

MONTHLY BUSINESS REVIEW

of the FEDERAL RESERVE BANK of Dallas

Volume 31

Dallas, Texas, September 1, 1946

Number 9

CAUSES AND IMPLICATIONS OF WARTIME DEVELOPMENTS IN THE FARM INCOME OF THE SOUTHWEST

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Since the beginning of World War II, some significant changes have occurred in the agricultural pattern of the Southwest and of the United States as a whole. Expanded production and rising prices of farm commodities have resulted in a sharp increase in farm incomes and a substantial improvement in the economic position of the farm population. New crop and livestock enterprises have been introduced into the operation of many farms as the result of shifting the emphasis in farm production to those crops and livestock enterprises that were most vital to supporting the Nation's war and relief efforts. These developments and their implications are significant not only to farmers but to businessmen and industrialists as well. For, while agricultural income constitutes only 10 per cent of the income of the Nation as a whole and about 15 per cent of the income of the people of the five Southwestern states lying wholly or partly in the Eleventh Federal Reserve District, changes in farm incomes are quickly reflected in changes in general business activity. There are, moreover, many communities in this district where agriculture accounts for almost the entire net income and where the prosperity or depression of the community is directly dependent upon agriculture.

Therefore, it is appropriate to examine major wartime developments in agriculture as reflected by changes in farm income, to review the causes underlying these changes, and to determine, as far as possible, their implications for future agricultural developments in the Southwest. Farmers, bankers, and others concerned with the welfare of agriculture must appraise these matters properly in order to chart a sound course of action during the critical years ahead while agriculture is adjusting itself to postwar conditions. The present Government price-support program guaranteeing 90% or more of parity or equivalent prices for major farm commodities for a period of at least two years following the official end of the war and the probability of continued strong demand for farm products give promise of relatively high cash incomes to farmers for a few years during which some necessary adjustments in the farm economy may be made. Wise decisions now regarding these adjustments will reduce the likelihood of future financial difficulties in agriculture.

Since it is proposed to appraise wartime developments in the agricultural economy by examining changes in farm income, it is necessary to differentiate several current concepts of such income. First, there is the concept of **cash farm income**, which includes cash receipts from farm marketings and Government payments. This corresponds to the concept of gross revenue in industry. Then, there is the concept of **gross farm income**, which includes cash farm income plus certain non-cash items such as the value of farm products used for home consumption and an estimated rental value of farm homes. This classification of income has no counterpart in industry. It is used primarily to arrive at another

concept which is extremely useful in the analysis of the business success or failure of farming in general; namely, realized net income of farm operations. This **realized net income**¹ of farm operators represents the difference between gross farm income, as defined above, and production expenses.²

Wartime Developments in Agriculture

First, then, what have been the major changes in farm incomes and in the agricultural economy during the war period? The demand for agricultural products expanded tremendously, the index of prices received by farmers more than doubled between 1939 and 1945, and the prices received for some individual commodities increased by an even greater amount. Cash farm incomes, as indicated by Table No. 1 and Chart 1, rose sharply in each of the five states of the Southwest, with a maximum increase of 148 per cent in Arizona and a minimum increase of 93 per cent in Louisiana. Total gross farm income, which includes non-cash items in addition to receipts from marketings and Government payments, followed the same general trend as cash income, but increased at a slower rate, rising 134 per cent in Arizona and 81 per cent in Louisiana. In New Mexico and Arizona both gross and cash incomes were still rising in 1945, but in Texas and Oklahoma the wartime peak was reached in 1944, and in Louisiana in 1943.

TABLE I. FARM INCOMES—1939-1945

(Thousands of dollars)

Year	TEXAS						
	Sale of crops	Sale of livestock and products	Government payments ¹	Total cash income	Gross income ²	Production expenses	Realized net income
1939.....	230,207	239,316	98,403	567,926	674,904	335,050	339,854
1940.....	263,112	247,255	76,971	587,338	693,560	350,637	342,923
1941.....	382,681	323,911	56,595	763,187	882,452	420,101	462,351
1942.....	465,718	466,214	52,929	984,861	1,127,009	538,235	588,774
1943.....	609,629	583,024	47,400	1,240,053	1,407,955	610,968	796,987
1944.....	678,136	555,526	36,746	1,270,408	1,434,839	645,006	789,833
1945.....	557,808	589,382	36,000 ³	1,183,190	1,345,000 ³	680,000 ³	665,000 ³
ELEVENTH FEDERAL RESERVE DISTRICT*							
1939.....	433,424	420,061	150,851	1,004,336	1,200,819	598,578	602,241
1940.....	462,511	440,294	126,687	1,029,492	1,224,269	614,453	609,816
1941.....	649,863	567,688	96,269	1,313,820	1,531,912	735,663	796,249
1942.....	846,481	814,610	90,084	1,751,175	2,010,420	939,622	1,070,798
1943.....	1,041,813	1,016,352	80,024	2,138,189	2,444,013	1,071,926	1,372,087
1944.....	1,171,323	966,702	76,373	2,214,398	2,521,689	1,119,363	1,402,326
1945.....	1,026,573	1,042,562	70,586 ³	2,139,721	2,440,000 ³	1,178,000 ³	1,262,000 ³

*Texas, Arizona, Louisiana, New Mexico, and Oklahoma.

¹Payments to landlords living on farms.

²Includes cash income, value of products raised on the farm and used in the home, and an imputed rental for the farm dwelling.

³Estimated.

SOURCE: United States Department of Agriculture, Bureau of Agricultural Economics.

Wartime rises in farm incomes were accompanied by considerable shifts in the relative importance of different income sources. In each of the five states Government payments declined in actual amounts and in relative importance. Income derived from the sale of crops and of livestock and livestock products increased substantially in each of the five states, but there was considerable variation in the relative importance of these two major sources of income in the different states. For example, the most signifi-

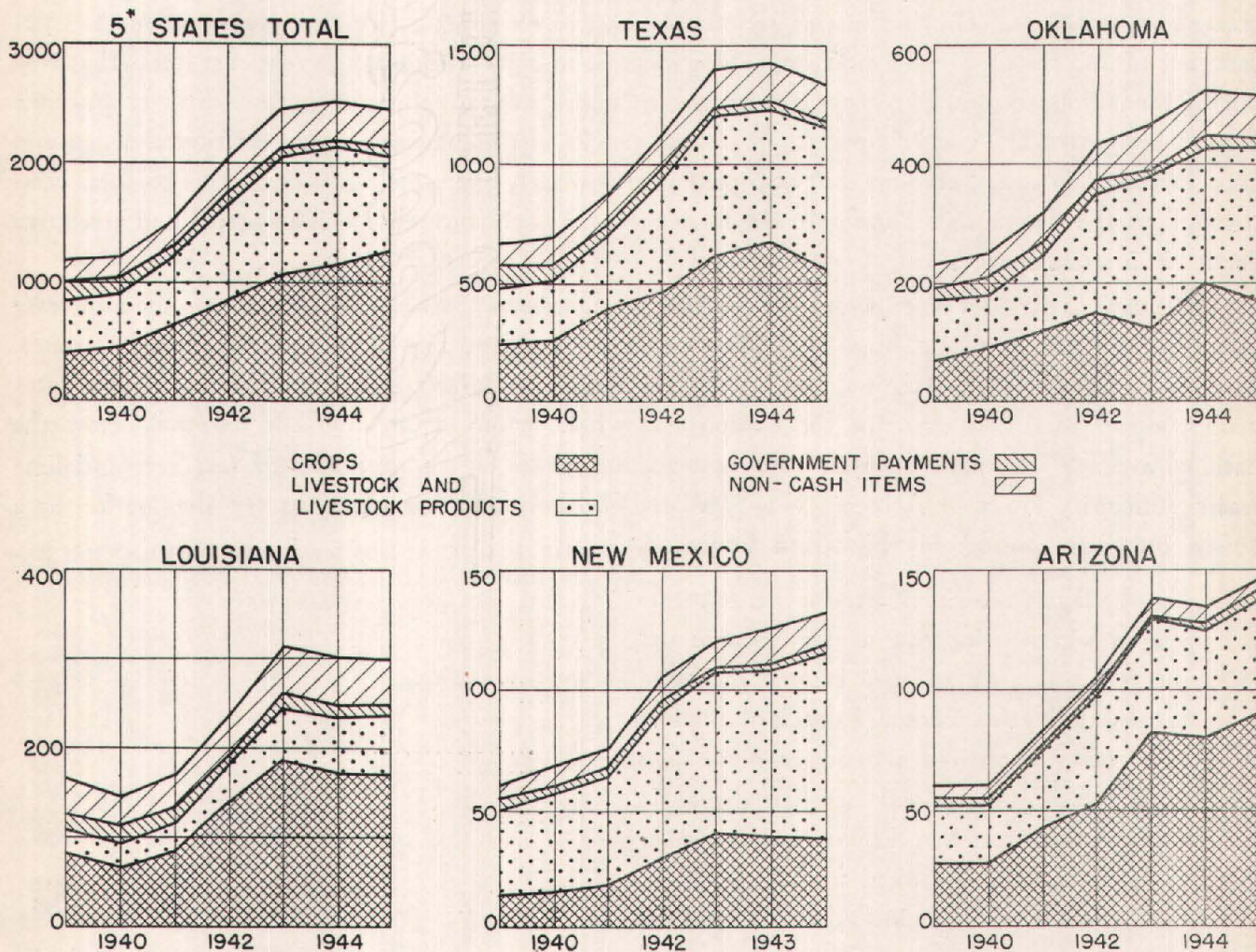
¹Includes return on operator's investment, unpaid family labor, and payment to the operator for his risk and managerial ability.

