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## Housing in the 60's: A Survey of Some Nonfinancial Factors

#### By Glenn H. Miller, Jr.

A SURVEY of the developments in the general area of housing during the 1960's is featured in this article. In focusing on nonfinancial factors, the article omits consideration of the availability and cost of financing for residential construction; this *Review* has already devoted considerable attention to the role of financing.<sup>3</sup> In a sense, this article serves as both background and introduction to a forthcoming article that will examine, in some detail, the influence of demographic factors such as population growth, marriage rates, and net household formations on the future market for housing in the United States.

#### RESIDENTIAL CONSTRUCTION IN THE ECONOMY

A look at the residential construction sector within the framework of the gross national product (GNP) accounts gives a broad picture of the recent past performance of this sector, and of its place in the economy. Spending for new residential structures as shown in the GNP accounts, which is mostly the value of new construction put in place for the given periods, covers new dwelling units (the bulk of the total), nonhousekeeping residential facilities, and additions and alterations.

Residential construction spending, after being at low levels during the depression of the 1930's and World War II, began to rise rapidly after the war-primarily to repair the deficiency in housing that had developed. In constant (1958) dollar terms, gross private domestic investment in residential structures rose from an annual average of about \$16.9 billion in 1947-49, to about \$20.6 billion from 1950 to 1954, and about \$22.6 billion in 1955-59. The real output of residential structures, so computed, averaged about 5.3 per cent of total real GNP in 1947-49 and 1950-54, and about 5 per cent in 1955-59. This ratio dropped to about 4.4 per cent for the first half of the 1960's.

For the 1960's, quarterly expenditures for residential structures are presented in both current dollars and constant dollars in Chart 1. Following the decline associated with the brief recession of 1960-61, residential construction spending rose until the fourth quarter of 1963, then moved virtually horizontally until early in 1966 when it declined precipitously. Spending for housing reached its trough in the first quarter of 1967, then began the upward move-

<sup>&</sup>lt;sup>1</sup>J. A. Cacy, "Financial Intermediaries and the Postwar Home Mortgage Market," January-February 1967; J. A. Cacy, "Specialized Mortgage Marketing Facilities," July-August 1967; and Robert E. Knight, "The Quality of Mortgage Credit," Part I, March 1969, and Part II, April 1969.

#### Chart 1

RESIDENTIAL CONSTRUCTION EXPENDITURES IN CURRENT AND CONSTANT (1958) DOLLARS, AND RATIO TO GNP 1960-68



SOURCE: U. S., Department of Commerce, Survey of Current Business.

ment that lasted through 1968. During this latter period, the constant dollar and current dollar series diverged markedly as rapidly rising prices for the output of this sector made their presence apparent.

Although the constant dollar value of residential structures averaged somewhat higher in the first half of the 1960's than in the last half of the 1950's, the ratio of that value to GNP dropped to about 4.4 per cent for 1960-64. In Chart 1, this ratio—shown on a quarterly basis—moves virtually horizontally through 1963. From late 1963 through 1968 real output of residential structures was a declining percentage of real GNP, with allowance for the sharper drop and recovery of 1966-67.

Another broad-brush description of construction activity in the 1960's is based on employment information. Although the data in Table 1 are broader than for the residential construction industry alone, they are related closely enough to be relevant. Both total nonagricultural employment and total contract construction employment declined in 1961, due to recessionary influences, then rose through 1966. Contract construction employment fell in 1967, but total nonagricultural employment continued to rise; both increased in 1968. Contract construction employment as a proportion of total nonagricultural employment was 5.3 per cent in 1960, 5.2 per cent in 1961 through 1965, 5.1 per cent in 1966, and 4.8 per cent in both 1967 and 1968. During the 1960's, construction workers made up about 85 per cent of total employment in the contract construction industry. On the average, about 31 per cent of all construction workers were employed by general building contractors and about 48 per cent worked for

#### Table 1

#### EMPLOYMENT IN NONAGRICULTURAL ESTABLISHMENTS AND IN CONTRACT CONSTRUCTION, 1960-68

(In thousands)

	Total Emp	loyees	Const	ruction Wa	orkers
	All Non- agricultural Industries	All Contract Con- struction	All Contract Con- struction	General Building Con- tractors	Special Trade Con- tractors
1960	54,234	2,885	2,459	785	1,162
1961	54,042	2,816	2,390	753	1,131
1962	55,596	2,902	2,462	756	1,192
1963	56,702	2,963	2,523	787	1,214
1964	58,332	3,050	2,597	817	1,250
1965	60,832	3,186	2,710	852	1,297
1966	64,034	3,275	2,784	888	1,315
1967	66,030	3,203	2,705	835	1,297
1968	68,134p	3,256	2,750	822	1,335

pPreliminary.

