# Texas Business Review <br> Bureau of Business Research 

The University of Texas

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Indexes of Business Activity in texas
AVERAGE MONTH OF $1930=100 \%$
$\begin{array}{ll}\text { EMPLOYMENT } & 25 \% \\ \text { PAY ROLLS } & \text { FREIGHT CARLOADINGS } \\ \text { OEPARTMENT STORE SALES }-10 \% & \text { CRUDE OLLRUNS } \\ \text { ELECTRIC POWER CONSUMPTION- }\end{array}$
OEPARTMENT STORE SALES-10 \%
Bureau of Business Researct






# Business Review and Prospect 

## National Defense

In the opening paragraph of his financial article in this issue of the Review, Dr. Irons calls attention to four significant stages or factors in the national defense pro-gram-first, the letting of contracts on the basis of money already appropriated by Congress, a phase which is now nearing completion; second, the production of goods and the payment therefor, a phase which will grow in significance for many months; third, the financial problems involved in raising the funds and making payment as goods are delivered, as well as assisting in new plant construction; and fourth, the development of a policy which will result in the maximum progress of the defense program, while at the same time causing the minimum of disturbance to normal business activity and standard of living.

In other portions of his article Dr. Irons points out the need of sound, orthodox methods of financing the defense program and the avoidance of needless experimentation; the elimination of non-essential federal expenditures and the reduction of expenditures for work relief programs and public works as the defense expenditures get under way; the need of a system of taxation which will support as large a part of the cost of the defense program as possible without restricting industrial activity; and the adoption of a policy whereby the funds to be raised by borrowing may come from the sale of government securities to individual investors instead of through the commercial banking system, in order to minimize the dangers of inflation.

## General Business

Physical volume of business in the week ended October 12, as measured by Barron's index, advanced to 87.6 from 87.2 the preceding week. This figure represents a new high since the last week in January and is only about six points below the peak reached during December, 1939, when the index rose to nearly 94. There is every reason to expect that the index will continue throughout the fall to maintain at least its present narrow margin of about three per cent over a year ago. After the turn of the year, this margin of improvement is expected to widen substantially during the first six months since the index receded during the early months of 1940, whereas, it is expected to trend upward during 1941.

It should perhaps again be pointed out that the Barron's index cited above has for its base the period 1923-1925, and that it differs from other national indexes in common use in that it is adjusted not only for seasonal variation but also for long time trend including population growth. Because of this fact, Barron's index continues to make a highly unfavorable showing with 1929, the peak pre-depression year, when Barron's index reached l15. Thus, with the population increase of
nearly $12,000,000$, which has taken place during the past ten years, had the trend in the standard of living which prevailed during the period from 1900 to 1930 continued during the past decade, the rate of activity in industry and trade would now be 27 points higher than it actually is. This situation is reflected in our about eight to nine millions who are still unemployed and the comparatively low standard of living which still prevails among a large percentage of those who are employed.

## Texas Business

Texas industry increased its tempo of activity substantially between August and September, while maintaining a fair margin of improvement over September, 1939. All of the factors adjusted for seasonal variation used in the composite index, except department store sales, showed a gain from August to September; while all but miscellaneous freight carloadings and oil refining showed a gain over September, 1939.

|  | Sept. 1940 | $\underset{\substack{\text { Sept. } \\ 1939}}{\text { che }}$ | ${ }_{1940}$ |
| :---: | :---: | :---: | :---: |
| Employment | 92.5 | 90.4 | 90.3 |
| Pay Rolls Miscellaneous Freight Carload- | 100.0 | 93.0 | 95.9 |
| Miscellaneous Freight Carload- ings (Southwest District) | 62.5 | 67.4 | 60.8 |
| Crude Runs to Stills --- | 188.4 | 195.1 | 179.0* |
| Department Store Sales --_ | 115.3 | 109.4 | 125.3 |
| Electric Power Consumption --- | 138.3 | 134.9 | 136.2* |
| COMPOSITE INDEX .----- | 102.3 | 100.3 | 100.6* |

*Revised.
An upward trend in the Texas business index is confidently expected during the remaining months of the current year and during at least the early months of 1941. The bases for this expectation are to be found in the strengthening of prices and the increase in marketings of a number of important farm products (of which Texas has huge surpluses) resulting largely from increasing industrial activity in the North and East; the growing pay rolls from Texas industry; and federal disbursements in connection with the national defense program.

What makes the favorable showing with September last year especially significant is the fact that industry and trade were then being stimulated to a marked extent by the outbreak of war in Europe, so that current comparisons are made upon a relatively high base.

## Farm Cash Income

Cash income from the sale of farm products in Texas during September, as computed by this Bureau, totalled $\$ 76,227,000$ compared with $\$ 80,074,000$ during September last year, a decline of 4.8 per cent; for the first nine months of the current year aggregate farm cash income is estimated at $\$ 264,940,000$, while for the corresponding period last year farm cash income was
estimated at $\$ 287,822,000$, a decline of nearly 8.0 per cent. This decline in income from a year ago is almost entirely the result of smaller ginnings of cotton during August and September. Since production of cotton this year is estimated at about $3,500,000$ bales, and ginnings to the end of September were only $1,487,007$ bales, there remains to be ginned more than $2,000,000$ bales during the current cotton ginning season which is normally almost completed by the end of the year. Last year with an actual crop of about $2,800,000$ bales, $1,968,000$ bales had been ginned by the end of September, leaving only about 832,000 bales to be ginned during the remainder of the season. Thus, assuming that the value per bale of cotton and cottonseed continues to be virtually the same as during the corresponding period a year ago, the value of cotton still to be ginned in Texas this year is about $\$ 100,000,000$, whereas, last year the value of the cotton and cottonseed ginned after September was only about $\$ 40,000,000$. This difference of $\$ 60,000,000$ in itself insures a considerably larger farm cash income during the current year than in 1939. It is less certain, but highly probable moreover that cash income from Texas livestock and livestock products during the remainder of the year will be well above that received from these sources during the last three months of 1939.

The indexes of farm cash income for the State and for the various crop reporting districts in Texas are as follows:


It will be noted that the current September index for the State as a whole is well above that of the preceding month but slightly below September, 1939. The wide variations in the district indexes in a number of instances during September this year compared with a year ago are the result, primarily, of the earlier ginning of cotton last year.

## F. A. Buechel.

## The Southwest Is Not the Southeast

The one economic feature peculiarly common to both the Southwest and the Southeast is that of the growing of cotton. But even in this regard, cotton is grown in the Southwest under conditions quite different indeed from those in the Southeast. It may be noted parenthetically that I am using the term Southwest to include what has sometimes been called the Gulf Southwest, and as I am using it, the Southwest does not include the Far Southwest, the latter comprising the California region.

The reason the Southwest is not the Southeast lies in the decrees of Nature. The natural resources pattern, the usable combinations of resources, and even the geographic orientation of the Southwest are all very different from those of the Southeast. Fundamental differences between these extensive portions of the United States are those of physical geography-and the essential elements of a region's physical geography are not readily modified by man. By physical geography is not meant a simple concept of areal physiography but rather a regional science that has evolved during the past few decades.
In historical background the Southeast differs sharply from that of the Southwest-so much so that the terms, the Old South, or the Deep South, are never applied to the Southwest. In their economic background there is one fundamental resemblance-both have been important primarily as surplus producers of raw materials; but in this regard, these regions are not unlike the Northwest.

In the history of the growth of internal commerce in the United States (which means the rise of the vast home market that is so important an element in American economy) the very important position of the Old South has been severely neglected by economic historians.

Concerning the economic activities of the Southeast and the Southwest, it is well to keep in mind that, in spite of certain overlappings, the two major regions are quite unlike. Economic activities have to be considered as a function of resources utilization (which factors are largely internal to the region concerned) and the impingement of outside or external factors which condition the rate or degree of utilization. Of external factors, the imposition of freight rates is a typical example, and in this regard freight rate differentials for the Southwest are more unfavorable than for the Southeast.
The conception, commonly held, that cotton is the one outstanding agricultural enterprise of the South hardly applies to the Southwest; for the Southwest has long been, is now, and for a long time will be one of the very important livestock surplus producing regions of the United States. In contrast, save for exceptional areas, the Southeast does not now and never has produced livestock in any considerable volume except for local consumption.

The Southeast is not a surplus corn producing region, although normally the acreage in corn is approximately equal to that in cotton. Corn yields in the Southeast (except in certain favored areas) are low, and the corn is grown for local consumption. The Southwest grows
some corn, but the characteristic feed grain crop is grain sorghums. Western Texas and adjacent areas in Oklahoma can aptly be designated as the Grain Sorghums Belt of the United States. Also, the Southwest grows wheat, in areas along and north of the northern limit of cotton growing. Furthermore, most of the wheat produced in the Southwest is of very high quality. The Southeast is not and never has been a wheat producing region. Nor is the Southeast, taken as a whole, a rich grass or pasture region. Producing neither high yielding grains nor rich grasses, except in favored localities, the Southeast does not have a basis for an important livestock industry such as is characteristic of the Southwest.