²Includes current operating expense, hired labor, taxes, farm-mortgage interest, and maintenance or depreciation on buildings, motor vehicles, machinery, and equipment.

cant change in the sources of income in Arizona was the sharp increase in the importance of crops, whereas the rise in importance of livestock and livestock products in Oklahoma and Louisiana was most significant.

The acreage devoted to the production of truck crops, citrus fruits, grains, and peanuts in the Eleventh District was substantially expanded. The number of cattle, calves, sheep, and lambs also increased, and the production of dairy products, poultry, and poultry products rose slightly. Cotton, however, which is historically one of the most important sources of income in this district, declined in relative importance. The acreage devoted to cotton in the five Southwestern states declined from 11,705,000 acres in 1939 to 8,281,000 acres in 1945, while production fell from 4,421,000 bales to 2,742,000 bales.

GROSS FARM INCOME
(MILLIONS OF DOLLARS)



*TEXAS, OKLAHOMA, LOUISIANA, NEW MEXICO AND ARIZONA

These data relating to cash farm income and gross farm income are useful as indicators of shifts in the agricultural pattern of the area, as measures of the economic contribution of agriculture, and as measures of the welfare of farm families. None of these data, however, presents an accurate picture of the economic well-being of farming as a business. For this purpose realized net income per farm is a

better measure. To arrive at such a measure, it is necessary, as indicated above, to deduct production expenses from gross farm income.

Examination of production expenses shows that they also increased during the war period, because of higher prices paid by farmers for the commodities and services they bought, and partially offset the rise in gross farm income. Total production expenses in the Nation at large increased about 93 per cent between 1939 and 1945, compared with an increase during this same period of about 148 per cent in cash farm income and of about 123 per cent in gross farm income. In the five Southwestern states the rise in production expenses between 1939 and 1945 varied from about 76 per cent in Louisiana to 113 per cent in Texas. The portion of production expenses made up of such more or less fixed charges as taxes, farm-mortgage interest, and maintenance and depreciation increased for the Nation as a whole only about 35 per cent during the war period, but variable costs, such as operating expenses and hired labor, rose 113 per cent.

The greatest rise in production expenses occurred in feed purchased, which for the nation increased about 174 per cent during this period. The cost of hired labor, which increased about 125 per cent, accounted for the second most important increase in costs. Among other expense items that rose during the period, the cost of livestock purchased increased substantially and that of fertilizer and lime increased slightly. The cost of operating cars and trucks, maintenance and depreciation charges, and taxes increased in actual amount, but occupied approximately the same position relative to total costs throughout the war period. The fall in the farm mortgage debt brought both an actual and a relative decline in interest charges.

The various production expenses for the five Southwestern states advanced at about the same rate as for the Nation as a whole, but the relative weight of the respective items varied in different states. The cost of hired labor in Arizona, Louisiana, New Mexico, and Texas made up a considerably greater proportion of total cost than for the Nation as a whole, while in Oklahoma it fell well below the national average. The proportion of total cost accounted for by the purchase of fertilizer and lime was significantly lower in Arizona, New Mexico, Oklahoma, and Texas than for the Nation as a whole, but was considerably higher in Louisiana.

Due to the lag in the rise of production expenses as compared with the increase in cash income and gross income, total realized net income increased more rapidly than gross income. In each of the five Southwestern states realized net income more than doubled, increasing three and one-half times in Arizona. Due, however, to a decline in the number of farm operators, which ranged from 29 per cent in Arizona to four per cent in Oklahoma, and the consequent increase in the size of farms in each of the states, the total realized net income per farm increased two to five times in the various states between 1939 and 1945. Chart No. 2 shows the extent of this increase in each of the states and the extreme variations which have come to exist since the beginning of World War II. In 1939 there was only a 75 per cent variation between the lowest and the highest net income per farm in the five Southwestern states, but in 1945 there was a variation of about 300 per cent between the low and the high.

TABLE II. AVERAGE NET INCOME, PRODUCTION EXPENSES, AND GROSS INCOME PER FARM
1939 and 1945*

	Net income	Production expenses	Gross income
Texas			
1945.....	1,670	1,708	3,378
1939.....	793	782	1,575
Arizona			
1945.....	5,227	5,759	10,986
1939.....	1,081	2,288	3,369
Louisiana			
1945.....	1,324	972	2,296
1939.....	616	473	1,089
New Mexico			
1945.....	2,239	2,173	4,412
1939.....	771	1,024	1,795
Oklahoma			
1945.....	1,666	1,330	2,996
1939.....	661	613	1,274

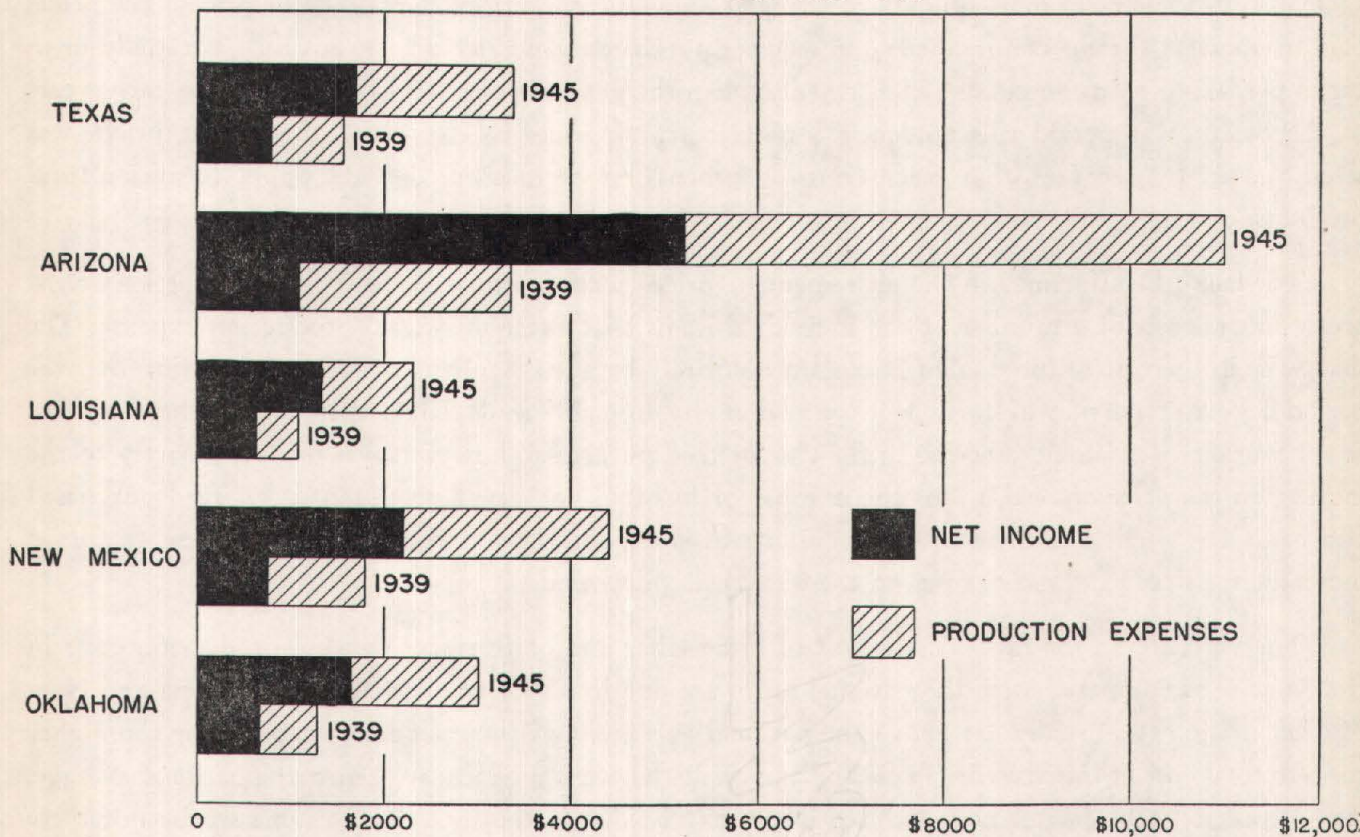
*1939 figures from the United States Department of Agriculture, Bureau of Agricultural Economics; 1945 figures estimated.

Causes of Wartime Changes

The causes of the wartime changes in farm incomes generally and in the agricultural economy of the Southwest are not far to seek. Indeed, many of them are readily apparent from the statement of the changes themselves. The rise in prices, due to increased demand arising from military requirements, from expanded industrial activity and consumer purchasing power, and from the export of a great volume of goods under lend-lease, is directly responsible for the greater part of the increase in cash farm incomes and in large measure for the increase in the volume of agricultural production and for shifts in production from some farm commodities to others. The increase in the volume of production in the face of reduced supplies and labor was accomplished partly through the more complete utiliza-

**NET INCOME, PRODUCTION EXPENSES
AND GROSS INCOME**

AVERAGE PER FARM - 1939* AND 1945*



SOURCES: 1939* - U.S. DEPARTMENT OF AGRICULTURE, B. A. E.
1945* - ESTIMATED

tion of existing resources and the adoption of improved farming methods, but the greater part of this expansion was due to successive years of extremely favorable weather conditions.

Changes in the emphasis placed upon the production of certain commodities, though largely explained by the more than proportionate increase in the prices received for these commodities, were dictated in part by physical requirements. Thus, because of the shortage and high cost of labor during the war, the acreage devoted to the production of cotton was reduced in each of the five states except New Mexico, in spite of a substantial rise during the war period in the prices of lint cotton and cottonseed. Many farm operators shifted away from cotton to the production of livestock, grains, or

hay crops, because these latter enterprises required less labor. Other farmers were further encouraged to make such shifts because the prices of many of the commodities that compete with cotton for farm productive resources advanced to the extent that it was possible to increase net incomes by rearranging their farm plans. This was particularly true in parts of the cotton belt of Texas and Louisiana, where the growth of truck crops, grain sorghums, and livestock was extensively substituted for production of cotton.

