

Monthly Review



TWELFTH FEDERAL RESERVE DISTRICT

FEDERAL RESERVE BANK OF SAN FRANCISCO

July 1956

Review of Business Conditions 78

Farm Capital Expenditures 79

Trends in Twelfth District

Retail Trade, 1948-54 85

REVIEW OF BUSINESS CONDITIONS

BUSINESS activity in June continued at record levels nationally. Total employment reached a new peak in excess of 65 million, though unemployment also rose as the seasonal increase in workers exceeded the rise in jobs. Nonagricultural employment also reached a new peak after seasonal adjustment despite some decline in manufacturing. Continuation of gains in construction, finance, service, and state and local government employment more than offset the drop in manufacturing. Construction activity, industrial production, and retail sales remained close to or continued at their previous highs.

For the second quarter as a whole, preliminary data indicate a \$5 billion rise in gross national product to a new record. The gain over the first quarter resulted primarily from increased consumer outlays and expanded private investment outlays. A substantial gain in spending on nondurables and a rise in service outlays were sufficient to cause a substantial rise in personal consumption despite lower outlays on durable goods. Private investment gained as a result of larger outlays for plant and equipment.

The labor-management dispute in the steel industry led to a shutdown of many steel mills after the end of June. Operations fell to 12 percent of capacity and idled some 650,000 workers. In this District the impact was relatively less severe since steel mills accounting for more than 30 percent of the District's capacity continued to operate. Nationally, the steel dispute led to reductions in railroad employment and declines in jobs in some other associated industries. Many steel consumers were reported as holding adequate stocks, but as the strike became more prolonged some builders expressed a fear that steel shortages might affect heavy construction projects in the near future. Shipyards, rail car builders, and other consumers of steel plate were reported to be facing shortages.

Business activity in this District continued to expand moderately during June. Declining residential building tended to restrain growth in activity in a number of areas. Most other lines of activity continued to expand and manufacturing

as well as other industries had higher levels of activity in June than in May. So far this year the District economy has displayed a somewhat greater rate of growth than that of the nation.

District employment strong

Total Twelfth District employment in June, after seasonal adjustment, reached an all-time high. Unemployment dropped further, reaching the lowest point on record since World War II. Nonagricultural employment, after seasonal adjustment, also moved to a new record high; and in at least two states even the unadjusted figure was at an all-time record, exceeding the seasonal peak level of last December. One of these states, Arizona, recorded the largest relative gain in seasonally adjusted nonagricultural employment. Continued strong gains in manufacturing, supported by increases in most other categories, contributed to the new record level of nonagricultural employment in Arizona. California, too, reported a new record in employment, both before and after seasonal adjustment. Gains in California were also widespread, and manufacturing jobs increased, in contrast to the decline nationally. The total gain in District nonagricultural employment from May to June, after seasonal adjustment, was just under one-half of one percent or about the same as the average rate of rise in the first five months of the year.

The rise in manufacturing employment in the District reflected a variety of forces. California's manufacturing employment moved up as workers were added in the aircraft, electrical equipment, ship repair, lumber, food processing other than canning, paper products, and ordnance industries. All-time highs were established in June in paper products, ordnance, and electrical equipment. Food canning declined slightly because of a work stoppage, and small decreases were reported for automobiles and textiles. Washington manufacturing industries had gains somewhat smaller than expected on a seasonal basis. Softness in the lumber market led to a minor drop in employment in that industry. Manufacturing employment will probably fall in July because of the steel strike. More than

10,000 District workers were directly involved in the dispute. According to current reports most District manufacturers apparently had adequate stocks of steel to carry them through and, consequently, secondary effects may not be immediately apparent in District manufacturing employment.

Total construction increases, but residential activity declines

June authorizations for construction in the District increased moderately over May in dollar volume. The total was approximately the same as in June a year ago, but the change between May and June, and between this year and last reflected divergent movements. The number of dwelling units authorized declined more than 10 percent from May and 20 percent from a year ago. Preliminary data also indicate substantial declines in the dollar volume of residential permits. Nonresidential construction increased sufficiently so that the June 1956 dollar volume was higher in Arizona, Oregon, Utah, and Washington than a year ago. Permit valuation declined sharply in California and Nevada, and a minor

drop was recorded in Idaho. Construction employment continued to rise in most District states as improved weather conditions permitted a stepped-up rate of activity on the large volume of work in process.

Retail trade increased during June

Preliminary data indicate that retail trade rose somewhat during June. Department store sales, seasonally adjusted, rose 5 percent from May. Most of the gain occurred in California, with Northern California showing the largest percentage rise. Only moderate increases, mostly less than one percent, were reported in the Pacific Northwest, and a 4 percent decline was recorded in Utah and Southern Idaho. Automobile sales continued to be a soft spot compared with a year ago. In California the number of new car registrations was 13 percent less than in June 1955. Compared with May, however, the situation was somewhat improved. Registrations increased 10 percent in June over the May volume, and the gap between this year and last narrowed considerably.

Farm Capital Expenditures

TWELFTH District farmers rely heavily upon farm capital goods because of the characteristics of farming in this area. This is reflected in the comparatively large and rising amount of farm machinery and equipment on District farms. Those District farms reporting farm machinery of various types in the 1954 Census of Agriculture had more equipment per reporting farm than did farms in the nation as a whole. This was due in part to the larger average size of District farms. Nevertheless, the relatively larger investment in the District indicates the importance of farm machinery and equipment to western agriculture. Not only is there a great deal of farm machinery on District farms but the incentive to make additional capital outlays also is great. Many of the crops produced in the District, particularly irrigated truck crops, require a comparatively large amount of labor in production and harvesting operations. With the growing scarcity

and higher cost of farm labor there is a great incentive to purchase capital items, such as machinery, which reduce labor requirements and permit farmers to exercise better control over their farming enterprises.

Data on farm capital expenditures are not available on a District basis, and consequently the following discussion of farm capital expenditures will be confined to those for the country as a whole.

