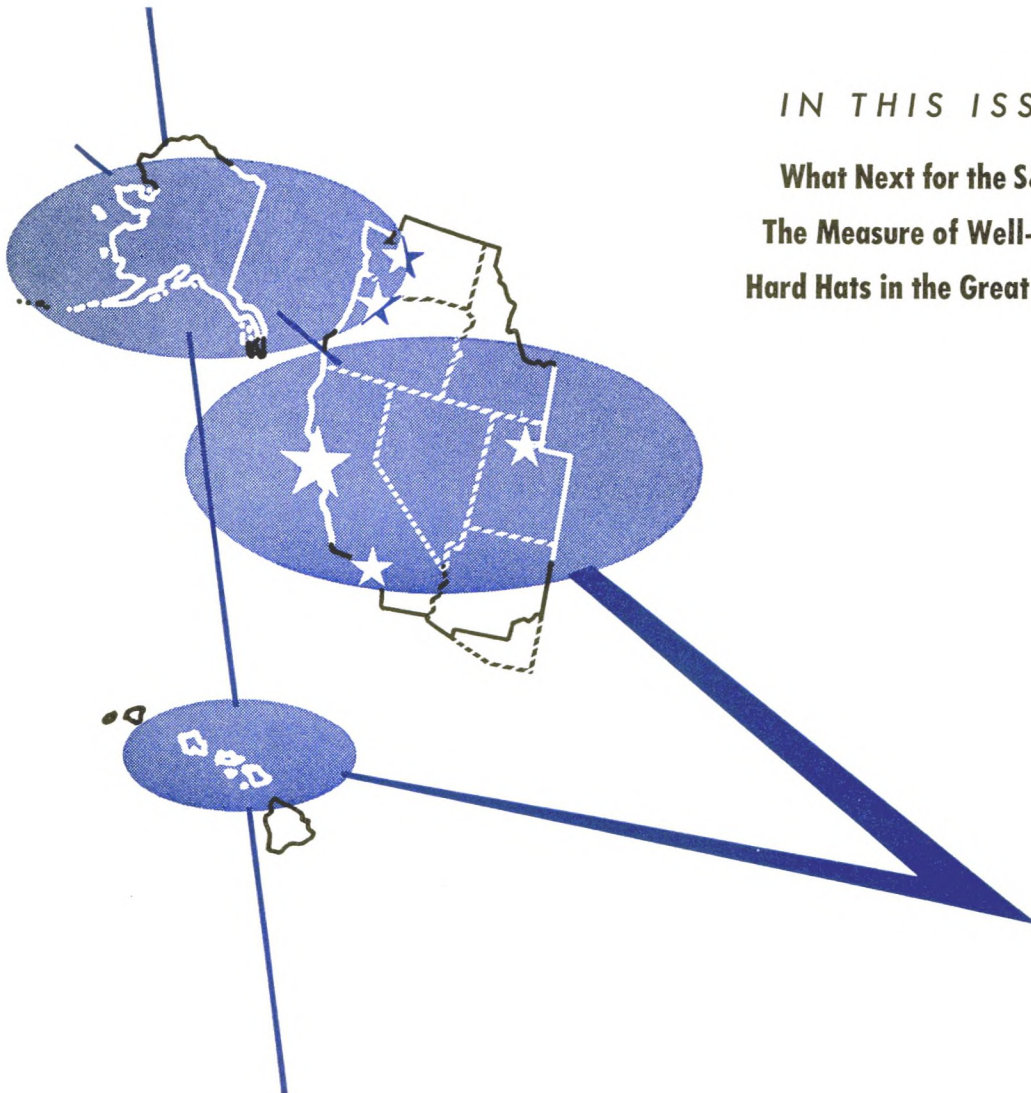


FEDERAL RESERVE BANK OF SAN FRANCISCO

# MONTHLY REVIEW



*IN THIS ISSUE*

**What Next for the S&L's?  
The Measure of Well-Being  
Hard Hats in the Great Society**

**JUNE  
1965**

### **What Next for the S&L's?**

- . . . The West's high-flying savings and loan industry looks to the new Housing Act to provide a base for expanded lending.

### **The Measure of Well-Being**

- . . . The average American took home \$2,200 in disposable income last year, but the average Westerner took home more.

### **Hard Hats in the Great Society**

- . . . Western growth requires much new housing, of course, and it requires factories, stores, roads, and bridges too.

**Editor: William Burke**

# What Next for the S&L's?

*“The Housing Act of 1964 in our opinion is a hallmark . . . (which) will, in the long run, be an opening wedge for your participation in the consumer credit field and in other medium and long-term credit fields. . . . It will offer you, when fully realized, an opportunity to diversify your lending and to adjust your allocation of funds with the changing needs of the economy. It will place you nearer the center of financial activity and bring you closer to that multi-faceted range of needs that constitute the public interest.”*

THE speaker was the former chairman of the Federal Home Loan Bank Board, and the audience was a very attentive group of savings and loan executives. The subject was the wider market open to this burgeoning industry under the terms of the new Housing Act — for example, through investment in the general obligations of states and political subdivisions, or through lending up to five percent of assets for college-education loans. The implications, both for the nation’s savings and loan men and for their competitors throughout the financial world, are interesting indeed.

The “opening wedge” thesis was advanced against a background of phenomenal industry growth throughout the postwar period. It was put forward, too, in realization of the recent softness in the one major field — residential mortgage financing — to which S&L lending activity has heretofore been restricted.