In the western part of the district, it was possible to increase greatly the production of such crops as vegetables and citrus fruits because of the development of new irrigation projects. Moreover, further expansion in the production of many commodities was doubtless held in check by physical requirements that may have been in opposition to the trend indicated by the movement of prices.

The lag in production expenses behind the advance of cash farm income is explained partially by the fact that a large portion of such expenses is made up of fixed costs and in part by the fact that agricultural prices react more quickly to changed economic conditions than do other prices. The prices paid by farmers for the commodities and services purchased generally do not advance as rapidly or as far in periods of rising prices or fall as rapidly when the general price level declines. In the early years of the recent war period this tendency for agricultural prices to rise faster than other prices was strengthened by the fact that price controls, when first established, did not apply to agricultural products.

The lack of uniformity in the movement of prices accounts for the more than proportionate increase in the costs of a number of the individual items that enter into total production expense. The sharp rise in the cost of hired labor is explained entirely by the sharp rise in wages, for during the war period a greater portion of farm work was done by unpaid family labor than before the war, and fewer workers were hired. The rise in the cost of feed purchased, however, was due only partly to the increase in the price of feed, for as the number of livestock increased, the quantity of feed purchased also rose. The slight rise in most other cost items is explained by a combination of these factors—increases in prices paid and changes in the quantities purchased.

The variation in the ratios of the cost of hired labor and of fertilizer to total production costs in the Southwest compared with the national ratios are due to a variety of factors. In Arizona and New Mexico, wage rates usually are above the national average, and this fact may account for the higher ratio to total cost in this area. In Texas and Louisiana, where wage rates are below the national average, the proportionately greater cost of hired labor may be due to the fact that in some sections of these states mechanized farming is not extensively practiced, and, consequently, a greater amount of hand labor must be employed. The fact that in Oklahoma wage rates are below the national average and mechanization is extensive may explain the proportionately smaller labor cost in that state. There are also several possible explanations for the variations in the relative importance of fertilizer costs. The soils of New Mexico and Arizona have not been exposed to the leaching action of heavy rainfall, characteristic of a large part of the remainder of the United States, and so do not require the application of as much fertilizer and lime to maintain high yields. In Texas and Oklahoma, though soils have suffered much from leaching and erosion, farmers generally use only small amounts of fertilizer. In Louisiana, where the soils are even more leached and where farming operations are generally more intensive, fertilizer applications are larger and costs proportionately higher.

Implications for the Future

The question now arises as to the implications of these wartime changes for the future of agriculture in the Southwest. How have these changes affected the position of agriculture, and what influence will they exert on the course of future events? First, as a consequence of the tremendous expansion in farm incomes during the war, farmers are entering the postwar period in the best financial position they have enjoyed in many years. Liquid assets in the form of bank deposits, war savings bonds, and cash held by the Nation's farmers totaled about \$17,000,000,000 at the beginning of 1946. The total farm mortgage debt has declined to only \$5,081,000,000—the lowest figure to which the debt has fallen in more than 30 years. This reduction in mortgage indebtedness and the sharp rise which has occurred in land values have greatly increased farmers' equities in lands and buildings. In addition, farm proprietors have increased their equities in other types of farm property, such as livestock, machinery, and equipment.

The wartime gain in farm real estate equities, however, does not necessarily represent a permanent improvement in the financial position of farmers, since any sharp future decline which may occur in land values will considerably reduce these equities. It must also be borne in mind that the farm plant has deteriorated considerably during the war years. Heavy cropping has, in many cases, seriously reduced the fertility of the soil, and the shortage of labor, equipment, and supplies has limited the continuation and expansion of soil conservation and improvement work. Buildings have suffered from lack of repair, and many need to be replaced. Farm equipment has also depreciated due to heavy use and the lack of repair parts. Therefore, farmers will be wise to use a large portion of their wartime gains to repair the damages done to the farm plant since the beginning of the war.

A second conclusion resulting from the survey of wartime farm incomes in the district is that a more diversified type of agriculture is developing as a result of shifts in the emphasis placed upon production of various commodities. Some new crops have been added to the agricultural pattern, while some commodities that formerly occupied a minor position in many areas, such as truck crops, flax, citrus, hay, and seed crops, have expanded in importance. This does not mean that every farmer is following a more diversified system of farming; it does indicate, however, that for the area as a whole less dependence is being placed upon any single crop or enterprise as a source of income. Also, the shift from cotton production to the growing of food crops or livestock strengthens the prospect of sustaining farm incomes in the years ahead at relatively high levels. Even if the present demand and price for cotton should continue for some time, food products appear more likely to maintain permanently the wartime increases in demand and price. Demand for both food products and cotton will be affected by the general levels of employment and prices that prevail in the years ahead, but the competition offered American cotton by synthetic fibers and foreign cotton makes the future profitability of that commodity very uncertain.

Due to the complementary nature of many of the enterprises that have been added to the farm pattern of the Southwest during the war years, it appears probable that many of them will become permanent parts of the agricultural picture of this section. The degree of permanency of the new enterprises will, of course, be determined by the price relationships existing between the various commodities in the years ahead. Any marked and sustained rise or fall in the price of any one commodity will necessarily affect the distribution of land, labor, and capital devoted to production of that commodity. Likewise, any great alteration in the competitive position of any one of these commodities,

due to technological changes or the development of new uses for the commodity, will also affect the distribution of productive resources.

A third conclusion, suggested by a study of the distribution of production expenses, is that there has been a substantial increase in cash outlays which cannot be postponed to a more convenient time for such variable items as the costs of hired labor, purchased feed, fertilizer and lime, and the operation of motor vehicles and other farm equipment. The re-organization of farming operations to achieve the wartime increases in production and the rise in prices paid by farmers for labor and supplies were responsible for the increase in such costs. The prices of these items, however, are generally less flexible than prices received by farmers, and in the event of a general decline in prices, these costs are not likely to decline as rapidly or as much as prices of commodities sold by farmers. If such a situation should develop, many adjustments would be necessary. Some farmers might find it necessary to restrict the production of particular commodities and others to cease production altogether. While such a development would work extreme hardships on some individual producers, it might tend, in the long run, to bring about a more rapid adjustment of supply to changing conditions of demand. In the past when such cash costs were relatively less important, farmers could continue to produce for a number of years even though their total costs were not covered, and a decline in cash farm income was not quickly reflected in restricted production. On the contrary, many farmers expanded production in an effort to offset the reduction in income resulting from declining prices.

Moreover, the fixed charges of farm production may be increased by the purchase of equipment and land, coupled with possible rises in taxes and mortgage interest. These charges incurred under present prosperous conditions may prove to be an extreme burden in the event of future declines in income.

Finally, what are the possibilities that farmers will enjoy incomes at near their present levels in the years after the war-created demand for agricultural products abates and the Government's present agricultural price-support program expires? According to estimates of the United States Department of Agriculture, it appears that the recent volume of production could not only be maintained in the future but even be expanded. However, when we consider prices, which are the other determining factor in income, the prospects are not so encouraging. As pointed out above, agricultural commodity prices are very flexible, and in the past such prices have always risen more rapidly and to a higher level during periods of prosperity and fallen more rapidly and to a greater depth in times of depression than have other prices. Therefore, a slight decline in the general level of economic activity or even a slackening in the rate of increase might precipitate a sharp fall in farm prices. Moreover, the volume of production that appears probable during the next several years may be larger than can be sold at high prices, even under favorable conditions of employment and international trade. Under such conditions it appears probable that agricultural prices may decline unless the present Government price-support program is extended or some new program inaugurated. However, even under such a program if production is restricted in order to maintain prices, the cutting back of agricultural operations to less than capacity will necessarily affect farm incomes.

In view of this possible future decline in incomes, it becomes, then, even more important that the assets accumulated during the war years be used wisely to improve and rebuild the existing farm facilities and to provide for the future financial security of farm families. Improvement of the farm plant as supplies and labor become more plentiful, will greatly improve the prospects of stabilizing future farm incomes. With land values already at a very high level and still rising, expenditures for the

improvement of farms already owned may well prove more profitable than the purchase of additional land. A comprehensive soil conservation program will not only maintain but even increase the present productiveness of the soil and the profits derived from farms. This fact is attested by reports both from individual farmers and from experiment stations located in various parts of the district. Moreover, the increased feed supplies and the reduction in labor requirements for existing enterprises, which will result from better utilization of the land, will encourage the introduction of new farm enterprises such as the production of dairy products, beef cattle, and poultry and poultry products. Broadening the income base in this manner will not only tend to increase and stabilize the income of individual farmers, but will also aid in stabilizing the economy of rural communities.

Farmers, in general, have acted to provide for their future financial security by using a portion of their increased incomes to make substantial reductions in their indebtedness—a policy which is in sharp contrast with developments during and after World War I. The possibility is thus reduced of a recurrence of the experiences of the Twenties, when many farmers lost their farms because of foreclosures, and when many credit institutions which had extended loans to farmers were forced to close their doors. However, in spite of the substantial over-all reduction of the farm debt, a number of farmers, particularly those who purchased farms during the war at high prices and made only small cash payments, still have a dangerously large indebtedness relative to their future income prospects. The small equities held by this group of farmers might be wiped out entirely if land values should fall from their present high levels. For these farmers, it is vitally important that existing liquid assets and any surpluses that may accrue from future income be used to reduce the debt to manageable size.

It is already apparent that many farmers will be faced with a serious problem of readjustment to peacetime conditions in the very near future as the result of shifts in demand for various farm commodities. On most farms such adjustments will require cash expenditures, and the demand for this cash outlay will probably come at a time when the incomes from those farms are declining. Therefore, if the cash reserves now held by farmers can be carried through until the time for readjustment arrives, the necessary changes can be made with less hardship. Such prudent management and use of current reserves will also strengthen the credit position of farmers in the event that future crises make it necessary for them to seek loans from banks and other credit institutions.

