With the easing of credit conditions, sales increased rapidly while inventories lagged, and in early 1971 inventories averaged only 4¼ months of sales. The increase in the sales rate subsequently slowed and inventories expanded; by late 1972, the ratio of new homes for sale to homes sold once again averaged 6½ months of sales, but this time at a much higher level of activity than at the beginning of the recovery.

The sales rate for single-family homes was boosted by a sharp drop in the median ratio of downpayment to sales price in 1970. For the Nation as a whole, the median downpayment fell from 12.3 percent of sales price in 1969 to 6.6 percent in 1970, and downpayments remained low in 1971 (data for 1972 are not yet available). The drop was sharp in the South, West, and North Central regions of the country and slight in the Northeast. At the same time that downpayments declined, mortgage loan maturities began to lengthen so that increases in monthly payments were held down. Another

factor figuring in the strength of the single-family home market was the introduction of new homeownership subsidy programs (which are discussed below). Prior to 1970, only a small part of the single-family home market was subsidized.

The strong expansion of residential construction from 1970 to 1973 resulted in heavy demands for building sites and materials; land and building costs rose strongly, and prices of new single-family homes increased. The effect of price increases, particularly on low-priced homes, is evident from the data in Table 2: only about 2 percent of new single-family homes sold for under \$15,000 last year. The sharpest increases in costs early in the recovery were for labor. Average hourly earnings in construction rose 9.3 percent in 1970. In April 1971, the Construction Industry Stabilization Committee was organized for the purpose of moderating wage increases. Hourly earnings rose 8.5 percent in 1971 and 6.4 percent in 1972. Early in 1971 price increases for some materials became pronounced. Costs of lumber, and especially softwood lumber and plywood, rose particularly sharply. Lumber is generally estimated to account for about 15 percent of the cost

of a new detached house, and thus increased lumber prices have had considerable impact on overall construction costs.

The Census Bureau's index of selling prices of new one-family homes rose about 3½ percent in 1970, 5 percent in 1971, and 6½ percent in 1972. This price index aims to measure changes in transactions prices (including land, construction costs, selling expenses, etc.), for new homes with like characteristics—that is, it attempts to abstract from changes in quality, such as size, materials, or facilities. Another Census Bureau measure, the median sales price of new homes, is not adjusted for quality changes. This measure rose 7½ percent in 1971 and 8 percent in 1972, but dropped 8½ percent in 1970. That decline was related to a 9½ percent shrinkage in the median size of new homes and reflected the impact of new Federal subsidy programs for low- and moderate-income housing. In 1971 and 1972, the change in the subsidized share of single-family home construction was less pronounced and the median size of new homes rose, although not as rapidly as the median sales price.

Changes in ownership patterns

In the past, it has been conventional to equate single-family home construction with the ownership market, and multiunit construction with the rental market. Although this convention has never been quite accurate, it has become even less so in recent years because of the rising importance of condominiums and cooperatives. Increases in land and construction costs have led to this higher density construction of ownership housing. Condominium units generally are in multiunit apartment buildings (generally large apartment buildings or "townhouse" clusters¹) in which each tenant owns rather than rents his own unit. This allows an apartment dweller to

Table 2.—Distribution of New 1-Family Homes Sold, by Sales Price

[Percent of total sales]

	Under \$15,000	\$15,000 to \$19,999	\$20,000 to \$24,999	\$25,000 to \$29,999	\$30,000 to \$34,999	\$35,000 to \$39,999	\$40,000 and over
1965	21	29	22	15	7	3	3
1966	15	30	21	16	9	5	5
1967	11	27	21	17	11	5	7
1968	8	22	22	19	13	8	9
1969	6	21	21	18	13	9	12
1970	4	31	23	15	10	7	12
1971	3	24	22	17	11	9	14
1972	2	17	21	20	13	11	17

Source: Census

1. "Townhouse" clusters are classified by the Bureau of the Census as multiunit structures because they fail to meet the definition of a single-family unit—i.e., a unit having a separate entrance, separate plumbing, a ground to roof party wall separating it from adjoining units, etc. "Townhouse" clusters, which probably account for many units in modern developments, are not to be confused with the traditional townhouses or rowhouses which do meet the Census Bureau's definition and are counted in the starts data as single-family units.

gain the advantages of home equity, and property tax and mortgage interest deductions from his taxable income. Surveys by the Builder's Economic Council of the National Association of Homebuilders indicate that although condominium ownership was relatively unknown outside of resort areas a few years ago, by 1970 condominiums constituted 11 percent of all starts of ownership housing (single-family homes and condominium units). Preliminary figures indicate that as much as 30 percent of such starts in 1972 may have been condominiums.