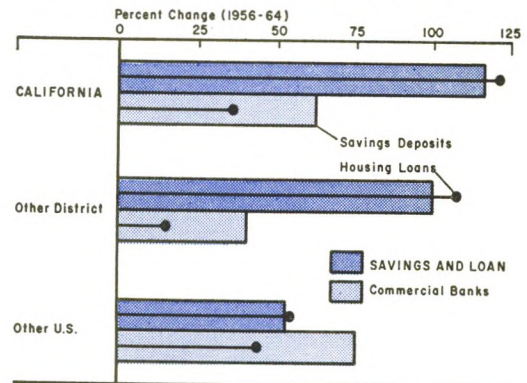
## Postwar prodigy

The statistics give something of the flavor of the industry’s prodigious postwar growth. Assets of the nation’s savings and loan associations increased thirteen-fold, from \$9 to \$119 billion, between the end of 1945 and the end of 1964. (By way of contrast, assets of the commercial banking system doubled during the same period, rising from \$160 to \$340 billion.) And the S&L boom was essentially a Western — and particularly a California — phenomenon. Assets of California associations grew from less than \$1 billion to

\$4 billion in the first postwar decade, and then jumped to \$24 billion by the end of 1964.

During the 1945-64 period, the S&L’s have played an increasingly important role in the expanding world of residential mortgage finance. Nationally, these associations increased their share of mortgages held by depository institutions — S&L’s, commercial banks, and mutual savings banks — from 52 to 61 percent during this period. The commercial-bank share meanwhile declined from 29 to 19 percent, while the savings bank share held steady at 19 percent. In California, savings and loan associations over the postwar period increased their share of mortgage funds advanced by institutional lenders from 20 to 75 percent, while commercial banks suffered a decline from 70 to 25 percent. (The

## Savings and loan growth centered in California, other Western states



Sources: Federal Home Loan Bank Board; Federal Reserve Board

data refer to mortgage recordings of \$20,000 and less.)

Needless to say, District commercial banks have continued to play a major role in this expanding market. Holding a comparatively large proportion of their total deposits in the time and savings categories, these banks have been able to conduct a great deal of real-estate financing with their expanded resources. The District proportion of real estate to total loans currently is about 35 percent—the same proportion as in the 1920's although somewhat less than the 40-percent average maintained earlier in the postwar period.

The rapid growth of the West obviously has permitted both a strong upsurge in S&L financing and an expanded mortgage commitment (albeit a declining share) by commercial banks. Since the end of World War II, District population has grown 3.5 percent annually—double the rate of increase recorded elsewhere. Moreover, since most of the increase has been due to migration, the District has consistently accounted for well over one-fourth of the nation's housing starts. And, needless to say, construction on that large a scale generates a large supply of mortgages.

### **Burgeoning expansion**

What of the trends during the current business expansion? During this period, each type of depositary institution assumed a larger role in the nation's financial markets. Over the four-year period—a period in which the total volume of funds supplied to the credit markets increased more than in the preceding six-year span—depositary institutions accounted for 57 percent of total funds supplied, or considerably more than in the two business cycles of the late 1950's.

The expanded role of these institutions reflected the expanded role of mortgage financing in the credit markets—and reflected the fact that a record proportion of a record vol-

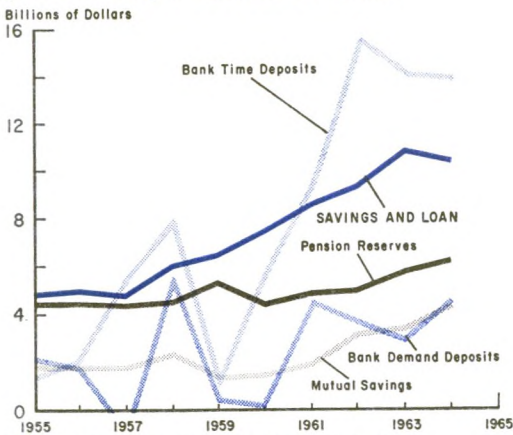
ume of savings took the form of claims on depositary institutions. Their interest-bearing claims accounted for 44 percent of total sources of credit during the 1961-64 period, in large part because of the rising rate of return on depositary institutions' claims relative to those available on market instruments.

The frenetic activity of Western S&L activity during the 1961-64 business expansion has somewhat overshadowed the growth of the region's commercial banks. Although District banks accounted for one-sixth of the national gain in time and savings deposits during this period, District S&L's accounted for fully one-third of the national gain in S&L share accounts.

The rapid savings-and-loan pace was due partly to the rapid pace of activity in their major financing field—residential construction—and partly to the “loaned-up” condition of their major competitors in that field. But yet, perhaps the major factor in this upsurge was the high level of rates paid by District (especially California) associations—rates that were high in relation to those paid by other S&L's, high in relation to those paid by the banks, and certainly high in relation to yields on alternative investments such as stocks and bonds.

By the same token, the savings inflow into the various types of savings institutions could be expected to respond to a narrowing of the rate differential, and this is precisely what happened in the early months of 1965. Following last November's revision in Federal Reserve Regulation Q, many banks throughout the nation increased the rates payable on their time and savings deposits, and promptly increased their share of the total savings inflow. District commercial banks, for example, accounted for 65 percent of the West's savings inflow in the first quarter of the year—up from 45 percent in the year-ago period. District S&L's meanwhile recorded a savings

## S&L shares, bank time deposits provide major sources of credit



Source: Federal Reserve Board (flow-of-funds data)

inflow that (even in dollar terms) was substantially below the first-quarter inflow of the last several years.