Bankers and other businessmen have an opportunity to perform a valuable service to their communities by encouraging farmers to preserve their liquid assets to meet future crises or to use them in improving their present farms. This course will enhance the future income prospects of farmers and tend to stabilize the economy of the entire community. If such a course is not followed, a large volume of present assets may flow into the land market and further inflate land values. This could prove particularly disastrous if the extension of bank credit to make speculative purchases of farms should further increase the pressure on farm land prices.

There appears to be a growing conviction among farmers themselves that present land values are not justified by future farm income prospects. This is attested by the results of a recent survey conducted by the United States Department of Agriculture among farmers in the Midwest in which it was found that a large majority of the farmers in that area view further advances in land values as dangerous to the future security of agriculture. It seems, then, that the best interest of agriculture would be served if, instead of dissipating wartime gains in land speculation, farmers will use such funds to inaugurate a comprehensive program of soil conservation and improvement and to provide for their future financial stability.

Review of Business, Industrial, Agricultural, and Financial Conditions

DISTRICT SUMMARY

Although the stimulating effect which undiminished consumer demand would normally exert upon manufacturing and construction activity is currently being held in check by shortages of vital materials, aggregate employment in this district has increased almost without interruption for the past six months and is now only a little short of the wartime peak reached late in 1943. Improvement in supply of materials will need to be accompanied by an increase in the available number of skilled craftsmen if industrial activity is to achieve maximum output. Expanding use of natural gas as a source of energy and as a basic material for the production of numerous industrial and consumer goods emphasizes the important role of the natural gas resources of this district in stimulating the industrial development of the Southwest. As a result of drought and extremely hot weather, the condition of most farm crops and ranges deteriorated slightly during August in all parts of the district except in certain local areas which were visited by rains during the latter part of the month or in the southeast coastal section where heavy spring rains had provided abundant sub-soil moisture. Both in acreage and in anticipated production this year's cotton crop will be only slightly larger than last year's, which was one of the smallest on record. Department store sales in the district, though declining seasonally in June and July, showed a cumulative increase of 30 per cent during the first seven months of this year over the same months of 1945.

BUSINESS

The moderate seasonal decline noted in June in the level of sales of reporting department stores in the district continued at a diminishing rate during July. Total sales for the month were 4 per cent less than those of June but exceeded the total for July of last year by 33 per cent. The cumulative increase in sales for the first seven months of this year over the same months of last year rose to 30 per cent. Preliminary figures from weekly reporting department stores for the first two weeks of August indicate that the sales index, reversing its downward trend of the two preceding months, has started an ascent which, if controlled by the pattern of previous years, should reach an autumn peak near the middle of September.

The slight drop in sales of monthly reporting stores between June and July was accompanied by a moderate increase of 8 per cent in merchandise stocks. Compared with July a year ago, stocks were up 23 per cent. Orders outstanding in July showed a negligible increase over June of this year but exceeded those of a year ago by 60 per cent.

Among district department stores which reported their sales by type of transaction, cash accounted for 48 per cent of total sales in July of this year, as compared with 56 per cent in the corresponding month last year. This decline within the year in ratio of cash to credit transactions reflects an expanding use of consumer credit—in the form of open charge accounts—by the customers of department stores. Charge account sales in July constituted 49 per cent of total sales and 93 per cent of all credit transactions, as compared with 41 per cent of total and 94 per cent of credit sales in July a year ago. The rate of collection during July of department store accounts receivable indicates an average collection period of 51 days on charge accounts and of about 3 months and 14 days in the case of instalment contracts.

Sales of reporting furniture stores in the district declined 1 per cent during July, as compared with the preceding month, while stocks increased 3 per cent over the same period. Compared with July of last year, total sales were up 52 per cent, and inventories, 42 per cent. There was no significant change

during the month or since the same month of last year in the ratio of cash to credit sales. Approximately 75 per cent of all sales were credit transactions, mostly in the form of instalment contracts.

Three current developments affecting business seem likely to become increasingly significant in the months ahead. First, a gradual, though uneven, improvement in the supply of most consumer goods is making it possible for retail shoppers to exercise a wider freedom of choice and to diversify their purchases. Prewar competition among retailers in the same line and in different lines for the consumer's dollar may soon revive. Second, the higher levels to which prices have been allowed, and to some extent required, to rise by the revised price control law will increase the dollar volume of retail sales at a rate much in excess of the increase in the volume of goods sold. At the same time, accumulated and currently accruing consumer purchasing power will not "go as far" or buy as great a volume or variety of goods as producers and distributors may have anticipated a few months ago. Third, the rapid expansion in the use of consumer credit which began last October may be expected to continue as an increasingly important supplement to the liquid savings and cash income of consumers confronted with the long-awaited opportunity to buy many essential and non-essential items that have been in short supply. Moreover, merchants and banks are eager to invest some of their accumulated reserves in instalment-sale contracts and consumers' instalment loans. As automobiles and other important durable goods approach normal supply, instalment credit in the United States may be expected to reach, if not exceed, the prewar volume of more than 10 billion dollars.

Changes effective September 3 in Regulation W reflect the belief of the Board of Governors of the Federal Reserve System that consumer credit is expanding so rapidly as to consti-

WHOLESALE AND RETAIL TRADE STATISTICS

	Number of reporting firms	Percentage change in			Stocks †	
		July 1946 from 1945	June 1946 from 1945	Jan. 1 to July 31, 1946 from 1945	July 1946 from 1945	June 1946 from 1945
Retail trade:						
Department stores:						
Total 11th Dist.....	48	+33	-4	+30	+24	+10
Corpus Christi.....	4	+26	+2	+22	+28	+9
Dallas.....	7	+39	-8	+33	+30	+12
Fort Worth.....	4	+26	-3	+22	+17	+10
Houston.....	7	+41	-8	+34	+38	+12
San Antonio.....	5	+30	+7	+29	+19	+2
Shreveport, La.....	3	+26	+1	+24	.....	.....
Other cities.....	18	+23	-4	+21	+14	+14
Retail furniture:						
Total 11th Dist.....	47	+52	-1	.....	+42	+3
Dallas.....	4	+51	+1	.....	.....	.....
Houston.....	5	+49	-2	.....	.....	.....
Port Arthur.....	3	+55	+7	.....	+27	+14
Wholesale trade*:						
Machinery eqpt & supplies.....	3	+41	-14	.....	.....	.....
Automotive supplies.....	4	+39	+7	.....	.....	.....
Drugs.....	7	+25	+13	.....	+12	+5
Groceries.....	26	+22	+1	+21	+35	+5
Hardware.....	12	+39	-4	+38	+27	+2

*Compiled by United States Bureau of Census. Wholesale trade figures preliminary.

†Stocks at end of month.

‡Change less than one-half of one per cent.

INDEXES OF DEPARTMENT STORE SALES AND STOCKS

	Daily average sales—(1935-1939=100)							
	Unadjusted*			Adjusted				
	July 1946	June 1946	May 1946	July 1945	July 1946	June 1946	May 1946	July 1945
District.....	293	313	322	227r	385	368	342	299r
Dallas.....	273	307	331	209	379	374	352	290
Houston.....	298	336	320	220	368	387	333	272

	Stocks—(1935-1939=100)							
	Unadjusted*			Adjusted				
	July 1946	June 1946	May 1946	July 1945	July 1946	June 1946	May 1946	July 1945
District.....	272	246	229	212	252	254	241	196

*Unadjusted for seasonal variation.

r—Revised.

tute an inflationary pressure. These changes extend the scope of the Regulation to cover instalment sale credits up to \$2,000 and reduce from 18 months to 12 months the repayment period of instalment loans made for purchase of other than consumer's durable or semi-durable goods. The extension of control upward from the \$1,500 limit established less than two months ago to the new limit of \$2,000 will affect sales of former low-priced automobiles which are now priced in the \$1,500 to \$2,000 class. The Board's action relative to the repayment period for consumer loans seems to have been prompted by a very rapid increase in such loans which followed the relaxation of controls in October. Out of a volume of 625 million dollars of consumer loans made within 7 months after that relaxation more than half were instalment loans.

AGRICULTURE

Hot, dry weather over most of the district from mid-July through much of August was favorable for harvesting operations but unfavorable for ranges and pastures, and caused some deterioration of late planted crops. Drought conditions which had beset the western part of the district during the spring persisted there, except in favored local areas, and spread into the central and southern sections, rapidly reducing surface and sub-soil moisture. Scattered showers during July checked drought damage in some areas of New Mexico and Arizona and improved moisture conditions in southeast Oklahoma. In some parts of Louisiana a continuation of early season rains through July prevented proper cultivation of field crops. A low production of grain sorghums in Texas was indicated by the first crop forecast of the season on August 1. The forecast of the corn crop was lowered slightly from that of a month earlier, while wheat production estimates remained unchanged. Range feeds were dry and cured throughout most of the western half of the district by mid-August, and range conditions had reached a critical stage in many parts of that area. Ranges were becoming dry in eastern Texas, but were still furnishing fair grazing. Livestock continued to lose weight in drought areas, and the movement of cattle and sheep was increasing considerably, with very close culling reported.

The August 1 report of the United States Department of Agriculture estimates the United States 1946 cotton crop at 9,290,000 bales, compared with a crop of 9,015,000 bales in 1945 and a 10-year (1935-44) average of 12,553,000 bales. Anticipated production in Texas is placed at 1,900,000 bales, or slightly above the 1945 short crop of 1,794,000 bales, but far below the 10-year average of 3,137,000 bales. The estimate of 6,198,000 acres of cotton for harvest this year is slightly above the acreage harvested in 1945 but smaller than for any other year since 1895. The indicated yield of 147 pounds per acre in 1946 is slightly above that of last year but 19 pounds below the average yield. A very small crop of 290,000 bales was forecast for Louisiana on August 1, due to a greatly reduced acreage for harvest and an extremely small indicated yield per acre. In Oklahoma the crop was estimated at 310,000 bales, compared with 285,000 bales produced last year with a 10-year average of 596,000 bales. Both the acreage and the indicated yield per acre in Oklahoma are above those of last year.