Since the end of the "return-to-the-farm" movement of the mid-1930's, farm population has consistently declined except for a temporary rise immediately after the end of World War II. With this decline in population the number of workers on farms has also been reduced. Despite the reduction in the farm labor force, however, the output of agriculture has risen as the result of the increased productivity of those workers remaining on farms. Not only is the farm worker of

today able to produce more; he is able to accomplish it by working fewer hours. Between 1935 and 1954, farm production per man-hour more than doubled while the man-hours of labor used for farm work declined by 30 percent.

Productivity has increased not because the more productive farm workers remained on the farm, although this may account for part of the increase, but largely because farm workers have more machines and more efficient buildings to aid them in their productive efforts. These changes have resulted in some modification of farmers' expenditure patterns. Expenditures on capital items, for instance, rose from 12 percent of farm cash receipts in the 1920's to over 18 percent in the 1950's, whereas expenditures for hired farm labor declined from 13 percent of cash receipts in the 1920's to 9 percent in the 1950's. The availability of improved farming facilities, however, would not have contributed to increased efficiency unless farmers had sufficient incentive to seek their services and the financial ability to command them.

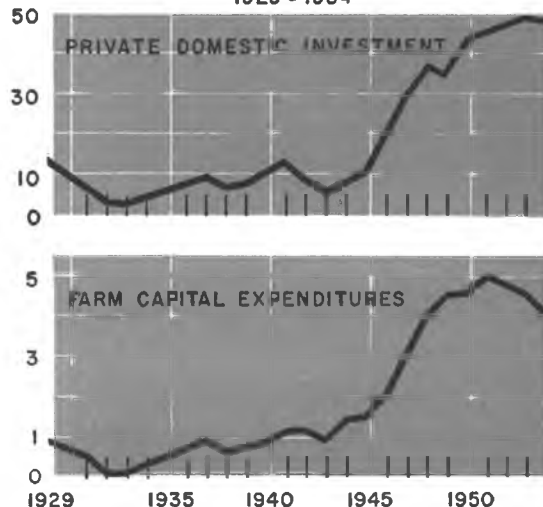
What kind of capital goods does the farmer buy? What are some of the factors, other than the declining supply of farm workers, that are associated with the volume of capital expenditures made by farmers? How important are these expenditures to other sectors of the economy? These aspects of farm capital expenditures are discussed in the following sections.

Importance of farm capital expenditures

Farm expenditures for new construction, motor vehicles, and farm machinery and equipment are a part of gross private domestic investment which, in turn, is an important determinant of the course of our economy. Gross private domestic investment, as that term is used in computing our gross national product, is made up of three major components—new construction, producers' durable goods, and changes in business inventories.

Farm inventories and total business inventories (of which farm inventories are a part) do not fall within the scope of this discussion. At this point, however, it might be well to examine them briefly since changes in business inventories make up one of the more volatile components of

CHART 1
FARM CAPITAL EXPENDITURES &
PRIVATE DOMESTIC INVESTMENT ¹/₂
BILLIONS OF DOLLARS 1929 - 1954



¹ Does not include inventories.

Source: United States Department of Commerce, *National Income Supplement*, 1954 edition; *Survey of Current Business*, July 1955.

United States Department of Agriculture, *Farm Income Situation*, October 1955.

gross private domestic investment. Almost without exception short-term changes in business inventories during the 1929-53 period were more severe than corresponding fluctuations in total gross private domestic investment. Farm and nonfarm inventories more often than not moved in opposite directions in the 1929-40 period, but in the 1947-53 period they generally moved in the same direction.

Excluding inventories, farm investment expenditures since 1929 have averaged about 10 percent of gross private domestic investment for construction and equipment. These expenditures, however, have ranged from as little as 6 percent to as much as 18 percent of gross private domestic investment for structures and equipment. Capital outlays by farmers have accounted for a somewhat larger part of the total during most of the post-World War II period than in prewar years. The postwar peak in the ratio was reached in 1949. Farm capital expenditures, however, have since trended downward in relative importance and by 1953 were almost back to their prewar

share of gross private domestic investment (excluding inventories).

Moreover, the relationship between the turning points in the volume of farm capital expenditures and the turning points in business activity¹ and spending on gross private domestic investment (excluding inventories) is different now from what it was before World War II. In the prewar period, turning points in farm capital expenditures occurred about the same time as turning points in business generally and in gross private outlays for construction and equipment. Following the war, however, farm capital outlays continued to expand through 1948 and 1949 even though fixed capital expenditures by private business and business activity generally had two turning points during that period. The postwar peak in the dollar volume of farm capital expenditures was attained in 1951, and farm capital outlays were declining when the turning points in general business activity occurred in 1953 and 1954.

Farm use of nonfarm-produced capital items

Agricultural capital expenditures which interest other sectors of the economy most are those which draw directly upon the output of the nonfarm industries. This does not mean that expenditures for capital items produced within agriculture, such as purchases of livestock, do not play an important part in the pattern of farm capital expenditures; the volume of funds or effort spent on these items directly affects the ability of farmers to make purchases from other economic sectors.

The flow of funds between agriculture and other sectors of the economy, for example, has been affected by changes in the ownership of farm land. These transfers of ownership were quite important during the late 1920's² and after the depression of the early 1930's. Large quantities of farm land were transferred to nonfarm holders of farm mortgages during the earlier period. With the improvement of farm income following the depression, however, there was a net transfer of farm land to the ownership of

farmers. This latter transfer required the payment of substantial sums by farmers and an increase in their outstanding credit obligations. These outlays, however, were not for new capital produced outside of agriculture. During recent years a large proportion of the transfers of farm land ownership have been within agriculture itself. Farm operators have purchased farm land to increase the size of their farms and former tenant farmers have changed their status to that of farm owners. In some cases the sellers of the land have withdrawn from agricultural activity. Thus, land transactions can and do affect the movement of funds between agriculture and other sectors but do not constitute a direct demand for goods from the nonfarm segment of the economy.

The effect of farm capital expenditures on the rest of the economy is more directly apparent through the demand of agriculture for the output of other sectors of the economy. The farm capital items purchased primarily through payments to other sectors of the economy include (1) dwellings of farm operators, (2) service buildings and other structures, (3) tractors, (4) trucks, (5) automobiles, and (6) other machinery and equipment. The expenditures related to automobiles include only that portion allocated to agriculture as a business.