Cotton growing in the Southeast is a function of large applications of chemical fertilizers, for most of the cotton lands of the Old Cotton Belt are poor sandy soils which require fertilization for continued production of cotton. The qualities of these soils are functions of the geographic geology and the climatic environment of the areas concerned. Cotton growing in the Southwest is a function of soils chemically rich-the alluvial lowlands, the Prairies, and the sub-humid Plains-but in the western portions soil moisture is the limiting factor to crop growth.

Furthermore, the cotton lands of the Southwest are mostly smooth plains areas on which power machinery can be advantageously utilized. This is indeed a contrast to the prevailing conditions of the Southeast in which the darky, a mule, and a single-shovel plow have long been and still are so characteristic of cotton farming.
There are other contrasts too. Most of the cotton grown in the Southeast is consumed in domestic mills; most of the cotton grown in the Southwest has been exported. Now that foreign markets for raw cotton from the United States have severely contracted, the cotton problem of the Southwest has indeed become a critical one.

The characteristics of agricultural and range production and their contrasts in the Southeast and the Southwest are largely associated with differences in the physical geography of these regions. Disposal of the surplus production is primarily dependent upon economic conditions and forces outside these regions.

The Southeast is a forest region-one of the major forest regions of the United States. The Gulf Timber Belt of southern pines and hardwoods extends well into the Southwest, merchantable timber being grown over most of East Texas, east of the Black Prairies and north of the Brazos River. The Southeast remains an important lumbering region but it is in the industrial utilization of its forests in pulp and paper manufacture that interest now centers. The extensive use of Southern woods for paper making may be said to have arrived.
In metallics and non-metallics the contrasts between the Southwest and Southeast are as sharp and striking as in the other resources already mentioned.
The Southeast has in the Birmingham area an important iron ore resource; and the near-by coal fields are able to supply coal for fuel and for coke making.

As a matter of fact, the Great Warrior coal field is one of the more important coal deposits of the nation.

The Southeast has considerable water power and the growth and expansion of electricity using industries has been one of the accompaniments of T.V.A. Owing to its geographic orientation the Southeast is importing bauxite, which at Mobile is reduced to alumina. The latter is then shipped to Alcoa, Tennessee, to be made into aluminum through the utilization of electric energy.

Then the Southeast has industries based upon its own non-metallics, such as clays, granites, phosphate rock, and the manufacture of fertilizers.

Iron and steel and associated enterprises concentrated in the Birmingham district, electro-chemicals and electric using industries in the T. V.A. district, and pulp and paper plants scattered throughout the forest lands reflect one type of industrial development in the Southeast. Another type is reflected in the textile and tobacco industries. Still another feature of this type is represented in the rayon mills of the Southeast.

Comparatively speaking, industry of the Southeast is rather diversified; its agriculture is highly specialized. In contrast, the agricultural and range enterprises of the Southwest are diversified, taking the region as a whole, and its industry is highly specialized inasmuch as quite a bit of it centers about the oil industry or the closely related natural gas industry.

The oil industry is basic to the Southwest, and the Southwest's oil industry is one of the big items in the economics of the United States. Wherever other industries, such as the rise of the chemical industry for instance, are developing in the Southwest, they, with few exceptions, are closely associated with the use of natural gas.

This brief presentation seeks only to outline the high points of the more important regional aspects of the South, of the regional distribution and differentiation of the South's resources-of the Southeast and the Southwest. Policies of concern to the South cannot be expected to advance the welfare of the people of the South unless these fundamental regional characteristics are fully taken into consideration.

It should not be necessary to have to emphasize these fundamental characteristics of the South. That it is necessary means, simply, that wide gaps exist in our educational procedure. Those dealing with either economics in the accepted sense or with specific aspects of the South's development and future apparently have not come to grips with the essential factors, as unfortunately is so obviously attested by recent and current conditions in the South, in both the Southeast and the Southwest.

Natural resources have to be considered as something more than a lump of real estate, to be considered as something merely from which income can be squeezed. Regions have to be considered as something more than geometrical divisions on a map, particularly lines drawn by swivel-chair experts.

Regions, and the resources associated with them, have to be considered as a source of wealth; that is, of a means of advancing the material well-being of the
community, and not as merely a means of realizing an income. Nor can the concept of regions and resources be lumped together as land considered as one of the economists' factors of "production," even if the economist were interested in factors of "production" in the sense of material production. In this case the economist would indeed be interested in differentiation of resources and their classification on the basis of fundamental characteristics.

The point in making these observations at this place is that resource economics together with the regional implications involved have something positive and sub. stantial to offer in understanding present day economic life, and in looking into the future, scientific analyses of resource utilization and regional environments become essentials.

Elmer H. Johnson.

## Economic Geography Notes

## Aircraft Plant

The Pacific Coast airplane producer, North American Aviation, Inc., 30 per cent of which is owned by General Motors Corp., and which specializes in military planes has completed plans for a $\$ 7,000,000$ plant at Dallas; this plant is to be ready for operation in March, 1941.
The Texas plant will employ from 10,000 to 12,000 men.

## Carbon Black Plant

United Carbon Company is expected to begin construction of a new carbon black plant some 2 miles north of Aransas Pass. This new unit will use residue gas from the gasoline plant of the Natural Gasoline Corporation a few miles distant.
This will be the second carbon black plant in the Gulf Coast region.

## United States Tin Smelter

Although the United States is the largest consumer of tin the the world (normal consumption amounts from 70,000 to 80,000 tons annually) it produces but small amounts of tin ore; nor does this country possess tin smelting facilities.

Tin ore is produced in British Malaya, Siam, Dutch East Indies (Banka and Billiton, two small islands being outstanding as tin producers), in Bolivia and more recently from Nigeria and the Belgian Congo.
Tin looms rather large as a strategic metal and the United States is actively considering the building of a tin smelter to care for imports from Bolivia.

No definite results on the establishment of a tin smelter in the United States thus far have been announced, and so far there is no indication of where such a smelter would be built.

## Scrap Iron Embargo

Japan is largely dependent upon imports for her iron and steel industry which in 1939 attained the highest volume of output in the history of Japan.

Japan has been importing large quantities of scrap from the United States as well as some pig iron and certain ferro-alloys. In 1939 Japan secured more than 90 per cent of her iron and steel scrap from the United States. A considerable part of this scrap has been supplied from Texas during the past decade. At the same time she has been getting iron ore, pig iron, scrap, and molybdenum from India and Malaya.

These supplies are now being cut off from Japan; but it is believed that Japan has built up stocks of these essential materials to last a year on the basis of the 1939 output of steel.

## Toluol at Baytown

It has been announced that Humble Oil and Refining Company will build a government-financed plant at Baytown for the making of Toluol. This plant is estimated to cost around $\$ 12,000,000$. It will be located near Humble's Baytown refinery.

Elmer H. Johnson.

## Financial Review

Business and financial developments of the past few months have reflected the progress of the national defense program and the substantial British demand for war materials. The first phase of the defense program is now approaching completion, with the obligation of all appropriations expected to be made by November 1. As the program moves into the second stage involving the production of goods and the payment therefor, the effects upon business activity may be expected to become even more significant. Moreover, the financial problem involved in raising the funds which will be required in increasing amounts by the Treasury to make payment as goods are delivered, and also to assist in financing new plant construction, will have to be met.

Finally, it will be necessary to determine policy in respect to controlling the economic disequilibria which may be expected to accompany the enormous productive demand and financial expenditures.

During the past four months, or from the ap. proximate date of the inception of the national defense program to the date of writing this article, the principal commercial banking assets and liabilities-as reported by the member banks in 101 leading cities-have increased moderately. Between May 29 and October 9 total loans of the reporting banks increased by $\$ 325,000,000$ from $\$ 8,475,000,000$ to $\$ 8,800,000,000$; commercial, industrial, and agricultural loans increased from $\$ 4,367,000,000$ to $\$ 4,672,000,000$, an increase of
$\$ 305,000,000$. During the same period the reporting banks increased their holdings of United States Government Securities by $\$ 378,00,000$, or from $\$ 11,480,000,000$ to $\$ 11,858,000,000$. The increase in the amount of bank credit, together with gold imports, has been reflected in an increase in the demand deposits of the reporting banks amounting to slightly less than one billion dollars during the four month period. Very substantial gold imports, however, have more than offset the demands of these banking developments upon the reserve funds of the reporting banks, and consequently excess reserves of the banking system have increased from $\$ 6,360,000,000$ to $\$ 6,820,000,000$.

Industrial production, factory employment, and factory payrolls have also increased steadily during the period. The Federal Reserve Board index of industrial production advanced from 116 at the end of May to an estimated 124 at the end of September. Very substantial increases in the production of airplanes, machine and tool equipment, iron and steel, and other products for which a war demand exists have been the most important factors in this development, although numerous other products have been favorably affected. Between May and August (the latest date reported) factory employment, as indicated by the index of the Bureau of Labor Statistics, rose from 99 to 104, with the largest gain in the durable goods industry; factory payrolls followed a similar course, advancing from 96 to 108 . Total non-agricultural employment is estimated to have increased by approximately 750,000 during the period, with most of the increase occurring in manufacturing establishments and the construction industry.

