

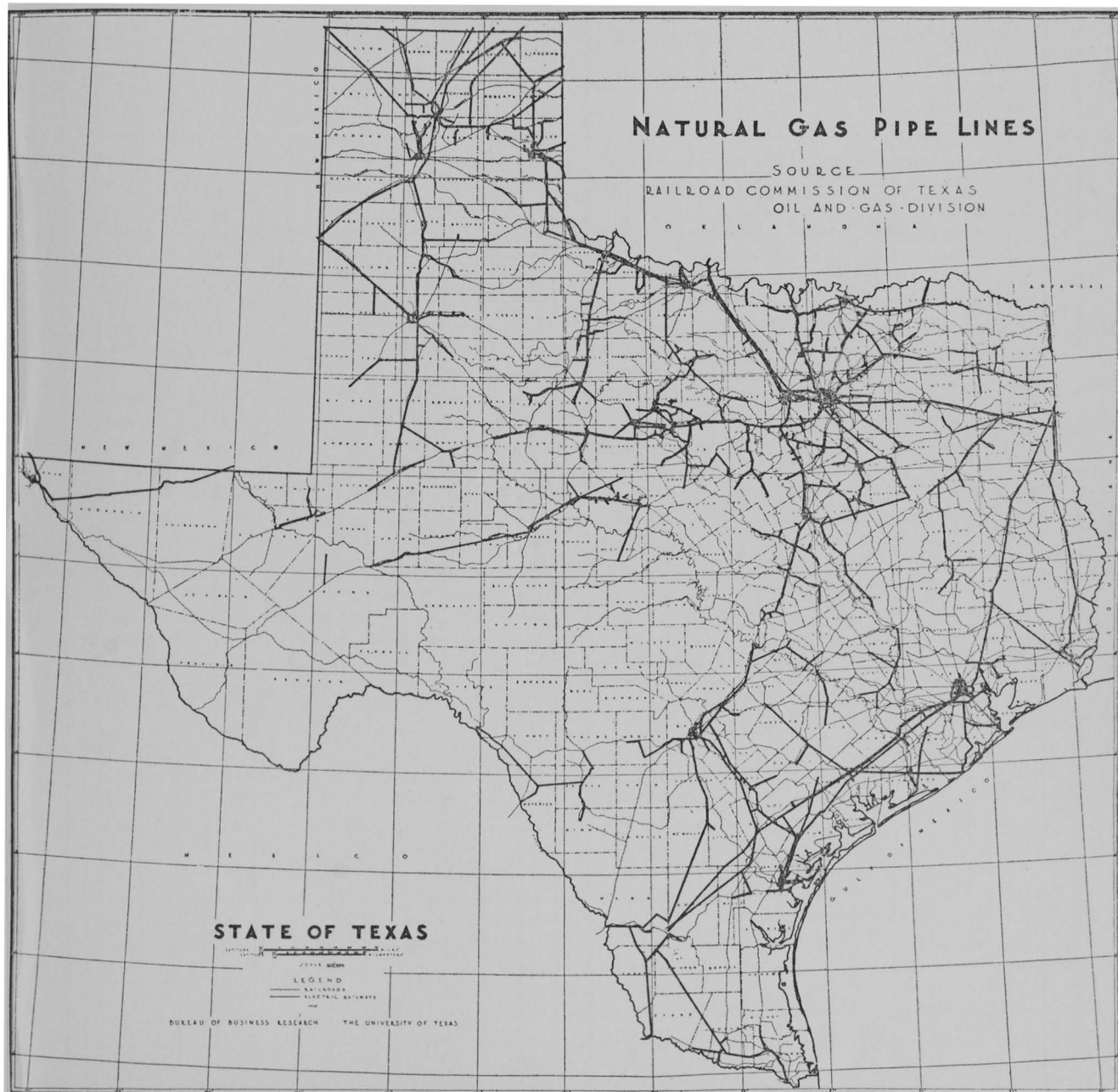
# TEXAS BUSINESS REVIEW

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## INDEXES OF BUSINESS ACTIVITY IN TEXAS

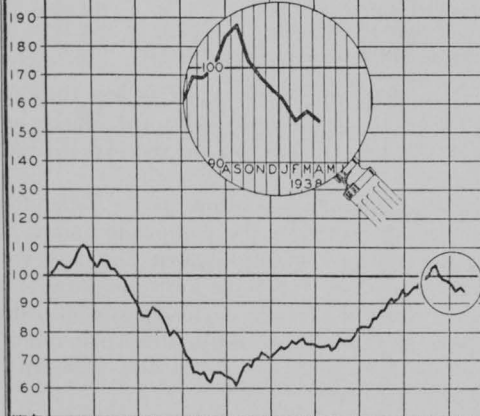
AVERAGE MONTH OF 1930 = 100 %

WEIGHT IN COMPOSITE INDEX  
 EMPLOYMENT — 25%  
 PAY ROLLS — 25%  
 DEPARTMENT STORE SALES — 10%  
 FREIGHT CARLOADINGS — 20%  
 CRUDE OIL RUNS — 5%  
 ELECTRIC POWER CONSUMPTION — 15%

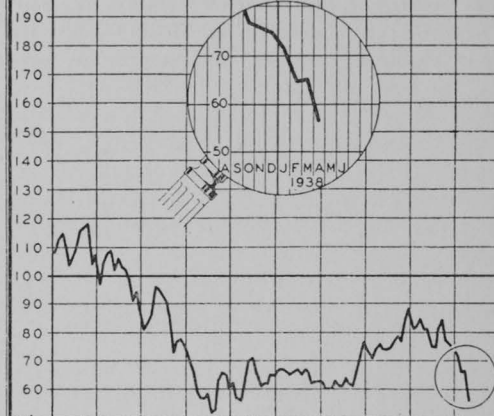
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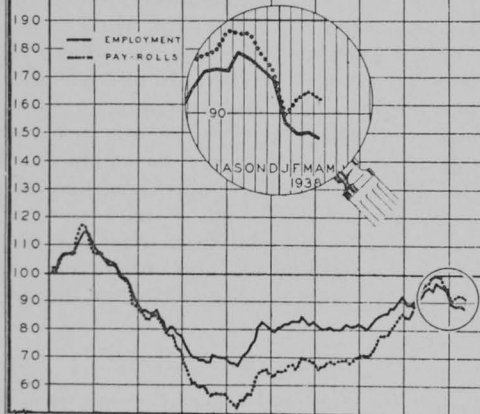
COMPOSITE INDEX OF BUSINESS ACTIVITY IN TEXAS



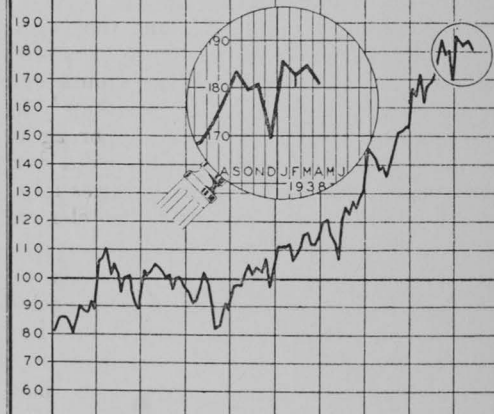
INDEX OF MISCL. FREIGHT CARLOADINGS IN SOUTHWESTERN DIST.