Farm capital expenditures have varied considerably since 1910 but they have trended upward, reaching their peak in 1951. This upward trend was interrupted three times: by the agricultural depression in the early 1920's, by the general depression of the early 1930's, and by World War II. The depression period of the 1930's was the low point of farm capital expenditures. They dropped to an annual rate of less than \$200 million, a small fraction of the more than \$5 billion spent for capital items by farmers in 1951. Whereas a lack of funds and poor income prospects caused the drop in farm capital expenditures during the early 1920's and 1930's, the lack of capital items for purchase by agriculture was responsible for the reduction in capital expenditures during World War II.

The dollar value of capital expenditures does not clearly indicate the changes in the physical volume of goods purchased by the farm sector of the economy when a considerable period of time

¹ Goldsmith, R. A., *A Study of Savings in the United States*, Vol. 1., p. 166. (The turning points in business activity are those recognized by the National Bureau of Economic Research.)

² National Bureau of Economic Research, *Annual Report*, May 1955.

² Goldsmith, R. A., *op. cit.*, Vol. 1, p. 753.

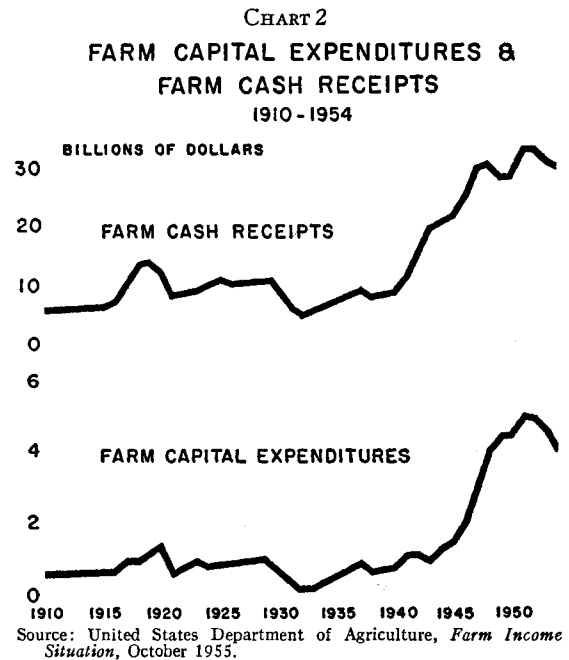
is involved. Variations in expenditures have been influenced by price movements. By adjusting for changes in prices, a more precise measure of the quantity of capital goods purchased by farmers is available. A rough adjustment, made by using wholesale prices of industrial goods as a deflator, suggests that the physical quantity of farm capital purchases in 1953 was almost two and one-half times larger than during the 1920's and over two and one-half times larger than the peak volume of expenditures during the 1930's, which occurred in 1937.

Factors associated with farm capital expenditures

The ability of farmers to make farm capital expenditures is related in part to the volume of assets that they have under their control. These assets may be in a liquid form which may be exchanged directly for capital goods or they may be in a form which may be used as collateral for a loan when credit is utilized. Ability alone does not dictate the volume of expenditures that farmers make since there must also be some incentive for farmers to assume the risks which may be involved. Income prospects, for example, influence current farm capital expenditures because adequate future income is needed to justify the outlay. Furthermore, the desire to cut production costs and the need to substitute capital equipment for labor that shifts to nonagricultural pursuits may also induce capital expenditures.

Current income affects the volume and pattern of farm capital expenditures, particularly since farmers may regard current earnings as indicative of future income. Since 1920, farmers have tended to divert an increasingly greater share of their cash receipts to the purchase of capital items as income rose, and they reversed this expenditure pattern when income declined. Income, therefore, constitutes a crucial element in the course of farm capital outlays.

Farmers must pay production costs from the cash income derived from the sale of their products. Frequently, farm costs lag behind changes in prices received by farmers. This results in a somewhat different relationship between farm net income and capital expenditures than between cash receipts and farm capital expenditures.



During the period from 1910-40 (exclusive of the years during World War I) a change of about \$175 million in farm capital expenditures was associated, on the average, with a change in the same direction of \$1 billion in realized net income of farm operators. The period during World War I was exceptional, with farm capital expenditures being relatively low in comparison to net income. Farm capital expenditures were also depressed by the nonavailability of capital items during and immediately after World War II but increased rapidly thereafter. Based on the average relationship prevailing from 1910 to 1940, farm capital expenditures should have been somewhat more than \$2 billion from 1948 through 1954. This is a much smaller amount than was actually spent by farmers during this period.

A higher average level of capital spending relative to income appeared during the 1950's. Farm capital expenditures have risen from less than one-fifth of the net income of farm operators for the prewar years to about one-third in the 1950's. There is also a greater response of farm capital expenditures to changes in net income of farm operators. For a change in net income of \$1 billion, farm capital expenditures changed in the

same direction by about \$250 million, compared with a change of roughly \$175 million in the prewar period. This means that with declines in net income from present levels a greater cutback in expenditures may be forthcoming than would have been expected from a similar drop in income in the prewar period.

Capital expenditures, financial assets, and credit

The period since the end of World War II illustrates the use of the various sources of funds by farm operators for capital expenditures. Concentration of industrial production on war items during the war period left comparatively few capital items that were available to agriculture. In the meantime, the net cash income of farmers was rising rapidly. This increased their holdings of financial assets in the form of time deposits and savings deposits in banks and in the form of United States Savings Bonds. Immediately after the war the volume of farm capital expenditures increased drastically as farm operators' net cash income continued to increase, reaching its peak in 1947. During 1946 and 1947 the high level of net income probably provided a considerable portion of the funds as well as the incentive for farm expenditures on capital items.

Although the net income of farm operators declined after 1947, farm capital expenditures continued to increase until 1951. This was the longest period of time on record that net cash income and farm capital expenditures moved in different directions. Either farm income prospects remained favorable in the eyes of farmers or they felt that their cost-price relationships could be improved by increased farm capital expenditures despite the decline in current income. Farmers, however, found it necessary to rely more on other sources of funds as net income declined. This was reflected to some extent in the substantially larger volume of farm non-real estate loans in the last half of 1947 as compared with the last half of 1946. Loans of this type continued to rise rapidly through 1950. Although non-real estate loans include credit extended for operating costs, loans for the purchase of capital items that are not secured by farm real estate are also included. Farm capital expenditures during the 1948-50 period probably were not financed

entirely by current net income and by the use of credit. Farmers also reduced their holdings of financial assets; for instance, they drew down their bank balances in 1948.