SOURCE: U. S., Bureau of Labor Statistics, Employment and Earnings and Monthly Report on the Labor Force, and U. S., Department of Commerce, Construction Review. special trade contractors—a category including plumbing, electrical work, painting, masonry, sheet metal work, and so on. The remainder were employed by heavy construction contractors.

#### SOME FEATURES OF THE MARKET FOR SHELTER, 1960-68

Residential structures have relatively great durability and a long average life span, and spending for new residential construction is included in the GNP accounts as a part of gross private domestic investment. There is a very large stock of housing in the United States, especially in relation to the additions to the stock that may be made in any one year. For example, according to the 1960 census of housing, there were approximately 58 million housing units in the United States in that year. Thus, 1.5 million housing starts in one year is only about 2.5 per cent of the total housing stock-a relatively small change in the total number of dwelling units, which also is affected by removals from the stock. The level of removals from the housing inventory and the replacement demand generated do influence the overall demand for new construction. But this influence is of lesser importance than some others.

#### **Housing Starts**

Chart 2 brings together several quarterly series for the period since 1960 that represent some different features of the market for shelter in the United States. The series on new private housing units started shows the seasonally adjusted annual rate of new dwelling units in housekeeping residential buildings begun in each quarter. As such, it provides the fundamental element of change in the stock of housing (along with removals and changes due to conversions or mergers). The housing starts series also is closely related to the GNP series on investment in new residential structures.

#### Chart 2

HOUSING STARTS, VACANCY RATES, AND MOBILE HOMES SHIPMENTS 1960-68

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SOURCES: U. S., Bureau of the Census, Construction Reports; U. S., Bureau of the Census, Current Housing Reports; and U. S., Business and Defense Services Administration, Construction Review.

The housing starts data of Chart 2 are for all private units, as already noted, although farm starts have been a negligible part of the total. Before 1959, housing starts data are available only for nonfarm private units. On that basis, starts moved up very sharply immediately after the end of World War II. An underlying upward trend continued to 1955, but the average level of starts in the last half of the 1950's was below that of the first half. Turning to the total private starts series shown in Chart 2, following a decline through 1960, the seasonally adjusted annual rate of private housing units begun marched steadily upward until the first quarter of 1964, when it fell sharply and then moved horizontally until the end of 1965. The deep but relatively narrow trough in housing starts commencing in early 1966, like that in spending for residential construction-due mainly to financial factorshas been followed by further upward movement. However, the decade-peak levels of 1963 and early 1964 were not yet reached by the end of 1968, although this was accomplished in the first quarter of 1969.

The division of total new private housing units started between single-family homes and multifamily structures is shown in Table 2 for the years 1960-68. The trend toward an increasing proportion of total units started found in multifamily structures is clear: in 1960, single-family homes accounted for 80 per cent of all units begun; in 1968, for just 60 per cent. A relatively long list of factors may be assembled to explain this shift, among them the following: increasing numbers of single young adults, young married couples, and older people-groups that tend to prefer apartment living for one reason or anotherthe rising trend of construction costs and housing prices generally, including especially the cost of land, and the relatively favorable position of multifamily structures with regard to these factors; and the preference of some lenders for financing apartment houses where they can receive an equity interest, rather than single-family dwellings.

#### **Vacancy Rates**

Vacancy rates are used to indicate the degree of pressure of demand for housing on

#### Table 2

#### TOTAL NEW PRIVATE HOUSING UNITS STARTED IN THE UNITED STATES, BY TYPE OF STRUCTURE, 1960-68

#### (In thousands and as per cent of total)

			In Structures With:							
	Tot	al	One l	Jnit	Two or More Units					
Year	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent				
1960	1,252.1	100.0	994.7	79.4	257.4	20.6				
1961	1,313.0	100.0	974.4	74.2	338.6	25.8				
1962	1,462.7	100.0	991.3	67.8	471.4	32.2				
1963	1,610.3	100.0	1,020.7	63.4	589.6	36.6				
1964	1,529.3	100.0	971.5	63.5	557.8	36.5				
1965	1,472.9	100.0	963.8	65.4	509.1	34.6				
1966	1,165.0	100.0	778.5	66.8	386.5	33.2				
1967	1,291.6	100.0	843.9	65.3	447.7	34.7				
1968p	1,507.5	100.0	899.4	59.7	608.1	40.3				

pPreliminary.

SOURCES: 1960-62, U.S., Bureau of the Census, Housing Construction Statistics: 1889-1964, p. 20. 1963-68, U. S., Congress, Joint Economic Committee, Economic Indicators, March 1969, p. 21.

the supply-given by the inventory of applicable housing units-and are shown in Chart 2 for both homeowner and rental housing units. Obtained from sample surveys by the Bureau of the Census, the vacancy rate for each category is the percentage relationship of vacant units available for sale or rent, respectively, to the appropriate total inventory. The total inventory in each category includes occupied units, vacant units for rent and sale, respectively, and vacant units rented and sold, respectively, but awaiting occupancy. In computing the rate, the following vacant units are excluded from the inventory in both categories: those too dilapidated to be considered fit for living quarters; seasonal housing units; and units held off the market for various reasons. Declining vacancy rates generally are considered to be an indication of strength in housing markets.