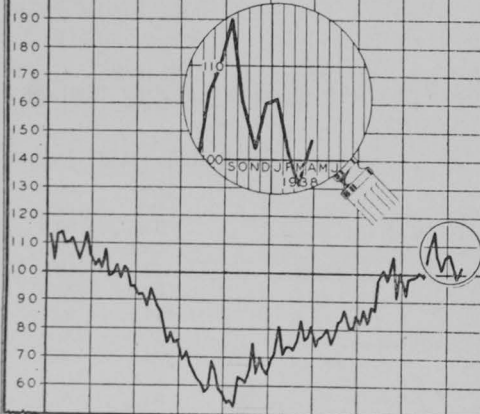
INDEX OF EMPLOYMENT AND PAY ROLLS IN TEXAS



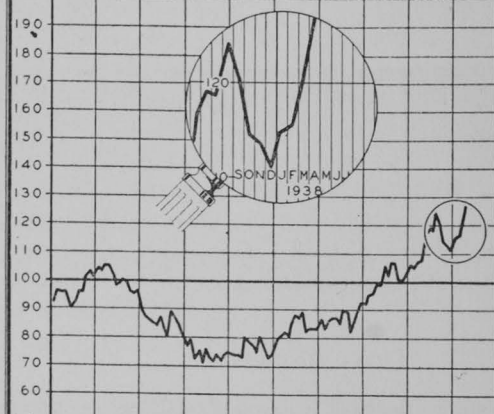
INDEX OF RUNS OF CRUDE OIL TO STILLS IN TEXAS



INDEX OF SALES OF TEXAS DEPARTMENT STORES



INDEX OF CONSUMPTION OF ELECTRIC POWER IN TEXAS



YEAR 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939

YEAR 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939

## Business Review and Prospect

Consensus of opinion among business analysts now is that business volumes in the country at large will contract somewhat further during the next three or four months and that a sustained upturn in industrial activity is not likely to occur until next fall. Should this expected business pattern materialize we shall by September have experienced a decline in business activity extending about eighteen months, and aggregate production during the first nine months of 1938 will have fallen more than 30 per cent under that of a year ago. Not only was the initial downswing from March, 1937, through December, 1937, virtually the sharpest on record except for 1907, but the nine months' trough would be one of the longest periods of approximate stability at depressed levels which the country has ever experienced. From present levels manufacturing pay rolls in the Nation at large will have to increase nearly fifty per cent before attaining the peak reached in 1937.

Whether business is to receive reassurance from the political angle at this time depends upon whether Congress adjourns at an early date. Of the four major pieces of legislation passed during the present session of Congress, three—the amendments to the Federal Housing Act, the Revenue Act of 1938, and the Naval Expansion Act—were designed to be business stimulants. Should such measures as the Wage Hours and the Government Reorganization bills be revived, however, as now seems possible, the political factor again would serve to depress business sentiment as it did during the winter months. The forthcoming Congressional primaries and fall elections will inject another element into the confused political picture.

The influence of reduced national income has not yet made itself seriously felt in the demand for non-durable consumer goods, but it would be surprising if this line of business activity, too, were not to become more seriously affected with the prolongation of the depression.

Farm income is substantially below a year ago although the volume of marketings has materially increased, thus reflecting the sharp drop in farm prices. Moreover, the current outlook for the forthcoming harvest is such that further weakness in prices of farm products, especially cash crops, is expected.

Barron's index of physical volume of business for the week ended May 14 declined to 53.4 per cent of normal from 53.7 the week before. This compares with 88.2 per cent a year ago and carries the index to the lowest point since the spring of 1933. This index is adjusted for seasonal variation, population growth, and standard of living.

### TEXAS BUSINESS

A further slight decline in Texas business occurred from March to April, but the rate of activity is still only moderately below what it was during April last in the following tabulation:

	April 1938	April 1937	March 1938
Composite .....	94.41	96.09	95.23
Employment .....	87.67	91.05	87.99
Pay Rolls .....	91.52	92.64	92.04
Miscellaneous Freight			
Carloadings .....	56.19	80.77	65.32
Runs of Crude Oil to Stills .....	181.66	161.68	185.22
Department Store Sales .....	102.32	98.54	97.25
Electric Power Consumption .....	127.05	107.97	121.12

The composite index for April is less than one point below the revised composite index for March and about one and one-half points below the April, 1937, composite index.

There was marked variation in the behavior of the various factors entering the composite index. For example, the indexes of employment and pay rolls show moderate recessions from the two comparable months; while miscellaneous freight carloadings declined sharply. As to runs of crude oil to stills, the April index showed a moderate decline from March but a sharp increase over April last year.

Contributing to the favorable comparison of the April index of department store sales with the two comparable periods was the fact that Easter fell in March last year whereas this year it came in April. As a consequence the March index this year was adversely affected and the April index was favorably affected after adjustment was made for seasonal variation.

Consumption of electric power was easily the most favorable element entering into the composite business index for the month. There was a substantial increase in this index over March and a sharp rise over April last year. This situation is in marked contrast to that existing in the country at large where electric power consumption is about ten per cent below that of a year ago.

### FARM CASH INCOME

Cash income from the sales of crops, livestock, and livestock products in Texas during April was sharply below both the preceding month and the corresponding month last year. The April index for the State also indicates a substantial decline when compared with the base period, 1923-32. The usual wide variation in the indexes of the several crop reporting districts is shown in the table below.

INDEX OF AGRICULTURAL CASH INCOME			
District	April 1938	April 1937	March 1938
1-N .....	54.0	59.9	107.7
1-S .....	93.1	172.5	112.3
2 .....	72.1	112.6	100.5
3 .....	82.9	121.0	165.9
4 .....	114.6	150.7	118.7
5 .....	129.9	132.5	131.8
6 .....	124.4	86.0	194.4
7 .....	71.2	115.5	116.7
8 .....	84.1	79.7	112.8
9 .....	138.8	126.4	184.6
10 .....	124.1	201.2	74.0
10-A .....	92.6	123.0	155.7
STATE .....	80.1	104.8	120.7

*For Other Texas Data, See Statistical Tables at the End of This Publication*

Sharp decline in the April index in comparison with that of the month before and the corresponding month last year are especially noticeable in the crop reporting districts 1-N and 1-S of the High Plains, District 2 of the Permian Plains and District 3 North Central Texas.

Total farm cash income for the State as computed by the Bureau was \$20,921,000 in April, compared with \$16,434,000 in March, and \$27,370,000 in April last year. The average April farm cash income during the base period 1928-32 was \$26,076,000.

F. A. BUECHEL.

## Agricultural Regions and the Agricultural Situation

The one outstanding fact regarding the agricultural situation of the United States is the vast productive capacity of its major regions. This enormous capacity is due to the size of the country and to the advantageous elements involved.

A second outstanding fact concerning the agriculture of the United States is the wide variety of products that are grown in large and substantial quantities. This great variety is attributive to the occurrence in the United States of a large number of distinctive agricultural regions and areas of sufficient extent and possessing advantageous environments which make possible the variety, the volume, and the quality of the individual products.

Among nations the United States, in regard to aggregate volume of agricultural production, ranks as one of the few great producers of the world; as to variety of important products, no country in the world approaches the United States. In the nature of the country lies the destiny of its people; in the nature of the territory of the United States lies the factors for its large and highly diversified agricultural production.

Because of the extent and the variety of agricultural production in the United States, the agricultural problem is not only a national problem; it is one of the MAJOR economic problems of this country.

### *Our Agricultural Problems*

The great volume of aggregate production of agricultural commodities and the wide variety of these products are obvious, in spite of the tendency to pay not too much attention to their fundamental economic reactions and their social implications.

But when critical analyses are made of our agricultural problem, it is at once apparent that blanket statements or conclusions have very little influence in solving the complexities of this question. The agricultural problem of this country has to be analyzed in the perspective of time or period, and it has to be placed in its various regional settings; for the major agricultural regions of the United States are far larger than the average size of nations of Western Europe.

In the time perspective, this country had no national agricultural problem until after the close of the nineteenth century. In fact, prior to the 1920's the agricultural problems of the United States were local; they were solved, in the main, by the people concerned moving West or by going into industrial occupations.

Without doubt the Westward Movement with its various successive waves of migration and aided by the applications of the new technology—the cotton gin, railroads, the sod plow, wire fencing, the windmill, and the like—constituted the dominant factor in the economic development and the enlargement of production in the

United States during the whole of the last century. Large amounts of rich and productive lands were available at low money cost and the various economic crises and periods of hard times were marked by great waves of settlers marching westward, particularly into the Prairies and the Western Plains.

And during all this time the steadily expanding demand of the European market for foodstuffs and raw materials was absorbing the United States' surpluses as fast as they could be produced. The deluge of wheat and meat-stuffs from the United States onto West-Central Europe after 1870 occasioned a long-time agricultural crisis in those countries during the last quarter of the century, and forced rather severe adjustments in their agriculture. In the United States the Westward Movement resulted not only in peopling the West and in greatly accentuating our agricultural surpluses, but in addition it reflected in no uncertain terms the rise of specialized regional production, or territorial specialization, and with the growth of the various regions characterized by different types of production and by different products—these products being based upon the distinctive environments of the region—there arose inter-regional trade and the expansion of domestic commerce and the rise of the home market which by 1900 had become one of the outstanding features in the economic life of the Nation.

The shadows of the forthcoming agricultural problem of the United States were being cast during the early years of the twentieth century; for the western agricultural migrations in this country were approaching the geographic limits of the lands concerned, competitive agricultural regions in the Middle Latitudes and Sub-tropics were growing rapidly, and even the fringes of the Equatorial lands were being brought under subjection to provide certain Equatorial products and particularly the greatly desired and highly competitive vegetable oils.