The availability of financial assets is an important consideration in farmers' spending decisions, including plans for capital outlays. To some extent financial assets provide a ready source of funds, but they are also a factor affecting the willingness of farmers to change their rate of investment in fixed capital. It is not uncommon to find that an increase in financial assets is followed by expanded farm capital investment. From time to time, however, there have been some notable exceptions; several have appeared since World War II. Though financial assets are a factor in determining capital outlay decisions, the looseness of the relationship suggests that other considerations, particularly income prospects, may play an even greater role.

Types of farm capital expenditures

The preceding section has dealt with farm outlays for capital items as a group. Within this group, however, there have been shifts in the proportion of farm capital expenditures allocated to the various items that make up farm capital and in the relative importance of these farm expenditures in comparison with expenditures by the private sector of the economy for similar items.

Farm capital expenditures, excluding inventories, may be divided into three general types: (1) motor vehicles (tractors, trucks, and automobiles), (2) other machinery and equipment, and (3) service buildings and farm dwellings. Of these categories, construction expenditures in 1954 were the largest, followed by expenditures for other farm machinery.

Since 1910 there has been a significant increase in expenditures on motor vehicles, and motor power has been substituted for animal power at a rapid rate. The increasing purchase of motor vehicles has been associated with a progressively smaller proportion of expenditures on farm buildings and other farm machinery. This trend continued through the depression of the 1930's with expenditures, particularly for farm buildings, declining drastically following 1929.

FEDERAL RESERVE BANK OF SAN FRANCISCO

Expenditures on construction during this period were evidently not at a sufficient rate to maintain the number of farm buildings at a desirable level. With improved income following the depression, expenditures for farm building rose rapidly and increased proportionately more than expenditures for motor vehicles. Expenditures for other machinery and equipment increased rapidly from the depth of the depression through 1937. The World War II period also was characterized by increased expenditures for farm machinery and equipment since these items were available in relatively large quantities during this period.¹ Immediately following the war there was again a change in emphasis, with expenditures on farm buildings increasing rapidly. From 1951, the peak year for gross farm income, through 1954, total farm capital expenditures declined in the aggregate but the reduction was fairly evenly distributed among the three main types of farm capital items. Expenditures on construction held up somewhat better during this period than those for motor vehicles or other farm machinery. In 1954 farm capital expenditures were allocated in the following manner: buildings, 40 percent; motor vehicles, 34 percent; and other machinery and equipment, 26 percent.

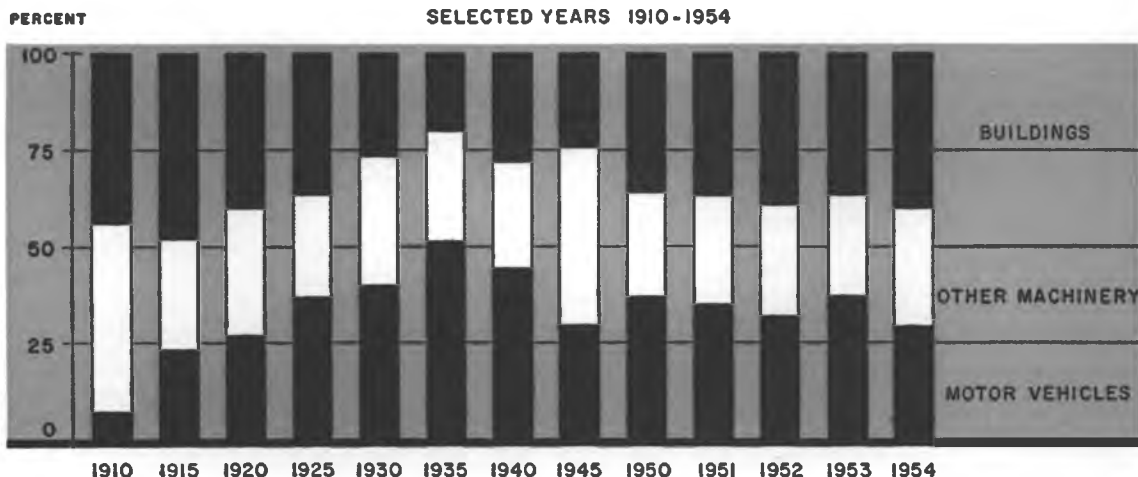
¹ United States Department of Agriculture, *Impact of the War on the Financial Structure of Agriculture*, Misc. publication No. 567, August 1945, p. 132.

The importance of farm spending in relation to total outlays made by the private sector for each of the categories of capital goods discussed above has varied over the years. However, there is no category of private capital expenditures that is strictly comparable to the farm category of "other farm machinery and equipment." These are specialized items and it is likely that the bulk of expenditures for these items would stem from the farm sector of the economy.

The farm sector is also the main purchaser of tractors, accounting for 75 to 90 percent of the demand. Nevertheless, since the relatively large purchases of tractors by farmers in 1949, farm purchases of tractors have tended to decline relative to total private spending for tractors. Moreover, there has been a tendency for farm outlays for motor vehicles other than tractors to decline in importance relative to total spending on other motor vehicles since 1949. This decline resulted from the expansion of nonfarm industries utilizing trucks, buses, and trailers; a greater increase in the use of passenger automobiles by nonfarm business than by farms; and the effects of declining net farm income in recent years. In the years just prior to World War II, for every six dollars spent by private business for passenger automobiles, one dollar was spent by the farm business for the same purpose. In 1949 this ratio

CHART 3

PERCENT DISTRIBUTION OF FARM CAPITAL EXPENDITURES BY TYPE



Source: United States Department of Agriculture, *Farm Income Situation*, October 1955.

was somewhat less and by 1952 it had fallen to one farm dollar for every twelve dollars spent by private business.