Residential mortgage lending since 1970

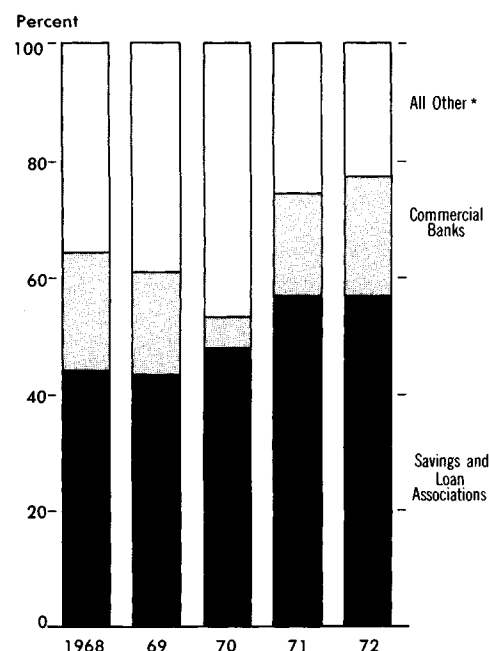
After averaging about \$18 billion per year from 1965 through 1970, mortgage debt expansion accelerated to \$36½ billion in 1971 and \$48 billion in 1972 (table 3). The savings and loan associations, commercial banks, and mutual savings banks accounted for virtually all of that acceleration; life insurance companies reduced their holdings of mortgages. After stepping up their lending activity in 1969 and early 1970, the major Federally sponsored credit agencies slowed their acquisition rate slightly and did not contribute to the acceleration in mortgage lending activity after 1970.

The savings and loan associations (S. & L.'s), which account for the largest share of mortgage lending, nearly tripled their lending from 1970 to 1972 and accounted for about three-fifths of the acceleration of mortgage debt expansion in this period. In major part, the increased lending re-

flects the record flow of savings to S. & L.'s—\$32¼ billion in 1972 as compared to \$11 billion in 1970. The largest part of the acceleration in lending was for mortgages on structures with 1 to 4 units, where S. & L. investment is concentrated by law, regulation, and custom (table 4). However, the S. & L.'s also more than doubled their investment in multifamily mortgages (table 4), and also used some of the savings inflow to reduce their borrowing from the Federal Home Loan Banks (FHLB's). The reduction in borrowing from the FHLB's would probably have been much larger had the FHLB Board not adopted a new policy in 1969-70 that encouraged S. & L.'s to borrow to support their mortgage lending. Under the new policy, loans by the FHLB's to S. & L.'s carry a fixed rate of interest and penalties for prepayment. Traditionally, borrowing from the FHLB's had been viewed mainly as a means of meeting unusual deposit drains during tight credit periods, and interest rates on borrowings were tied to the cost of funds to the FHLB, making this an expensive source of funds. Thus, when savings flows improved, S. & L.'s traditionally used the new funds to repay borrowing before they expanded their lending.

Regulatory changes adopted by the FHLB Board have also been a factor in the recent expansion in mortgage lending by the S. & L.'s. In 1971, the Board's regulations were changed to allow associations to raise the maximum loan on 1- to 4-unit structures from 90 to 95 percent of value, and on apartments from 75 to 80 percent, and the

Shares in Net Expansion of Residential Mortgage Credit



*Includes FNMA, GNMA, households, State and local governments, credit unions, pension funds, and mortgage companies.

Data: FRB

U.S. Department of Commerce, Bureau of Economic Analysis

maximum loan term was increased for both types.

Mortgage lending by commercial banks also accelerated sharply from 1970 to 1972. Bank investment ranged between \$1 billion and \$3½ billion per year from 1965 through 1970, but was \$6½ billion in 1971 and almost \$10 billion in 1972. Almost all of the acceleration in 1971 was in mortgages on one- to four-unit structures; in 1972, banks also stepped up their investment in mortgages on multifamily structures.