Then came the Great War which seriously disturbed short-time trends, hastened events of longer-time trends, and turned a substantial proportion of the currents of world trade into entirely new directions. The aftermath of the Great War embraced the feverish expansion of the 1920's, especially marked in agriculture by the greatly accentuated application of improved mechanization in the various Great Plains of the Middle Latitude countries and by increased agricultural production in the Sub-tropics and the Equatorial lands of the world; these latter lands with the low-cost labor and great potentialities of production of certain foodstuffs and of various raw materials, were and are strongly competitive with the agriculture of the United States.

It is in the light of these world-wide circumstances that much of the agricultural problem of the United States must be seen. But just as the problem as a



whole has to be viewed in the background of the larger perspective, the specific problems have to be viewed in the light of the regional circumstances concerned.

In the United States the predominance of agricultural production lies east of the Rocky Mountains and in this vast territory comprising approximately two-thirds of the area of the country are the rather well-defined major agricultural regions—the Cotton Belt, the Wheat Belt, the grazing lands of the Western Plains, the Corn Belt, and the Dairy Region of the Lake and Middle Atlantic States, and of New England.

Stripped of detail and qualification the agricultural problem of the United States during the past three decades has concerned primarily the Cotton Belt, the Corn Belt, and the Wheat Belt. These from the standpoint of agriculture are the problem regions of the United States; and they are problem regions because of their large size, because in the aggregate they embrace a very large proportion of the arable lands of the Nation, and because directly or indirectly they occupy a distinctive competitive position in the world's agricultural situation as it has evolved so strikingly during and since the Great War.

Of foremost importance in visualizing the national import and the regional complexities of this most significant problem is the recognition that the principles governing the economics of agriculture are quite distinct from those governing the economics of industry, that the world's commercial agriculture is carried on in an industrialized world, and that, historically speaking, the self-sufficing system of peasant agriculture has been during the past three-quarters of a century almost absolutely transformed in its historic centers of the Western World. And, furthermore, the commercial problems of agriculture itself have been thoroughly transformed in the exploitation of new regions on the earth's surface—lands which prior to the 1870's were occupied only by roving tribes or by very primitive peoples. These include particularly the vast grassland plains of the Middle Latitudes and the Sub-tropics with their rich, dark-colored soils, their sub-humid climates, and their outstanding adaptabilities to large power-farming operations. The problem of the agricultural surpluses the world over is concerned particularly with these regions, to which are to be added the fringes of the Equatorial lands capable of supplying at low costs vast quantities of certain foodstuffs and a wide array of raw materials.

Until very recently, historically speaking, the world has always been seriously disturbed by the specter of want—even of starvation. The conquest, or certainly the potential conquest, of scarcity in the Western World is a very recent phenomenon—so recent that many of the agricultural countries stand appalled before the fact of large production and of the unmarketed surpluses.

These surpluses are regional in origin—the sources of the problem surpluses are the new regions brought under man's dominion in the past few decades—a movement initiated with extensive railroad building into the continental interiors since the early 1870's, and continued by a steadily advancing technology applied through machine production, transportation, processing and manufacture, and in the Equatorial lands, also of sanitary measures.

### *Major United States Agricultural Problem Regions*

*The Wheat Belt.* By the Wheat Belt of the United States is meant the arable lands in those regions of the northern and middle Western Plains characterized by dark soils, a sub-humid climate, and surface features eminently adapted to large power-machine agriculture.

There are three of these major provinces in the World—the largest one embracing the vast Steppes of southern Russia, and which extends into the Danubian plains at the west and across the Urals into Siberia at the east; the interior Pampas of Argentina; and the North American sector which includes the United States Wheat Belt and its northwestern extension into the plains of Western Canada. Smaller regions exist elsewhere as in Australia and in the Pacific Northwest. On first thought it is rather a surprising fact that the historical development of all these regions should be so similar, even though differing in the time of their periods of large development.

The similarities of the environment features of all these regions are striking—soil, climate, topography, comparative geographic location, and their former occupancy by grass vegetation and by roving tribes. The environmental features and particularly the soils—the basic agricultural resource—are marked by highly pronounced and definite qualities; it is a SPECIALIZED environment, excellently adapted for certain types of specialized production; and it is *not* a generalized environment, fairly well adapted to a great variety of agricultural enterprises.

Of this environmental situation and of the agricultural adaptations thereto the late Dr. C. F. Marbut, of the United States Department of Agriculture, wrote:\*

"The Wheat Belt is a wheat belt made so by the environmental conditions under which its soils developed and its features are of so pronounced a character that man is well-nigh helpless except to do the thing demanded by the conditions. In the timbered regions of the world man is a change producing factor because he deals with an environment without strong concentrated or specialized character. In the Wheat Belt he is the play thing of the environment. To advise a man caught in such an environment to diversify is a little like advising a man caught in a resistless current to swim upstream to safety. Adjustment of his agriculture as agriculture in the direction of changing his cropping system and the introduction of a wide range of new crops is a performance, not impossible, but one requiring resources material and a psychological attitude that are difficult to find in ordinary human beings. Commercial agriculture is the type to which the Wheat Belt has been destined through the events that took place long before any man, much less the white man, had any contact with it. Its adaptabilities are grounded in unchangeable conditions and because of their dominant strength man is next to helpless in the face of them."

The above statements apply to lands in the Wheat Belt possessing representative, heavy-textured, dark-colored soils and other typical features; broken areas,

\*Personal communication.

sand hill sections, and the like are characterized by very different types of utilization most of which involve grazing activities.

*The Corn Belt.* The American Corn Belt is unique; no other extensive section of the world resembles it, environmentally, economically, or otherwise. Argentina has a small corn growing region but its area is less than a third of that of the State of Iowa. The American Corn Belt occupies the Mid-western Prairies, with extensions both eastward and westward.

Owing to a variety of factors, the soils of the Prairies (which include also the Black Prairies of Texas) "have a producing capacity," again quoting from the late Dr. Marbut, "higher than that of the soils of any of the other soil regions of the United States [excluding alluvial soils] and probably of the world. They are characterized by all those features which give soils their high productivity and in addition to this, they occupy a region in which climatic conditions are highly favorable to plant growth."

The unique economic position of the Corn Belt is that of a large producer of animal fats; and excepting the dairy regions of West-central Europe and of North-eastern United States there are no other regions in the world distinguished for the production of animal fats (excepting, of course, the highly specialized and smaller production of marine oils). Furthermore, the major dairy regions have to import substantial quantities of concentrated feedstuffs. The Corn Belt as a producer of high grade meatstuffs is one thing; as a large producer of animal fats it comes into direct competition in no small way with the greatly enlarged production of vegetable oils which has become a fact of world importance, particularly since the turn of the century.

The following quotations from the late Dr. Marbut summarize some of the major features of the Corn Belt as envisioned a decade ago by that astute observer and student:

"Like most other crop plants the corn plant will grow and produce some kind of a crop under a wide range of environmental conditions. In the United States it is grown from Canada to the Southern limit of the country and south of us it is the most universal subsistence crop of the tropics. Like most other crops, however, it produces its maximum yield only in a given environment with a rather narrow range of conditions. Its origin is, I believe, not known exactly. That it comes from the high plateaus of the tropics, however, seems rather well agreed upon. It, like the other grains, is a grass or belongs to the grass group of plants. Unlike the other grains, however, it is a rank growing grass and seems to have developed in an environment with abundant moisture. It is like the other grasses, however, in finding its most agreeable habitat in soil with a good supply of basic constituents though it seems not to demand so much as wheat. It is a coarse grass, rank growing, and demands a good supply of nitrogen. Summing the whole matter up it seems to require a soil with abundant moisture and otherwise similar characteristics to the strongest of the wheat belt soils. It demands a humid climate and a semi-arid soil, or what is next to this, a wet-land soil to which a constant supply of soluble mineral material is being added. This statement of the

requirements of the plant is based on our actual experience with it. While it is not possible to find within the boundaries of the United States either a large area of humid climate prevailing over a semi-arid soil nor a large area of moist land continually being supplied with mineral plant-nutrients in any kind of climate, yet the true Corn Belt in the United States approaches the former of these two conditions in the character of its soils and general geographic environment. . . .