While farm purchases of automobiles have declined in importance since the prewar period, farm outlays for trucks have been relatively more important in the postwar years than during the 1930's. This is true despite the downward trend of farm spending on trucks since 1950. From 1929 to the beginning of World War II, farm purchases of trucks averaged about 16 percent of private business expenditures for trucks, buses, and trailers. After World War II the ratio of farm truck expenditures to total spending on trucks, buses, and trailers reached a level of 25 percent. After 1949 the ratio dropped, reaching a level of 19 percent in 1952.

Farm expenditures for new construction have been less important in comparison with total outlays of the private sector of the economy than any of the previously considered major groups of capital items. Expenditures for farm construction increased considerably after World War II to 9 percent of total outlays for new private construction compared with 5 percent in the years immediately preceding the war. In recent years the percentage has been slipping downward from the immediate postwar level and in 1955 it stood at the prewar level, 5 percent. Farm construction expenditures are such a small proportion of total outlays for construction at the present time that changes in farm construction activity have little effect on the course of total expenditures for new construction.

Conclusions

If a further decline in farm income occurs, it may be expected to exert a depressing effect on farm capital expenditures. There is also a tendency for farm capital expenditures to drop more sharply with a given decline in farm income at

present than they would have in the prewar period. This seems to be based on the greater response in recent years of farm capital outlays to income changes.

If farm income should continue to decline, the rate of decline in farm capital expenditures might be retarded by several factors. The need to maintain or improve the efficiency of farms and a continued exodus of labor from agriculture may dictate that capital spending should not fall below some minimum level. When capital expenditures tend to fall significantly less than farm income, credit tends to become a more important element in financing farm capital outlays. The increased use of credit may be a temporary means of sustaining purchases of capital items. It may also have the effect, however, over a long period of time, of reducing the equity of farmers in their farm assets. As a consequence, their ability to obtain credit on the basis of net worth would be impaired.

The direct impact of changes in farm capital spending on the nonagricultural sector of the economy is limited by the relatively small size of the outlays and by occasional differences in movement between farm and nonfarm investment. For individual producers, specializing in the output of farm equipment, the effect is considerably greater.

Farm investment, however, has been a major element in making it possible to increase agricultural production with a declining labor force. This change is obviously important for the farm sector, and has a considerable significance for the economy as a whole. Farm capital outlays have made it possible for the nation to enjoy growing farm output while increasing the proportion of the labor supply used in the very rapid expansion of the output of nonagricultural goods and services.

PRELIMINARY reports of the recent Census of Business indicate that total retail sales in the Twelfth District topped \$23 billion in 1954, somewhat less than one-seventh of the national total. This figure represents a 38 percent rise

above the previous 1948 business census figure compared with a 32 percent increase in the country as a whole. The larger rate of growth in the District reflects a greater percent gain in non-durable goods sales here than in the country gen-

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erally. Durable goods purchases showed about the same percent rise in the District as in the nation. District states and metropolitan areas did not share equally in the growth in retail purchases. The growth in sales in this region was largely concentrated in metropolitan areas, which accounted for about 77 percent of the total dollar increase. Slightly more than half of the rise in expenditures in metropolitan areas was accounted for by increased purchases from suburban outlets.

The relatively greater percent growth in retail trade in the District reflects, among other things, trends in income and population. From 1948 to 1954 the rate of increase of personal income in the District was one-fourth higher than in the nation, and population grew at about twice the national rate. As a result of the differences in the relative increases in sales and population, per capita retail purchases in the District showed a smaller rise than the national average. However, per capita retail buying in the District was—as in 1948—higher than in the United States as a whole.

An interesting question suggested by the postwar census data is: How well do rates of growth based on comparison of 1948 and 1954 data alone indicate trends in retail trade during the entire postwar period 1946 to 1955 and particularly the average annual growth in the period 1948 to 1954? Annual data for the District are not available. However, a graph showing monthly averages of retail sales for the country as a whole suggests that projections for the entire postwar period using data for just 1948 and 1954 tend to understate the "actual" national upward trend in sales of both durable and nondurable goods outlets during the ten postwar years 1946 to 1955. On the other hand, comparison of business census data for 1954 and 1948 tends to understate the average annual growth between these two years for durable goods sales only.

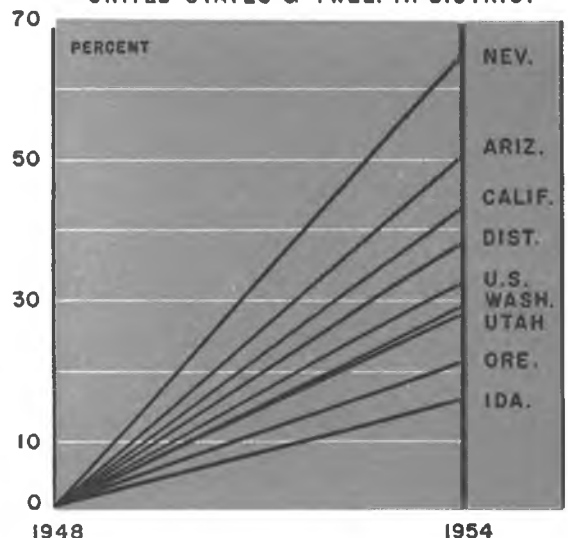
A look at the economic climate during the two postwar years in which the business censuses were made offers an explanation for these disparities. While 1948 was marked as a peak preceding a recession, 1954 was notable as a year of recession and recovery. Some indication of the strength of consumer demand for durables in 1948 is shown by the reimposition in the final

quarter of 1948 of consumer credit controls which had been removed in November 1947. The backlog in demand for automobiles because of wartime shortages was still large in 1948 so that auto sales continued to rise during the 1949 recession. In contrast, durable goods buying was slow during the first three quarters of 1954 compared with the corresponding period of 1953 and only began to recover in the fourth quarter. Therefore, the picture imparted by using 1948 and 1954 data only yields a much lower annual rate of increase than was actually registered.

The situation confronting nondurable goods outlets was somewhat different. Nondurable goods sales were strong during both 1948 and 1954. Purchases of nondurables continued their earlier postwar strength into 1948 despite some evidence of weakness in demand and a reduction of the backlog of orders. Nondurable goods sales also rose in 1954, continuing, though at a somewhat slower rate, their upward trend following the 1949 recession.