### Measuring the impact

Does the current slackening represent only a temporary breather or rather a reversal of the long-term uptrend? Whatever the answer, there is no doubt that the nationwide upsurge of the S&L's has already exerted a strong impact on financial markets.

Some of this impact can be discerned in recent changes in the level and structure of interest rates. For example, the intensified competition among financial institutions for short-term funds and for longer-term assets has tended to compress the yield spread throughout the maturity range. (The average spread between the rate on S&L savings shares and the rate on FHA mortgages narrowed from 2.34 percentage points in 1960 to about 1.15 percentage points in 1964.) Moreover, the rapid growth of lending by nonbank institutions has been consistent with the condition of ample credit availability characteristic of the current expansion. In this connection, a leading industry journal recently editorialized (apropos the large volume of relatively low-

cost borrowings by member associations from the Federal Home Loan Banks), "The extension of credit through advances became the avenue employed by the FHLB System in helping to reach the established monetary goal" of ample credit at stable long-term interest rates.

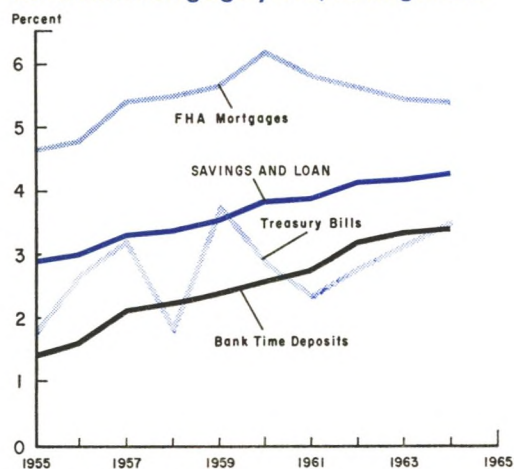
### Deteriorating quality?

In their field of greatest activity, S&L's have become involved in a disproportionate growth of mortgage financing in relation to the level of housing starts — a situation attributable not only to the rise in home and land values, but also to the growing use of mortgages as a vehicle for financing nonhousing expenditures. In any event, over one-third of the nation's outstanding residential mortgage debt has been accumulated during the past four years, in the face of a gradual decline in mortgage-loan yields and gradually rising trends in vacancies and foreclosures.

As a consequence, growing fears have been expressed about the vulnerability of the mortgage market—because, in the words of economist Saul Klaman, "pressure to lend funds and to maintain yields are so great that the quality of mortgage credit is deteriorating." This situation thus has impelled the Federal Home Loan Bank System to shift toward a more restrictive policy over the past year.

Last August, the Bank Board admonished Federal Home Loan Banks to consider "restricting the borrowing privileges" of high-risk associations, that is, associations with more than four percent of their assets in foreclosed property or delinquent loans. (Normally, an association may borrow up to 17.5 percent of its outstanding savings in order to acquire mortgages, in addition to borrowings to meet savings withdrawals.) The Bank Board also introduced several reserve changes during 1964, in order to relate reserves more to assets than to savings.

## S&L problem: narrowing spread between mortgage yield, savings rate



Source: Federal Reserve Board

### Away from specialization

Perhaps the most significant development of the past year, however, has been the S&L's achievement of broadened lending powers under the terms of the Housing Act of 1964. This is the "opening wedge" mentioned at the beginning of this article. With the Housing Act now on the books, the industry (in the words of former FHLB Chairman McMurray) "will strive for its fair share in other types of lending and will seek more diversified lending powers."

Broadened lending powers are most clearly apparent in the provision authorizing S&L's to invest in Federal agency issues and the general obligations of states and political subdivisions, and also in the provision authorizing associations to place up to five percent of assets in unsecured personal loans for college educational purposes. Other provisions of the Act, although important, may have less long-term significance. Among other things, they

extend the geographical limits of an association's lending authority from 50 to 100 miles (and up to five percent of assets in any metropolitan area, regardless of distance), provide for higher loan limits in several mortgage-financing categories, increase the limits on unsecured property loans, and permit associations to act as depositories for public trust funds up to the \$10,000 insurance limit.

This shift away from specialized lending, understandably enough, has taken place within a context of a relatively restrained housing market and a still-generally exuberant savings atmosphere. And a number of related factors are also at work. Some savings and loan executives, after examining the demographic and financial portents, conclude that the mortgage credit requirements of the next decade will not match the heavy financing needs of the past decade. Other industry spokesmen argue that the industry should extend its financing to all articles that are related to the home, such as furniture and household equipment. Still other commentators have suggested that broadened lending powers may be a preferable alternative to an otherwise-likely decline in interest rates on savings.

While this trend is developing, the question of most immediate interest, especially in the West, is likely to be whether the headlong pace of recent S&L activity can be sustained. Western associations, which have doubled their savings inflow and their mortgage lending within a four-year span, may encounter some difficulty in repeating that performance. Yet, whatever their success, there is no doubt that they have now carved out an important niche in the financial structure of the West.

—Verle Johnston

# The Measure of Well-Being

**A**DD UP all individual incomes from wages, salaries, proprietorships, dividends, rent, interest, social security payments, and the like. Subtract individual income taxes and license fees. Adjust for changes in consumer prices and divide by population. The result is a rough but usable measure of individual well-being — per capita real disposable income.