"It is not necessary to undertake to discuss their development [the Prairie soils] here but their characteristics seem to be the inevitable product of the conditions under which they have developed even though these conditions be unusual and accidental. It suffices to say that while the Prairies do not seem as a whole to present conditions to the corn plant identical with those under which it developed, yet they represent conditions only slightly different from them and near enough the natural habitat of the plant to enable it to develop far more naturally than on any other group of soils in the known world. Corn Belt soils are soils with highly specialized characteristics and like all soils of that kind they are not easily adaptable to a wide range of products. They furnish conditions for the development of the corn plant that are highly favorable but they do not furnish conditions favorable to the growth of wheat, fruit, and many of the vegetables. Since they lie intermediate in their characteristics between the sub-humid soils on the one hand—highly specialized soils—and the humid soils—almost wholly unspecialized soils—on the other, their specialization is not so extreme as the former.

"It is easier to produce on them a relatively wider range of crops than on the wheat belt soils but they are wholly unlike, in this respect, the humid forest soils of the Eastern United States and Western Europe.

"While diversification is possible within the Prairies yet they do not supply those conditions which make it easy to develop a peasant-like type of agriculture and we must remember that reduction of the surplus tends inevitably in that direction. If it be true, as it seems to be, that in order that a money crop or commercial crop be profitable it must be grown on land that is approximately adapted to it; naturally it follows that the Corn Belt must continue to grow corn. Since the total acreage of the Corn Belt is large it seems inevitable that prosperity, other than a mere peasant self-sufficing life, is dependent on the production of a large corn crop. It seems that prosperity for the region is dependent on the maintenance of a permanent market for a good large surplus."

*The Cotton Belt.* Available space does not allow a full analysis of the Cotton Belt—of its distinctive place in the Westward Movement and the consequent rise of internal commerce, of the characteristics of the Old Cotton Belt as a producer of raw materials particularly at a period when national prosperity was dependent very largely upon the large export of raw materials, or of the various economic and social problems characteristic of this important section of the country.

The whole of the Cotton Belt has certain common features and problems. Different as its various portions are, cotton *can* be grown on the arable lands throughout

its extent; but cotton is a tropical or sub-tropical plant which requires a long growing season. The American Cotton Belt, though continuously expanding westward for a period of more than a century and a quarter, has had the problem of tropical production and of the extremely low-cost labor of the tropics to contend with constantly.

The American Cotton Belt is the one great cotton growing province in the world outside the tropics. Cotton growing had been advancing for a century in cotton growing countries outside the tropics but it was not until the Great Depression that the specter of huge cotton growing areas within the tropics really became discernible. This article does not attempt to consider the future of the world's cotton growing enterprises; the significance not only to the American Cotton Belt but to the whole nation of the competitive power of the tropics and of the low-cost production, cheap labor, etc., however, cannot be too strongly emphasized.

The American Cotton Belt comprises four rather distinct sub-divisions: a) The sandy uplands of Southeastern United States, originally covered with forests of the Southern pines; b) The lowlands of the Mississippi and other major streams, together with the Black Land, or Southern, Prairies; c) The Southern Black Earth soil regions of the Permian Plains of north-central Texas and southwestern Oklahoma and of the High Plains of Texas; d) The irrigated alluvial plains such as those of the Rio Grande and of the Salt rivers and irrigated lands in the southern third of California.

Of the sandy uplands of Southeastern United States the late Dr. Marbut wrote:

"This region and its environment do not seem to be at all identical with that in which the cotton plant developed as a plant. This plant seems to have developed in the Savannas or Savanna edges in the tropics and sub-tropics, mainly in the highlands of the tropics where sub-tropical temperatures prevail with low rainfall during at least a considerable part of the year and with an annual rainfall of moderate to low amount. Such soils would assume somewhat the characteristics of those of the southern end of the Wheat Belt in this country. The soils of the southeastern states are characterized by those features present in soils developed under the influence of high rainfall rather than low, and high temperatures wholly unlike the soils of the true tropical Savannas. On the other hand, these soils are widely different from those of the Wheat Belt, the Corn Belt, or even the humid forest soils of western Europe and northeastern America. They do not seem to supply characteristics favorable to the grain crops or even the moderate non-committal conditions somewhat favorable to the wide range of crops of the latter regions. It is apparent that they do not present features especially favorable to any of the crops with which northern Europeans have dealt from time immemorial. While they do not supply the conditions favorable to the full development of the cotton plant they come nearer meeting its requirements than those of the other crops, especially the grains, grasses, various fruits, and many of the vegetables. While it does not grow cotton like the Corn Belt grows corn or the Wheat Belt, wheat, yet it is

possible to grow the crop with a smaller effort on man's part than would be required to grow corn, wheat, grasses, fruit, or many vegetables. The main thing that seems to make this possible is the long hot late summers with relatively low rainfall. This latter is much higher than that of the Savannas in which the plant seems to have developed, but the sandy soil, together with the high temperatures and high percentage of sunshine compensate to a great extent for the rainfall of summer or for the absence of a real dry season due to low rainfall. The dry season is a soil dry season rather than a climatic dry season. The other soil condition which is demanded by the cotton plant, of rather high or at least a moderate amount of soil nutrients must now be supplied by man since the small amount of virgin nutrients have been exhausted from the soil through a few years of cultivation of a given spot. Otherwise the farmer must shift to another until it, in turn, has been impoverished by cropping. These elements, it is true, could be supplied for the corn or small grain plants but the dry summer and dry soils are wholly unfavorable to them. With a continuous supply of fertilizers at a low cost this region can grow cotton with moderate success. There is no other crop to the use of which white man has yet fully adjusted himself which can be grown with anything like equal success. It is very easy to advise farmers in such a region to diversify. Actually to do it to any extent beyond a home supply of some of the things the farmer's family has been taught to regard as necessities is quite a different matter. The prosperity of the southeastern States is dependent to a much greater extent on the continued growth of cotton than is usually granted by many professional advisers to the farmer."

The production of cotton in the alluvial soils of the Mississippi lowlands and of the Black Prairies of Texas reflect conditions widely different from those of the sandy uplands of the piney woods country. The soils are rich and the inherent characteristics of these soils are such that the fertility can be maintained. The different properties of the representative soils of these regions are reflected in the fact that they will produce good yields of corn without the use of commercial fertilizers. Furthermore, they are well adapted to the use of large power agricultural machinery.

The irrigated cotton growing areas of southwestern United States are examples of highly specialized undertakings; the area available for farming is limited by the small proportion of the entire area for which adequate water can be secured; the area available for cotton is still further limited by the competition of highly specialized crops. But in the sub-humid plains of western Texas and southwestern Oklahoma and also of south Texas, particularly, in the Corpus Christi district, occur wide stretches of rolling, undulating, or flat plains which until a few decades ago were utilized entirely for grazing. Power mechanization of agriculture has been of great importance in bringing the arable lands in these regions into cultivation. The big crop is cotton which because of mechanization and larger scale development is produced widely. The cotton plant is very drouth-resistant, a fact of great importance in the development of these newer cotton growing regions. In these plains the broken lands have to a large extent remained in



grazing uses; the climate is not suited to corn production, though in certain sandy loam areas of the High Plains from extreme western Texas northward to the Platte river, there occur corn producing "islands" which have been designated as the "Little" Corn Belt. Within these regions, however, grain sorghums are grown extensively and the whole section is sometimes designated as the "grain sorghums belt."

The soils of the Prairies and sub-humid plains together with the related Mississippi alluvial lowlands are similar to those of the lands where the cotton plant seems to have originated; the natural adaptability of the cotton plant to these fertile lands are factors of tremendous importance in the regional costs of production. Furthermore, the adaptability of these lands to large power machine production constitutes an indisputable fact in the competitive capacity of these regions.

### *In Conclusion*

American agriculture is distinctive among the nations of the world due primarily to the potentialities of its Prairie and Western Plains, to which may be added its various extensive alluvial areas. The problems confronting American agriculture are basically regional, embracing the Corn Belt, the Cotton Belt, and the Wheat Belt—each of which comprises vast areas fitted by nature to produce effectively a limited group of agricultural commodities. They are inherently surplus producing regions; upon the profitable disposal of their surpluses depends their agricultural prosperity; and because of the large proportion of the arable lands of the country which these regions include, their agricultural prosperity is a matter of serious import to the nation.

ELMER H. JOHNSON.

## Financial

Except for renewed purchasing of government obligations, commercial banking trends have shown but little change in recent weeks. Adjusted demand deposits of the reporting member banks, after dropping sharply during the second week of April, remained relatively constant through May 4 when they aggregated \$14,450,000,000. The volume of business loans of the reporting banks continued to shrink, dropping from \$4,275,000,000 on April 6 to \$4,126,000,000 on May 4. Apparently any possible reversal of this trend is yet some months away. Reflecting the mid-April sharp increase in excess reserve balances, the reporting member banks have added materially to their holdings of government obligations, this category of earning assets increasing from \$9,065,000,000 on April 6 to \$9,323,000,000 on May 4.