Despite the apparent weaknesses of using census data to demonstrate trends, comparison of

CHART 1
PERCENT INCREASE
IN TOTAL RETAIL SALES, 1948-1954
UNITED STATES & TWELFTH DISTRICT



Source: United States Department of Commerce, Bureau of the Census, *Census of Business*.

TABLE 1
PERCENT CHANGE IN RETAIL SALES BY KIND OF BUSINESS, 1948-54
UNITED STATES AND TWELFTH DISTRICT

	Total	Food group	Eating and drinking places	General mer- chandise group	Apparel group	Gasoline service stations	Drug and pro- prietary stores	Auto- motive groups	Furniture, furnishings, appliance group	Lumber, building, hardware group	Other retail stores
Pacific Northwest....	+26	+32	+18	+15	+15	+ 59	+38	+25	+25	+16	+20
Washington	+29	+32	+17	+21	+13	+ 59	+42	+25	+33	+24	+26
Oregon	+21	+32	+19	+ 6	+19	+ 60	+31	+25	+13	+ 6	+10
California	+43	+50	+31	+26	+27	+ 94	+36	+54	+43	+14	+37
Intermountain States.	+35	+45	+24	+13	+33	+ 82	+42	+49	+26	+14	+21
Arizona	+50	+63	+39	+13	+41	+120	+35	+68	+43	+39	+30
Idaho	+16	+25	+ 2	+ 4	+35	+ 44	+35	+26	+11	-12	+17
Utah	+27	+34	+13	+14	+ 6	+ 60	+44	+51	+12	+13	+11
Nevada	+65	+69	+48	+36	+91	+143	+70	+61	+66	+62	+50
Twelfth District	+38	+46	+27	+21	+25	+ 84	+37	+47	+38	+14	+31
United States	+32	+35	+23	+14	+14	+ 66	+31	+48	+30	+17	+23

Source: United States Department of Commerce, *Census of Business*.

regional and national changes between 1948 and 1954 can indicate the course and rate of growth of this area's retail market relative to the country as a whole. The remainder of this article compares some of the more important factors of growth in retail trade in the District and the nation.

California accounted for large proportion of District rise in retail trade

Chart 1 shows that the percent increase in total retail sales was larger in the District than in the nation from 1948 to 1954 but that only three District states—Nevada, Arizona, and California—had relative gains above the national average. The widest dispersion in rates in the region occurred among the Intermountain states; Nevada showed the largest relative gain in the District while Idaho showed the smallest. Retail sales in California, which accounted for nearly two-thirds of the District total in 1954, rose 43 percent. California alone accounted for nearly three-fourths of the District dollar rise in trade from 1948 to 1954. Arizona had a 50 percent rise in total retail sales between the postwar business census years. In the Pacific Northwest, retail merchants in Washington rang up sales in 1954 about 29 percent above 1948 whereas in Oregon the gain was only 21 percent, the second smallest figure in the District.

Durable goods outlets showed same percent increase in District as in nation

The parallel rate of growth in durable goods sales in the District and the nation reflects smaller

than national percent increases by District automobile dealers and by lumber, building materials, hardware, and farm equipment dealers and a larger than national percent rise among furniture and appliance outlets (Table 1). Despite smaller percent gains by automobile dealers in this District, automotive outlets in California, Arizona, Nevada, and Utah registered percent gains which were significantly larger than the national rate. Arizona showed the largest percent gains while Washington and Oregon made the poorest showing.

Lumber, building materials, hardware, and farm equipment dealers were the only group in the District which experienced relative gains significantly below the national average. Sales by this group ranged from an increase of 62 percent in Nevada to a drop of 12 percent in Idaho, the only state in the District to record a decline in any group during the period. Furniture and appliance dealers, in contrast to the other two types of durable goods outlets, experienced larger percent gains in the District than in the country as a whole. Furniture and appliance stores in Washington, California, Arizona, and Utah showed the largest gains in the District.

Nondurable goods outlets showed larger percent gains in District than in nation

All kinds of nondurable goods stores had relatively larger gains in the District than in the country as a whole from 1948 to 1954. Food stores and service stations reported the largest gains among nondurable outlets. Food sales in

FEDERAL RESERVE BANK OF SAN FRANCISCO

1954 accounted for nearly one-fourth of total retail sales in the District, about the same as in the country as a whole. Among the District states, gains in food sales between the business census years ranged from 25 percent in Idaho to 69 percent in Nevada. California shops experienced a 50 percent increase. Gasoline service stations recorded the largest percent gains among all types of outlets in both the District and in the nation. A notable growth occurred in Nevada where gasoline service station sales were nearly two and one-half times as large in 1954 as in 1948. California service station sales were almost double the 1948 figure.

Apparel and accessories shops in the District also experienced substantial gains between the business census years. These types of specialty shops located in California had a 27 percent gain in sales compared to 14 percent in the country as a whole. Apparel and accessories shops were the only type of retail outlet in Oregon to show a larger percentage increase than the nation.

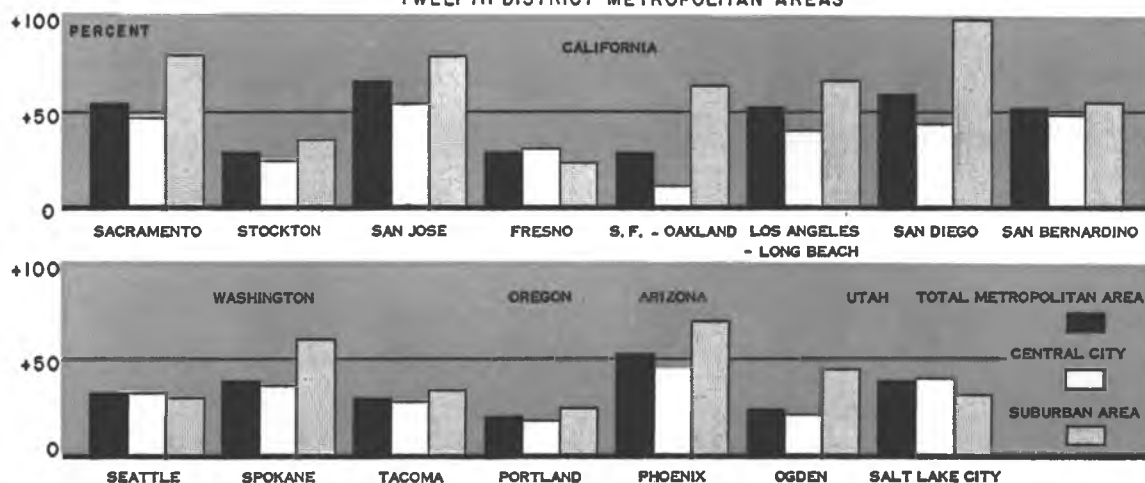
District rise in retail trade associated with increases in income and population

The District's larger than national percent increase in total retail sales from 1948 to 1954 was associated with larger than national percent rises in both personal income and population.