Real disposable income, in 1964 prices, was over \$2,200 for the average American last year. But the national figure masked significant regional differences; for instance, the average Westerner took home about \$2,450, or far more than the \$2,150 average for the rest of the country. Similarly, within the Twelfth District, the average ran from about \$2,600 for California to about \$2,300 for the Pacific Northwest and \$2,000 for the Mountain states.

Real disposable income increased substantially in the two tumultuous decades between 1929 and 1949, but the growth rate has speeded up even more in the subsequent decade and a half. Since 1949, individual well-being by this measure has increased more than one-fourth in the West and more than one-third elsewhere. Thus, there is a growing tendency towards the national norm. Per capita figures in the above-average regions, such as California and the Northwest, have risen more slowly than elsewhere during the post-war period, while the index has risen at a better-than-national pace in the Mountain states and other regions that formerly lagged.

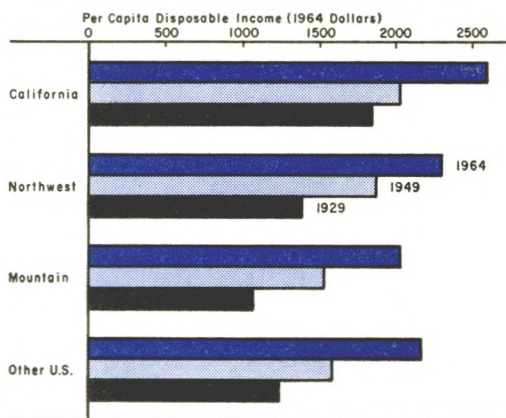
Throughout the nation, state differences in per capita real disposable income have narrowed considerably. The geographic inequality in levels of per capita income, as measured by state deviations from the national mean, has been cut in half since 1929. Most of the substantial reduction in inequality took place during the war years. No further shift oc-

curred in the first postwar decade, but the convergence toward the national average resumed again after 1957.

A different picture emerges, however, when total instead of per capita income is used as a measure. Since 1929, the southern and western regions of the country have increased their share of total disposable income by almost 50 percent, with the northeastern and central regions sustaining the loss. And the West's gains have been notably strong, in both dollar and percentage terms. Real disposable income in District states more than doubled between 1929 and 1949, and more than doubled again in the shorter time span since 1949. Real disposable income in the rest of the nation increased by about one-half and two-thirds, respectively, in those two time periods.

On the basis of this sustained rapid growth, the Western market last year totalled about \$65 billion after taxes. California earners took home roughly \$48 billion, while the Northwest and Mountain states accounted for about \$11 billion and \$7½ billion, respectively.

## California holds edge as all areas show gains in real per capita income



Source: Department of Commerce

## Hard Hats in the Great Society

AS PART of his long-range program, President Johnson has proposed a national effort "to make the American city a better and more stimulating place to live . . . to increase the beauty of America . . . and to develop regions of our country now suffering from distress and depression." Since the construction industry will play a major role in attaining these goals, hard hats obviously will be a popular piece of wearing apparel in the Great Society.

Throughout the postwar period, the industry has clearly exhibited the viability and adaptability needed to carry out the responsibilities now assigned to it. Immediately after World War II, construction men successfully met the pent-up demand created by the war. Subsequently, they have confronted the problems created by other new developments — urbanization and suburbanization, the growing use of automobiles, increasing resource utilization, and flights to the moon as well.

Since World War II the construction industry has enjoyed its longest boom. Construction spending in the early postwar period reached 11 percent of GNP — a level not achieved since the mid-1920's — and it has maintained that pace in more recent years. The relatively stable pattern of construction expenditures, moreover, has helped account for the stability of general economic growth in the postwar period.

### Large industry, small firms

The importance of the nation's construction industry is spotlighted in the recently published inter-industry study for 1958. According to that study (published in the November 1964 *Survey of Current Business*), construction accounts for about three-fifths of gross private domestic investment, for about one-twelfth of Federal government purchases,

and for nearly two-fifths of purchases by state and local governments.

Total construction activity consumes more than half of the output of the following industries: heating, plumbing, and structural metal products (75 percent); stone and clay products (61 percent); and paint and allied products industries (57 percent). It is also the dominant customer for several other industries: stone and clay mining and quarrying (47 percent); lumber and wood products except containers (44 percent); and electric lighting and wiring equipment (40 percent). The industry also purchases 13 percent of primary iron and steel output, 11 percent of primary nonferrous production, 14 percent of other fabricated metals products, and 24 percent of materials handling machinery and equipment. (Again, all data in this and the following paragraph are from the 1958 inter-industry study.)

The construction industry exerts a significant multiplier effect on the rest of the economy. The expenditure of \$1,000 on new construction results in the generation of \$1,343 of total output from other industries, and maintenance and repair construction generates \$807 per \$1,000 spent. In consequence, changes in the level of construction spending affect the economy much more than changes in actual dollar spending would suggest.

Construction work is heterogeneous, and this helps account for the size of the firms in the industry. Each building project is unique both in its nature and in its location; consequently, any economies of scale are reflected more in the size of individual jobs rather than in the size of individual firms. Each project requires the mobilization of a different set of factors and at a different place. It is not surprising, then, that small firms can frequently compete on even terms with large firms.