Following the April 15 reduction in legal reserve requirements, the excess reserve balances of the member banks have shown but little week to week change. On May 11 such excess reserves were estimated at the huge total of \$2,430,000,000, approximately the same level which obtained on April 20. This immense supply of idle cash, of course, all but guarantees continued money market ease and high prices for government obligations for many months to come.

The sharp decline in commodity prices which has occurred since last September has obscured largely the potentialities for commodity price inflation which are inherent in the present situation. These possibilities lie chiefly in the existence of the broadest credit base in the history of the country and to a lesser extent in the lack of adequate controls to check an inflationary development after it has once been started.

Potential bank credit expansion in the United States is of two types—primary and secondary. The former is based on the idle cash held by commercial banks (chiefly in the form of excess reserve balances) and is beyond the direct control of the Federal Reserve System except in so far as excess reserves can be reduced through open market selling and raised legal reserve ratios. Neither primary nor secondary credit expansion, of course, can get under way until such time as the commercial banks can find satisfactory outlets for their loanable funds. Secondary credit expansion, based on reserve bank lending and limited by the free gold hold-

ings of these institutions, is directly controllable by the Federal Reserve Banks through raising their rediscount rates or simply refusing to lend to their member banks. On the optimistic assumption that such control would be exercised when needed, secondary credit expansion is not further considered here.

Potential primary credit expansion is limited by the amount of excess reserves held by the commercial banks and by the average primary reserve ratio required against deposit liabilities. At the present time, required primary reserves probably average 20 per cent of demand deposits, on which basis each dollar of loanable funds could support approximately five dollars of new bank credit. The existing \$2,430,000,000 of excess reserve balances, therefore could be expanded to some \$12,400,000,000 of additional bank credit via the process of lending, checking out loan proceeds, redepositing checks, and relending such redeposits less reserves.

Large as are present excess reserve balances, the total is certain to grow as the Treasury spends the proceeds of its recent gold sale. This process will raise excess reserves to a probable record level of \$3,800,000,000. In addition, the Administration can increase this aggregate enormously through the sale of some \$2,000,000,000 remaining free gold, use of approximately \$750,000,000 of silver seignorage profits, issuance of \$3,000,000,000 in fiat currency, reduction in member bank reserve requirements to the old level, open market purchasing by the reserve banks as authorized by the Thomas Rider, and cutting the weight of the dollar to the legally allowed limit with subsequent sale of the resulting gold profits of some \$2,600,000,000. The Standard Statistics Company estimates that the full utilization of all of these inflationary powers would increase excess reserve balances to approximately \$13,500,000,000.

It now seems improbable, of course, that these powers will be fully utilized. The existing credit base, however, would support a tremendous expansion of bank deposits. To control this potential expansion, the central banking system now has three checks: raising rediscount rates, open market selling, and raising legal reserve requirements for member banks. The first weapon would hardly be effective so long as member banks possessed huge excess reserves rendering borrowing from the cen-



tral banks unnecessary. The second measure is unlikely to be used so long as the Treasury must depend on the bond market for deficit financing, and, even if fully used, could absorb only \$2,564,000,000 of excess reserves. The third check could write off but \$760,000,000 of excess reserves since present legal reserve requirements are close to the maximum limit provided by law.

The normal tendency is for commercial bankers to put idle funds to work as soon as possible. Such utilization could be expected to take the form of government bond purchasing first, then of acquiring high grade corporate bonds, and finally of new lending to business

borrowers. The latter step must necessarily await the development of an effective demand for commercial credit, which at present is held back by the depressed level of business activity and by the many Administration policies discouraging new business undertakings.

Although there is no immediate prospect of price inflation, it is well to remember the long-run potentialities inherent in the present credit base and to realize that these possibilities are likely to be experienced either through continued Treasury deficits or the development of a major period of business recovery and prosperity.

J. C. DOLLEY.

## World Cotton Production

Cotton production is one of the greatest world enterprises. Its most attractive advantages to the nations that can produce it are that it is relatively easy to produce, it is a cash enterprise, and it furnishes much employment of many types. Cotton assumed a major role of importance among world industries during the latter half of the eighteenth century largely because of the invention of mechanical devices in England for manufacturing it into cloth cheaply.

Even the discovery of America was partly the result of the rising demand in western Europe for the cotton goods of India. Cotton was just coming to be the world's greatest cash crop as the United States won its political independence. Cotton literally saved the new nation in that it was the exporting of cotton which enabled the country to balance its trade and build a high credit rating. Cotton constituted from one-third to one-half of all exports of the United States prior to the Civil War. Cotton was not only the big export item which in a large measure paid for the necessary imports of capital goods to develop the country, but the money received from raw cotton exported from the South and the resulting regional specialization furnished the originating force for the three-cornered trade which made possible specialized regional production in New England and the Middle West.

With the exception of the brief period of the Civil War, the world supremacy of the United States as a cotton producer was not successfully challenged from 1800 down to 1934. In view of such a long history of successful predominance it is not surprising that we failed to recognize our increasingly vulnerable position in the world's cotton markets, and that many believed our supremacy was based on a "natural monopoly." The surprising thing is that in the face of our tremendous loss of foreign markets during the last few years we refuse to be greatly concerned. It may not be true that a United States Senator actually said recently that "all this talk about loss of foreign cotton markets and increased foreign cotton production is all propaganda"; nevertheless, the facts remain that in substance that is being said so long as the Nation does not adopt a constructive, aggressive program to deal with a matter so vitally important.

What is the actual status of the world cotton production situation? How much has foreign production increased and to what extent has the United States lost markets, and where?

TABLE I  
Production of Commercial Cotton  
1915-16 Through 1937-38 and Exports from the United States  
(In Thousands of Bales\* )

Year	U. S. Production	U. S. Exports	Foreign Production	World Production
1915-16	11,192	5,896	7,218	18,410
1916-17	11,450	5,300	7,468	18,918
1917-18	11,302	4,288	6,903	18,205
1918-19	12,041	5,592	6,537	18,578
1919-20	11,425	6,545	8,795	20,220
1920-21	13,440	5,745	6,225	19,665
1921-22	7,954	6,184	7,380	15,334
1922-23	9,762	4,823	8,197	17,959
1923-24	10,140	5,656	8,829	18,969
1924-25	13,628	8,005	10,197	23,825
1925-26	16,104	8,051	10,555	26,659
1926-27	17,977	10,927	10,064	28,041
1927-28	12,956	7,542	10,643	23,599
1928-29	14,478	8,044	11,331	25,809
1929-30	14,825	6,690	12,105	26,930
1930-31	13,932	6,760	11,548	25,480
1931-32	17,096	8,708	9,700	26,796
1932-33	13,002	8,419	10,924	23,926
1933-34	13,047	7,534	13,460	26,507
1934-35	9,637	4,799	13,437	23,074
1935-36	10,638	5,973	16,370	27,008
1936-37	12,399	5,440	18,063	30,462
1937-38	18,934	5,900†	18,500‡	37,434

Source: United States Department of Commerce.

\*478-pound net bales.

†Estimated.

‡Garside's estimate of foreign production of commercial cotton.

Table I shows total world production of cotton, United States production, and foreign production during the past twenty-three years. It is believed that these figures from the United States Department of Commerce are the best and most authentic available. Observation of these data indicate very radical changes in trends of production in the United States and foreign countries since 1932 compared with the previous period but that trends in total world production have not changed greatly. The trend in United States production from 1915-1916 through 1928-1929 was up at the average rate of 331,000 bales per year. From 1929-30 through 1937-38 the trend has actually been down at the rate of 74,000 bales per year. What happened to foreign production during the same time? From 1915-16 through 1928-29 foreign production increased at the rate of 353,000 bales per year, or 22,000 bales per year faster than the increase in the United States. During 1929-30 through 1937-38 foreign production increased at the rate of 1,016,000 bales per year. The rate of increase of total world production from 1915-16

through 1928-29 was up at the rate of 684,000 bales annually. During 1929-30 through 1937-38 the trend of world production was up at the rate of 942,000 bales annually. Increases in cotton production abroad has thus more than made up for our enforced decreases in the United States. Do not the facts show that the policy of the United States to restrict production to raise price has failed in its purpose, and that the net result has been to transfer production from the United States to foreign countries?