Although there has been some inventory accumulation in anticipation of increased demand, and also because of probable restriction later in the output of certain products, the inventory situation is not viewed unfavorably. Likewise, as yet there is no evidence of any serious distortion in the price situation, although administration officials are watching price developments closely in certain lines, and warning against unwarranted price increases.

The trend outlined in the preceding paragraphs probably will continue its upward course even more sharply during the coming months. Up to the present, actual expenditures for defense purposes have been relatively small as compared with the appropriations obligated by contract. Likewise, production on defense orders is only just getting underway. During the remainder of the fiscal year, however, a great speeding up of expenditures and production must take place if even the revised estimates of Treasury expendituresabout $\$ 3,500,000,000$ as against an earlier estimate of approximately $\$ 5,000,000,000-$ prove to be correct. During the remainder of this fiscal year and, perhaps, for several succeeding fiscal years, the economic system will be subjected to an abnormal sort of stimulation-a form of pump-priming involving the heavy industriesthat may be expected to influence strongly the tempo of business activity. Merely because the causal factors underlying these expenditures may be of an emergency nature and essential, thus compelling the expenditures, this fact in no way mitigates the dangers inherent in
the situation. Therefore, it is imperative that sound, orthodox methods of financing be utilized exclusively just as long as it is possible to do so; the present is certainly no time for experimentation with untested theories or for continued resort to fiscal policies which have been of uncertain efficacy during the past several years. The method by which the Treasury raises the funds needed to finance the defense program is a case in point.

If recognition is given to the practical financial aspects of the situation, and assuming that devaluation, currency issues, or other unorthodox monetary methods are disregarded-and surely they must be by a responsible government-then it is obvious that a substantial proportion of the funds must be obtained through the sale of government securities. However, the extent to which deficit financing should be used by the Treasury, and the method of deficit financing to be used, are problems of the utmost significance.

In the first place, expenditures which are non-essential should be entirely eliminated, and those expenditures might be classified as not urgently essential should be reduced to an absolute minimum. The two classes of expenditures which should offer the greatest possibility of diversion of funds to defense purposes are those covering work relief programs, and public works and investments. The 1940-1941 federal budget included an estimate of $\$ 1,300,000,000$ for the former and $\$ 1,100,000,000$ for the latter, or over 25 per cent of budgeted expenditures. By confining public works to those projects which serve an essential purpose in connection with the defense program, and by effecting sharp economies in public relief programs, a substantial sum should be available from each of these items, especially in view of the fact that during the remainder of the current fiscal year the pump-priming effects of the original budget will be supplemented by the additional pump-priming expenditures of defense production.
Secondly, a sound program of taxation should be designed to support as large a part of the cost of defense as possible without restricting industrial activity, upon which the completion of the program is dependent, to such an extent as to defeat the very purpose for which the taxes are imposed. Steps in this direction have already been taken in the form of an excess profits tax expected to raise approximately $\$ 500,000,000$-although there is a possibility that it will be revised before taxes are paid under it. Other tax revisions are expected to raise about $\$ 750,000,000$ during the current fiscal year and at least a billion dollars annually thereafter. Additional tax legislation may be anticipated, and sooner or later the increasing tax burden must fall heavily on the shoulders of the large middle class income group of the nation, the group from which the largest proportion of the nation's tax revenue is drawn. Burdensome though these taxes may become, the burden is preferable to the cost of continuing huge deficits, weakened government credit, and subsequent inflation.

The remainder of the needed funds must be raised by borrowing, with the Treasury financing as large a part of the deficit as possible through the sale of its
securities to individuals and individual investors, instead of through the commercial banking system, in order to minimize the dangers of inflation. From the point of view of government credit there may be little difference, if any, whether the government sells its securities to the commercial banks or to the public, but there is a significant difference both in respect to the soundness of the banking system and the volume of available funds. Financing through the banking system affects the nature of the bank assets, and it creates additional deposits; whereas, the sale of securities to the public leaves bank assets unaffected and instead of creating additional deposits, results in a shift of existing deposits from the accounts of savers and depositors to the accounts of the government.

Commercial bank deposits have been increasing steadily for several years past, and are now greater than at any other time in the nation's history. These
deposits represent money just as truly as if they were printed by the printing presses. If an excessive issue of money in the form of currency possesses inflationary potentialities, then so does this huge volume of bank money. To date these funds have not reacted with inflationary force because their turnover-or velocityhas been very low; the bank money has remained unused; it has not been an effective inflationary force. But as business activity increases and industrial production expands, the increasing demand for goods will tend to increase the circulation of this huge hoard of bank money, and then it will tend to exert a strong inflationary influence in the economic system. Because of this danger, which will become more real as the months pass, the Treasury should draw on the savings of the nation and avoid the creation of additional purchasing power through deficit financing.

Watrous H. Irons.

## Changing Markets for American Cotton

Vast changes have taken place in the markets for American cotton. A hundred years ago, or in 1840, the United States consumed only about eleven per cent of its cotton production; and seventy per cent of the 236,525 bales consumed in the United States was outside the cotton growing states, and sixty-seven per cent in New England.

The real market for American cotton, however, at that time was not in the United States at all but was the export market, for it took about eighty-nine per cent of United States production. Moreover, all exports went to Europe; and two countries, the United Kingdom and France, took ninety-five per cent of all exports to Europe. The fact is that in 1840 New England and Europe furnished the market for 95.5 per cent of the cotton production of the South. The United Kingdom alone consumed almost half of the American crop.

Much of the cotton consuming power of the cotton growing states was destroyed during the Civil War, so much so that in 1870 less than nine per cent of the cotton consumed in the United States was consumed in the cotton growing states. In 1870 the South consumed only about two per cent of its cotton production, and, therefore, furnished a negligible home market for its cotton. New England and Europe furnished ninetyseven per cent of the market for the $2,714,000$ bales of American cotton marketed in 1870 . However, the market in Europe was broadening, for in 1870 the purchases of the United Kingdom and France had declined to seventy-eight per cent of total exports of American cotton to Europe. The rise of cotton manufacturing in Germany accounts for most of this change.

During the thirty years from 1870 to 1900 important changes took place in the markets for the cotton crop of the South. The total number of bales marketed during the latter year was $10,074,000$, and thirty-eight per cent of it was consumed in the United States and sixty-two per cent exported. New England and Europe, the original markets for American cotton, still supplied
seventy-six per cent of the demand for it in 1900, the cotton growing states and the rest of the United States, 15.4 per cent, and exports to countries outside of Europe, mostly Japan and Canada, 4.6 per cent. The European market during this period was characterized by a further relative decline of the United Kingdom and France as markets, and pronounced increases in the importance of Germany and Italy.

The trends in the development of markets established between 1870 and 1900 continued down to 1929, even though interrupted temporarily by the World War beginning in 1914.

During the year 1928-29 the United States consumed and exported $15,135,000$ bales of cotton, included in which were 458,000 bales of foreign grown cotton consumed in the United States. New England and Europe, the original markets for American cotton, took only fifty per cent in 1929, compared with seventy-six per cent of it in 1900, and ninety-seven per cent in 1870. The big decrease in the relative importance of these markets was due on the one hand to a decrease in cotton consumption in New England and only a slight increase in the consumption of American cotton in Europe from 1900 to 1928; and, on the other, to the very rapid rise in the consumption of cotton in the cotton growing states and Japan.

The cotton growing states furnished a market for about thirty-seven per cent of its production in 1929, 15.4 per cent in 1900, and only two per cent in 1870.

The great depression and its aftermath have wrought tremendous changes in Markets for American cotton. During 1938-39, the tenth year after the depression began, the United States exported $3,327,000$ bales of cotton and consumed $6,858,000$ bales. Of the latter, 150,000 bales were foreign grown cotton, making a total sale of American cotton of only $10,035,000$ bales in 1938-39, compared with 14,677,000 bales in 1928-29 and $10,074,000$ bales in 1900.

The markets for American cotton have been vastly changed during the past ten years. During 1938-39 New England and Europe furnished markets for only 28.6 per cent of the cotton consumed in and exported from the United States, compared with fifty per cent in 1929, seventy-six per cent in 1900, and ninety-seven per cent in 1870.
The one bright spot of the cotton situation for the cotton growing South is the continued rise in the ability of the region to furnish a market for its own cotton. During 1938-39 the cotton growing states consumed fifty-seven per cent of all the cotton consumed in the United States and exported from the United States. The cotton growing South is now its own biggest market for cotton. In the course of one hundred years the cotton states have grown from a 70,000 -bale cotton market to almost one hundred times that, or a $7,000,000$-bale market.