Mutual savings banks have increased their residential mortgage lending since 1970, but the acceleration has been much less than in the case of the S. & L.'s and the commercial banks. The mutuals have increased their lending on both one- to four-unit and multifamily structures; this contrasts somewhat with the pattern in the latter part of 1960's when they added to holdings of multifamily mortgages at a fairly steady pace but slowed the rate at which they acquired mortgages on one- to four-unit structures. At that time, the

Table 3.—Net Change in Residential Mortgage Credit Outstanding, by Lender

[Billions of dollars]

	1965	1966	1967	1968	1969	1970	1971	1972
Total	19.0	13.5	16.1	18.8	20.4	19.2	36.8	47.9
Savings and loan associations.....	8.2	3.4	6.9	8.3	8.9	9.3	21.0	27.3
Mutual savings banks.....	3.6	2.1	2.4	1.9	1.9	1.3	3.0	4.3
Commercial banks.....	3.4	2.5	2.7	3.8	3.6	1.0	6.4	9.8
Life insurance companies.....	2.7	2.1	.9	.3	.3	.6	-1.4	-1.8
Federal agencies ¹.....	.4	2.8	2.0	2.7	4.7	5.8	5.9	5.3
All others ².....	.7	.6	1.2	1.8	1.0	1.2	1.9	3.0
Memo: Net change in Federal Home Loan Bank advances to member savings and loan associations...	.7	.9	-2.5	.9	4.0	1.3	-2.7	(*)

*Less than \$50 million.

1. Mainly Federal National Mortgage Association, Government National Mortgage Association, and Federal Home Loan Mortgage Corporation.

2. Includes households, State and local governments, credit unions, pension funds, and mortgage companies.

Source: Federal Reserve Flow-of-Funds Accounts.

Table 4.—Net Change in Mortgage Credit Outstanding by Structure Size, by Lender

[Billions of dollars]								
	1965	1966	1967	1968	1969	1970	1971	1972
1- to 4-Unit Structures								
Total	15.4	10.4	12.5	15.3	15.6	13.4	28.0	38.1
Savings and loan associations.....	7.1	2.9	6.0	7.2	7.7	7.2	18.0	22.9
Mutual savings banks.....	2.7	1.6	1.8	1.4	1.4	.9	1.2	3.1
Commercial banks.....	3.1	2.4	2.4	3.5	3.0	.9	5.7	7.6
Life insurance companies.....	1.1	.6	-.5	-.7	-1.1	-1.3	-2.1	-2.3
Federal agencies ¹.....	.4	2.5	1.8	2.4	4.0	5.0	4.5	3.8
All others ²	1.0	.4	.9	1.4	.6	.7	.7	3.0
Multiunit Structures								
Total	3.6	3.1	3.6	3.5	4.8	5.9	8.8	9.8
Savings and loan associations.....	1.1	.5	.9	1.1	1.2	2.1	3.0	4.4
Mutual savings banks.....	.9	.5	.6	.5	.5	.4	1.8	1.2
Commercial banks.....	.3	.1	.3	.3	.5	.1	.7	2.2
Life insurance companies.....	1.6	1.5	1.4	1.0	1.4	1.9	.7	.5
Federal agencies ¹	(*)	.3	.2	.3	.7	.8	1.4	1.5
All others ²	-.3	.2	.2	.3	.5	.6	1.2	(*)

(*) Less than \$50 million.

1. Mainly Federal National Mortgage Association, Government National Mortgage Association, and Federal Home Loan Mortgage Corporation.

2. Includes mainly households and State and local government pension funds.

Source: Federal Reserve Flow-of-Funds Accounts.

mutual savings banks (which are permitted greater asset diversification than the S. & L.'s) were adding substantially to their holdings of corporate bonds.

In contrast, life insurance companies have continued to cut their mortgage lending. From 1965 to 1970, life insurance companies slowed their mort-

gage investment, and in 1971 and 1972 they actually reduced holdings. Life insurance companies have been reducing their holdings of mortgages on one- to four-unit structures since 1966, and in 1971 and 1972 were liquidating mortgages on multifamily structures as well.

Expanded Federal Role in Subsidized Housing

THE Federal Government's involvement in subsidized housing began in 1937 with the low-rent public housing program (LRPH). Through that program, Federal support was provided to local housing authorities to own and operate rental units for low-income families. In the 1940's, the Federal role in housing support was expanded when the Farmers Home Administration (Department of Agriculture) began making low-cost direct loans for rural housing to families that could not qualify for private financing. In the early 1960's, direct loans and federally insured low-cost (below market interest rate, or BMIR) mortgages were introduced to assist new projects for the elderly, the handicapped, and persons displaced by the urban renewal ("Section 202," and "Section 221(d)(3) BMIR"), and a

program of rent supplements was started to aid low-income tenants in private housing.