Irrigated cotton in northwest Texas made generally good progress during August, but other cotton in most of that area was suffering from a lack of moisture by the middle of the month. In the Trans-Pecos area, the crop was reported to be in good condition with insect damage light. Cotton in the Low Rolling Plains was still blooming and fruiting rapidly, but shedding of squares and young bolls was reported. In east Texas and the Blacklands, hot, dry weather favored insect control, prompted fruiting, and made it possible for the crop to overcome some of the earlier handicaps. Except for late plantings in these

areas, cotton was in good condition and maturing rapidly by the middle of August. Boll weevil activity had been checked by favorable weather conditions, but infestations were greater than average and still represented a serious threat to the crop. Bollworms were active in central Texas, and leafworms had appeared in scattered areas over much of the State. Cotton harvesting had become general in southeast Texas by the second week in August and was almost complete in the south coastal area and the Lower Valley. In central Texas counties the crop was approaching maturity.

Late planted corn deteriorated considerably during July, and total production for Texas was estimated on August 1 at only 65,472,000 bushels, or about 2,000,000 bushels below the estimate made on July 1. This is to be compared with the 1945 production of 66,832,000 bushels, and the 10-year average of 80,209,000 bushels. The yield per acre, forecast at 16.5 bushels, is slightly above average. It was estimated that 51,268,000 bushels of grain sorghums would be harvested this year in Texas from 3,662,000 acres, compared with 60,921,000 bushels harvested in 1945 from 4,069,000 acres. The yield this year, estimated at 14 bushels per acre, is the lowest since 1938. Good yields were realized in the southern commercial areas, where harvesting has been completed, but the prospective crop in the High Plains showed further deterioration as drought conditions continued. The estimated production of 1,539,000 tons of hay this season is about nine per cent above average.

The Texas peanut crop for 1946 was estimated on August 1 at 351,440,000 pounds, and the acreage for harvest at 764,000 acres. The indicated 460-pound yield per acre is well above the yield in 1945 and slightly above average. Harvesting had begun in all southern counties by mid-August, and in other areas the crop was holding up fairly well but needed moisture. The forecast of the rice crop was for 16,400,000 bushels, compared with 18,000,000 bushels last year and an average production of 13,926,000 bushels. The indicated yield of 41 bushels per acre is considerably below that of last year as well as below the 10-year average. The crop was reported, however, to be making satisfactory progress during the first part of August, and harvesting of early varieties was under way at the middle of the month. Broomcorn production this year, estimated at 5,700 tons, is about 110 per cent of average. The year's pecan crop, which on August 1 was expected to aggregate 25,500,000 pounds, will fall about 20 per cent below the 1945 crop and seven per cent below the 10-year average.

During August harvesting of the remaining Texas truck crops, potatoes, cantaloupes, and watermelons progressed rapidly, but high temperatures and the lack of moisture retarded planting of fall and winter garden crops in some areas. The Irish potato crop was estimated at 5,642,000 bushels, compared with 4,648,000 bushels last year and a 10-year average of 4,036,000 bushels. Movement of the Panhandle potato crop continued active during the first part of August, with shipments from the important Hereford district reported 90 per cent complete at the beginning of the second week of the month. Sweet potato production for this year, estimated at 5,120,000 bushels, exceeds both last year's crop and the average by about 13 per cent. Transplanting of early fall crops was started during the first week in August in the Laredo-Eagle Pass Winter Garden district, but activities have been slowed by high daylight temperatures. In this area tomatoes, peppers, and onions made good progress during the first part of August, and additional acreages were being transplanted. Some land was being prepared for fall vegetables in the non-irrigated Coastal Bend area, but additional moisture was needed before operations could become general. The growth of fruit in the citrus areas of Texas was retarded during July, but sizes are reported larger than usual, and the condition of both oranges and grapefruit was above

average on August 1. In Arizona at that date oranges and grapefruit were in above average condition, and prospects were favorable.

Dry, curing ranges supplied fair to good grazing throughout most of the district in July, but continued dry weather during August resulted generally in short supplies of range feeds in the western part of the district and further depleted short water supplies. Soaking rains were badly needed in this area to stimulate the growth of range grasses. Scattered local showers checked drought conditions in some areas of Arizona and New Mexico, but late summer and fall grazing prospects are generally poor. Ranges were dry by mid-August in the Upper Coastal area and some eastern counties of Texas and in southeast Oklahoma, but were still furnishing fair to good grazing. Cattle and calves made good gains during early July throughout most of the district, but underwent some shrinkage after that time in dry areas and were below average in condition on August 1. The condition of sheep and lambs was below normal on August 1 in Texas, New Mexico, and Arizona, but better than a month earlier in the latter two states.

Favorable weather conditions over most of Texas during the spring are reflected in the State's large 1946 lamb crop, estimated at 4,934,000 lambs by the United States Department of Agriculture. While falling seven per cent below last year's record crop of 5,284,000 lambs, this year's crop is 18 per cent above the 1935-44 average. The 1946 Texas wool clip is estimated at 76,830,000 pounds, compared with 79,159,000 pounds in 1945. The number of sheep shorn, estimated at 9,751,000, is about three per cent below the number in 1945 but somewhat above the 10-year average. The weight of 7.9 pounds per fleece is slightly above that of last year and equal to the 10-year average.

In response to sharply increased prices, receipts of cattle, calves, and hogs at Fort Worth and San Antonio markets during July were more than double those of the previous month and well above receipts in July 1945. The movement of sheep into these markets declined sharply in July, reflecting the ending of subsidies on June 30.

Sharp advances in prices received by Texas farmers during the month ending July 15 brought the prices of cattle and calves to a new all-time high, according to the Mid-Month Local Price Report of the United States Department of Agriculture. Hog prices rose to the highest level since 1919, and lamb prices were just under the all-time high recorded in 1918. Corn brought the highest prices since 1919, but did not reach the record level of 1918. The price of wheat also rose substantially, but was well below the 1917 record level. Cotton prices reached a new 26-year high. The prices received for dairy and poultry products also advanced significantly, but wool prices remained unchanged.

FINANCE

Gross demand deposits of member banks in this district averaged \$4,943,000,000 daily during July, representing declines of \$15,000,000 from the June average and of \$159,000,000 from the average for March of this year. This decline, which has been in progress since March, is closely associated with large Treasury withdrawals from war loan accounts, principally from reserve city banks. Time deposits continued to rise moderately, the rate of gain during July being slightly greater at country banks than at those in reserve cities.

Reserve balances of member banks, which averaged \$760,000,000 for the first half of August, were off slightly from the July average but were higher than in any other period since the first half of January this year. Required reserves, continuing the increase begun in March of this year, averaged \$660,000,000 for the last half of July, or \$50,000,000 over

CASH FARM INCOME

(Thousands of dollars)

	April 1946		Total receipts			
	Receipts from Crops	Livestock*	April 1946	April 1945	January 1946	1 to April 30 1945
Arizona.....	4,247	16,550	20,797	11,214	55,067	46,067
Louisiana.....	4,309	11,516	15,825	13,523	53,322	66,225
New Mexico.....	5,769	591	6,360	5,289	20,219	24,333
Oklahoma.....	17,518	2,753	20,271	25,316	97,621	119,780
Texas.....	68,769	32,672	101,441	89,455	315,295	345,987
Total.....	100,612	64,082	164,694	144,797	541,524	602,392

*Includes receipts from the sale of livestock and livestock products.

SOURCE: United States Department of Agriculture.

CROP PRODUCTION—(Thousands of units)

Crop	Unit	Texas		Eleventh District	
		Estimated Aug. 1, 1946	1945	Estimated Aug. 1, 1946	1945
Cotton.....	Bales	1,900	1,794	2,305	2,258
Winter wheat.....	Bushels	53,613	41,778	54,283	42,546
Corn.....	Bushels	55,472	66,832	75,337	80,483
Oats.....	Bushels	37,375	42,441	40,727	47,001
Barley.....	Bushels	3,616	3,857	8,442*	9,167*
Tame hay.....	Tons	1,316	1,344	1,872	1,937
Potatoes, Irish.....	Bushels	5,642	4,648	6,410	5,433
Potatoes, sweet.....	Bushels	5,120	4,524	16,620†	16,098†
Rice.....	Bushels	16,400	18,000	37,908†	41,028†

*Arizona, New Mexico, Oklahoma, and Texas.

†Louisiana, Oklahoma, and Texas.

‡Louisiana and Texas.

SOURCE: United States Department of Agriculture.

LIVESTOCK RECEIPTS—(Number)

	Fort Worth			San Antonio		
	July 1946	July 1945	June 1946	July 1946	July 1945	June 1946
Cattle.....	121,904	79,483	64,683	52,820	30,754	20,243
Calves.....	53,699	33,288	22,330	27,988	30,192	9,186
Hogs.....	33,141	28,917	12,196	10,645	3,990	1,538
Sheep.....	276,672	287,842	546,526	78,262	120,286	107,069

COMPARATIVE TOP LIVESTOCK PRICES

(Dollars per hundred weight)

	Fort Worth			San Antonio		
	July 1946	July 1945	June 1946	July 1946	July 1945	June 1946
Beef steers.....	\$19.00	\$16.60	\$17.35	\$19.00	\$15.65	\$17.00
Stocker steers.....	16.50	14.00	16.50	.....	.....	.....
Heifers and yearlings.....	18.00	16.00	17.35	18.50	13.85	17.00
Butcher cows.....	15.50	13.00	15.00	14.00	12.50	14.00
Calves.....	18.35	14.50	17.35	18.50	14.00	17.00
Hogs.....	24.50	14.55	14.65	21.00	14.55	14.65
Lambs.....	19.00	14.25	15.50	17.50	13.00	14.25

the February 1946 average. As a consequence, excess reserves declined to \$99,000,000, the smallest amount since February of 1945. The tightening of reserve positions of member banks since February of this year has been due to large withdrawals from war loan accounts, principally for the purpose of financing the Treasury's debt retirement program but in part to meet current expenditures.