## Causes of Shifting Markets

What have been the causes which have brought about these far-reaching changes in markets for the South's major crop, cotton? Many forces and factors have doubtless played a part in the wide dispersion of cotton manufacturing over the world during the nearly two centuries of its existence as a mechanized industry. At the time of the invention of the basic machinery for the mechanical manufacture of cotton in England in the latter half of the eighteenth century, climatic factors were of vital importance in the location of cotton mills because they had to be in a humid climate. Nearness to iron and steel industries, power resources, and accumulations of capital were all vital forces and conditions in locating cotton factories in the early days of the industry.

During the last fifty years, inventions and business organization have largely freed the industry from the dominance of climatic factors, of capital, of power and other factors as location determinants except as they influence costs of production and distribution.

The necessity of locating the cotton textile industry in areas of lowest costs of production has been the
major force during the last fifty years in causing the rise and rapid growth of the industry in southern Europe, the South in the United States, and more recently in the Orient, Japan, India, and China, as well as its decline in New England and Great Britain.

The powerful, persistent pressure of lower costs has occasionally been checked or stimulated in particular countries by governmental policies such as the provision of tariff protection for home markets; and in some instances bounties or their equivalents on exports of cotton manufactures have modified the broad pattern of the world industry, but have not changed it fundamentally.

The major item in the cost of manufacturing cotton is labor. The low wage areas of the world are, therefore, the great centers of cotton manufacture now, and the growth of concentration in these areas has been especially pronounced since 1918. Indeed, the cotton spinning spindles of the Orient have increased nearly two hundred per cent since the close of the first World War. Cotton manufacturing in Italy and the cotton growing states of the United States has likewise increased at the expense of New England in the United States and of the United Kingdom.

Fundamental changes in the economic conditions in major cotton consuming countries and the adoption of many effective devices for controlling trade such as quotas, exchange controls, and bilateral trade agreements, may cause still further important changes in markets for American cotton. In view of the many controls now being used and the great increase in the volume of cotton grown in foreign countries, American cotton must not only meet with these cottons on a competitive price quality basis, but on what may be even more important, on an equitable commodity trade basis. It seems certain now that exports of American cotton during the current cotton year will be the lowest for about seventy years, and the prospect for regaining normal volume of exports in the near future is very poor.
A. B. Cox.

COTTON BALANCE SHEET FOR THE UNITED STATES AS OF OCTOBER 1


## EMPLOYMENT AND PAY ROLLS IN TEXAS <br> SEPTEMBER, 1940

|  | Estimated Number of Workers Employed Employed | $\begin{gathered} \text { Perce } \\ \text { from } \\ \text { August } \\ 1940 \end{gathered}$ |  | Estimated <br> $\underset{\text { Weekly }}{\text { Amount of }}$ <br> Pay Roll | (ers $\begin{gathered}\text { Perce } \\ \text { from } \\ \text { August } \\ \text { 1940 }\end{gathered}$ | Change from Septembe 1939 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MANUFACTURING |  |  |  |  |  |  |
| All Manufacturing Industries | 137,963 | $+2.7$ | + 5.9 | \$2,800,438 | + 5.9 | +11.3 |
| Food Products |  |  |  |  |  |  |
| Baking | 6,894 | + 4.4 | $+8.3$ | 150,052 | + 1.7 | +13.7 |
| Carbonated Beverages | 3,271 | $-2.6$ | + 8.7 | 77,252 | - 0.2 | + 15.5 |
| Confectionery | 661 | +11.8 | -9.3 | 6,781 | +18.4 | - 7.2 |
| Flour Milling | 1,760 | +10.9 | +17.7 | 38,524 | +14.0 | + 12.6 |
| Ice Cream | 1,113 | + 1.0 | +27.2 | 18,983 | + 0.6 | +24.5 |
| Meat Packing | 4,142 | + 5.2 | + 1.7 | 95,983 | + 4.9 | + 2.6 |
| Textiles |  |  |  |  |  |  |
| Cotton Textile Mills | 6,141 | $-0.8$ | $+5.2$ | 92,043 | $+6.1$ | +28.0 |
| Men's Work Clothing | 3,692 | + 4.8 | -10.7 | 41,192 | + 16.5 | - 2.3 |
| Forest Products |  |  |  |  |  |  |
| Furniture | 1,751 | + 7.6 | - 5.2 | 44,861 | +13.7 | + 8.7 |
| Planing Mills | 1,987 | + 0.6 | + 2.2 | 35,861 | + 5.4 | (1) |
| Saw Mills | 17,026 | + 5.6 | +20.8 | 230,135 | +11.6 | +36.7 |
| Paper Products |  | + 0.4 | + 9.9 |  | + 0.4 | + 0.3 |
| Printing and Publishing |  |  |  |  |  |  |
| Commercial Printing- | 2,014 | $-11.2$ | -10.9 | 46,699 | $-8.3$ | $-10.4$ |
| Newspaper Publishing | 4,507 | + 0.6 | - 0.5 | 120,971 | + 4.6 | + 0.1 |
| Chemical Products |  |  |  |  |  |  |
| Cotton Oil Mills | 3,562 | + 39.5 | +37.3 | 38,825 | + 42.7 | +31.7 |
| Petroleum Refining | 20,270 | + 0.4 | $-1.2$ | 685,310 | + 4.2 | + 5.7 |
| Stone and Clay Products |  |  |  |  |  |  |
| Brick and Tile | 2,004 | $-2.2$ | $+0.7$ | 27,115 | + 2.4 | +13.1 |
| Cement | 1,060 | + 3.5 | $-1.8$ | 25,961 | + 6.6 | $-6.5$ |
| Iron and Steel Products |  |  |  |  |  |  |
| Foundries and Machine Shops | 10,704 | $-2.0$ | + 6.0 | 285,193 | $-0.5$ | + 9.0 |
| Structural and Ornamental Iron. | 2,089 | + 2.9 | +19.3 | 41,350 | + 6.0 | +28.0 |
| NONMANUFACTURING |  |  |  |  |  |  |
| Crude Petroleum Production | 30,896 | $-0.7$ | ${ }^{(1)}$ | 953,188 | $-3.2$ | $-4.2$ |
| Quarrying | ${ }_{\text {(2) }}$ | + 0.9 | + 1.2 | (2) | + 2.6 | + 9.9 |
| Public Utilities | (2) | - 1.9 | + 2.6 | ${ }^{(2)}$ | - 4.0 | + 5.5 |
| Retail Trade | 191,403 | + 6.4 | + 7.8 | 3,206,628 | + 6.6 | + 8.0 |
| Wholesale Trade | 58,190 | + 0.4 | - 1.3 | 1,910,356 | + 5.4 | +17.4 |
| Dyeing and Cleaning. | 2,478 | - 0.2 | - 5.2 | 36,752 | + 7.7 | + 0.3 |
| Hotels | 13,947 | +0.8 | - 1.6 | 166,780 | $+^{(3)}$ | +10.0 |
| Power Laundries.. | 9,845 | + 0.1 | + 2.7 | 124,829 | $-0.2$ | + 6.4 |

CHANGES IN EMPLOYMENT AND PAY ROLLS IN SELECTED CITIES

|  | Employment Percentage Change |  | Pay Rolls <br> Percentage Change |  |  | Employment Percentage Change |  | Pay Rolls <br> Percentage Change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Aug. 1940 |  | Aug. 1940 | Sept. 1939 |  | Aug. 1940 |  | Aug. 1940 |  |
|  | ${ }^{\text {to }}$ | to to ${ }_{\text {cept. }} 1940$ | $\begin{aligned} & \text { to } \\ & \text { Sept. } 1940 \end{aligned}$ | Sept. ${ }_{\text {to }} 1940$ |  | ${ }^{\text {to }}$ | to 1940 | ${ }^{\text {to }}$ | ${ }_{\text {to }}$ |
|  | Sept. 1940 | Sept. 1940 | Sept. 1940 | Sept. 1940 |  | Sept. 1940 | Sept. 1940 | Sept. 1940 | Sept. 1940 |
| Abilene | - 2.5 | -13.6 | - 0.9 | - 1.5 | Galveston | $+4.7$ | - 12.2 | +12.7 | + 3.0 |
| Amarillo | $+0.9$ | $+29.8$ | $+3.5$ | +48.9 | Houston | $+3.4$ | $+0.8$ | + 4.0 | + 5.4 |
| Austin | +16.7 | + 6.4 | $+11.6$ | + 6.0 | Port Arthur | + 0.6 | + 1.1 | + 3.2 | +10.1 |
| Beaumont | + 3.2 | $+3.2$ | + 9.0 | $+14.3$ | San Antonio | - 1.3 | - 2.1 | + 0.3 | + 2.8 |
| Dallas | $+6.5$ | $+2.0$ | +11.1 | +10.2 | Sherman | $+6.0$ | $+20.4$ | + 4.3 | +59.5 |
| El Paso | $+1.4$ | +10.9 | + 5.1 | $+25.6$ | Waco | + 7.3 | $+2.1$ | +13.4 | + 6.4 |
| Fort Worth | - 0.9 | - 0.7 | + 2.8 | + 2.7 | Wichita Falls | - 5.5 | - 9.0 | - 2.7 | + 6.8 |
|  |  |  |  |  | STATE .----------- | + 2.4 | + 2.3 | + 4.3 | + 7.7 |