The Housing and Urban Development Act of 1968 fundamentally changed the size and direction of Federal aid to housing. The act set a housing production goal of 25½ million new units to be achieved over the 1969-78 decade (compared to 14½ million units built in the preceding decade). The act also introduced two new subsidy programs—"Section 235" homeownership assistance and "Section 236" assistance to rental units. Both programs employ a subsidy mechanism by which the Federal Government pays part of the mortgage interest—in some cases all but 1 percent of the mortgage interest rate—for eligible homeowners or apartment projects. In the latter case, the subsidy is passed

through to the tenants in the form of lower rents. Two other rather minor programs were started in 1968—grants to colleges to provide housing for faculty and married students (college housing), and assistance in the form of interest subsidy payments or rent supplements to projects initiated under State programs without federally insured mortgages (uninsured State projects). There was a start-up lag between the time the new programs were initiated and the time they began to have a significant impact on the housing market, but by 1970, subsidized production under the new programs was growing rapidly at a time when the market was characterized by an otherwise weak private sector.

Subsidized starts

During the contraction in overall homebuilding in 1969-70, the number of subsidized starts increased very steeply. In 1970, subsidized starts totaled 430,000 units, compared to 200,000 units in 1969 and 165,000 in 1968 (table 5); assistance to homeowners ("Section 235") and to rental projects ("Section 236") accounted for nearly 80 percent of that increase. The increase in subsidized starts, and the weakness of starts in the nonsubsidized private sector, combined to produce an overall starts total for 1970 which was 30 percent subsidized (table 6). By comparison, subsidized starts averaged about 12 percent of the total in 1968 and 1969, and had averaged only about 6½ percent in 1966-67.

The number of subsidized starts in 1971 was about the same as in 1970—430,000—and the subsidized share of the total dropped to 20 percent. Starts under the Section 202 (elderly and handicapped) and the 221(d)(3)(BMIR) (below market interest rate) programs declined as those programs were discontinued in favor of the Section 236 program of assistance to rental projects. The programs of assistance to homeowners and rental projects continued to grow rapidly, as did the direct loan programs of the Farmers Home Administration; taken together these programs accounted for nearly three-fourths of all subsidized new units in

Table 5.—Starts of New Housing Units Under Government Subsidy Programs, by Structure Size and by Subsidy Program

	1965	1966	1967	1968	1969	1970	1971	1972 ^p
Total subsidized starts.....	63,686	70,941	91,370	165,521	199,933	429,797	430,001	339,221
1- to 4-unit structures.....	15,510	22,457	26,501	28,500	60,247	173,857	207,860	174,684
Section 235.....				637	28,127	116,073	133,222	83,246
Department of Agriculture ¹	15,510	22,457	26,501	27,863	32,120	57,784	74,638	91,438
Multifamily structures.....	48,176	48,484	64,869	137,021	139,686	255,940	222,141	164,537
Low-rent public housing.....	32,152	30,228	32,566	66,442	66,993	95,404	68,505	43,396
Section 236.....				10,168	10,168	105,160	107,604	81,418
Rent supplements.....	300	309	2,565	16,901	17,912	22,919	10,880	9,083
Section 221(d)(3)BMIR.....	10,756	12,145	22,855	45,403	33,439	16,544	5,445	1,100
Section 202.....	4,968	5,802	6,883	6,598	7,423	2,984	947	192
College housing ²				578	870	2,112	3,884	3,469
Uninsured State projects ³				1,099	2,881	10,817	24,876	25,879

^p Preliminary

1. All Farmers Home Administration (Department of Agriculture) units are treated as single-family houses although the total includes a small number of multifamily structures (5 or more units) which cannot be separately identified.

2. College housing given in this table includes only those housekeeping apartments for faculty and married students which are counted by Census as private housing starts. All group, i.e., dormitory, nonhousekeeping, or other units not counted as housing starts by Census are omitted. Aid to college housing is in the form of grants.

3. Federal assistance to projects initiated under State programs without federally insured mortgages.

Source: HUD.

1971. In 1972, the number of assisted starts dropped to 340,000 units, largely because of major declines in the Section 235 and 236 programs, which were facing management problems, some corruption, and rising costs. However, the Farmers Home Administration direct loan programs continued to expand in 1972 and the three programs together once again accounted for about three-fourths of assisted starts. Low-rent public housing, which initially had been sharply expanded to help meet the new production goals, fell back sharply from the peak of 95,000 units in 1970; in 1972, public housing starts numbered only 43,000 units, not far above the annual totals of the mid-1960's.