The rental vacancy rate for the United States, as measured in annual averages, rose from 5.1 per cent in 1957 to 6.4 per cent for 1959. The rates in Chart 2 are on a quarterly basis, and show the rental vacancy rate

rising to 8.1 per cent in the second quarter of 1961. After falling back to the 7.3-7.4 per cent level in the last half of 1962, this rate moved nearly horizontally until the end of 1965. From then the rental vacancy rate dropped sharply, reaching 4.9 per cent in the fourth quarter of 1968. The annual average homeowner vacancy rate rose slightly from 0.9 per cent in 1957 to 1.1 per cent in 1959. On a quarterly basis, as shown in Chart 2, the homeowner rate shows a very slight upward movement until 1963, when a leveling tendency began. The decline in the homeowner vacancy rate also began in 1966, but was not as sharp as that in the rental rate; the homeowner rate was 1.1 per cent in the fourth quarter of 1968.

#### **Mobile Homes Shipments**

The final series in Chart 2 shows manufacturers' shipments of mobile homes (excluding travel trailers) in quarterly totals, unadjusted for seasonal variations. Mobile homes are not included in the housing starts series, nor in the GNP account for investment in residential structures. However, mobile homes are becoming an increasingly important source of shelter, especially in the lower range of prices. As such, some note must be taken of them in any consideration of future markets for housing.

Having become larger, more attractive, and better-designed in recent years, mobile homes now dominate the market for new low-priced, single-family homes, and the mobile homes industry has been called "a major force in the permanent shelter market." According to one estimate, the industry is supplying nearly 30 per cent of all single-family dwellings, and about three-fourths of the homes selling for under \$12,500. The steady increase in manufacturers' shipments of mobile homes since the beginning of 1960 is clearly seen in Chart 2; total 1968 shipments amounted to more than 300,000 units, and the Mobile Home Manu-

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facturers' Association estimates shipments of 400,000 units a year by the early 1970's.

The prime market for mobile homes appears to be among young married couples, and older, often retired, couples-both rapidly growing segments of the population. At the same time, mobile homes (or some related dwelling units such as modular units or other factory-built homes) often are mentioned as possible sources of shelter for low-income families. Factorybuilt homes, mass-produced on production lines and transported to the site rather than built there, are thought to have the potential to reduce both building costs and construction time significantly. Since it is not too difficult to switch from mobile homes to sectional homes or modular units, some mobile home companies are already producing factory-built homes. But neither mobile homes nor factorybuilt homes represent a simple panacea for the burgeoning demand for shelter, for they have problems, too. One is the problem of acceptance by potential occupants, by homebuilders and construction workers, and by zoning bodies. Both have the problem of finding suitable sites, and in the case of factorybuilt homes there are often problems in erecting them once they are built-especially in crowded city conditions. Finally, although banks, savings and loan associations chartered in some states, and finance companies finance mobile homes, financing problems have not been completely resolved.

#### CONSTRUCTION COSTS AND HOME PRICES

Rising land and construction costs and home prices, and expectations concerning them on the part of builders and homebuyers, also seem to be stimulating demand for housing currently, and may well continue to do so in the future. The importance of, and interest in, these developments calls for a brief summation of the recent construction cost-price situation. Five kinds of data have been chosen for this summary, and are shown in Chart 3: the Bureau

#### Chart 3

CONSTRUCTION COSTS AND HOUSE PRICES



SOURCES: U. S., Business and Defense Services Administration, Construction Review; U. S., Department of Commerce, Business Statistics, 1967; U. S. Savings and Loan League, Savings and Loan Fact Book, 1968; U. S., Bureau of Labor Statistics, Monthly Labor Review; U. S., Bureau of Labor Statistics, Employment and Earnings Statistics for the United States, 1909-68.

of the Census Price Index for New One-Family Houses, site value of FHA-insured one-family houses, the Department of Commerce Composite Construction Cost Index, the Bureau of Labor Statistics Wholesale Price Index for Construction Materials, and Average Hourly Earnings of Construction Workers, for all contract construction, general building contractors, and special trade contractors.