## ESTIMATED NUMBER OF EMPLOYEES IN NONAGRICULTURAL BUSINESS AND GOVERNMENT ESTABLISHMENTS ${ }^{(1)}$

| January - $\quad 941,000$ |  |
| :---: | :---: |
|  |  |
| February $-\square-\quad 944,000$March $-\quad-\quad-\quad-\quad-\quad-\quad-\quad-\quad-\quad-\quad-\quad-\quad-\quad, 000$ |  |
| April | 954,000 |


| May | 967,000 |
| :--- | ---: |
| June |  |
| July $-\quad 96,000$ |  |
| August (revised) $-\quad 900000$ |  |
| September (preliminary) $-\quad-\quad 963,000$ |  |
| $-\quad-\quad 979,000$ |  |

[^0]BUILDING PERMITS


## TEXAS CHARTERS



SEPTEMBER RETAIL SALES OF INDEPENDENT STORES IN TEXAS

|  | Number of Firms Reporting | $\begin{aligned} & \text { Percentage } \\ & \text { Dollar } \\ & \text { Sept. } 1940 \\ & \text { from } \\ & \text { Sept. } 1939 \end{aligned}$ | Change in <br> Sales <br> Sept. 1940 <br> from <br> Aug. 1940 | Number of Firms Reporting |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TOTAL TEXAS 1, | 1,066 | + 3.4 | + 6.8 | 1,008 | + 5.0 |
| TEXAS STORES ${ }^{\text {a }}$ |  |  |  |  |  |
| GROUPED BY |  |  |  |  |  |
| PRODUCING |  |  |  |  |  |
| AREAS: |  |  |  |  |  |
| DISTRICT 1-N | - 61 | - 2.2 | - 9.4 | 57 | + 6.9 |
| Amarillo --- | - 13 | + 0.7 | + 2.1 | 12 | + 7.2 |
| Pampa | 8 | - 6.4 | -27.4 | 7 | +13.6 |
| Plainview | 12 | - 2.9 | - 9.1 | 11 | + 9.4 |
| All Others | 28 | - 2.2 | - 6.3 | 27 | - 3.7 |
| DISTRICT 1-S | - 15 | + 4.1 | - 5.5 | 14 | +13.7 |
| Lubbock --- | - 5 | +14.3 | -15.0 | 4 | +13.7 |
| All Others--- | - 10 | -16.1 | +35.4 | 10 | +13.5 |
| DISTRICT 2 | - 86 | + 0.01 | + 9.1 | 81 | - 1.1 |
| Abilene-- | - 13 | - 6.0 | +30.2 | 13 | - 4.0 |
| Vernon | 6 | + 9.7 | + 8.7 | 5 | + 4.5 |
| Wichita Falls | ¢ 13 | + 4.7 | + 0.1 | 11 | + 4.4 |
| All Others - | - 54 | - 1.8 | + 8.4 | 52 | - 4.0 |
| DISTRICT 3--- | - 41 | +11.8 | +19.5 | 40 | + 4.4 |
| Breckenridge | - 7 | -6.6 | +14.1 | 7 | $-6.1$ |
| Brownwood | - 7 | + 17.1 | +29.5 | 7 | - 0.2 |
| All Others - | - 27 | + 12.8 | +18.6 | 26 | + 6.2 |
| DISTRICT 4--- | - 247 | + 4.1 | + 7.6 | 235 | + 6.1 |
| Cleburne-- | - 7 | + 3.6 | +11.9 | 6 | + 5.6 |
| Corsicana | - 7 | - 1.3 | +47.0 | 6 | + 5.7 |
| Dallas | 38 | + 9.8 | +13.3 | 37 | + 5.7 |
| Denison | 9 | +10.8 | - 8.3 | 9 | +18.2 |
| Fort Worth | -- 50 | + 1.2 | + 2.7 | 47 | + 8.6 |
| Sherman --- | - | - 3.1 | - 3.6 | 6 | +13.9 |
| Temple | 8 | -12.4 | +24.6 | 8 | - 1.5 |
| Waco | 29 | - 5.1 | + 9.0 | 27 | + 6.2 |
| All Others | - 93 | - 0.5 | - 5.7 | 89 | + 0.5 |
| DISTRICT 5-.. | - 101 | - 0.4 | + 5.6 | 96 | + 4.9 |
| Bryan. | 6 | - 15.3 | + 0.4 | 6 | - 1.0 |
| Longview --. | - 7 | - 9.6 | +25.1 | 4 | +13.5 |
| Marshall - | - 7 | +11.9 | +11.5 | 7 | +3.3 +3.5 |
| Palestine | 5 | - 5.0 | + 0.5 | 5 | + 6.1 |
| Tyler | 12 | + 1.0 | +9.4 | 12 | + 4.6 |
| All Others - - | -- 64 | + 0.8 | + 3.4 | 62 | + 5.0 |
| DISTRICT 6 | - 39 | + 4.5 | + 15.1 | 37 | + 5.8 |
| El Paso --- | 23 | + 5.4 | +16.5 | 23 | + 6.0 |
| All Others- | - 16 | - 4.5 | + 0.6 | 14 | + 0.9 |
| DISTRICT 7 --- | - 56 | - 6.2 | $+\quad 9.0$ | 53 | + 2.4 |
| Brady | -- 8 | -13.5 | +11.9 | 6 | $\begin{array}{r}\text { a } \\ -9.7 \\ \hline\end{array}$ |
| San Angelo - | - 9 | - 0.7 | +22.8 | 9 | + 3.1 |
| All Others.- | - 39 | $-9.6$ | -1.9 | 38 | + 2.6 |
| DISTRICT 8 --- | - 210 | + 0.9 | + 2.6 | 204 | + 3.7 |
| Austin | 24 | - 8.2 | +17.1 | 23 | - 0.2 |
| Beeville | 5 | -19.3 | -11.5 | 5 | -26.9 |
| Corpus Christ | 111 | - 5.5 | -15.1 | 11 | + 0.2 |
| Lockhart. - | - 7 | - 5.5 | +10.9 | 7 | -17.0 |
| San Antonio.- | -- 62 | +11.0 | - 1.6 | 61 | + 8.4 |
| San Marcos... | - 9 | +26.6 | - 6.8 | 9 | + + +8.3 |
| All Others | -- 92 | -4.3 | - 7.0 | 88 | + 2.7 |
| DISTRICT 9 | - 147 | + 6.6 | +10.9 | 134 | + 4.8 |
| Bay City -- | - 6 | +75.7 | +23.3 | 5 | +31.6 |
| Beaumont..- | - 18 | + 7.5 | +20.9 | 18 | + 3.7 +1.6 |
| Galveston | 18 | + 7.2 | $-18.4$ | 16 | + 5.2 |
| Houston | 48 | + 3.6 | +22.7 | 43 | + 2.3 $+\quad .3$ |
| Port Arthur-- | -- 16 | +21.9 | - 5.3 | 14 | +13.8 |
| Victoria - | - ${ }^{7}$ | + 0.3 | - 3.3 | 7 | - 2.0 |
| All Others - | - 34 | - 0.5 | -12.9 | 32 | + 7.9 +7 |
| DISTRICT 10 | -. 63 | +11.1 | -4.8 | 56 | + 2.1 |
| Brownsville -- | - 10 | - 6.2 | -11.0 |  | - 2.8 |
| Harlingen - | - 6 | +30.1 | - 5.0 | 5 | - 4.7 |
| Laredo | 6 | -13.0 | $-19.3$ | 5 | $-11.9$ |
| All Others-- | - 41 | +18.4 | + 2.3 | 38 | + 9.8 |

Note: Prepared from reports of independent retail stores to the Bureau of Business Research coöperating with the U.S. Bureau of the Census.