The ten largest firms accounted for \$2.1 billion in contract awards in 1963—only about 4½ percent of the industry total. The top 86 companies won only about 14 percent of total contracts awarded.

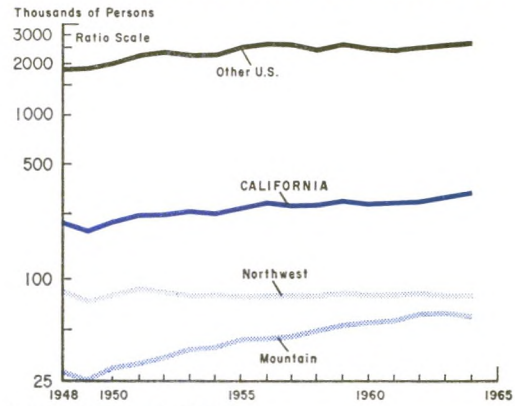
More than 800,000 firms operate in the construction industry, and almost 90 percent of these are of the single proprietorship or partnership form. Gross receipts per firm average only \$71,000. Moreover, industry turnover averages about 13½ percent annually, compared with 8 percent in manufacturing and 9 percent for all industry. Not unexpectedly, because of the large proportion of small firms in this turbulent industry, the failure rate runs about 60 percent higher than the all-industry average.

Profit rates in the industry are normally quite low. In the postwar period net-income/sales ratios have averaged 3 percent for construction corporations compared with 7 percent in manufacturing. Moreover, the profit rate has drifted downward, falling from about 5 percent of total receipts in 1948 to less than 1½ percent in 1961.

### Crucial Western industry

In the West, the construction industry is far more important than it is elsewhere. In relation to population, for example, contract construction awards are 40 percent greater in Twelfth District states than in the rest of the country. The size of the Western industry is partly attributable to the region's rapid growth, but the high level of construction activity has also contributed to the economy's overall growth, so that cause and effect are intertwined in a mutually supporting relationship. The growth of the economy has caused expansion of the construction industry, and this has produced additional growth of the economy, with perhaps even further expansion in construction activity. And of course, there are other supporting factors as well—for example, the Western emphasis on rela-

### Construction employment gains centered in California, Mountain states



Source: Department of Labor

tively expensive housing and on large-scale natural-resource development.

Construction employment in the District jumped to a high level immediately following World War II, but then experienced its sharpest postwar drop in 1949. Since that recession year, District construction employment has risen about 50 percent—slightly more than the national employment increase. Most of the growth has been in California, but growth rates have been much sharper in the more sparsely populated (and more rapidly developing) south-eastern portion of the District. Construction employment in the Pacific Northwest has been virtually stable in the later postwar period, following the construction boom of the early postwar years.

Contract construction payrolls have tripled since 1948; wage and salary disbursements in the District (excluding Alaska and Hawaii) have grown from \$1.2 billion in 1948 to \$3.8 billion in 1964. The District industry thus now accounts for one-fifth of the nation's construction payrolls. Moreover, construction generates about 8 percent of all production income in the District—significantly more than the industry generates in the rest of the national economy.

## Housing—only one component

In recent years, just as in the first postwar decade, the various components of the region's construction industry have boasted substantial records of accomplishment, although each has encountered occasional setbacks in its rising growth trend. These fluctuations have reflected different rates of progress in modifying the physical environment as new problems, new demands, and new technology have developed.

The industry's largest single component is residential construction, which accounts for nearly one-half of all contracts awarded in the District and for about two-fifths of those awarded elsewhere. Since 1956 the per capita value of housing awards has grown more than twice as fast in the District than in the rest of the nation. Obviously, then, the recent high level of residential construction activity is greater than population increases alone would justify.

The West's postwar housing boom has been widely discussed and the industry's 1964 decline has received perhaps even more attention. Suffice it to say that substantial strength is still visible in the residential construction field—even in the volatile apartment-building sector. The shift to apartments has resulted from a number of factors. For example, land costs have more than tripled in the last decade, and house prices thus have been pushed up some \$2,000 to \$5,000. The number of young marrieds has increased in line with the coming of age of the baby-boom generation, and the number of elderly persons has increased in line with rising longevity. The number of single households has also increased. These groups — the young, the old, and the single — are important in the apartment market, and this market thus can boast significant underlying strength.

## The rest of the industry

The rest of the region's construction industry has been subjected to a different set of stimuli, and its patterns of growth have been different from those of the housing sector. Consequently, this sector deserves examination in somewhat greater detail.

Nonresidential construction — everything except housing—experienced its sharpest postwar growth in the District immediately after World War II. Activity doubled in volume between the 1945-1946 reconversion period and the 1948 boom year, but by 1951 volume increased by half again. Growth has been less rapid since, in contrast to the trend in residential construction. During the present cyclical expansion, for example, spending in this category has increased about one-fourth, as against a two-fifths gain in housing.

Building construction and heavy construction (public works and utilities) are the two major divisions of the West's nonresidential construction industry. Both categories showed little change in contract-award volume between 1956 and 1960, but both have grown more rapidly (roughly 25 percent each) during the last four years. In 1964, awards totaled about \$2½ billion for new buildings and \$2 billion for heavy construction.

## Factories, offices, stores

Nonresidential building recently has reached record levels in the West. California, Oregon, and Nevada all attained new highs in 1964, and other District states lagged only slightly behind their 1963 levels. (Washington, however, remained below the peak reached in 1957.)