War loan accounts are drawn down by periodic calls of the Treasury upon depository banks, which remit the amount called for to the Federal Reserve Bank for credit to the Treasury's account. Payment is usually made by a charge against the depository bank's reserve account. If excess reserves are not sufficient to cover the war loan account call, the banks may build up their reserve balances by drawing on balances with correspondents, by sales of bills and certificates, or by borrowing. The usual effect of war loan withdrawals is a tightening of the reserve positions of depository banks, since they will tend to utilize cash assets rather than liquidate earning assets. Although the reserve positions of member banks are tightened when war loan deposits are withdrawn, an easing of reserve positions may occur when the funds are disbursed.

When the Treasury utilizes these balances at the Reserve Bank to redeem in cash a maturing security issue, the effect on member bank reserves depends upon the ownership of the maturing securities. Cash redemption of securities held by the Federal Reserve banks does not affect reserves, as the proceeds do not enter the commercial banking system. The redemption of securities held by the commercial banks, however, increases excess reserves by the full amount of the securities redeemed, since the banks receive payment for maturing securities through

credits to their reserve accounts. In the case of securities held by non-bank investors, the banks gain reserves to the extent that the funds received by those investors are deposited with the banks. Excess reserves are increased by the amount of such deposits less required reserves. To the extent that the excess reserves of banks are restored by Treasury payments for maturing securities, depository banks are in position to repay borrowings, or to increase investments and loans.

Federal Reserve notes of this bank in actual circulation continued the increase begun in May, and, on August 15, the total circulation amounted to \$603,000,000. This was \$5,000,000 more than a month earlier and \$14,000,000 more than in mid-May. It was the highest mid-month total since January, but was \$24,000,000 below the peak reached at mid-December 1945.

Total loans and investments of weekly reporting member banks in this district decreased \$3,100,000 during the four weeks period ending August 7, reflecting a decline of \$18,400,000 in total investments, offset in large part by an increase of \$15,200,000 in total loans. The increase in loans was due primarily to a general increase in commercial, industrial, and agricultural loans of \$24,100,000, which raised the total of these loans to an all-time high of \$418,500,000. This total represents a net increase of \$103,400,000, or 33 per cent, over a year ago and reflects the expected heavy postwar demand for credit. Continued liquidation of loans made to non-brokers for carrying Government securities during the Victory Loan drive provided an offset of \$9,100,000. Nevertheless the total of these loans outstanding on August 7 aggregated \$92,400,000, or more than twice the amount of such obligations outstanding last October, prior to the beginning of the Victory Loan drive. The decrease in investments, resulting largely from a reduction of \$24,000,000 in holdings of Treasury certificates in connection with the cash redemption of part of the certificate issue which matured August 1, was partially offset by an increase in holdings of other securities.

Changes in deposits of weekly reporting member banks followed the pattern which has been in evidence since the inauguration of the Treasury's cash debt retirement program. Total deposits declined as the Treasury drew down war loan balances and correspondent banks withdrew deposits. There was a resultant shift of some part of the Government's war loan deposits to the accounts of individuals and business firms, and time deposits continued to increase. Funds to meet withdrawals of Government and inter-bank deposits and to increase loans to customers were obtained by drawing down reserve balances with the Federal Reserve Bank and with correspondent banks, and by a decrease in investments.

INDUSTRY

Industrial activity in the Eleventh Federal Reserve District is currently increasing very slowly despite the undiminished demands of a market which absorbs durable and most types of nondurable goods as rapidly as they can be delivered. Rapid acceleration of manufacturing and construction is apparently still deterred primarily by material shortages, particularly in the building material, metal, and metal products lines. From such

CONDITION OF THE FEDERAL RESERVE BANK OF DALLAS

(Thousands of dollars)

	August 15, 1946	August 15, 1945	July 15, 1946
Total gold certificate reserves	\$495,614	\$476,611	\$489,860
Discounts for member banks	1,000	None	None
Foreign loans in gold	3,840	None	3,840
U. S. Government securities	911,463	864,174	915,352
Total earning assets	916,303	864,174	919,222
Member bank reserve deposits	703,642	705,049	700,134
Federal Reserve Notes in actual circulation	602,863	595,515	597,938

CONDITION STATISTICS OF WEEKLY REPORTING MEMBER BANKS IN LEADING CITIES—Eleventh Federal Reserve District

(Thousands of dollars)

	August 7, 1946	August 8, 1945	July 10, 1946
Total loans and investments	\$2,013,662	\$1,884,107	\$2,016,809
Total loans	685,291	452,314	670,085
Commercial, industrial, and agricultural loans	418,538	281,153	394,302
Loans to brokers and dealers in securities	8,605	5,393	8,496
Other loans for purchasing or carrying securities	123,444	85,140	132,500
Real estate loans	44,580	24,201	43,968
Loans to banks	333	227	391
All other loans	89,791	56,200	90,338
Total investments	1,328,371	1,431,793	1,346,724
U. S. Treasury bills	49,062	68,508	44,313
U. S. Treasury certificates of indebtedness	379,284	411,348	403,245
U. S. Treasury notes	181,536	275,567	181,695
U. S. Government bonds	645,664	620,951	646,419
Obligations guaranteed by United States Gov't	145	263	145
Other securities	72,680	54,156	70,907
Reserves with Federal Reserve Bank	397,638	374,407	410,160
Balances with domestic banks	217,492	237,614	232,408
Demand deposits—adjusted*	1,469,518	1,255,645	1,461,985
Time deposits	312,090	259,811	311,043
United States Government deposits	192,426	327,580	219,861
Interbank deposits	552,427	575,170	565,973
Borrowings from Federal Reserve Bank	None	None	None

*Includes all demand deposits other than interbank and United States Government, less cash items reported as on hand or in process of collection.

DEBITS TO INDIVIDUAL ACCOUNTS

(Thousands of dollars)

	July 1946	July 1945	Pctg. change over year	June 1946	Pctg. change over month
Abilene	\$ 23,898	\$ 16,810	+42	\$ 23,394	+ 2
Amarillo	71,660	50,938	+41	59,186	-21
Austin	79,653	70,061	+14	96,296	-17
Beaumont	62,743	59,536	+ 5	57,355	+ 9
Corpus Christi	65,143	59,351	+10	65,035	+ 1
Corsicana	6,782	6,346	+ 7	6,528	+ 4
Dallas	752,827	572,407	+32	713,020	+ 6
El Paso	85,245	57,886	+47	83,275	+ 2
Fort Worth	305,746	212,810	+44	254,322	-20
Galveston	57,202	47,843	+20	54,007	+ 6
Houston	682,115	572,881	+19	672,717	+ 1
Laredo	14,827	12,763	+16	15,140	- 2
Lubbock	38,399	28,511	+35	41,251	- 7
Monroe, La.	25,244	16,170	+56	22,051	+14
Port Arthur	25,980	21,378	+22	25,522	+ 2
Roswell, N. M.	11,426	8,407	+36	10,526	+ 9
San Angelo	26,270	18,857	+39	24,872	+ 6
San Antonio	218,192	162,198	+35	208,826	+ 4
Shreveport, La.	92,017	72,297	+27	89,786	+ 2
Texarkana*	21,030	17,143	+23	20,251	+ 4
Tucson, Ariz.	43,899	31,457	+40	44,778	- 2
Tyler	30,246	24,606	+23	29,562	+ 2
Waco	42,367	26,207	+62	39,544	+ 7
Wichita Falls	37,131	32,359	+15	39,026	- 5
Total—24 cities	\$2,820,042	\$2,199,202	+28	\$2,696,270	+ 5

*Includes the figures of two banks in Texarkana, Arkansas, located in the Eighth District.

†Change less than one-half of one per cent.

GROSS DEMAND AND TIME DEPOSITS OF MEMBER BANKS

Eleventh Federal Reserve District

(Average of daily figures—Thousands of dollars)

		Combined total		Reserve city banks		Country banks	
		Gross demand	Time	Gross demand	Time	Gross demand	Time
July 1944	\$3,601,462	\$303,719	\$1,900,222	\$187,985	\$1,701,240	\$115,734	
July 1945	4,481,169	398,157	2,306,773	249,764	2,174,396	148,393	
March 1946	5,101,702	465,564	2,592,431	296,725	2,509,271	168,839	
April 1946	5,012,062	472,155	2,520,721	300,908	2,491,341	171,247	
May 1946	4,966,772	480,926	2,480,288	305,520	2,486,484	175,406	
June 1946	4,957,846	486,339	2,461,342	310,839	2,496,504	175,500	
July 1946	4,942,638	494,265	2,437,422	313,893	2,505,216	180,372	

SAVINGS DEPOSITS

July 31, 1946

Percentage change in savings deposits from

	Number reporting banks	Number of savings depositors	Amount of savings deposits	Percentage change in savings deposits from	
				July 31, 1945	June 29, 1946
Beaumont	3	12,591	\$ 7,826,552	+ 12.0	- .2
Dallas	8	131,437	73,474,864	+ 21.9	+ .6
El Paso	2	30,685	22,854,018	+ 24.7	- .3
Fort Worth	3	40,894	33,105,658	+ 18.3	+ .9
Galveston	4	24,617	20,573,250	+ 15.9	+ 1.0
Houston	8	104,219	71,065,324	+ 13.6	- .5
Lubbock	2	946	2,429,822	-278.5	+ .5
Port Arthur	2	6,196	5,475,755	+ 15.1	- .8
San Antonio	3	36,957	43,932,469	+ 19.4	+ .1
Shreveport, La.	5	33,472	26,175,947	+ 16.4	+ .7
Waco	3	9,161	9,148,240	+ 21.9	+ .7
Wichita Falls	3	7,461	4,855,241	+ 7.6	+ 1.6
All other	37	61,846	51,335,238	+ 19.4	+ .6
Total	103	500,482	\$372,252,378	+18.7	+ .3

information as is available it appears that manufacturers' inventories of raw materials, goods in process, and finished goods remain very small as compared with sales and orders.