Table II shows the decreases in exports of American cotton from 1929-30, the first year of government interference, from the average exports from 1924-25 through 1928-29, and the increases in foreign production from 1929-30 over the average foreign production from 1924-25 through 1928-29. The average annual exports from the United States during the five years 1924-25 through 1928-29 was 8,713,000 bales, and average foreign production was 10,558,000 bales.

It is a very striking as well as significant fact that the United States, during 1929-30 through 1937-38, has exported a total of 18,194,000 fewer bales than would have been exported had exports averaged as much as they did during the five years ending 1928-29, and that total foreign production of cotton during the same time amounted to 31,861,000 bales more than it would have been had foreign production averaged the same as during the five years ending 1928-29.

TABLE II

Annual Exports of American Cotton Beginning with 1929-30,  
Annual Foreign Production and the Relation of Exports  
and Foreign Production to the Five-year  
Pre-depression Average

Average pre-depression exports = 8,713,000 bales.

Years	United States Exports Annual in 000	Change from Five-year Pre-depression Average in 000	Foreign Production in 000	Change from Five-year Pre-depression Average in 000
1929-30	6,690	-2,023	12,105	+1,547
1930-31	6,760	-1,953	11,548	+990
1931-32	8,708	-5	9,700	-858
1932-33	8,419	-294	10,924	+376
1933-34	7,534	-1,179	13,460	+2,902
1934-35	4,799	-3,914	13,437	+2,879
1935-36	5,973	-2,740	16,370	+5,812
1936-37	5,440	-3,273	18,063	+7,505
1937-38	5,900	-2,813	18,500	+7,942

Source: Figures are from United States Department of Commerce Bulletin and are in 478-pound net weight bales, except exports for 1937-38 are estimated, and foreign production is Garside's estimate.

A. B. Cox.

## COTTON BALANCE SHEET

Total supplies of cotton in the United States, May 1, were 13,336,000 bales as compared with 6,921,000 bales last year, 7,841,000 bales two years ago, and an all-time previous high of 11,742,000 bales in May, 1933. In addition to this, supplies of American cotton in European ports and afloat to Europe were 523,000 bales more than on May 1 last year. These two items of the world's supply of American cotton increased to 6,969,000 bales from May last year, or over 100 per cent.

Increases in supplies of foreign grown cotton, even though there was a record crop, have increased less than 15 per cent. The United States Government now owns or has under loans above market price about 6,800,000 bales of cotton. It is thus holding the umbrella over foreign cotton growers now in a really big way.

All methods of price calculations using total supplies indicate lower prices. It is evident that Government loans are sustaining prices of cotton above those indicated by supply and demand conditions.

## SPINNERS MARGIN

Spinners ratio margins on 32's twist yarn in Manchester to Middling 7/8-inch American cotton in Liverpool averaged 212 during April compared with 213 for March and 194 for April, 1937.

The pence margin in Manchester during May averaged 5.44d compared with 5.66d in March and 7.11d in April, 1937. These margins indicate a continued slowing down of consumption in England.

## COMMODITY PRICES

	April 1938	April 1937	March 1938
<b>WHOLESALE PRICES:</b>			
U. S. Bureau of Labor Statistics (1926 = 100)	78.7	80.0	79.7
The Annalist (1926 = 100)	80.7	85.3	82.5
<b>FARM PRICES:</b>			
U. S. Department of Agriculture (1910-14 = 100)	94.0	130.0	96.0
U. S. Bureau of Labor Statistics (1926 = 100)	68.4	92.2	70.3
<b>RETAIL PRICES:</b>			
Food (U. S. Bureau of Labor Statistics, 1923-25 = 100)	79.4	85.6	78.6
Department Stores (Fairchild's Publications, Jan. 1931 = 100)	90.2	95.2	90.6

\*Preliminary.

# Current Manufacturing Developments in Texas

Dairy shows held during the last month at various points in the State are significant of the increasing interest in the manufacture of dairy products in Texas. The Kraft-Phenix Cheese Corporation opened a cheese plant at Grapeland the latter part of 1937 which is proving successful, and the cheese plant under construction at Sulphur Springs by the same company is expected to begin operation some time next month. The Spring Valley Butter Company of Houston has also been added to the list of dairy manufacturers in the State.

Other food processing plants include the egg drying plant of the Cudahy Packing Company at Cuero, em-

ploying approximately 125 workers, the Freezerved Foods, Inc., of Houston, which has opened a plant at Port Lavaca for freezing fruit juices, and the canning plant at Jacksonville of the Ozark Mountain Canning Company and the Ogburn Canning Company factory at Lindale, which have opened for the season canning fruits and vegetables.

Among the Houston plants to begin operation during April are: Chas. W. Breneman Company, manufacturing venetian blinds, window shades, and screens; Dobkins Welding Works; J. E. Hanger, Inc., Safety Over-

head Garage Door Corporation; and the Safety Signal Corporation.

The Shult Manufacturing Company, Schulenburg, is producing under a patent issued to a member of their local branch company, a machine for applying poison dust to cotton plants. The factory began operation in April and employs an average of fifteen persons.

In Uvalde the Beauty Rest Chair Factory has begun operation with an average production of fifty chairs a day. A plant for the retreading of auto tires has been established by the Tex-Mex Nu Tread Company at Laredo. At Weslaco a factory known as the Valley Mat and Supply Company is manufacturing rubber mats.

Charters granted to manufacturers in Texas during the month of April, 1938, include:

Ashmore Beauty Supply Company, Abilene, cosmetics; D and I Pipe and Supply Company, Inc., Abilene, steel and iron products; Clark Brothers, Inc., Campbellton, mining and manufacturing; Auto-Venette, Dallas, auto-

mobile shades; The Chex Company, Inc., Dallas; Crank-pin Tool Company, Dallas; Detroit Graphite Company, Dallas; Motter Riegel Bindery, Dallas; Sheen-Glo, Inc., Dallas; Southwest Fur Company, Inc., Dallas; Valentine and Company, Inc., Dallas; Stone-Hart Grain Company, Inc., Fort Worth; Triple XXX Bottling Company, Galveston; The Valley Publishing Company, Harlingen; Bluebonnets and Blood, Inc., Houston; Chiksan Oil Tool Company, Houston; Efco, Inc., Houston, iron and steel articles; Gross Electric Supply, Houston; Mud-Relay Company, Houston; Texas Books, Houston, printing and publishing; Ogburn Canning Company, Lindale; Lebus Rotary Tool Works, Longview; H. M. Fristoe Company, McAllen, food products; Midland Chemical Company, Midland, industrial chemicals; No-Mo Products Company, Nocona; Kincaid-Osburn Electric Steel Company, San Antonio, iron and steel products; National Films, Inc., San Antonio; and Texas Creameries, Inc., San Antonio.

CLARA H. LEWIS.

#### COTTON BALANCE SHEET FOR THE UNITED STATES AS OF MAY 1

(In Thousands of Running Bales Except as Noted)

	Carryover Aug. 1	Imports to May 1*	Final Ginnings	Total	Consumption to May 1	Exports to May 1	Total	Balance May 1
1928-1929	2,536	368	14,297	17,201	5,306	7,194	12,500	4,701
1929-1930	2,313	311	14,548	17,172	4,848	6,121	10,969	6,203
1930-1931	4,530	69	13,756	18,355	3,893	5,910	9,803	8,552
1931-1932	6,369	82	16,629	23,080	3,932	7,397	11,329	11,751
1932-1933	9,682	96	12,710	24,488	4,219	6,521	10,740	13,748
1933-1934	8,176	112	12,664	20,952	4,458	6,485	10,943	10,009
1934-1935	7,746	83	9,472	17,301	4,116	3,986	8,102	9,199
1935-1936	7,138	102	10,417	17,657	4,658	5,167	9,825	7,832
1936-1937	5,397	167	21,130	17,694	6,017	4,762	10,779	6,915
1937-1938	4,498	99	18,242	22,839	4,438	5,034	9,472	13,367

The cotton year begins August 1.

\*In 500-pound bales.

NOTE: The figures have been revised in accordance with the revisions made by the United States Bureau of the Census.