#### Price Index for New One-Family Houses

The price index for new one-family houses results from a Bureau of the Census program of research aimed at developing a number of new construction price indexes. It is currently available on an annual basis for the years 1963 through 1968. As a "price" index, it measures changes in the prices paid by, or cost to, the ultimate buyer and, as such, differs from "cost" indexes that measure changes in costs to speculative builders or prime contractors, excluding their profit (but including profits of subcontractors). The new one-family house price index includes value of site, and attempts to correct for "quality" changes such as the tendency for new houses to become larger with more facilities, such as extra bathrooms and central air conditioning. The index has been succinctly described as follows:

This is an index of the total sales price of new one-family houses built for sale and sold, including the value of the site on which the house is built. Since this is an index of sales prices, it reflects not only changes in the costs of labor, materials, and land, and selling expenses, but also changes in productivity and profit margins in residential construction. The index is designed to measure annual changes in the total sales prices of houses with the same composition of characteristics. . . .<sup>a</sup>

The price of new one-family houses so mea-

<sup>&</sup>lt;sup>2</sup>John C. Musgrave, "New Measures of Price Changes in Construction," *Construction Review*, U. S., Department of Commerce, Business and Defense Services Administration, October 1968, p. 5.

sured rose by nearly 18 per cent over the fiveyear period, 1963 to 1968.

#### **Site Values**

As noted, the price index of new one-family houses includes site value. Land values have gone up more in recent years than other construction costs, and thus are a rising proportion of the total price of house and land together. The charted series on land values is for FHA-insured one-family homes and is representative of the generally increasing values of home sites, although the proportion of land costs for conventionally financed one-family homes is probably greater. For FHA-insured one-family homes, the ratio of site price to total value of house and lot has increased from 16.6 per cent in 1960 to an average of barely under 20 per cent in 1965-67. The average site price for such houses rose from \$2,470 in 1960 to \$3,766 in 1967, or an increase of 52 per cent.

#### **Composite Construction Cost Index**

The Department of Commerce composite construction cost index is an implicit price deflator that "measures the combined result of cost changes and of changes in the weights of different types of construction in the current dollar construction activity aggregate." Thus, its coverage is broader than residential construction alone; it includes, besides farm and nonfarm residential building, nonresidential building of various types, public utility construction, and several other types of nonbuilding construction.3 This index increased by about 12.6 per cent from the beginning of 1960 to the end of 1965 and by about 15.4 per cent from the beginning of 1966 to the close of 1968. The increase in 1968 alone amounted to 6.3 per cent.

### Wholesale Price Index for Construction Materials

The prices of construction materials, which have made a sizable contribution to the overall upward pattern of construction costs in recent years, are represented here by the Wholesale Price Index for Construction Materials. It consists of those products or materials used in building construction "which are either (1) physically incorporated as an integral part of a building (residential, commercial, or industrial), or (2) normally installed during the process of construction and not removable without seriously impairing the use of the building, or actually destroying a portion of it." The index thus includes plumbing and heating equipment but excludes consumer durables, such as kitchen ranges. Being a component of the Wholesale Price Index, the index measures prices at the first level of commercial transaction in the United States. The seven main parts of the index and their relative weights are as follows: lumber and wood products, 24 per cent; building paper and board, 2 per cent; paint and paint materials, 6 per cent; metals and metal products, 37 per cent; machinery and motive products, 5 per cent; nonmetallic mineral products, 25 per cent; and household durables (mainly floor covering), 1 per cent.<sup>5</sup>

The total materials index participated in the general stability of wholesale prices in the early 1960's, rising by just over 1 per cent from 1960 to the close of 1965. From that point to the end of 1968, however, the increase amounted to more than 12 per cent, and the index rose by 7 per cent in 1968 alone.

<sup>&</sup>lt;sup>a</sup>For more detail on the construction of this index, see U. S., Department of Commerce, *Business Statistics: 1967*, Explanatory Notes to the Statistical Series, p. 51.

<sup>&</sup>quot;Building Materials Wholesale Price Indexes," *Construction Review*, U. S., Business and Defense Services Administration, August 1967, p. 4.

<sup>&</sup>lt;sup>5</sup>For a discussion of the relative importance of the various commodities in the index, see *Ibid.*, pp. 5-9. The indexes for selected groups and commodities appear monthly in the *Construction Review*.

#### Average Hourly Earnings of Construction Workers

The last cost factor shown in Chart 3 is average hourly earnings of construction workers, by total and two major classes. Although not even a measure of total labor cost to employers, much less of labor costs per unit of output since no productivity considerations are involved, these series make up a highly significant part of both of those measures, and movements in them are indicative of movements in labor costs. From 1960 through 1965, average hourly earnings of all contract construction workers (including those employed by heavy contractors) increased about 23 per cent. Earnings of workers employed by general building contractors rose about 24 per cent in the same period; and those hired by the special trade contractors, 23 per cent. Thus, the hourly earnings of all three groups rose on the average about 4 per cent per year from 1960 through 1965. From the beginning of 1966 to the end of 1968, the relative rise in average hourly earnings of all contract construction workers was 19.6 per cent, or about 6.5 per cent per year. For the same interval, general building construction workers' earnings rose 20.1 per cent, while earnings of those in the special trades increased 16 per cent-average yearly increases of about 6.7 per cent and 6.5 per cent, respectively.