Composition of subsidized starts

Prior to implementation of the homeowner assistance program (Section 235), subsidized housing was mainly confined to rental apartment structures with more than 4 units, and virtually all subsidized smaller structures (mainly single-family homes) were under the

jurisdiction of the Farmers Home Administration and located in rural areas and small towns. Following implementation of the Section 235 program, however, subsidized housing in structures with four or fewer units grew rapidly and in 1972 accounted for better than half of all subsidized starts.

The impact of this increase in the number of subsidized smaller structures becomes clearer when starts of subsidized units are compared to all starts by size category. In 1968, when the housing goals were established, subsidized starts accounted for only about 3 percent of all starts in one- to four-unit structures, while about one-fourth of the units in larger buildings were subsidized (table 6). These proportions rose markedly for both structure types in 1970 and then fell off as private unsubsidized building grew stronger. But even in 1972, when the number of subsidized units declined, their share of total starts was still very large, and the share of subsidized units in smaller structures was closer to the share of subsidized units in structures having five or more units

Table 6.—Subsidized Share of New Housing Starts

[Percent]

	1965	1966	1967	1968	1969	1970	1971	1972
Subsidized starts as a percent of:								
Total public and private starts.....	4.2	5.9	6.9	10.7	13.3	29.3	20.6	14.3
Starts in 1- to 4-unit private structures.....	1.5	2.7	2.9	2.9	6.7	19.4	16.4	12.0
Starts in multi-family (5 or more units) public and private structures.....	10.9	14.0	16.5	24.9	23.7	45.8	27.8	17.9

Source: HUD.

According to the Department of Housing and Urban Development (HUD) a very large share of subsidized units has been built in the South. This reflects not only the expanding need for housing in that strongly growing area, but also the fact that a large number of families in the South are eligible for subsidy assistance under present income limitation rules. In addition, these programs have ceilings on housing prices and apartment costs, and the South's generally lower construction costs tend to contribute to the willingness of local builders to construct units which qualify under subsidy programs.

Expenditures

The type of commitment made by the Section 235 and 236 programs allows these programs to have expenditures which are relatively low initially but which grow rapidly over time as new units are placed under subsidy contract. Both programs pay a portion of the monthly interest due on 30-year FHA-insured mortgages and, therefore, the full cost of a new subsidy is many times greater than the first year's outlay. As a result, current outlays reflect new subsidies as well as those continued from previous years. Based on the number of units approved for subsidy by the end of fiscal year 1972, HUD estimated that the Federal Government was already committed to total future outlays of about \$12 billion for these two programs.

The impact of these programs on the Federal Government's unified budget is in sharp contrast to the impact of the programs which use direct loans, or mortgages with interest rates less than market rates—the so-called below market interest rate (BMIR) mortgages. These programs have an initial outlay of the full mortgage principal, and this outlay is later partly offset as the loan is repaid. Partly because of this difference in budget impact, the low-cost direct loan programs financed by HUD have largely been discontinued and replaced by the newer Section 236 program.

Table 7 shows the Federal budget outlays for five separate HUD programs. The outlays under these pro-

Table 7.—HUD Subsidy Outlays for Five Major Programs

[Thousands of dollars]

Fiscal year	Total	Section 235	Section 236	Rent supplement	Public housing	College housing
1968	291,098	n.a.	n.a.	1,039	290,059	n.a.
1969	357,485	812	0	4,804	351,869	0
1970	474,123	21,127	666	18,728	433,602	0
1971	733,365	119,734	12,704	42,294	558,363	270
1972	1,119,680	221,306	77,284	74,513	744,133	2,446
1973 *	1,663,000	320,000	105,000	117,000	1,110,000	11,000
1974 *	2,000,000	387,000	188,000	157,000	1,250,000	18,000
(Percent of total)						
1968		n.a.		0.4	99.6	
1969		0.2		1.3	98.4	
1970		4.5	0.1	4.0	91.5	
1971		16.3	1.7	5.8	76.1	0.0
1972		19.8	6.9	6.7	66.5	.2
1973 *		19.2	6.3	7.0	66.7	.7
1974 *		19.4	9.4	7.8	62.5	.9

n.a. Not applicable.

* Estimated.

NOTE.—These figures include rehabilitation outlays which cannot be separately identified.