Improvement in the materials supply situation would probably be accompanied by an immediate marked expansion of manufacturing employment and output and a substantial increase of construction activity in this district. The supply of labor is estimated to be adequate to support a general increase of industrial operations. The United States Employment Service reports that surplus labor is still available in the principal labor markets and in the smaller cities of Texas, despite the fact that aggregate employment has increased almost continuously since February of this year and now is only slightly less than at the peak of employment late in 1943. There are indications, however, that spotty shortages of skilled labor are imminent, and that general scarcity of urban housing may prevent the shifting of craftsmen to the areas in which they are needed to relieve such shortages. Inability to obtain skilled workmen in many localities, therefore, may prove to be a limiting factor upon a substantial increase in manufacturing and construction activity when the materials supply situation improves.

Inadequate supplies of cottonseed from the cotton crop of 1945-1946, which was the smallest since 1921, curtailed activity at cottonseed mills in Texas and in the United States during the past season. Receipts and crushings of cottonseed at Texas mills during the 12 months ended July 31 were the smallest for any season of record and 28 per cent smaller than during 1944-1945. Production of cottonseed oil, cake and meal, and hulls also dropped to the lowest level of record, and the heavy sustained demand for cottonseed products was met, in part, by depletion of stocks. At the end of the 1945-1946 season, mill stocks of cottonseed oil and other cottonseed products in Texas were at or near the lowest levels of record and substantially smaller than a year earlier. In the United States, operation at cottonseed mills during the past season followed approximately the same pattern as in Texas, with receipts and crushings declining to a lower level than during any other season since 1921-1922. The strong demand for cottonseed products seems likely to continue throughout 1946-1947. Imports of vegetable oils from the Far East and other areas and production of vegetable oils from domestic crops other than cottonseed are not likely to be appreciably larger than in 1945-1946; and although record or near record production of feed crops during the coming year is anticipated, the requirements for cottonseed cake, meal, and hulls will probably not decline. Activity at cottonseed mills will again be limited, however, by the shortage of cottonseed from the anticipated cotton crop of 1946-1947, which is expected to be only slightly larger than that of 1945-1946.

Petroleum production in this district declined from the all-time peak of 2,425,000 barrels daily attained in June 1946 to 2,405,000 barrels daily in July. A further slight decline in August and September seems likely in view of reductions in Texas oil production allowables effected in order to alleviate transportation and storage congestion in West Texas and to prevent accumulation of unnecessarily large stocks in the East Texas and Coastal fields. Outside the Eleventh District, however, production of crude oil increased slightly in July, with the result that total production in the United States was only

COTTONSEED AND COTTONSEED PRODUCTS

	Texas		United States	
	August 1 to July 31	August 1 to July 31	August 1 to July 31	August 1 to July 31
Cottonseed received at mills (tons)	674,852	986,857	3,161,894	4,362,633
Cottonseed crushed (tons)	701,737	933,554	3,260,708	4,254,149
Cottonseed on hand July 31 (tons)	57,314	84,199	117,968	219,340
Production of products:				
Crude oil (thousand lbs.)	211,712	286,811	1,016,647	1,324,039
Cake and meal (tons)	325,171	422,183	1,433,504	1,954,111
Hulls (tons)	163,188	215,700	783,162	984,218
Linters (running bales)	221,490	281,208	988,583	1,250,914
Stocks on hand July 31:				
Crude oil (thousand lbs.)	1,514	2,526	23,493	55,121
Cake and meal (tons)	6,844	9,915	32,384	52,258
Hulls (tons)	3,754	16,761	25,550	61,697
Linters (running bales)	7,616	5,701	35,508	18,576

SOURCE: United States Bureau of Census.

DOMESTIC CONSUMPTION AND STOCKS OF COTTON—(Bales)

	July 1946	July 1945	June 1946	August 1 to July 31 This season	Last season
Consumption at:					
Texas mills	17,567	16,060	16,559	200,205	190,656
United States mills	729,958	672,973	792,661	9,166,060	9,567,932
U.S. stocks—end of month:					
In consuming estabm'ts	2,282,118	1,963,512			
Public stg. & compresses	4,464,546	8,375,199			

CRUDE OIL PRODUCTION—(Barrels)

	July 1946		Increase or decrease in daily average production from	
	Total production	Daily avg. production	June 1946	July 1945
Total North Texas	7,643,350	246,559	+ 4,402	N.A.
Panhandle	2,639,250	85,137	- 1,265	N.A.
North Texas	5,004,100	161,422	+ 3,138	N.A.
West Texas	18,420,900	594,223	+ 5,699	N.A.
Total East Texas	14,473,850	466,898	-11,857	N.A.
East Central Texas	4,706,450	151,821	+ 833	N.A.
East Texas	9,767,400	315,077	-12,690	N.A.
Southwest Texas	12,565,600	405,341	+ 1,625	N.A.
Coastal Texas	15,822,850	510,416	- 2,546	N.A.
Total Texas	68,926,550	2,223,437	-22,880	+12,754
New Mexico	3,050,250	98,395	+ 853	- 4,827
North Louisiana	2,572,550	82,985	+ 1,440	+12,654
Total District	74,549,350	2,404,817	-20,586	+20,572
Outside District	77,991,800	2,515,865	+ 7,891	-25,614
United States	152,541,150	4,920,682	-12,695	- 5,042

SOURCE: Estimated from American Petroleum Institute weekly reports.

The American Petroleum Institute has abandoned its reporting districts for Texas in favor of those of the Texas Railroad Commission. Estimates of crude oil production in the Texas subdivision presented in this table are, therefore, not comparable with estimates of production in the subdivisions prior to June 1946.

The Texas subdivisions include the following Texas Railroad Commission districts: North Texas—districts 7b, 9 and 10; West Texas—districts 7c and 8; East Texas—districts 5, 6, and other 6; Southwest—districts 1, 2, and 4; and Coastal—district 3.

N.A.—Not Available.

BUILDING PERMITS

	July 1946		Percentage change valuation from		Jan. 1 to July 31, 1946		Percentage change valuation from 1945	
	No.	Valuation	July 1945	June 1946	No.	Valuation	No.	Valuation
Abilene	63	\$ 160,315	+ 33	- 47	648	\$ 2,965,305		*
Amarillo	195	691,490	+333	+ 53	1,493	5,112,065		+305
Austin	291	1,875,193	+727	+ 41	2,655	11,254,651		+755
Beaumont	248	320,989	+137	+ 48	1,693	2,026,147		+100
Corpus Christi	289	805,099	+132	- 26	1,848	6,055,024		+205
Dallas	1,169	2,899,377	+100	+ 10	8,545	29,522,755		+410
El Paso	118	230,262	+116	+ 6	749	2,669,623		+374
Fort Worth	566	1,431,091	+127	- 9	4,383	16,373,038		+337
Galveston	117	301,447	+265	+ 51	812	1,460,107		+184
Houston	430	1,165,030	- 41	- 52	4,646	40,224,469		+156
Lubbock	301	791,401	+163	- 79	1,438	6,846,874		+408
Port Arthur	197	157,563	+170	- 40	1,249	1,459,177		+372
San Antonio	1,201	1,400,483	+199	- 20	8,735	15,699,466		+405
Shreveport, La.	358	801,998	+287	+ 79	2,298	6,136,436		+370
Waco	136	915,486	+487	+126	967	3,137,591		+237
Wichita Falls	72	204,455	+519	+ 34	505	1,347,817		+309
Total	5,751	\$14,151,679	+119	- 18	42,964	\$152,320,545		+286

*Over 1,000 per cent.

VALUE OF CONSTRUCTION CONTRACTS AWARDED

(Thousands of dollars)

	July 1946	July 1945	June 1946	January 1 to July 31 1946	1945
	Eleventh District—total	35,204	27,204	54,418	379,049	166,428
Residential	13,667	4,918	20,183	168,308	20,947
All other	22,137	22,286	34,235	210,741	145,481
United States*—total	717,991	257,691	807,914	4,655,727	1,740,090
Residential	281,227	46,273	332,248	1,914,700	243,782
All other	438,764	211,418	475,666	2,741,027	1,496,308

†Preliminary.

*37 states east of the Rocky Mountains.

SOURCE: F. W. Dodge Corporation.

PORTLAND CEMENT STATISTICS—TEXAS MILLS

(Thousands of barrels)

Month	Production		Shipments		Stocks	
	1946	1945	1946	1945	1946	1945
January	787	553	709	512	736	1,050
February	742	465	810	497	668	1,018
March	998	576	1,072	598	595	997
April	871	566	988	572	478	991
May	888	651	922	815	443	825
June	970	661	975	730	438	757

SOURCE: United States Bureau of Mines.

fractionally below the all-time peak reached in June of this year. At the end of July crude oil stocks totaled 114 million barrels in the Eleventh District and approximately 225 million barrels in the United States. The district figure was the smallest for any corresponding date since 1942, while the total for the nation, though about as large as a year ago, was somewhat smaller than on any corresponding date during the preceding seven years. However, despite greatly increased civilian consumption, United States gasoline stocks of 88,626,000 barrels at the end of July were not only 3 per cent larger than a year earlier but exceeded those of the same date for any year since 1940; distillate stocks of 44,316,000 barrels had increased 19 per cent over July 1945 to the highest July level in more than a decade; fuel oil stocks of 49,517,000 barrels were the largest in 18 months and 15 per cent above those held a year earlier.