Personal income in the District rose by 49 percent compared with 38 percent in the country as a whole. Nevada and Arizona had the largest percent increases among the District states, 86 and 75 percent respectively. Personal income in California, which accounted for about 70 percent of the District total in 1954, rose about 53 percent between the business census years. Washington, Oregon, and Idaho all had smaller percent increases in income than the nation as a whole. The relationship between income and retail trade in the District is indicated to some degree by the fact that a ranking of District states by size of percentage rise in income corresponds closely to the ranking by size of percent increase in total retail sales.

Population growth in the District was also a major factor contributing to this region's substantial increase in total retail sales. Civilian population in the District rose by about 20 percent from 1948 to 1954 compared with 10 percent in the nation as a whole. Arizona showed the largest gain (34 percent) and Idaho, the smallest (8 percent). California's population rose about 23 percent and Nevada's population increased about 30 percent. In the Pacific Northwest, the rate of growth of population in Oregon was about one and one-half times the national rate while Washington showed the same percent increase as the

CHART 2
PERCENT CHANGE IN TOTAL RETAIL SALES, 1948-1954
TWELFTH DISTRICT METROPOLITAN AREAS



Source: United States Department of Commerce, Bureau of the Census, *Census of Business*.

country as a whole. Much as in the case of income, the District states which had large relative increases in population also showed large percent increases in total retail trade between the business census years.

Differences in the rates of growth in trade and population resulted in a smaller increase in per capita retail sales in the District (15 percent) than in the nation (20 percent). This trend is noteworthy in that it parallels a similar downward trend in the ratio of District to national per capita income. Population census data indicate that the downward trend in the ratio of regional to national per capita income is, in part, explained by a decline in the proportion of District population participating in this region's labor force compared with a generally rising labor participation ratio in the country as a whole. Nevada was the only District state to have a larger percent increase in per capita retail sales than the country as a whole. California per capita retail sales rose 16 percent.

Despite the smaller District rise, per capita retail trade in this region continued to exceed the national average and was 16 percent above the United States figure in 1954. Utah was the only state in the District in which per capita sales were below the national average. At the top of the list, per capita retail trade in Nevada was more than one and one-half times and in California one-fifth larger than the national average. Arizona per capita sales, despite the large relative increases in income and retail trade, were just slightly above the national average in 1954.

District retail market becomes more heavily concentrated in metropolitan areas

Chart 2 shows growth in total retail sales by metropolitan areas from 1948 to 1954 broken down by central cities and suburban areas (metropolitan area excluding central cities). The regional increase in total retail sales brought with it a greater concentration of District retail trade in the metropolitan areas. In 1954, about 72 percent of total District sales were made by outlets

located in the metropolitan areas of the District compared with 63 percent in 1948. Within the metropolitan areas, suburban trade became increasingly important. Suburban retail sales as a proportion of total metropolitan area sales reached 40 percent in 1954 compared with 35 percent six years earlier.

At the extremes, the San Jose metropolitan area showed the largest rate of growth in the District while the Portland area showed the smallest. Except for the San Jose and Sacramento areas, metropolitan areas located in the Southern California-Arizona region showed the largest rate of growth in the District. Retail trade in the Los Angeles-Long Beach metropolitan area, which alone accounted for about 30 percent of District total sales in 1954, showed a 52 percent rise from 1948 to 1954. Retail dealers in the San Francisco-Oakland area experienced smaller gains than those in the country as a whole. The growth in sales by outlets in the Seattle metropolitan area matched the national rate.

Fresno, Salt Lake City, and Seattle were the only metropolitan areas in the District in which retail trade grew at a faster rate in the central cities than in the suburban areas. However, account should be taken of city annexations which tend to overstate the growth in central cities relative to surrounding areas; Seattle, for example, annexed adjacent areas several times during the postwar years. As shown in Chart 2, sales in the suburban areas of San Diego nearly doubled from 1948 to 1954. Retail outlets in suburban areas of both San Jose and Sacramento in 1954 were about 80 percent above the 1948 figures. Stores located in the suburban areas of Los Angeles accounted for 56 percent of the dollar increase in total retail spending in that metropolitan area.

Correction: On page 68 of the June 1956 MONTHLY REVIEW, the second sentence in the third paragraph of the second column should be corrected to read, "By 1958 hydro power will have dropped from 72 percent to 65 percent, gas from 24 percent to 18 percent, while coal and lignite will have jumped from 4 to 17 percent."

FEDERAL RESERVE BANK OF SAN FRANCISCO

BUSINESS INDEXES—TWELFTH DISTRICT¹ (1947-49 average=100)