Industrial construction, although not the largest nonresidential building sector, is significant both because of its importance in the growth process and because of its volatility. The value of permits issued for industrial construction reached a peak in 1956, but dropped sharply in the ensuing 1958 reces-

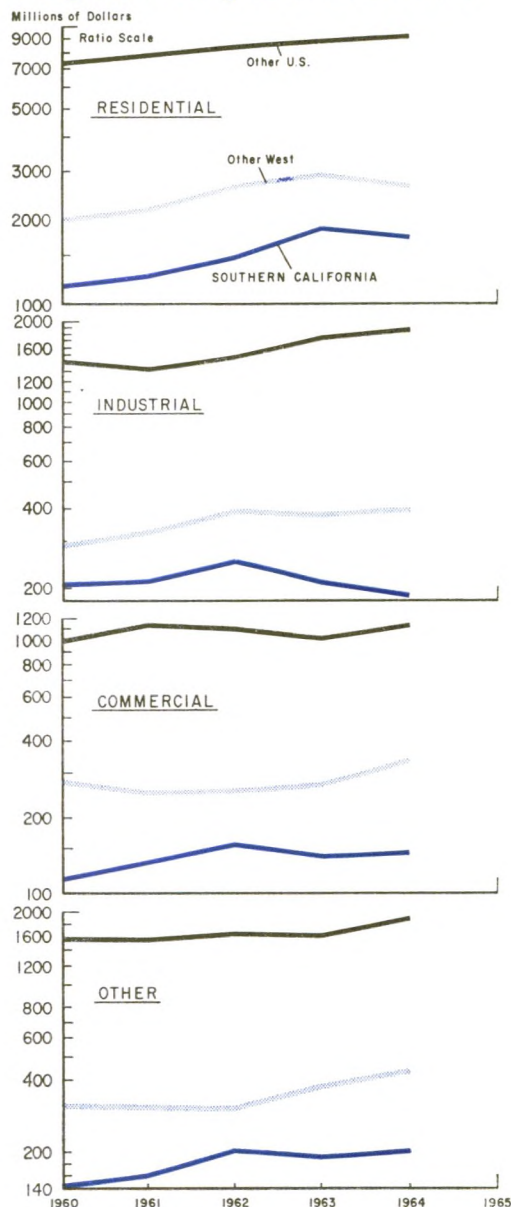
sion. Another investment boom began in 1962, however, and despite some fluctuations, has continued into 1965. Even so, the District has not yet regained the level of its 1956 performance in this field.

The ups and downs of industrial construction are primarily due to changes in the economic climate. Business capital expenditures fluctuate in line with general economic activity, but industrial construction spending is even more volatile. This volatility is exhibited during the stages of a typical business expansion; industrial investment tends to be confined to new equipment in old buildings until production presses on existing capacity, but it then accelerates as the demand for new factory space makes itself felt.

Office construction is another volatile sector of nonresidential building. The value of contract awards for Western office and bank building has fluctuated from year to year, reaching successive peaks in 1956, 1959 and 1963, but the trend has been sharply upward. The average value of awards in the two most recent years is two-thirds greater than the average for the 1956-57 period. This sharp uptrend suggests that office construction activity may be in the expansionary phase of a long-term cycle. Not since the 1920's has there been such a surge in this segment of the industry.

Office building has been stimulated not only by the expansion of the over-all economy but also by improvements in building design. Modern buildings offer a higher ratio of rental space to gross area than do their prewar counterparts, because of greater efficiency of layout and the utilization of air conditioning and new construction methods. Construction of this type also has been stimulated by the movement to the suburbs. Many firms have located in outlying areas in order to gain prestige and to gain the benefit of inexpensive land for buildings and parking facilities. In addition, the postwar upsurge in

### Western areas exhibit increases in commercial and other building, alongside housing boom and decline

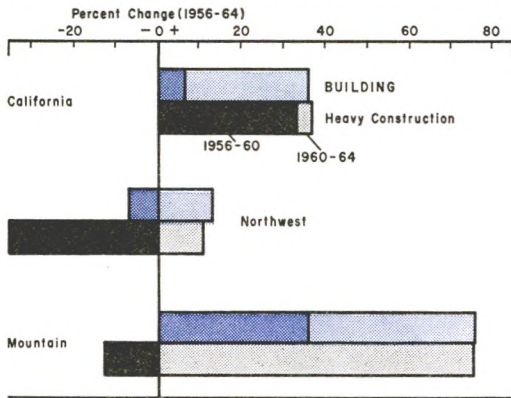


Source: Department of Commerce

service activities has undoubtedly contributed to the need for office space.

Store construction, a third segment of non-residential building, is much less volatile than

## Most areas boost spending for building and heavy construction



Source: Department of Commerce

either industrial or office building. This segment has increased year after year, so that awards today are nearly twice as great as in 1956.

Demand for store construction has been stimulated particularly by changing modes of transportation. The widespread ownership of cars and the consequent increase in mobility have created a demand for stores with ample parking space, a variety of services, and a minimum of traffic congestion. At the same time, the need for proximity has become less important. Thus, store space is being built in suburban shopping centers rather than in crowded downtown areas or in local neighborhoods with poor parking facilities.

Changing methods of selling have also affected store design; stores, in fact, probably suffer a higher rate of obsolescence than any other type of building construction. Finally, the continuing construction of new housing developments and new travel routes requires new stores at new locations.