Source: HUD.

grams are for interest, continuing operations, or outright grants; none of these programs uses direct loans or mortgages originated at below-market interest rates as the vehicle for providing housing assistance. Thus the outlays in table 7 will not be offset by future repayments to the Federal Government. The figures include small

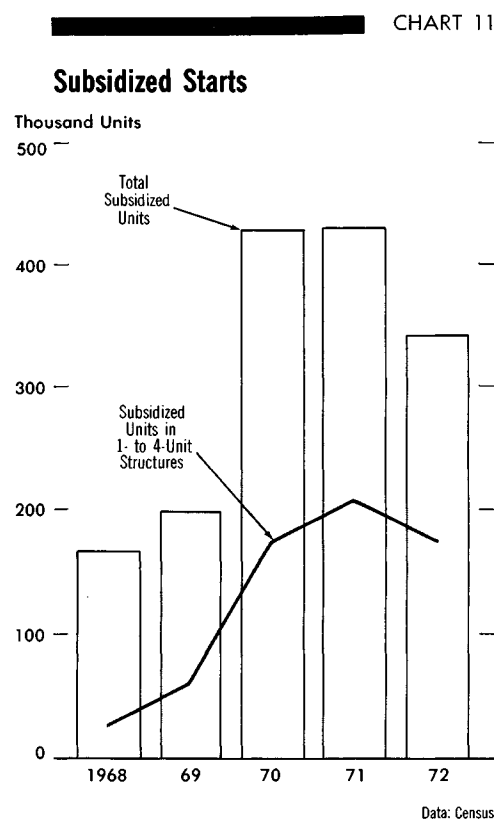
amounts paid for rehabilitation rather than for new units.

The Moratorium

A number of serious problems have emerged with the early evolution of the new subsidy programs. Default rates and the number of foreclosures and applications to receive FHA insurance have generally been higher for subsidized than for unsubsidized FHA-insured mortgages. In addition, there have been some widely publicized instances of corruption and poor management of Section 235 and 236 assistance programs. These instances ranged from cases of shoddy construction and over-valuation of housing to failures to counsel low-income families on the financial problems of homeownership. Also, the growing budget impact of new commitments added to ongoing obligations under the 235 and 236 programs has caused concern about

the magnitude of future outlays under these programs. In January 1973 a moratorium was announced on all new commitments under subsidy programs pending a thorough reevaluation of the programs. The moratorium is scheduled to last until such time as a special revenue-sharing program including housing is legislated. Such legislation would decentralize administration of housing assistance, but the earliest it could be implemented is probably fiscal year 1975, making the moratorium effective for about 18 months. The number of preexisting commitments under the HUD and USDA programs is expected to be sufficient to support a substantial level of subsidized starts in 1973, although less than the total in 1972.

There is no clear answer to the question of how large the housing recovery would have been in the absence of the subsidy programs. What does seem clear, however, is that the subsidies induced building of low-cost shelter by increasing the effective demand for housing of low-income families. In the case of homeownership programs, the subsidies have no doubt had an effect on the average size and cost of new homes. This was clearly true in 1970 when the distribution of new one-family homes by price class shifted downward (table 2). It seems likely that these subsidies were contributing to the stronger recovery in single-family homebuilding in the current period than in the post-1966 period. Moreover, the timing of the spurt in subsidized homebuilding probably kept the 1969-70 decline in overall housing activity from being more severe than it was.



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Expanded Federal Role in Mortgage Markets

THE flow of residential mortgage credit has typically been contracyclical. In periods of rapid economic expansion, rising market interest rates result in a reduction in the flow of funds to major lending institutions and mortgage debt expansion is curtailed. In periods of sluggish economic activity, when mar-

ket interest rates are declining, flows to lending institutions increase and mortgage lending activity accelerates.

In 1966, credit stringency resulted in a sharp slowdown of mortgage debt expansion, and this in turn was a major cause of the severe decline in homebuilding. Following that experience,

concern intensified over the impact that tight credit has on the availability of mortgage credit, and thus on homebuilding, and significant changes affecting the role of the Federal Government in mortgage markets were initiated as part of the Housing Act of 1968. The thrust of these changes was to expand the role of Federal credit agencies as a supplemental source of mortgage funds during periods of credit stringency, thereby maintaining a supply of funds to mortgage markets generally.

When credit conditions were once again tight in 1969 and early 1970, and the flow of funds to private mortgage lenders declined, Federal agencies were in a better position to increase their support of mortgage lending and cushion the impact of credit stringency on mortgage lending. Net credit extended by Government agencies in support of mortgage lending (including advances from the Federal Home Loan Banks to member savings and loan associations) expanded from \$3½ billion in 1968 to \$8¼ billion in 1969 and \$7 billion in 1970. That expansion raised the Federal Government's share in the mortgage lending process from 20 percent in 1968 to about 40 percent in 1969 and 1970, and total mortgage debt expansion was actually larger in 1969 than in 1968, and slowed only slightly in 1970 (table 3).