#### SUMMARY

Residential construction activity in the 1960's has been a source of concern, especially with regard to its variation in response to changing financial pressures, and to the needs of low-income families. Housing starts and construction put in place both responded sharply to the financial squeeze in 1966-67. But this survey has emphasized several other features of the housing situation. Residential construction activity as a share of total GNP (both expressed in real terms) has declined through the 1960's, as has contract construction employment as a share of total nonagricultural employment. Housing units in multiunit structures have become a significantly greater proportion of total private housing units started, and increasing sales of mobile homes have raised that industry's share in the total number of new single-family dwellings. Rising shelter needs and underbuilding, associated with financing problems and other factors, also have found expression in falling vacancy rates-especially toward the end of the period. Finally, all of these things occurred in an environment of rising land costs, construction costs, and home prices, again especially in the latter years of the period.

# Deposit Growth in the Tenth District–1949-68

#### By F. R. Krohmer

COMMERCIAL banks in the Tenth Federal Reserve District experienced considerable changes in their patterns of deposit growth during the past two decades. This article discusses these changes with respect to total deposits and their components at all insured commercial banks in the Tenth District. Deposit growth is examined by states, by metropolitan and nonmetropolitan areas, and by individual metropolitan areas. The article concludes with a brief investigation of the role of time deposits in the growth of total bank deposits during recent years.

#### **STATE PATTERNS**

Total deposits of Tenth District commercial banks increased from \$5.4 billion in June 1949 to \$18.4 billion in June 1968.<sup>1</sup> (See Table 1.) This represents a gain of 240 per cent, or a compounded annual rate of growth of 6.6 per cent. By comparison, commercial banks throughout the Nation grew at a rate of 5.8 per cent. Within the District, deposits at New Mexico banks grew most rapidly, especially in the early part of the period. However, these deposits accounted for only a relatively small percentage of total District deposits. Among the larger states, Colorado and Oklahoma District banks experienced the most rapid growth in deposits, while Nebraska banks had the slowest growth.

Following the national pattern of deposit growth, District banks experienced more rapid expansion during the 1960's than during the 1950's. For example, the annual rate of advance of total deposits at commercial banks in the District was 6.3 per cent during the 1949-60 period and 7.1 per cent during the 1960-68 period. It should be pointed out, however, that this growth pattern did not hold for all of the states, as District banks in Missouri, New Mexico, and Wyoming grew more slowly in the 1960's than in the 1950's. (See Table 1.)

Time and savings deposits have grown more rapidly than demand deposits during the past two decades, as indicated by trends in deposits of individuals, partnerships, and corporations (IPC).<sup>2</sup> (See Chart 1.) This is especially true in the 1960's (1960-68), when time and savings deposits grew at a 16.1 per cent annual

<sup>&</sup>lt;sup>1</sup>The Tenth District includes the states of Colorado, Kansas, Nebraska, Wyoming, most of Oklahoma and New Mexico, and the western tier of counties in Missouri. Data in this article pertain to banks in the Tenth District only.

<sup>&</sup>lt;sup>2</sup>The difference between total deposits and IPC deposits is comprised of interbank deposits, deposits of states and political subdivisions, and deposits of the U. S. Government. IPC deposits account for approximately 80 per cent of total deposits.

	District Commercial Banks												
	June	Per Cent of	June	Per Cent of	June	Per Cent of	Increase	Compounded Annual Rate of Change					
	1949 (Millions)	District	1960 (Millions)	District	1968 (Millions)	District	1949-68 (Per cent)	1949-60	1960-68 (Per cent)	1949-68			
Colorado Kansas	\$ 888 1,212	16.3 22.3	\$ 1,885 2,171	17.7 20.4	\$ 3,384 4,015	18.3 21.8	281.2 231.1 201.4	7.1	7.6 8.0	7.3			
Nebraska New Mexico*	983 120	18.1 2.2	1,845 1,529 425	17.4 14.4 4.0	2,724 685	14.8	177.1 470.2	4.1 12.2	7.5	5.5 9.6			
Oklahoma* Wyoming	1,125 191	20.7 3.5	2,389 378	22.5 3.6	4,239 612	23.0 3.3	276.8 219.9	7.1 6.4	7.4 6.2	7.2 6.3			
<b>Total District</b>	\$5,441	100.0	\$10,622	100.0	\$18,435	100.0	238.5	6.3	7.1	6.6			

Table 1

OF TOTAL DEDOCITE AMONIC STATES

\*Tenth District portion only. In June 1968, this represented 29 per cent of total deposits of \$9,610 million in Missouri; 97 per cent of total deposits of \$4,356 million in Oklahoma; and 62 per cent of total deposits of \$1,103 million in New Mexico.

rate, compared with 2.8 per cent for demand deposits. For the 20-year period (1949-68), IPC time deposits grew at an annual rate of 12.0 per cent, while IPC demand deposits advanced at a rate of 2.6 per cent. (See Table 2.)