School construction, which accounts for almost half of the nonresidential building category, has been expanding strongly in the last few years because of the coming of age of the babies born during the postwar population explosion. This year, a large number

of those individuals will be turning 18, which means increasing pressures on Western colleges and universities—pressures accentuated by the growing percentage of persons attending such institutions. Higher education, of course, requires more expensive facilities than elementary and secondary schools, so the volume of construction will be bolstered from that source too.

### Heavy construction too

Heavy construction awards in the West generally have lagged somewhat behind the volume of nonresidential building. But this category is more important in the District than elsewhere, due to the large number of Western rivers needing flood control measures and offering an opportunity for power production or irrigation. However, the margin is narrowing as the rest of the nation expands road and bridge building, water control, and power production. In 1956, heavy construction accounted for 45 percent of nonresidential awards in the District and 40 percent nationally, but by 1964 the relative shares were 44 and 42 percent, respectively.

Both 1963 and 1964 were exceptionally good years for the District's heavy construction industry. Strength in 1963 was based mainly on two large electric light and power system awards in California. And, in 1964, the emphasis shifted to other states, so that every District state except California showed an increase.

### Roads and more roads

The making of streets and roads currently accounts for one-third of the dollars spent for heavy construction in the West. Road construction expenditures are approaching \$1 billion a year. More than three-quarters of this amount goes for state highway systems, and the balance is about equally divided between locally-financed urban and rural systems. Since 1948, annual expenditures for

new road construction in the District have expanded six-fold. State highway spending has actually experienced a nine-fold increase, while spending for local systems has grown to about three times its 1948 dollar volume.

The Interstate Highway program begun in 1958 accounts for about half the current level of state-highway system construction. The 6,772-mile District share of the 41,000-mile national system is almost half-finished, with about \$1.5 billion budgeted to complete the task by the 1972 target date. Massive as this program is, however, it will be only an interim accomplishment in the rabbit-on-a-stick pursuit of highway needs.

The number of automobiles in the District has more than doubled over the past decade and a half. Thus, despite population growth, the ratio of residents to vehicles has declined from 2.6 to 1.9 between 1948 and 1964. Not surprisingly, then, projections of highway needs show no sign of abatement in the foreseeable future.

In striving to meet these needs, highway planners have attempted to make better and wider highways rather than just more. District highway mileage has increased only about 10 percent over the postwar period, but the emphasis in construction work has shifted from thinly-surfaced, rather narrow roads to heavily-paved highways averaging more than twice the widths of a few years earlier.

Highway construction, moreover, has experienced a veritable revolution in technology. The giant earthmovers, ribbon-paving machines, and on-site concrete plants are innovations of the postwar era. And it is hard to realize that pre-stressed concrete—a prime factor in the now ubiquitous freeways on stilts, bridges, and overpasses—was not introduced into this country until 1951.

### Lines of civilization

While the freeways fructify, the growth of metropoli is generating another closely re-

lated transportation development — urban transit systems. Fifty years ago, of course, the interurban was a common means of travel. The automobile later reduced the interurban to a vestigial form — but now, with the overwhelming volumes of traffic on highways and in parking lots, it is experiencing a rebirth.

Metropolitan areas from Seattle to San Diego have discussed and planned new commuter systems, but the San Francisco Bay Area Rapid Transit District is the first system to reach the ground-breaking stage. Rapid transit construction now underway in the Bay Area will tunnel through the Berkeley Hills, dive under San Francisco Bay through a four-mile tube, and run through 16 miles of subway and over 31 miles of elevated track in its 75-mile length, all at a cost of some \$996 million. While metropolitan transit solutions will probably be less dramatic in other areas, they are quite sure to involve substantial outlays and major projects.

Construction on other kinds of transportation facilities is over-shadowed by the vastness of highway building programs, but developments in air and water facilities are still substantial. The zooming growth of air transport operations has caused large-scale expansion at major airports throughout the District, and while airplanes account for the major part of air-transport investment, construction of runways and other facilities alone has totalled over half a billion dollars during the past decade. Bigger terminals and longer runways for heavier aircraft have been most in demand, but in the near future the focus may turn to new air freight facilities to handle the rapidly growing volume of freight traffic.

New railroad investment has been concentrated in rolling stock, but water transport has benefited from new port facilities and river and harbor improvements. Ports on the Pacific Coast, grown archaic through many years of neglect, are undergoing major

changes to provide efficient new cargo-handling facilities for all kinds of materials — from liquids to lumber to beans to bananas. Deeper channels, breakwaters, and shoal removal are improving harbors; meanwhile, on the Columbia and Snake Rivers, barge navigation is gradually being extended upriver by a series of locks, while on the Sacramento a 45-mile ship canal is giving California's state capital greater access to the sea.

Utilities — electric power systems in particular — have also placed heavy demands on the contract construction industry. Generating plants, transmission lines, and distribution facilities have multiplied fast to meet the 10-percent annual growth rate characteristic of the recent past. Some hydro-electric projects remain to be built — especially in Alaska, with its fantastic potential—but most of the future generating facilities may take the form of mine-head coal stations or nuclear reactor plants. The new dual-purpose reactor at Hanford, Washington, which will produce as much electricity as one of the larger dams in the country, is but one of a number of reactors being planned or already operating. (The Humboldt Bay reactor station on the California coast produces 60,000 kilowatts.) Meanwhile, new high-voltage D.C. techniques have increased the feasibility of long-distance power transmission, as in the \$700-million Pacific Northwest-Southwest Intertie.