Since 1970 credit has been readily available and at lower cost, and the volume of mortgage debt expansion by private lenders has accelerated sharply. Federal agencies have not contributed to the acceleration in debt expansion although their lending activity has continued at very high rates.

Institutional changes

An enlarged role for the Federal Government in mortgage markets was established by the Housing and Urban Development Act of 1968, which reorganized the Federal National Mortgage Association (FNMA) and established the Government National Mortgage Association (GNMA). The Emergency Home Finance Act of 1970 broadened the scope of FNMA's operations and created the Federal Home Loan Mortgage Corporation (FHLMC). The fol-

lowing discussion outlines various institutional changes that have occurred since 1968 affecting the Federal Government's role in mortgage markets.

Prior to the housing legislation of 1968, FNMA was a Federal agency responsible for making a secondary market in FHA-insured and VA-guaranteed mortgages and providing special assistance for federally subsidized housing. As a result of the reorganization, FNMA became a privately owned corporation subject to some regulation by the Secretary of Housing and Urban Development, and its operations were confined to secondary market activities. The shift of FNMA to private auspices has taken its operations out of the Federal budget, thereby enabling it to expand the scale of its operations substantially.

At the time of the reorganization of FNMA, a forward commitment program for the purchase of mortgages in its secondary market operations was adopted—the so-called "Free Market System." Under the new program, FNMA specifies the volume of funds it will make available and makes commitments for future purchases of mortgages up to that amount. Lenders bid for FNMA funds by offering to sell mortgages to FNMA at a yield specified by the lender. FNMA takes the highest yields and commits itself to purchase at the agreed upon future date. Thus, FNMA determines the volume of funds it will provide and the market determines the price of these funds. Prior to the introduction of the "Free Market System," FNMA set the price at which it would buy mortgages and was obliged to purchase whatever volume was offered at that price, and hence could not specify the degree of market support it would provide.

As credit conditions tightened in 1969 and early 1970, the new FNMA was in a position to increase sharply its mortgage market support activity and its mortgage investment, increased from \$1¼ billion in 1968 to \$3¼ billion in 1969. After mid-1970, when credit again became readily available, FNMA's secondary market activity slowed; net purchases amounted to \$2¼ billion in 1971 and \$2 billion in 1972.

The Housing Act of 1968 also established GNMA to subsidize the

interest cost of mortgages on housing constructed under the various subsidy programs. These mortgage loans are made by private mortgage lenders (sometimes by GNMA itself) at interest rates below the prevailing yield in mortgage markets. Private mortgage lenders then sell these mortgages to GNMA at face value—i.e., the actual amount of the mortgage loan—and GNMA resells them to FNMA at a lower price that will bring the effective yield on the mortgages into line with current market yields. The arrangement with FNMA is called the Tandem Plan, and it allows GNMA to limit its cash outlay to the difference between the price at which it buys the mortgages from private lenders and the price at which it sells them to FNMA.

In mid-1971, the Tandem Plan was extended to cover FHA-insured and VA-guaranteed mortgages on nonsubsidized housing. The purpose was to reduce the points lenders charge borrowers on Government-backed mortgages. The maximum legal interest rate on such mortgages is 7 percent, and when interest rates on conventional mortgages rise above 7 percent, lenders charge borrowers on Government-backed mortgages points to bring yields into line with higher yields on conventional mortgages (a point is 1 percent of the loan value of the mortgage). When points are charged, the borrower must pay a lump sum at the time of settlement which can appreciably raise the initial cost of homeownership.

Under the extended Tandem Plan, GNMA issues a commitment to mortgage originators (e.g., S. & L.'s) to buy Government-backed 7-percent mortgages at more than market value. This reduces points borrowers would otherwise have to pay. GNMA then sells these mortgages to FNMA at market value and absorbs the difference between the price it paid and the price at which it sold. There has been very little activity under this program since inception because mortgage interest rates have held close to 7 percent. However, if conditions in mortgage markets again tighten, as now seems to be the case, this program will provide a means of support for Government-backed loans.