Banks in all District states except New Mexico showed a marked increase in the rate of growth of time deposits during the 1960's compared with the 1950's. The more rapid growth in time and savings deposits during the 1960's was especially evident in Nebraska, where the rate increased from 4.1 per cent in the 1950's to 22.8 per cent during the years 1960 to 1968. The sharp increase in time and savings deposits at Nebraska banks may be attributed to payment of higher interest rates on such deposits and the resultant "catching up effect." During the 1950's, deposit interest rates in Nebraska were considerably lower than the District average and the deposit structure of Nebraska banks showed a considerably smaller proportion of time and savings deposits compared with all commercial banks in the District. However, as Nebraska banks began to offer more competitive interest rates during the 1960's, they experienced a rapid growth of time and savings deposits and moved toward a deposit structure more similar to that of the rest of the District.

#### AREA PATTERNS

#### Metropolitan and Nonmetropolitan Areas

Deposit growth in the District metropolitan areas has been more rapid than in nonmetropolitan areas. Differential growth was especially pronounced in the 1950's when deposits increased nearly 8 per cent a year in metropolitan areas and lagged elsewhere. During the 1960's, however, deposits grew at about the same rate in both metropolitan and nonmetropolitan areas—7 per cent a year. (See Table 3.)

This development is somewhat surprising. Relatively higher rates of deposit growth in metropolitan areas may have been expected due to the continued movement of population to urban counties. However, the pace of population growth at District urban centers slowed down in the 1960's, while population increased in nonmetropolitan areas during the 1960's compared with a small decline in the 1950's. Similar developments occurred with regard to income trends, according to available data. Thus, the fact that the pace of deposit growth in metropolitan areas exceeded that in all other areas in the 1950's, but failed to do so in the 1960's, is compatible with the income and population developments.

#### Individual Metropolitan Areas

Commercial banks in the District's standard metropolitan statistical areas (SMSA's) experienced considerably different rates of deposit growth. (See Table 3.) For the 1949-68 period as a whole, gains were most pronounced in the Albuquerque, Oklahoma City, and Lawton areas. In Denver, one of the large District metropolitan areas, deposit expansion was recorded at an annual rate of 8 per cent. Several other areas, including Colorado Springs, Lincoln, Topeka, and Wichita, also experienced annual growth in total deposits of about 8 to 8.5 per cent. Following at a somewhat slower pace was the Kansas City area, the largest metropolitan area, together with Omaha and Tulsa. The slowest pace of deposit expansion occurred in the Pueblo and St. Joseph areas.

The pattern of deposit growth changed somewhat during the most recent years, the 1960-68 period. Banks in the Oklahoma City, Colorado Springs, and Lincoln areas enjoyed the most rapid rate of deposit expansion. In the Colorado Springs area, IPC demand deposit increases were substantial, while time and savings deposit growth slipped below the average for all District metropolitan areas. In the Oklahoma City and Lincoln areas, on the other hand, total deposits received a strong boost from exceptionally rapid growth of time and savings deposits. Time and savings deposit growth in the Omaha area was also very rapid but it may have been at the expense of demand deposit expansion. A similar explanation may also be involved in the experience of Tulsa area banks - i.e., somewhat above average gains in time and savings deposits coupled with a very weak performance of demand deposits.

The two largest District metropolitan areas, Kansas City and Denver, showed relatively similar annual gains in IPC time and savings deposits in the years 1960-68, but Denver area banks experienced slightly greater demand deposit growth. In Topeka, Wichita, and Albuquerque, bank deposits increased at a rate

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Chart 1 DEPOSIT GROWTH AT COMMERCIAL BANKS IN THE TENTH DISTRICT, 1949-68



NOTE: A semi-logarithmic chart emphasizes rates of change rather than absolute changes. For example, the line representing time and savings deposits has a greater slope than that of demand deposits, showing that time deposits grew faster than demand deposits.

somewhat above the metropolitan area average and in the two Kansas areas, time and savings deposit growth also exceeded the average during 1960-68. Expansion continued slow in both deposit categories among banks in the Pueblo and St. Joseph areas. In keeping with longer-term trends, Lawton area banks reported solid gains in total deposit growth during recent years.

#### GROWTH OF TIME DEPOSITS DURING THE 1960'S

The rapid growth in time and savings deposits during the 1960's was associated with increases in the interest rates that banks pay on these deposits. Commercial banks, of course, must comply with regulatory ceilings when they adjust the rates they offer on deposits. Federal regulatory agencies, at various times during recent years, raised the maximum rates payable by commercial banks on time and savings deposits. Different ceilings also were established for time deposits and savings deposits. In 1964, the maximum rate payable on time deposits was raised to  $4\frac{1}{2}$  per cent, and in late 1965 the maximum was raised again, to  $5\frac{1}{2}$  per cent. In both instances, the rate for savings deposits was left unchanged at 4 per cent. These adjustments in maximum rates allowed banks to compete more effectively for the community's savings flows.