PURCHASES OF SAVINGS BONDS

|  | $\begin{gathered} \text { Sept. } \\ 1940 \end{gathered}$ |  | $\begin{gathered} \text { Sept. } \\ 1999 \end{gathered}$ | $\text { Jan. } \begin{gathered} \text { 1-Sept. } 1 \\ 1940 \end{gathered}$ | $\begin{aligned} & \text { Jan. 1-Sept. } 1 \\ & 1939 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Abilene _ \$ | 11,044 | \$ | 5,325 | \$ 231,679 | 155,457 |
| Amarillo | 24,225 |  | 22,069 | 314,775* |  |
| Austin | 63,956 |  | 25,538 | 547,012 | 309,525 |
| Beaumont | 7,444 |  | 29,325 | 427,118 | 381,414 |
| Big Spring | 2,925 |  | 3,619 | 86,588 | 69,751 |
| Brownsville | 693 |  | 7,969 | 66,132 | 79,013 |
| Dallas | 155,044 |  | 118,181 | 2,162,814 | 1,983,281 |
| Del Rio | 94 |  | 488 | 15,714 | 6,245 |
| Denison | 7,669 |  | 1,406 | 109,802 | 92,137 |
| Denton | 49,219 |  | 619 | $\dagger$ | 42,827* |
| El Paso | 74,231 |  | 70,144 | 1,036,164 | 671,212 |
| Fort Worth | 63,225 |  | 70,763 | 793,122 | 972,152 |
| Galveston | 29,925 |  | 23,456 | 436,200 | 328,575 |
| Gladewater | 1,931 |  | 12,206 | 71,643 | 80,815 |
| Kenedy | 375 |  | 19 | 11,363 | 7,163 |
| Kilgore | 2,963 |  | 1,313 | 89,420 | 90,751 |
| Longview | 11,044 |  | 4,106 | 215,551 | 197,102 |
| Marshall | 1,069 |  | 8,325 | 147,075 | 57,076 |
| McAllen | 2,513 |  | 6,938 | 64,220 | 54,151 |
| Palestine | 3,188 |  | 3,150 | $\dagger$ | 118,125* |
| Pampa | 4,669 |  | 3,450 | $\dagger$ | 31,689* |
| Paris | 4,819 |  | 5,213 | $\dagger$ | 101,457* |
| Plainview | 7,894 |  | 694 | 48,395 | 55,314 |
| Port Arthur | 9,281 |  | 6,038 | 252,700 | 169,520 |
| Odessa | 656 |  | 3,375 | 33,768 | , |
| San Angelo - | 4,706 |  | 2,288 | 143,268 | 108,563 |
| San Antonio --. | 92,888 |  | 73,706 | 1,441,632 | 1,252,914 |
| San Benito | 3,206 |  | 3,431 | 37,182 | 22,388 |
| Sherman | 5,400 |  | 1,388 | 79,013 | 67,277 |
| Temple | 3,094 |  | 2,531 | 64,352* | + |
| Tyler | 2,663 |  | 9,150 | 228,656 | 221,137 |
| Waco | 19,125 |  | 33,900 | 541,066 | 407,905 |
| Wichita Falls | 14,475 |  | 13,969 | 397,765 | 338,283 |
| TOTAL _ \$ | 685,653 | \$ | 574,092 | \$9,745,666 | \$8,179,121 |

*Not included in total.
$\dagger$ Not available.

## SEPTEMBER, 1940, CARLOAD MOVEMENT OF POULTRY AND EGGS

Shipments from Texas Stations
Live Cars of Poultry
Chickens Turkeys Chicssed Cars of Eggs $\dagger$ Chickens Turkeys Chickens Turkeys Sept. Sept. Sept. Sept. Sept. Sept. Sept. Sept. Sept. Sept. $\begin{array}{llllllllll}1940 & 1939 & 1940 & 1939 & 1940 & 1939 & 1940 & 1939 & 1940 & 1939\end{array}$

## TOTAL

$\qquad$ Intrastate


Origin Receipts at Texas Stations

## TOTAL

 $-\quad 17.515 .0$ Intrastate Interstate $-\quad-\quad-\quad-\quad--$[^1]
## SEPTEMBER RETAIL SALES OF INDEPENDENT STORES IN TEXAS

| TE | ptember, |  |  | Year 1940 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number Firms Reporting | Percentage from Sept. 1939 | $\begin{aligned} & \text { Change } \\ & \text { Sept. } 1940 \\ & \text { from } \\ & \text { Aug. } 1940 \end{aligned}$ | Number of Firms Re. porting |  |
|  | 1,066 | + 3.4 | + 6.8 | 1,008 | + 5.0 |
| STORES GROUPED BY LINE OF GOODS CARRIED: |  |  |  |  |  |
| APPAREL* | 104 | + 6.2 | +25.5 | 101 | + 2.4 |
| Family Clothing Stores | 24 | + 3.1 | +29.9 | 24 | + 2.1 |
| Men's and Boys' Clothing Stores | 35 | + 4.6 | + 9.5 | 33 | - 1.5 |
| Shoe Stores | 16 | + 3.7 | +48.4 | 16 | + 2.9 |
| Women's Specialty Shops | 28 | + 7.8 | +31.4 | 27 | + 4.7 |
| AUTOMOTIVE* | 77 | +10.2 | -18.2 | 74 | +11.8 |
| Motor Vehicle Dealers | 75 | +10.3 | -18.5 | 72 | +11.4 |
| COUNTRY GENERAL | 105 | + 0.3 | $+3.1$ | 98 | + 4.2 |
| DEPARTMENT STORES | 55 | + 4.6 | +25.7 | 52 | + 4.8 |
| DRUG STORES | 118 | + 1.2 | + 1.4 | 108 | + 4.3 |
| DRY GOODS AND GENERAL MERCHANDISE | 23 | - 6.2 | +24.3 | 22 | - 0.2 |
| FILLING STATIONS | 43 | - 6.4 | $-10.0$ | 42 | - 5.1 |
| FLORISTS | 25 | - 2.1 | - 0.2 | 24 | + 6.9 |
| FOOD* | 184 | $-9.1$ | - 6.6 | 172 | - 1.6 |
| Grocery Stores | 60 | - 9.9 | - 6.9 | 55 | - 0.1 |
| Grocery and Meat Stores | 118 | - 9.0 | - 6.6 | 111 | - 2.2 |
| FURNITURE AND HOUSEHOLD | 58 | - 0.8 | + 0.4 | 55 | + 3.3 |
| Furniture Stores | 46 | + 1.4 | + 2.6 | 43 | + 3.4 |
| Household Appliance Stores | 7 | $-15.1$ | $-22.1$ | 7 | + 6.3 |
| Radio Stores. | 5 | + 0.4 | +31.0 | 5 | - 2.9 |
| JEWELRY | 38 | + 12.7 | +10.9 | 35 | + 3.1 |
| LUMBER, BUILDING, AND HARDWARE* | 198 | - 2.4 | - 2.5 | 189 | + 0.8 |
| Farm Implement Dealers | 12 | + 0.8 | -5.2 | 12 | $+11.4$ |
| Hardware Stores | 58 | - 3.5 | + 9.3 | 56 | + 7.2 |
| Lumber and Building Material Dealers | 126 | - 1.2 | - 5.3 | 119 | - 1.1 |
| RESTAURANTS | 25 | - 0.6 | - 5.0 | 23 | - 0.3 |
| ALL OTHER STORES | 13 | -18.4 | $-1.7$ | 13 | + 5.8 |

TEXAS STORES GROUPED ACCORDING TO POPULATION OF CITY:
All Stores in Cities of

| Over 100,000 Population | 221 | + 6.4 | + 11.0 | 211 | + 6.0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 50,000-100,000 Population | 105 | - 0.6 | + 6.6 | 98 | + 4.1 |
| 2,500-50,000 Population | 427 | + 1.7 | + 1.7 | 400 | + 3.5 |
| Less than 2,500 Populat | 313 |  |  |  | + 3.5 |

*Group total includes kinds of business other than the classifications listed.
Note: Prepared from reports of independent retail stores to the Bureau of Business Research coöperating with the United States Bureau of the Census.

## PETROLEUM

Daily Average Production
(In Barrels)

|  | Sept. 1940 | Sept. 1939 | Aug. 1940 |
| :---: | :---: | :---: | :---: |
| Coastal Texas* | 219,650 | 232,750 | 187,950 |
| East Central Texas | 77,450 | 90,900 | 71,000 |
| East Texas | 393,200 | 410,150 | 374,900 |
| North Texas | 106,200 | 85,300 | 92,700 |
| Panhandle | 77,650 | 59,100 | 65,500 |
| Southwest Texas | 222,300 | 232,300 | 178,550 |
| West Central Texas | 30,500 | 32,450 | 28,400 |
| West Texas | 233,400 | 255,400 | 194,450 |
| STATE | 1,360,350 | 1,398,350 | 1,193,450 |
| UNITED STATES | 3,673,050 | 3,497,550 | 3,500,850 |
| Imports | 202,643 | 153,143 | 209,429 |

[^2]