#### APRIL CREDIT RATIOS IN TEXAS RETAIL STORES

(Expressed in Per Cent)

	Number of Stores Reporting	Ratio of Credit Sales to Net Sales		Ratio of Collections to Outstandings		Ratio of Credit Salaries to Credit Sales	
		1938	1937	1938	1937	1938	1937
All Stores	74	64.9	64.3	39.9	40.5	1.2	1.3
Stores Grouped by Cities:							
Abilene	4	60.3	59.0	34.9	34.6	1.7	1.7
Amarillo	3	59.2	55.7	42.3	45.7	2.2	2.6
Austin	6	60.1	58.5	44.0	44.1	1.1	1.0
Beaumont	3	63.7	63.1	41.3	41.3	1.5	1.5
Dallas	11	71.0	71.0	40.6	41.2	1.2	1.2
Fort Worth	8	64.0	61.8	35.3	33.8	1.4	1.4
Houston	7	62.5	62.3	43.7	44.8	1.3	1.5
San Antonio	7	60.4	60.6	43.9	43.5	0.9	0.8
Waco	4	64.9	62.3	30.4	31.7	1.3	1.3
All Others	21	60.0	59.0	37.6	41.4	1.3	1.5
Stores Grouped According to Type of Store:							
Department Stores (Annual Volume Over \$500,000)	21	65.2	64.7	41.4	40.8	1.2	1.2
Department Stores (Annual Volume Under \$500,000)	13	61.9	60.1	36.1	38.5	1.7	1.8
Dry Goods-Apparel Stores	6	61.0	57.7	36.5	33.2	1.9	2.3
Women's Specialty Shops	15	63.4	63.5	36.3	40.0	1.0	1.0
Men's Clothing Stores	19	66.7	65.6	40.0	40.6	1.6	1.7
Stores Grouped According to Volume of Net Sales During 1937:							
Over \$2,500,000	11	67.0	67.3	44.3	44.8	1.0	1.0
\$2,500,000 down to \$1,000,000	11	62.4	60.6	39.1	37.7	1.3	1.4
\$1,000,000 down to \$500,000	10	62.0	59.5	41.5	45.2	1.3	1.5
\$500,000 down to \$100,000	31	61.1	57.1	39.1	39.1	1.7	1.7
Less than \$100,000	11	64.0	56.0	43.7	42.1	2.8	3.1

NOTE: 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.

## EMPLOYMENT AND PAY ROLLS IN TEXAS, CLASSIFIED BY INDUSTRIES AND SELECTED CITIES, APRIL, 1938

## Pay Rolls for One Week Ending Nearest Fifteenth of Month

Industry	Number of Estab-lishments Re- porting	Number of Employees April 1938	Percentage Change from		Amount of Pay Roll April 1938	Percentage Change from		Average Weekly Wage per Employee*		
			Mar. 1938	April 1937		Mar. 1938	April 1937	April 1938	Mar. 1938	April 1937
<i>All Manufacturing Industries</i> .....	711	51,006	- 1.4	- 4.5	\$1,263,846	- 0.9	- 4.6	\$24.78	\$24.67	\$24.18
<i>Food Products</i>										
Bakery Goods.....	34	881	+ 1.9	- 2.5	18,115	+ 3.3	+ 6.3	20.56	20.27	19.55
Beverages, Carbonated.....	39	595	+ 5.7	+ 28.2	12,010	- 0.7	+ 14.4	20.18	21.49	21.42
Confectionery.....	5	181	- 0.6	+ 10.5	2,653	+ 0.1	+ 2.6	14.66	14.57	13.39
Flour Milling.....	6	334	- 3.7	+ 2.3	7,911	- 0.9	+ 13.5	23.69	23.00	21.87
Ice, Manufactured.....	75	697	+ 9.6	- 8.0	12,141	+ 5.6	- 8.6	17.42	18.09	17.51
Ice Cream.....	6	234	+ 4.9	- 20.7	4,666	+ 1.8	- 15.4	19.94	20.55	18.42
Meat Packing.....	13	3,159	- 1.4	- 19.6	78,814	+ 0.2	- 21.7	24.95	24.55	26.13
<i>Textiles</i>										
Cotton Textile Mills.....	10	2,703	+ 0.2	+ 13.0	34,834	+ 1.8	- 11.1	12.89	12.69	13.80
Men's Work Clothing.....	13	1,377	+ 3.2	- 30.0	15,357	+ 6.2	- 40.0	11.15	10.83	11.12
<i>Forest Products</i>										
Furniture.....	9	477	- 0.8	- 8.5	9,448	+ 4.0	- 6.6	19.81	18.88	19.14
Lumber: Planing Mills.....	20	650	+ 3.8	- 2.1	13,908	+ 4.2	+ 6.6	21.40	21.32	19.71
Lumber: Saw Mills.....	21	3,399	- 2.1	- 11.4	46,449	- 6.1	- 18.5	13.67	14.25	16.43
Paper Products.....	12	509	+ 0.4	- 0.2	10,026	- 0.2	- 2.4	19.70	19.82	19.76
<i>Printing and Publishing</i>										
Commercial Printing.....	40	790	+ 1.9	+ 5.0	23,306	+ 3.5	+ 11.1	29.50	29.06	24.74
Newspaper Publishing.....	17	1,009	+ 2.4	+ 1.6	34,915	+ 2.8	+ 3.5	34.60	34.50	35.65
<i>Chemical and Allied Products</i>										
Cottonseed Oil Products.....	34	1,000	- 20.7	+ 46.9	14,686	- 18.5	+ 56.3	14.69	14.29	14.41
Petroleum Refining.....	40	18,178	- 0.9	- 2.1	597,668	- 1.1	- 0.4	32.88	32.93	32.19
<i>Stone and Clay Products</i>										
Brick and Tile.....	15	646	- 8.4	- 26.3	8,036	- 10.2	- 23.7	12.44	12.70	13.12
Cement.....	4	700	+ 1.3	- 13.0	15,780	- 2.3	+ 12.6	22.54	23.36	18.03
<i>Iron and Steel Products</i>										
Foundries, Machine Shops.....	32	3,089	+ 0.8	- 4.1	81,904	- 0.9	- 5.5	26.51	26.97	26.91
Steam Railroad Repair Shops.....	14	1,529	+ 0.4	- 23.5	45,519	+ 1.5	- 20.9	29.77	29.39	27.57
Structural and Ornamental Iron.....	11	698	- 3.3	- 14.0	15,343	- 4.0	- 22.7	21.98	22.14	24.19
<i>Unclassified</i>										
Miscellaneous Manufacturing.....	241	8,171	- 3.8	+ 3.3	160,356	- 1.4	+ 0.4	19.63	19.14	18.85
<i>Nonmanufacturing Industries</i>										
Crude Petroleum Production†.....	51	9,558	+ 0.6	+ 9.2	345,908	- 1.2	+ 3.1	36.19	36.85	37.43
Quarrying and Nonmetallic Mining.....	21	1,332	+ 1.1	+ 1.3	36,061	+ 3.3	- 13.1	27.07	26.51	28.38
Public Utilities.....	810	19,291	\$	- 1.3	508,429	- 1.3	+ 8.3	26.36	26.71	27.76
Retail Trade.....	678	15,463	+ 4.4	- 1.2	289,926	+ 3.2	- 4.1	18.75	18.96	18.68
Wholesale Trade.....	271	5,349	- 0.9	+ 2.8	132,566	- 0.2	+ 3.1	24.78	24.62	25.32
Cotton Compresses.....	17	842	- 23.4	- 19.3	13,506	- 15.7	- 13.4	16.04	14.57	17.73
Dyeing and Cleaning.....	14	309	+ 5.1	+ 13.3	6,034	+ 4.8	+ 17.2	19.53	19.59	16.69
Hotels‡.....	28	2,410	- 1.8	+ 2.8	31,484	- 0.1	+ 9.4	13.06	12.84	11.67
Laundries.....	28	1,545	- 0.6		18,806	- 0.3	- 0.6	12.17	12.14	12.42
Miscellaneous Nonmanufacturing.....	46	864	- 6.8	- 14.5	21,528	+ 1.2	- 3.8	24.92	22.96	23.30
STATE.....	2,675	107,969	- 0.4	- 1.9	2,668,094	- 0.6	- 1.0	24.71	24.76	24.18
<i>Cities</i>										
Abilene.....	24	367	- 1.1	+ 5.6	7,312	+ 2.9	+ 7.0			
Amarillo.....	31	1,002	- 0.5	+ 8.4	28,163	+ 1.0	+ 13.0			
Austin.....	26	624	+ 3.7	+ 6.7	11,660	+ 1.3	- 0.8			
Beaumont.....	36	2,795	- 5.9	- 8.9	77,198	- 6.6	- 7.8			
Dallas.....	256	17,151	+ 0.2	- 0.7	406,603	- 0.9	+ 0.7			
El Paso.....	106	3,151	- 1.4	+ 0.5	60,459	- 2.2	+ 2.0			
Fort Worth.....	134	7,319	+ 0.8	- 6.7	170,841	+ 1.9	- 6.3			
Galveston.....	22	651	+ 1.4	+ 9.4	14,678	- 1.3	+ 2.8			
Houston.....	223	15,685	+ 0.6	+ 5.1	390,391	- 0.1	+ 6.3			
Port Arthur.....	16	7,019	- 0.9	- 14.0	222,888	- 1.7	- 10.5			
San Antonio.....	189	5,633	+ 2.1	+ 0.6	117,891	+ 1.9	+ 4.5			
Sherman.....	20	835	- 3.7	- 12.9	13,917	- 7.1	- 17.9			
Waco.....	56	1,557	- 2.6	- 5.0	28,502	+ 0.2	+ 3.7			
Wichita Falls.....	34	1,039	+ 1.7	+ 18.4	24,310	+ 1.2	+ 37.2			

\*Not strictly comparable from month to month because of changes in the size and composition of the reporting sample.