As a part of this competitive effort, the time certificate of deposit (CD) was employed extensively by banks in the 1960's, and was quite effective, as CD's grew very rapidly. IPC time deposits (which are mostly CD's) advanced at an annual rate of 33.8 per cent in the 1963-68 period, while savings deposits increased 3.6 per cent a year. (See Table 4.) It is clear that part of the advance in CD's came at the expense of a reduction in the growth of savings deposits. Thus, the growth of time deposits vis-a-vis savings deposits was especially pronounced in the 1965-68 period, following the action of the Federal Reserve allowing banks to pay more

on time than on savings deposits. This was dramatically evident in 1966. For the year ending June 1966, IPC time deposits increased 43.2 per cent in the District while savings deposits advanced less than 1 per cent. In 1964-65, however, CD's had advanced only 19.9 per cent, compared with 10.6 per cent for savings deposits.

The use of the CD was evident in another area—time deposits of state and local governments, as these depositors shifted their idle balances into CD's. Time accounts of state and local governments advanced at a 19.3 per cent rate in the 1963-68 period, compared with only 2.1 per cent for their demand accounts.

Time deposits grew more rapidly than savings deposits in each of the metropolitan areas in the 1960's; however, the extent to which this occurred varied considerably. (Table 4.) In most cases, those areas having relatively rapid CD growth had relatively low savings deposit growth. Thus, banks in the Tulsa, Topeka, and Wichita areas led the District in IPC time deposit growth, but had relatively small advances in savings accounts. Lincoln banks were exceptions, having rapid growth in both time and savings deposits. Following the general pattern, in areas such as Albuquerque, Colorado

		IPC Time and Savings Deposits						IPC Demand Deposits					
	Amount			Compounded Annual Rate of Change			Amount			Compounded Annual Rate of Change			
	June 1949	1960	1968	1949-60	1960-68	1949-68	June 1949	1960	1968	1949-60	1960-68	1949-68	
	(in millions of dollars)			(In per cent)			(In millions of dollars)			(In per cent)			
Colorado	220	523	1,457	8.2	13.7	10.5	667	1,032	1,372	4.0	3.6	3.9	
Kansas	162	472	1,624	10.2	16.7	12.9	1,050	1,168	1,494	1.0	3.1	1.9	
Missouri*	155	351	1,043	7.7	14.6	10.6	766	1,006	1,186	2.5	2.1	2.3	
Nebraska	139	216	1,118	4.1	22.8	11.6	845	989	1,190	1.4	2.3	1.8	
New Mexico*	32	112	262	12.0	11.2	11.6	88	211	272	8.3	3.3	6.1	
Oklahoma*	114	463	1,644	13.6	17.2	15.1	1,010	1,414	1,778	3.1	2.9	3.0	
Wyoming	46	114	304	8.7	13.0	10.5	146	191	210	2.5	1.2	1.9	
Total District	868	2,252	7,452	9.1	16.1	12.0	4,573	6,010	7,503	2.5	2.8	2.6	

Table 2

Individuals, Partnerships, and Corporations, District Commercial Banks

DEMAND, AND TIME AND SAVINGS DEPOSITS

		1949-68			1949-60			1960-68			
	Total Deposits	IPC Demand Deposits	IPC Time and Savings Deposits	Total Deposits	IPC Demand Deposits	IPC Time and Savings Deposits	Total Deposits	IPC Demand Deposits	IPC Time and Savings Deposits		
		(In per cent)			(In per cent)			(In per cent)			
Albuquerque	10.4	7.0	11.9	12.5	9.8	11.1	7.6	3.3	13.0		
Colorado Springs	8.3	5.0	12.1	7.5	4.5	10.2	9.4	5.7	14.8		
Denver	8.0	4.6	10.8	8.1	5.1	8.4	7.8	3.9	14.1		
Kansas City	6.8	2.9	10.6	7.5	3.1	7.8	5.7	2.5	14.6		
Lawton	9.8	5.6	17.7	10.6	6.2	19.2	8.8	4.9	15.7		
Lincoln	8.2	3.7	13.3	7.7	3.2	2.9	9.0	4.3	29.3		
Oklahoma City	9.4	4.2	16.2	9.2	4.0	12.9	9.6	4.6	20.8		
Omaha	6.4	3.0	10.3	6.5	3.4	1.7	6.3	2.4	23.2		
Pueblo	5.5	2.7	6.5	6.2	3.9	5.4	4.5	1.1	7.9		
St. Joseph	5.4	2.3	7.2	5.7	2.2	6.2	5.0	2.3	8.6		
Topeka	8.5	3.8	12.0	8.9	3.8	6.7	8.0	3.7	19.8		
Tulsa	6.9	2.8	14.6	7.9	4.6	12.8	5.6	.4	17.2		
Wichita	8.1	3.5	15.7	8.2	3.3	12.4	7.9	3.8	20.2		
fotal SMSA's	7.6	3.6	11.7	7.9	4.1	8.5	7.1	3.0	16.2		
fotal Non-SMSA's	5.5	1.6	12.4	4.3	.8	9.8	7.2	2.6	16.0		

#### Table 3

#### DEPOSIT CHANGES IN METROPOLITAN AREAS

District Commercial Banks, Compounded Annual Rate

NOTE: Data pertain to standard metropolitan statistical areas as defined in the County and City Data Book, 1967, U. S. Department of Commerce. Pottawattamie County, Iowa, is not included in the Omaha SMSA.