POSTAL RECEIPTS

|  |  | Sept. <br> 1940 |  | $\begin{aligned} & \text { Sept. } \\ & 1999 \end{aligned}$ |  | $\begin{aligned} & \text { Aug. } \\ & \hline \end{aligned}$ |  | $\begin{gathered} \text { Year } \\ \text { to Date } \\ \text { tate } \end{gathered}$ |  | $\begin{gathered} \text { Year } \\ \text { to Date } \\ 1939 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Abilene | \$ | 16,528 | \$ | 17,248 | \$ | 6,115 | \$ | 155,263 | \$ | 146,363 |
| Amarillo |  | 30,574 |  | 30,395 |  | 30,445 |  | 302,251 |  | 275,376 |
| Austin |  | 70,530 |  | 71,986 |  | 80,011 |  | 633,191 |  | 612,151 |
| Ballinger |  | 1,692 |  | 1,686 |  | 1,662 |  |  |  |  |
| Beaumont |  | 26,435 |  | 25,703 |  | 27,799 |  | 240,310 |  | 234,451 |
| Big Spring |  | 5,542 |  | 5,520 |  | 5,930 |  | 54,002 |  | 51,444 |
| Brownsville |  | 5,265 |  | 4,842 |  | 5,079 |  | 52,193 |  | 51,272 |
| Childress |  | 2,352 |  | 2,278 |  | 2,630 |  | 22,687 |  | 22,974 |
| Coleman |  | 2,090 |  | 2,037 |  | 2,123 |  | * |  |  |
| Corpus Christi |  | 28,762 |  | 23,915 |  | 31,342 |  | 252,456 |  | 220,883 |
| Corsicana |  | 5,340 |  | 5,148 |  | 5,326 |  | 5,340 |  | 47,947 |
| Dallas |  | 364,695 |  | 376,110 |  | 374,310 |  | 3,270,260 |  | 2,809,685 |
| Del Rio. |  | 3,807 |  | 4,496 |  | 3,314 |  | 36,121 |  | 35,416 |
| Denison |  | 5,827 |  | 5,135 |  | 6,237 |  | 52,643 |  | 47,852 |
| Denton |  | 6,534 |  | 6,988 |  | 5,617 |  | 65,072 |  | 62,207 |
| El Paso |  | 47,625 |  | 43,139 |  | 43,728 |  | 407,419 |  | 392,357 |
| Fort Worth |  | 152,437 |  | 144,998 |  | 139,736 |  | 1,282,887 |  | 1,226,503 |
| Galveston |  | 29,547 |  | 28,078 |  | 27,904 |  | 273,586 |  | 256,723 |
| Gladewater |  | 2,368 |  | 2,465 |  | 2,449 |  | 24,483 |  | 24,306 |
| Graham |  | 2,254 |  | 1,978 |  | 2,152 |  | 21,204 |  | 20,639 |
| Houston |  | 245,989 |  | 234,913 |  | 246,361 |  | 2,276,626 |  | 2,252,105 |
| Jacksonville |  | 2,968 |  | 2,763 |  | 2,961 |  | 27,804 |  | 29,047 |
| Kenedy |  | 1,197 |  | 1,125 |  | 1,295 |  | 11,292 |  | 10,974 |
| Kilgore |  | 5,383 |  | 5,082 |  | 5,579 |  | 52,451 |  | 51,534 |
| Longview |  | 7,844 |  | 8,322 |  | 8,928 |  | 81,662 |  | 81,228 |
| Lubbock |  | 22,982 |  | 23,642 |  | 18,700 |  | 170,242 |  | 158,834 |
| Lufkin |  | 4,472 |  | 4,393 |  | 4,086 |  | 41,475 |  | 39,577 |
| McAllen |  | 3,914 |  | 3,710 |  | 3,918 |  | 46,522 |  | 43,677 |
| Marshall |  | 5,869 |  | 5,650 |  | 6,473 |  | 55,613 |  | 53,173 |
| Odessa |  | 5,272 |  | 4,716 |  | 5,451 |  | 55,079 |  | 48,323 |
| Palestine |  | 4,773 |  | 4,882 |  | 6,539 |  | 48,102 |  | 47,453 |
| Pampa |  | 6,321 |  | 5,836 |  | 6,335 |  | 62,126 |  | 55,248 |
| Paris |  | 6,527 |  | 6,185 |  | 6,527 |  | * |  | * |
| Plainview |  | 3,376 |  | 3,941 |  | 3,913 |  | 35,266 |  | 35,351 |
| Port Arthur |  | 11,936 |  | 11,238 |  | 13,704 |  | 121,727 |  | 115,031 |
| San Angelo |  | 11,500 |  | 11,416 |  | 11,332 |  | 105,463 |  | 103,018 |
| San Antonio |  | 122,965 |  | 114,382 |  | 123,488 |  | 1,135,203 |  | 1,066,859 |
| San Benito |  | 2,943 |  | 2,515 |  | 2,737 |  | * |  | * |
| Sherman. |  | 7,610 |  | 7,470 |  | 6,839 |  | 67,225 |  | 66,839 |
| Snyder |  | 1,362 |  | 1,240 |  | 1,325 |  | 12,705 |  | 12,186 |
| Sweetwater |  | 4,463 |  | 4,831 |  | 4,351 |  | 43,772 |  | 43,419 |
| Temple |  | 6,714 |  | 6,734 |  | 6,647 |  | 60,754 |  | 59,443 |
| Tyler |  | 15,168 |  | 14,110 |  | 14,449 |  | 138,604 |  | 136,478 |
| Waco |  | 33,889 |  | 30,660 |  | 32,094 |  | 297,126 |  | 294,866 |
| Wichita Falls |  | 23,154 |  | 22,348 |  | 23,159 |  | 212,731 |  | 203,084 |
| TOTAL |  | 1,378,794 |  | 1,346,249 |  | 1,381,100 |  | 12,354,456 |  | 11,550,996 |

[^3]CEMENT (In Thousands of Barrels)


[^4]
## SEPTEMBER CREDIT RATIOS IN TEXAS RETAIL STORES

## (Expressed in Per Cent)

|  | Number of Stores Reporting | Ratio of Credit Sales to Net Sales $1940 \quad 1939$ |  | $\begin{aligned} & \text { Ratio of } \\ & \text { Collections to } \\ & \text { Outstandings } \\ & 1940 \quad 1939 \end{aligned}$ |  | $\begin{aligned} & \text { Ratio of } \\ & \text { Credit Salaries } \\ & \text { to Credit Sales } \\ & 1940 \quad 1939 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Stores | 65 | 68.7 | 67.8 | 37.0 | 37.3 | 0.8 | 0.9 |
| Stores Grouped by Cities: |  |  |  |  |  |  |  |
| Austin. | 5 | 63.6 | 62.4 | 43.7 | 45.5 | 1.0 | 0.9 |
| Beaumont | 3 | 72.6 | 73.2 | 35.9 | 39.2 | 1.0 | 1.3 |
| Dallas | 10 | 76.1 | 74.0 | 37.5 | 35.9 | 0.6 | 0.8 |
| El Paso | 3 | 61.5 | 61.4 | 34.4 | 34.4 | 1.0 | 1.0 |
| Fort Worth | 5 | 67.6 | 65.6 | 36.2 | 37.5 | 0.9 | 1.0 |
| Houston. | 7 | 66.0 | 64.4 | 37.9 | 38.9 | 1.0 | 1.0 |
| San Antonio | 5 | 61.0 | 65.2 | 41.2 | 45.2 | 0.9 | 0.7 |
| Waco | 5 | 67.1 | 63.3 | 28.0 | 28.7 | 1.1 | 1.1 |
| All Others | 22 | 61.0 | 61.9 | 36.1 | 37.1 | 1.4 | 1.3 |
| Stores Grouped According to Type of Store: |  |  |  |  |  |  |  |
| Department Stores (Annual Volume Over $\$ 500,000$ ) | 19 | 68.0 | 67.6 | 39.3 | 39.4 | 0.8 | 0.8 |
| Department Stores (Annual Volume Under $\$ 500,000$ ) | 11 | 61.4 | 62.6 | 33.4 | 34.6 | 1.5 | 1.4 |
| Dry Goods-Apparel Stores | 5 | 64.8 | 64.1 | 37.0 | 39.4 | 1.6 | 1.4 |
| Women's Specialty Shops | 15 | 73.7 | 71.1 | 32.9 | 30.4 | 0.5 | 0.8 |
| Men's Clothing Stores | 15 | 67.5 | 66.1 | 34.2 | 35.4 | 1.3 | 1.4 |
| Stores Grouped According to Volume of Net Sales During 1939: |  |  |  |  |  |  |  |
| Over \$2,500,000 | 9 | 70.9 | 70.8 | 40.3 | 39.2 | 0.7 | 0.8 |
| \$2,500,000 down to \$1,000,000 | 10 | 63.6 | 61.5 | 40.1 | 40.8 | 1.0 | 0.9 |
| \$1,000,000 down to \$500,000 | 10 | 62.5 | 61.1 | 37.8 | 39.1 | 1.1 | 1.1 |
| \$500,000 down to \$100,000 | 25 | 66.7 | 65.0 | 36.1 | 38.3 | 1.3 | 1.3 |
| Less than \$100,000 | 11 | 61.1 | 60.7 | 36.1 | 36.6 | 2.6 | 3.1 |

Nors: The ratios shown for each year, in the order in which they appear from left to right, are obtained by the following computations: (1) Credit sales divided by net sales. (2) Collections during the month divided by the total accounts unpaid on the first of the month. (3) Salaries of the credit department divided by credit sales.

The data are reported to the Bureau of Business Research by Texas retail stores.