Another innovation of the 1968 Housing and Urban Development Act aimed at improving the flow of funds to mortgage markets was the creation of a mortgage-backed securities program. Under this program, mortgage lenders pool holdings of FHA-insured or VA-guaranteed mortgages as collateral for securities that they sell with a GNMA guarantee of payment of principal and interest. Mortgage lenders use the proceeds from the sale of these securities to make new mortgage loans. Two types of securities may be sold: "pass-through" or "bond-type." On "pass-through" securities, buyers receive the principal and interest payments collected by mortgage lenders on the pool of mortgages set aside as collateral. On "bond-type" securities, mortgage lenders collect the principal and interest on the mortgages in the pool and pay the holder of "bond-type" securities a specified annual rate of interest and the principal when the securities mature. The volume of securi-

ties issued under this program has expanded from \$1¼ billion in 1970, the year this program became operational, to \$3 billion in 1971 and \$3¼ billion in 1972.

The Emergency Home Finance Act of 1970 enabled FNMA to extend its secondary mortgage market operations to conventional mortgages. Operations began in 1972, and activity to date has been negligible. During 1972, the maximum loan-to-value ratio on mortgages purchased under the program was raised from 90 to 95 percent and the maximum loan from \$33,000 to \$35,000. In 1973 this program will be further broadened to include mortgages on condominiums.

The 1970 Emergency Home Finance Act also created the Federal Home Loan Mortgage Corporation (FHLMC), a subsidiary to the Federal Home Loan Bank System, to provide additional secondary market facilities for mortgages held by S. & L.'s. In general, the FHLMC conducts two types of second-

ary market operations, the "whole loan program" and the "participation program." Under the "whole loan program," FHLMC purchases the mortgages offered by S. & L.'s at a yield set by the FHLMC. Under its "participation program," FHLMC also sets the yield it wishes to receive, but only purchases an interest (participation) in a pool of conventional mortgages originated and set aside by an S. & L. The S. & L. services the pool and pays to the FHLMC its share of the interest and principal. The FHLMC can make the "participation program" attractive to the S. & L.'s. For example, if the average yield on all the mortgages in the pool is 8 percent, and if the FHLMC agrees to accept 7 percent for its share of the pool, then the effective yield to the S. & L. on its share of the pool is higher than 8 percent. The FHLMC began operations in late 1970; the volume of activity grew from \$325 million in that year to \$640 million in 1971 and \$820 million in 1972.

Orders and Backlogs in Durable Goods Manufacturing—Continued from page 4

When the data on backlogs of those durable goods industries supplying final demand are aggregated according to three major market categories—nondefense capital equipment, defense goods, and household durables—it appears that nearly all of the rise in backlogs from mid-1972 to the spring of 1973 was accounted for by unfilled orders for nondefense capital equipment. Unfilled orders for household durables remained essentially flat over this period at about \$2 billion, as the 11 percent rise in new orders in that market category was about matched by the increase in shipments. Unfilled orders for defense goods have also changed little, holding at around \$20 billion since mid-1972; since then, the inflow of orders slowed somewhat while shipments rose. From mid-1971 to mid-1972, the defense order backlog had risen by 12 percent after 2 years of steep decline.

The backlog for nondefense capital equipment had reached a low early in 1972, began to recover in the second quarter, and increased 20 percent from

mid-1972 to the end of this year's first quarter. Some two-thirds of this increase occurred in nonelectrical machinery, where the order backlog rose 25 percent; the electrical machinery backlog increased 10 percent.

The sharp rise in new orders has apparently meant a significant lengthening of leadtime—i.e., the time from order to shipment—in some industries (Table 4). In primary metals, backlogs equaled 1.78 months of shipments at the end of the first quarter, compared with 1.45 months in the fourth quarter and 1.33 months in the first quarter of 1972. In nonelectrical machinery, the ratio of unfilled orders to shipments reached 2.76 in the first quarter, compared with 2.62 in the fourth and 2.48 in last year's first quarter, with increases chiefly in metal-working machinery and engines and turbines. However, the ratios declined in electrical machinery and aircraft, and consequently the overall ratio for durable goods manufacturing has not changed much in the past year.

In the case of primary metals, inventory data reinforce the evidence of tight supplies provided by the rising ratio of unfilled orders to shipments. Although steel production has been at a record level since mid-January supplies are apparently not sufficient to meet current demands. Inventories of finished steel held by steel producers rose from 8.8 million tons at the end of 1972 to 10.0 million last July and 10.2 million in December; by the end of March, however, they had fallen back to 9.2 million tons. Inventories of steel held by manufacturers who use steel have changed little since mid-1972. However, the rate of steel consumption by those manufacturers has risen 17 percent over this period, to a record in the first quarter, and the ratio of steel inventories to monthly consumption was down to 1.3 in the first quarter, the lowest since the beginning of the series in late 1961. In the second quarter of last year, the ratio was 1.5.