Water and sewer systems have also required much new construction activity, and the volume of work seems likely to grow much more. Cities are being forced to go farther afield for their water supplies, and they are under pressure to expand their sewage-treatment facilities in order to combat increasingly severe pollution problems.

### **The glamor industry**

Finally, much remains to be done in the most fascinating phase of construction—dam building and water control projects. In future

centuries, Western highways undoubtedly will perpetuate our memory (if only because of their ubiquity), but the West's dams may well surpass the pyramids.

Dam building is not a new activity, of course, but all the really large dams — from Grand Coulee and Hoover on — have been built during the last thirty years. Our technology simply could not master the power of major rivers until that time. Since then, the Columbia River has been converted to a series of still water pools over its 900-mile length to the Canadian border, and further construction on both sides of the border will soon tame the river to the point where seasonal variations in flow can be practically eliminated.

Flood control, power, irrigation (and more recently urban water supply), and recreation, all have called forth greater efforts in water control. The Columbia, with its great power and irrigation potential, was developed first, but other rivers have gradually been brought under the leash. Consequently, the West today boasts about half (18 million KW) of the nation's hydro-electric capacity, and also about half (17 million acres) of the nation's irrigated land.

But future water projects will occupy the construction industry for a long time to come. Now well underway under the California State Water Plan is a \$1,750-million project to collect and move water over a 444-mile aqueduct to the parched south. And this massive project has required new technological developments. For example, at the site of an earth-fill dam 770 feet high, a wheel excavator is used which produces 3,000 cubic yards of fill material per hour—enough to load ten 5-yard trucks a minute.

Beyond this, even more grandiose plans are in existence. The Pacific Southwest Plan to meet regional water needs in a more comprehensive manner has been estimated to cost

\$4.1 billion, and proper water control over Northern California rivers, the villains of last winter's disastrous floods, has been calculated at a mere \$822 million. Alaska in the course of time will witness the largest river projects on the continent. The Rampart Dam project alone could cost \$1.5 billion.

This survey suggests, then, that the hard-hat brigades will continue to transform the Western landscape. Although nature (in the form of fire, flood, or earthquake) may fre-

quently destroy their works, and although man (with the aid of the wrecking ball) may generate a comparable amount of havoc, the products of their industry will generally persist as the landmarks of a lifetime and more. And although new products and new technology will shape the currents of change in the industry, the pace of activity in this typically Western industry should continue on a strong uptrend.

—John Booth

## Excises: The Background

Copies are again available of the article, "Consumers and Their Taxes," which appeared in the December 1964 *Monthly Review*.

The article provides a background analysis of the recently revised Federal excise-tax system. The article suggests that the nation's tax structure may continue to show an increasing shift toward indirect consumption taxes (Federal excise and state sales taxes), even as Congress hacks away at the tangle of Federal excises, because of the states' ever-expanding utilization of sales taxes.

Copies of the article are available on request from the Administrative Service Department, Federal Reserve Bank of San Francisco, 400 Sansome Street, San Francisco, California 94120.

# Western Digest

## Banking Developments

The rapid first-quarter rate of loan expansion at District weekly reporting banks abated somewhat in the first six weeks of the second quarter. Total loans at these banks rose \$226 million between late March and mid-May, but this amounted to less than a third of the gain recorded in the comparable 1964 period. . . . Business loans, which had accounted for the major part of the contraseasonal first-quarter increase, rose by a nominal \$4 million. (A year ago the gain was \$208 million.) But mortgage lending, which had lagged during the first three months of the year, accelerated during the April-May period. . . . To meet the demands for credit and net withdrawals of deposits during this six-week period, banks reduced their total security holdings by \$94 million. A reduction of \$284 million in U.S. Government securities was partially offset by a \$190 million net addition in municipal and other securities. . . . In the same time span, demand deposits (adjusted) at District banks declined \$418 million — double the amount of decline in the comparable 1964 period. These banks recorded a greater-than-year-ago increase (\$241 million) in total time and savings deposits. But the savings component dropped by \$120 million (net), as individual depositors followed the usual practice of withdrawing sizable amounts to meet April income-tax payments.

## Employment and Unemployment

Total employment in Pacific Coast states remained virtually unchanged in April, as employment on farms declined and nonfarm employment held steady, on a seasonally adjusted basis. Labor disputes contributed to a dip in manufacturing employment, and declines were reported also for construction, transportation, and public utilities. The number of workers increased, meanwhile, in trade, finance, services, and government agencies. But the labor force expanded over the month, and the unemployment rate consequently rose from 5.4 percent in March to 5.8 percent in April. . . . In aerospace industries, preliminary figures indicate a slight employment gain for April — the first month-to-month gain for the defense-space sector since late 1962. In the State of Washington, aerospace employment rose in April for the third successive month. In California, April's slight increase was the first rise since a brief lift that occurred late in 1963.

## Metal Industries

Western steel production advanced to a new record in mid-May, supported by strong demand for construction materials. This latest increase widened the gain over the year-ago output level to 12 percent — about double the margin recorded for the nation as a whole. . . . Demand for copper showed no letup following early May's two-cent-a-pound increase in refined copper prices. Producers continued to ration their supplies, while experts predicted that copper shortages would persist throughout 1965.