PERCENTAGE CHANGES IN CONSUMPTION OF ELECTRIC POWER

TEXAS COMMERCIAL FAILURES

| Sept., 1940 | Sept., 1940 | Year to date 1940 from |  | $\begin{aligned} & \text { Sept. } \\ & 1940 \end{aligned}$ | $\begin{aligned} & \text { Sept. } \\ & 1939 \end{aligned}$ | Aug. <br> 1940* | Year to Date 1940 | $\begin{gathered} \text { Year } \\ \text { to Date } \\ 1939 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\xrightarrow{\text { fept., }} 1939$ | Aug., 1940 | $1939$ | Number | 22 | 17 | 28 | 213 | 242 |
| + 7.2 | - 4.0 | + 9.5 | Liabilities $\dagger$ | \$334 | \$337 | \$822 | \$5,873 | \$3,981 |
| - 12.8 | $-2.0$ | $-9.0$ | Assets $\dagger$ | 192 | 103 | 407 | 5,389 | 3,022 |
| $+2.7$ | - 2.4 | $+5.7$ | Average Liab |  |  |  |  |  |
| + 5.2 | - 0.6 | $+5.1$ | per Failur | 15 | 20 | 29 | 28 | 16 |
| - 3.4 | - 2.4 | - 0.7 |  |  |  |  |  |  |

## SEPTEMBER SHIPMENTS OF LIVE STOCK CONVERTED TO A RAIL-CAR BASIS*

|  | Cattle |  | Calves |  | Hogs |  | Sheep |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1940 | 1939 | 1940 | 1939 | 1940 | 1939 | 1940 | 1939 | 1940 | 1939 |
| Total Interstate Plus Fort Worth $\uparrow$ | 3,874 | 4,797 | 1,931 | 2,151 | 756 | 668 | 2,290 | 1,976 | 8,851 | 9,592 |
| Total Intrastate Omitting Fort Worth | 218 | 463 | 76 | 98 | 15 | 32 | 313 | 359 | 622 | 952 |
| TOTAL SHIPMENTS | 4,092 | 5,260 | 2,007 | 2,249 | 771 | 700 | 2,603 | 2,335 | 9,473 | 10,544 |

TEXAS CAR-LOT* SHIPMENTS OF LIVE STOCK-JAN. 1-OCT. 1

|  | Cattle |  | Calves |  | Hogs |  | Sheep |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1940 | 1939 | 1940 | 1939 | 1940 | 1939 | 1940 | 1939 | 1940 | 1939 |
| Total Interstate Plus Fort Worth 1 | 31,223 | 38,617 | 8,997 | 10,274 | 6,278 | 6,692 | 9,095 | 8,484 | 55,593 | 64,067 |
| Total Intrastate Omitting Fort Worth | 3,280 | 5,911 | 779 | 1,158 | 176 | 390 | 562 | 1,140 | 4,797 | 8,599 |
| TOTAL SHIPMENTS | 34,503 | 44,528 | 9,776 | 11,432 | 6,454 | 7,082 | 9,657 | 9,624 | 60,390 | 72,666 |

*Rail-car Basis: Cattle, 30 head per car; calves, 60 ; hogs, 80 ; and sheep, 250.
Fort Worth shipments are combined with interstate forwardings in order that the bulk of market disappearance for the month may be shown.
Note: These data are furnished the United States Agricultural Marketing Service, U.S. Dept. of Agriculture by railway officials through more than 1,500 station agents, representing every live stock shipping point in the State. The data are compiled by the Bureau of Business Research.

BANKING STATISTICS

|  | Sept., 1940 |  |  | Sept., 1939 |  |  | Aug., 1940 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Dallas <br> District | United States |  | Dallas District | United States |  | Dallas | United |
| Debits to individual accounts |  | \$ 1,001* | \$41,056* | \$ | 801 | \$33,483 | \$ | 733 | \$28,841 |
| Condition of reporting member banks on- |  | October | 2, 1940 |  | September | 27, 1939 |  | Augu | 28, 1940 |
| Assets: |  |  |  |  |  |  |  |  |  |
| Loans and investments-total |  | 543 | 24,329 |  | 516 | 22,419 |  | 530 | 24,157 |
| Loans-total |  | 278 | 8,785 |  | 263 | 8,350 |  | 269 | 8,509 |
| Commercial, industrial, and agricultural loans |  | 184 | 4,630 |  | 173 | 4,229 |  | 177 | 4,463 |
| Open market paper |  | 2 | 297 |  | 2 | 316 |  | 2 | 299 |
| Loans to brokers and dealers in securities. |  | 2 | 446 |  | 2 | 533 |  | 2 | 363 |
| Other loans for purchasing or carrying securities |  | 14 | 460 |  | 14 | 510 |  | 14 | 467 |
| Real estate loans |  | 23 | 1,220 |  | 22 | 1,180 |  | 23 | 1,215 |
| Loans to banks |  | 1 | 41 |  |  | 35 |  | 1 | 40 |
| Other loans |  | 52 | 1,691 |  | 50 | 1,547 |  | 50 | 1,662 |
| Treasury Bills.. |  | 38 | 628 |  | 13 | 419 |  | 31 | 712 |
| Treasury Notes |  | 40 | 2,112 |  | 49 | 2,137 |  | 39 | 2,113 |
| U.S. Bonds |  | 85 | 6,540 |  | 80 | 5,881 |  | 85 | 6,562 |
| Obligations fully guaranteed by U.S. Gov't. |  | 48 | 2,582 |  | 55 | 2,232 |  | 48 | 2,582 |
| Other securities |  | 59 | 3,682 |  | 56 | 3,400 |  | 58 | 3,679 |
| Reserve with Federal Reserve Bank |  | 144 | 11,646 |  | 133 | 9,794 |  | 137 | 11,449 |
| Cash in vault |  | 11 | 485 |  | 12 | 486 |  | 12 | 508 |
| Balances with domestic banks |  | 287 | 3,307 |  | 271 | 3,018 |  | 281 | 3,201 |
| Other assets-net |  | 30 | 1,196 |  | 30 | 1,220 |  | 30 | 1,169 |
| Liabilities: |  |  |  |  |  |  |  |  |  |
| Demand deposits-adjusted |  | 499 | 21,152 |  | 456 | 18,333 |  | 487 | 21,053 |
| Time deposits |  | 135 | 5,359 |  | 136 | 5,231 |  | 135 | 5,340 |
| U.S. Government deposits. |  | 32 | 530 |  | 31 | 540 |  | 32 | 528 |
| Inter-bank deposits: |  |  |  |  |  |  |  |  |  |
| Domestic banks |  | 256 | 8,734 |  | 248 | 7,667 |  | 243 | 8,392 |
| Foreign banks |  | , | 678 |  | --- | 753 |  | 1 | 682 |
| Borrowings - |  |  | 1 |  |  | 1 |  |  | 1 |
| Other liabilities |  | 4 | 716 |  | 5 | 700 |  | 4 | 701 |
| Capital account |  | 88 | 3,793 |  | 86 | 3,712 |  | 88 | 3,787 |
| * |  |  |  |  |  |  |  |  |  |

## ANNOUNCEMENT

The Texas Statistical Council has announced a meeting for Friday, November 8, 1940, The University of Texas, Austin, Texas.

The primary purposes of the organization are set forth in the Constitution as adopted at the meeting in April of this year: "To formulate, adopt, and promote means which will result in the better distribution of reliable statistical material concerning the State of Texas; to bring about a greater utilization of the statistical material now being compiled by numerous governmental, educational, and private institutions; to assist in initiating and setting up new statistical research projects which are needed in a thorough analysis of

Texas resources; and to foster the practical application of these data to the commercial, agricultural, and industrial development of the State of Texas."

Since the use of statistical information is at present in greater demand than ever before those interested in or engaged in compiling or using statistical data are urged to attend this meeting.

The program for the November meeting includes a discussion of the general program and policies of the Council, a series of fifteen-minute talks by representatives of the statistical departments of various organizations, discussion of the report of the cotton committee, and a report on the petroleum industry.

## CONTENTS




[^0]:    *Does not include proprietors, firm members, officers of corporations, or other principal executives. Factory employment excludes also office, sales, technical, and professional personnel. These figures are subject to revision.
    ${ }^{(1)}$ No change.
    (3) Less available. $1 / 20$ of one per cent
    ${ }^{(4)}$ Not including self-employed persons, casual workers, or domestic servants, and exclusive of military and maritime personnel. These figures are furnished by the Bureau of Labor Statistics, U.S. Department of Labor.

    Prepared from reports from representative Texas establishments to the Bureau of Business Research coöperating with the United States Bureau of Labor Statistics.

[^1]:    *The destination above is the first destination as shown by the original waybill. Changes in destination brought about by diversion orders are not shown.
    $\dagger$ Powdered eggs and canned frozen eggs are converted to a shell egg equivalent. Note: These data are furnished the Agricultural Marketing Service, United States Department of Agriculture, by railroad officials through agents at all stations which originate and receive carload shipments of poultry and eggs. The data are compiled by the Bureau of Business Research.

[^2]:    *Includes Conroe.
    Note: From American Petroleum Institute.
    See accompanying map showing the oil producing districts of Texas.
    Gasoline sales as indicated by taxes collected by the State Comptroller were: August, 1940, 123,375,000 gallons; July, 1940, 117,729,000 gallons; August, 1939, 117,552,000 gallons.

[^3]:    *Not Available.
    Note: Compiled from reports from Texas Chamber of Commerce to the Bureau of Business Research.

[^4]:    Note: From U.S. Department of Interior, Bureau of Mines.