Year and month	Industrial production (physical volume) ¹							Total nonagricultural employment	Total mfg employment	Car-loadings (number) ²	Dept store sales (value) ³	Retail food prices ⁴	Waterborne foreign trade ^{5,6}	
	Lumber	Petroleum ¹		Cement	Lead ¹	Copper ¹	Electric power						Exports	Imports
1929	95	87	78	54	165	105	29	....	....	102	30	64	190	124
1933	40	52	50	27	72	17	26	....	....	52	18	42	110	72
1939	71	67	63	56	93	80	40	....	55	77	31	47	163	95
1947	97	100	98	96	94	106	90	99	100	106	99	96	129	81
1948	104	101	100	104	105	101	101	102	102	100	104	103	86	98
1949	100	99	103	100	101	93	108	99	97	94	98	100	85	121
1950	113	98	103	112	109	113	119	103	105	97	105	100	91	137
1951	113	106	112	128	89	115	136	112	120	100	109	113	186	157
1952	116	107	116	124	86	112	144	118	130	101	114	115	171	200
1953	118	109	122	130	74	111	161	121	137	100	115	113	140	308
1954	112	106	119	133	70	101	172	120	134	96	113	113	131	260
1955	122	106	122	145	73	117	192	125	141	104	122	112	164	307
1955														
May	120	106	115	155	78	131	189	125	140	110	118	113	162	280
June	122	106	120	153	75	130	200	125	142	111	118	112	152	299
July	119	106	128	157	71	40	191	125	141	99	123	113	171	368
August	123	106	127	160	67	91	196	126	142	106	122	111	189	349
September	118	106	132	159	70	128	196	126	141	107	126	112	174	363
October	116	105	129	155	72	131	197	126	142	104	126	112	152	348
November	110	106	123	128	67	128	206	128	145	98	125	112	143	325
December	123	106	120	130	63	119	198	128	146	98	123	112	164	328
1956														
January	129	106	130	135	70	134	199	129	146	107	130	112	136	354
February	125	106	128	145	77	129	204	130	146	99	124	111	126	323
March	117	105	128	149	77	131	219	130	146	103	128	112	150	395
April	119	105	122	160	82 ^r	140	203	130	146	105	131	113	....	....
May	....	105	129	....	70	134	....	131	147	107	122	113	....	....

BANKING AND CREDIT STATISTICS—TWELFTH DISTRICT (amounts in millions of dollars)

Year and month	Condition items of all member banks ¹				Bank rates on short-term business loans ²	Member bank reserves and related items					Bank debits index 31 cities ^{12, 13} (1947-49=100) ¹⁴
	Loans and discounts	U.S. Gov't securities	Demand deposits adjusted ⁷	Total time deposits		Factors affecting reserves:				Reserves ¹¹	
						Reserve bank credit ⁸	Commer- cial ⁹	Treas- ury ¹⁰	Money in circulation ⁹		
1929	2,239	495	1,234	1,790	.....	- 34	0	+ 23	- 6	175	42
1933	1,486	720	951	1,609	.....	- 2	- 110	+ 150	- 18	185	18
1939	1,967	1,450	1,983	2,267	.....	+ 2	- 192	+ 245	+ 31	584	30
1947	5,358	7,247	8,922	6,006	.....	- 302	- 510	+ 698	- 206	2,202	95
1948	6,032	6,366	8,655	6,087	.....	+ 17	+ 472	- 482	- 209	2,420	103
1949	5,925	7,016	8,536	6,255	3.20	+ 13	- 930	+ 378	- 65	1,924	102
1950	7,093	6,415	9,254	6,302	3.35	+ 39	- 1,141	+ 1,198	- 14	2,026	115
1951	7,866	6,463	9,937	6,777	3.66	- 21	- 1,582	+ 1,983	+ 189	2,269	132
1952	8,839	6,619	10,520	7,502	3.95	+ 7	- 1,912	+ 2,265	+ 132	2,514	140
1953	9,220	6,639	10,515	7,997	4.14	- 14	- 3,073	+ 3,158	+ 39	2,551	150
1954	9,418	7,942	11,196	8,699	4.09	+ 2	- 2,448	+ 2,328	- 30	2,505	168
1955	11,124	7,239	11,864	9,120	4.10	+ 38	- 2,685	+ 2,757	+ 100	2,530	172
1955											
June	10,102	7,446	11,023	9,026	3.99	+ 27	- 449	+ 429	+ 35	2,439	178
July	10,191	7,557	11,212	8,995	.....	+ 10	- 193	+ 217	- 9	2,495	166
August	10,392	7,407	11,163	9,021	.....	- 23	- 253	+ 200	+ 8	2,415	177
September	10,559	7,375	11,312	9,054	4.17	+ 17	- 148	+ 276	+ 18	2,541	173
October	10,665	7,487	11,465	9,067	.....	- 43	- 245	+ 174	+ 15	2,417	171
November	10,931	7,238	11,665	9,005	.....	+ 46	- 81	+ 205	+ 18	2,575	181
December	11,115	7,298	11,876	9,084	4.25	+ 8	- 434	+ 417	+ 17	2,530	183
1956											
January	11,193	7,143	11,794	9,070	.....	+ 84	- 322	+ 136	- 99	2,554	188
February	11,323	6,819	11,233	9,095	.....	- 87	- 76	+ 95	- 7	2,488	179
March	11,476	6,731	11,112	9,103	4.34	+ 71	- 178	+ 188	+ 35	2,516	183
April	11,669	6,730	11,530	9,099	.....	+ 82	- 270	+ 371	- 7	2,578	190
May	11,837	6,566	11,144	9,139	.....	- 22	- 233	+ 217	+ 47	2,498	182
June	12,030	6,482	11,262	9,294	4.44	+ 5	- 405	+ 341	+ 32	2,404	186

¹ Adjusted for seasonal variation, except where indicated. Except for department store statistics, all indexes are based upon data from outside sources, as follows: lumber, National Lumber Manufacturers Association and U.S. Bureau of the Census; petroleum, cement, copper, and lead, U.S. Bureau of Mines; electric power, Federal Power Commission; nonagricultural and manufacturing employment, U.S. Bureau of Labor Statistics and cooperating state agencies; retail food prices, U.S. Bureau of Labor Statistics; carloadings, various railroads and railroad associations; and foreign trade, U.S. Bureau of the Census. ² Daily average. ³ Not adjusted for seasonal variation. ⁴ Los Angeles, San Francisco, San Diego, Oregon, and Washington customs districts; starting with July 1950, "special category" exports are excluded because of security reasons. ⁵ Annual figures are as of end of year, monthly figures as of last Wednesday in month. ⁶ Demand deposits, excluding interbank and U.S. Gov't deposits, less cash items in process of collection. Monthly data partly estimated. ⁷ Average rates on loans made in five major cities. ⁸ Changes from end of previous month or year. ⁹ Minus sign indicates flow of funds out of the District in the case of commercial operations, and excess of receipts over disbursements in the case of Treasury operations. ¹⁰ End of year and end of month figures. ¹¹ Debits to total deposits except interbank prior to 1942. Debits to demand deposits except U.S. Government and interbank deposits from 1942. ¹² Preliminary. ¹³ Revised.