Springs, and Pueblo, large advances in savings deposits were accompanied by small gains in IPC time deposits. In other cases, such as St. Joseph, both time and savings deposits were sluggish. It is interesting, however, that total time and savings deposits grew rapidly only in those areas that experienced rapid CD growth.

Similar patterns are evident in movements in time deposits of states and political subdivisions relative to changes in the demand accounts of these depositors. Thus, state and local governments increased their time deposits quite rapidly in Lawton, Topeka, Oklahoma City, and Omaha. In each of these cases, except Omaha, the demand accounts of these depositors declined, or advanced at a slow pace. Time deposits of state and local governments declined in Lincoln and recorded sluggish growth in Denver, Albuquerque, and Pueblo, while demand deposits increased sharply in each of these areas except Denver.

The pattern of growth in savings deposits and time deposits was different at metropolitan areas and nonmetropolitan areas in the 1963-68 period. Savings deposits increased more rapidly in nonmetropolitan areas, while time deposits advanced at a faster pace in metropolitan areas. Another difference is that fluctuations in deposit growth rates were considerably more pronounced at SMSA banks than at non-SMSA banks. For example, during the 1965-66 period, savings deposits at metropolitan banks declined 1.3 per cent, compared with a 12.0 per cent growth in 1964-65, while these accounts continued to grow at non-SMSA banks, although at a reduced rate. On the other hand, the growth of time deposits in 1965-66 increased much more at metropolitan banks.

#### Table 4

CHANGES IN DEPOSIT CATEGORIES

1963-68

#### District Commercial Banks, Compounded Annual Rate

		Demand Deposits			Time and Savings Deposits					
	Total Deposits (In per	IPC Demand Deposits	States and Political Subdivisions	Inter- bank	IPC Time and Savings	Savings	IPC Time	States and Political Subdivisions		
	cent)		(In per cent)		(In per cent)					
Albuquerque	6.6	4.8	12.5	7.5	9.7	5.8	27.5	4.7		
Colorado Springs	8.4	5.6	.8	15.0	13.3	9.6	20.1	11.5		
Denver	7.1	4.9	-1.0	2.7	10.9	2.6	35.8	10.2		
Kansas City	5.7	3.8	5.0	-1.3	12.3	2.8	40.3	28.9		
Lawton	10.6	7.6	-3.8	18.3	15.1	2.5	25.4	90.0		
Lincoln	10.7	5.2	2.9	7.8	26.7	8.9	41.6	-7.3		
Oklahoma City	7.2	3.1	3	2.4	15.7	6.5	28.6	42.5		
Omaha	6.9	3.5	11.1	3.9	17.2	2.3	34.7	265.4		
Pueblo	3.0	.7	6.8	-4.5	6.8	5.7	13.2	4.6		
St. Joseph	5.8	2.8	1.9	3.6	10.1	1.9	15.1	17.3		
Topeka	7.3	6.0	7	.5	16.4	-1.6	50.6	64.7		
Tulsa	7.2	2.8	.8	-3.2	16.1	1.4	52.2	63.1		
Wichita	8.5	4.6	.2	1.6	20.4	4.7	54.9	40.5		
Total SMSA's	6.9	4.0	2.2	1.0	13.7	3.4	36.4	22.2		
Total Non-SMSA's	7.0	2.6	2.1	2.9	15.1	3.9	31.1	16.2		
Total District	6.9	3.4	2.1	1.2	14.3	3.6	33.8	19.3		

NOTE: Data pertain to standard metropolitan statistical areas as defined in the County and City Data Book, 1967, U. S. Department of Commerce. Pottawattamie County, Iowa, is not included in the Omaha SMSA.

Prior to 1963, data were not available showing deposit categories other than IPC. Both IPC time deposits and time deposits of states and political subdivisions are primarily certificates of deposit.

#### SUMMARY

Commercial banks in the Tenth District experienced more rapid growth in total deposits than banks across the Nation during the 1949-68 period. In the 1960's, District banks recorded higher rates of deposit expansion than during the 1950's, due largely to a more rapid

growth of time and savings deposits. This growth was associated with increased competition for funds, upward movements in deposit interest rates, and with shifts by depositors into time deposits (CD's) and away from savings accounts and, to a lesser extent, demand deposits. These adjustments were in keeping with trends across the Nation.