NATURAL GAS

The increasing employment of natural gas as a source of energy and the rapid development of chemical processes which utilize gas hydro-carbons in the production of various industrial and consumer goods are stimulating the growth of the natural gas industry, particularly in the Eleventh District, where more than 60 per cent of the proved reserves of natural gas in the United States are located.

The relative importance of natural gas as a source of energy has increased almost continuously during the past half century as the output of new gas fields has been made accessible to heavily populated areas. At present, approximately 10 per cent of the energy consumed in the United States is derived from

SOURCES OF ENERGY IN THE UNITED STATES

	Percentages		
	1945	1931-1935	1921-1925
Anthracite coal.....	4.2	7.3	9.9
Bituminous coal.....	42.8	46.1	59.2
Domestic oil.....	29.1	26.7	13.2
Natural gas.....	10.4	9.1	4.8
Water power.....	12.3	9.6	5.2

SOURCE: U. S. Bureau of Mines, Bituminous Coal Division.

natural gas. Further expansion in its use as a fuel will probably accompany the growth of residential and commercial areas and the acceleration of industrial activity. The high heats which can be generated from natural gas, the ease with which it can be transported, stored, and controlled, and its low cost make it an ideal domestic and commercial fuel and stimulate its extensive industrial employment in the generation of steam, refining of oil, manufacture of glass, portland cement, and ceramics, puddling of iron, and roasting of ores, and in annealing and tool tempering. Natural gas is, furthermore, the most satisfactory source of carbon black, the manufacture of which, as the accompanying table indicates, accounts for a large portion of the natural gas consumed in industrial operations.

CONSUMPTION OF NATURAL GAS, 1943

(Billions of cubic feet)

	Texas	United States
Field*.....	353	781
Carbon black manufacturing.....	281	316
Petroleum refining.....	125	244
Portland cement plants.....	13	52
Other industrial.....	217	1,277
Total industrial.....	989	2,670
Domestic.....	45	529
Commercial.....	25	205
Total.....	1,059	3,404

*Drilling, pumping, and operating gasoline recovery plants.

SOURCE: U. S. Bureau of Mines.

The market for natural gas has been further expanded by the development since the early 1930's of a technology which recombines gas fractions into diverse chemicals from which industrial and consumer goods can be manufactured. Among the products now synthesized from gaseous hydro-carbons are super fuels, synthetic rubber, explosives, alcohol and its many derivatives, plastics, fertilizer, solvents, pharmaceuticals, dyes, insecticides, and textile chemicals.

Natural gas production in 1945 is estimated to have reached the impressive totals of 2.6 trillion cubic feet in Texas and 5.3 trillion cubic feet in the United States. Fortunately, as the estimates presented in the following table indicate, the proved reserves appear adequate to meet heavy production demands for

ESTIMATED PRODUCTION AND RESERVES OF NATURAL GAS

(Trillions of cubic feet)

	Production	Reserves
	1945	Jan. 1, 1946
United States.....	5.28	144.29
Louisiana.....	.73	13.96
New Mexico.....	.14	1.97
Oklahoma.....	.37	6.77
Texas.....	2.64	85.77

SOURCE: The Oil Weekly.

many years. Furthermore, these estimates are probably conservative. Total proved reserves of natural gas in the United States may exceed 200 trillions cubic feet, and expansion of reserves by more extensive exploration seems possible.

It is desirable, nevertheless, to conserve natural gas resources by efficient production and utilization. Wastage by escape of gas into the air, by flaring, and by inefficient utilization has been extensive in the past and still is excessive. It is estimated that in 1943 approximately 685 billion cubic feet of natural gas was lost or wasted in the United States, of which 354 billion cubic feet, or 52 per cent, was in Texas. High loss and waste rates continue. It is reported that the waste from the flaring of natural

ESTIMATED PRODUCTION AND DISPOSITION OF NATURAL GAS, 1943

(Billions of cubic feet)

	Production	Marketed	Repressed	Stored in ground	Losses and waste
	United States.....	4,943	3,415	825	19	684
Louisiana.....	700	505	91	..	104
New Mexico.....	166	87	3	..	76
Oklahoma.....	324	285	14	1	23
Texas.....	2,280	1,324	601	1	354

SOURCE: U. S. Bureau of Mines.

gas alone currently totals 750 million cubic feet per day in Texas. Aggressive action is being taken, however, by the Texas Railroad Commission, by supervisory agencies in other states, and by the natural gas and petroleum industries to curtail loss and waste and to conserve the valuable natural gas resource.

The dominant position which Texas and adjacent states occupy as producers of natural gas is proving to be an important stimulus to the industrial development of the Southwest. Many industrial plants which have been located in this area were originally attracted, in part, by the ready availability of cheap, efficient natural fuels. Synthetic rubber, glass, ceramic, carbon black, and various chemical plants which utilize natural gas as an essential fuel or as a primary raw material have been constructed in various sections of this district during the past decade. In the aggregate, they represent a tremendous investment in plant facilities and contribute substantially to the income of the area. In the Texas Coastal area and in other sections of the Eleventh District, large-scale facilities designed to process natural gas are being or will soon be constructed. These developments may be the prelude to a much more extensive growth of industry in the Southwest founded, in part, upon the utilization of the large reserves of natural gas which the area possesses.

September 1, 1946

NATIONAL SUMMARY OF BUSINESS CONDITIONS

(Compiled by the Board of Governors of the Federal Reserve System)

Industrial production increased somewhat further in July, after a sharp advance in June. Prices of commodities rose rapidly in July and continued to advance, although at a more moderate rate, in the first three weeks of August.

INDUSTRIAL PRODUCTION

Industrial production advanced from 171 per cent of the 1935-39 average in June to 174 in July, according to the Board's seasonally adjusted index. Output of durable goods and of minerals generally increased while output of nondurable manufactures as a group showed little change, with increases in some lines offset by declines in others.

Production at steel mills in July rose about one-sixth and in August has increased somewhat further, with output of ingots increasing to about 90 per cent of capacity. Activity in the machinery and transportation equipment industries continued to advance in July. Production in the nonferrous metal industries rose again but was still about 7 per cent below the January level. Output of stone, clay, and glass products continued to increase and the July index, at 197, was well above the previous high in March, with an increase in production of glass containers accounting for most of the July advance. Lumber production showed a decline, owing in large part to vacations for lumber workers on the Pacific Coast in the early part of July. Activity in the furniture industry remained at about the June rate.

In the nondurable industries, production at textile mills declined, owing to worker vacations during the first week in July, while output of manufactured food products increased considerably. Meatpacking rose sharply to the highest level since February and there were increases also in the output of flour, bakery goods, and dairy products. Sugar meltings declined. Output of paperboard and paper boxes declined from recent high levels while newsprint consumption showed a further advance. Activity in the chemical and rubber industries showed little change.

Mineral production rose to a new high 46 per cent above the 1935-39 average. Increases in the output of anthracite, copper ore, and iron ore accounted for most of the July rise in production of minerals.

CONSTRUCTION

Value of construction contracts awarded, as reported by the F. W. Dodge Corporation, declined further in July, but was still more than twice the prewar average. The drop reflected a continued decline in residential awards to a level about two-fifths below the May peak. Nonresidential building awards increased slightly in July, after a small decline in June.

EMPLOYMENT

Nonagricultural employment continued to rise in July, with major gains in the construction and manufacturing industries and some decrease in government employment. Total unemployment decreased to about 2.3 million in July, the lowest of the year.

DISTRIBUTION

Value of department store sales declined less than seasonally from June to July and the Board's adjusted index rose to 278 per cent of the 1935-39 average as compared with an average of 254 for the first six months of the year. In the first three weeks of August sales continued at a high level. As a result of large receipts of merchandise, value of department store stocks continued to increase in July but relative to sales was still lower than before the war. Unfilled orders were at an exceptionally high level.

Loadings of railroad freight increased further in July as shipments of livestock and grains and of ore and coke rose sharply and shipments of other classes of freight showed little change.

COMMODITY PRICES

Commodity prices, which had advanced sharply in July, rose somewhat further in the first three weeks of August. There were increases in prices of textiles, housefurnishings, and fuels as well as in some farm products and foods. Grains, however, declined and corn future contracts were still substantially below cash quotations, reflecting the continued prospect of a large harvest. With the renewal of price control at the end of July, ceiling prices were re-established but in many cases at higher levels than prevailed on June 30. Announcement was made that ceilings would not be re-established at this time on most grains or on dairy products but would be on livestock and meats and on cottonseed and soybeans and their products.

BANK CREDIT

The Treasury retired for cash 3.3 billion dollars of Government securities during July and early August; war loan balances at commercial banks were reduced by approximately the same amount. As most of the securities were held by banks, retirement operations had little effect on deposits of businesses and individuals. Drains on bank reserves resulting from redemption of securities held by the Reserve banks were met by System purchases of Government securities and by reductions in Treasury deposits. Need for reserve funds resulted also from an increase in nonmember balances at the Reserve banks, reflecting the deposit of the first instalment of the British loan, and from some outflow of currency into circulation. Changes in required and excess reserves, on the average, were negligible.

As a result of the Treasury debt retirement operations, as well as security sales to the Reserve banks in connection with reserve adjustment, Government security holdings at banks in 101 leading cities were reduced by an additional two billion dollars during the seven weeks ended August 14. Total loans for purchasing or carrying Government securities declined further to a level comparable to that which prevailed prior to the Victory Loan Drive. Commercial loans, both in New York City and outside, increased substantially over the period.