†Crude petroleum and natural gas production, including natural gasoline.

‡Cash payments only; the additional value of board, room and tips cannot be computed.

§Decrease of less than one-tenth of one per cent.

||Increase of less than one-tenth of one per cent.

Prepared from reports from Texas industrial establishments to the Bureau of Business Research, cooperating with the United States Bureau of Labor Statistics.



## APRIL RETAIL SALES OF INDEPENDENT STORES IN TEXAS

	April, 1938				Year 1938			
	Number of Firms Re- porting	Dollar Sales	Percentage Change in Dollar Sales from April 1937 to March 1938		Number of Firms Re- porting	Dollar Sales	Percentage Change in Dollar Sales from Year 1937	
TEXAS	1,324	\$16,129,787	- 9.2	- 3.2	1,017	\$51,547,220	- 4.5	
STORES GROUPED BY LINE OF GOODS CARRIED:								
APPAREL	148	2,282,164	+ 8.7	+ 12.3	118	6,973,671	+ 3.3	
Family Clothing Stores	37	294,637	+ 14.4	+ 24.1	27	708,523	+ 3.9	
Men's and Boys' Clothing Stores	54	939,969	+ 8.1	+ 28.9	45	2,525,944	- 0.5	
Shoe Stores	22	202,941	+ 20.6	+ 24.6	18	497,009	+ 3.8	
Women's Specialty Shops	35	844,617	+ 4.9	- 6.4	28	3,242,195	+ 6.3	
AUTOMOTIVE	152	3,218,940	- 24.9	- 20.6	118	12,022,622	- 14.3	
Filling Stations	49	144,108	- 3.7	- 2.8	34	448,736	- 0.7	
Motor Vehicle Dealers	103	3,074,832	- 25.6	- 21.3	84	11,573,886	- 14.8	
COUNTRY GENERAL AND FARMERS' SUPPLIES	111	728,492	- 16.1	- 2.4	100	2,165,719	- 10.1	
DEPARTMENT STORES	72	5,334,463	+ 1.4	+ 2.6	60	17,416,118	+ 2.7	
DRY GOODS AND GENERAL MERCHANDISE	19	78,830	- 1.0	+ 21.8	3	25,461	+ 4.0	
Dry Goods	11	60,328	+ 13.8	+ 26.7	---	---	---	
General Merchandise	3	6,244	+ 7.0	+ 9.4	---	---	---	
Variety Stores	5	12,250	- 40.9	+ 7.5	3	25,461	+ 4.0	
DRUG STORES	169	532,731	+ 0.9	- 3.2	142	1,821,514	+ 2.4	
FLORISTS	37	68,370	+ 31.8	+ 18.1	26	178,610	+ 2.3	
FOOD	189	1,158,360	- 2.6	+ 5.0	149	3,420,332	- 3.1	
Grocery Stores	53	225,385	- 2.2	+ 4.3	46	785,218	- 4.5	
Grocery and Meat Stores	136	932,975	- 2.7	+ 5.1	103	2,635,114	- 2.7	
FURNITURE AND HOUSEHOLD	64	801,592	- 22.2	- 6.5	44	2,387,957	- 9.5	
Furniture Stores	53	710,266	- 22.5	- 6.2	34	2,062,462	- 9.0	
Household Appliance Stores	6	56,070	- 32.9	- 14.7	5	187,681	- 19.2	
Other Home Furnishings Stores	5	35,256	+ 16.8	+ 2.7	5	137,814	- 1.3	
JEWELRY	54	175,032	- 14.5	+ 13.6	41	442,163	- 3.5	
LUMBER, BUILDING, AND HARDWARE	268	1,613,443	- 20.4	- 5.2	189	4,280,027	- 11.5	
Farm Implement Dealers	10	45,689	- 36.2	- 19.6	8	184,511	- 18.6	
Hardware Stores	74	351,837	- 13.2	- 5.9	58	1,074,737	- 10.4	
Lumber and Building Material Dealers	180	1,170,748	- 21.8	- 4.6	120	2,865,643	- 11.8	
Heating and Plumbing Shops	4	45,169	- 14.1	+ 2.9	3	155,136	- 3.6	
RESTAURANTS	30	102,900	- 7.7	- 6.3	18	311,573	+ 1.0	
ALL OTHER STORES	11	34,470	- 10.2	- 0.6	9	101,453	- 3.9	
TEXAS STORES GROUPED ACCORDING TO POPULATION OF CITY:								
All Stores in Cities of—								
OVER 100,000 POPULATION	305	8,524,114	- 5.2	- 0.5	229	28,089,363	- 4.0	
50,000-100,000 POPULATION	123	1,717,358	- 10.3	+ 1.7	95	4,751,765	- 4.3	
2,500-50,000 POPULATION	563	4,320,940	- 13.2	- 8.2	425	13,977,281	- 4.4	
LESS THAN 2,500 POPULATION	333	1,567,375	- 17.1	- 8.0	268	4,728,811	- 8.3	

NOTE: Prepared from reports from independent retail stores to the Bureau of Business Research, cooperating with the United States Department of Commerce.

## PETROLEUM

Daily Average Production  
(In Barrels)

	April 1938	April 1937	March 1938
Coastal Texas	206,100	199,100	199,080
East Central Texas	101,650	116,650	97,050
East Texas	431,900	458,000	428,310
North Texas	77,350	70,700	69,500
Panhandle	63,350	75,800	67,420
Southwest Texas	232,250	225,750	226,280
West Central Texas	29,550	33,050	27,510
West Texas	195,300	199,400	187,130
STATE	1,337,450	1,378,450	1,302,280
UNITED STATES	3,403,500	3,471,250	3,385,640
Imports	133,964	177,821	147,657

†Includes Conroe.

NOTE: From American Petroleum Institute.

See accompanying map showing oil producing districts of Texas.

Gasoline sales as indicated by taxes collected by the State Comptroller were: March, 1938, 105,179,000 gallons; March, 1937, 94,771,000 gallons; February, 1938, 90,638,000 gallons.



## BUILDING PERMITS

	April 1938	April 1937	March 1938
Abilene	\$ 328,627	\$ 92,372	\$ 56,920
Amarillo	223,770	109,445	119,071†
Austin	421,501	653,946	630,158
Beaumont	83,101	97,543	253,277
Big Spring	23,155	13,685	43,413
Brownsville	11,962†	45,845	11,570†
Brownwood	2,550	5,925	7,425
Cleburne	4,725	1,575	13,603
Corpus Christi	344,525	346,575†	264,931
Corsicana	6,215	24,165	17,275
Dallas	1,186,742	1,310,267	996,388
Del Rio	7,990	23,980	15,600
Denison	12,755	6,785	7,810
El Paso	160,879	119,682	105,501
Fort Worth	898,949	1,232,191	276,605
Galveston	177,662	111,147	602,891
Gladewater	11,900	3,650	17,313
Graham	9,660	10,600	15,950
Harlingen	11,815	13,742†	12,495
Houston	2,480,330	1,410,055	3,211,880
Jacksonville	500	17,798	6,900
Kilgore	59,800†	14,000	106,000
Laredo	1,750	3,900	4,425
Lubbock	215,430	122,094	242,979
McAllen	11,805	28,900	8,590
Palestine	55,641	25,448	56,867
Pampa	18,800	13,400†	25,075
Paris	9,920	8,290	9,490
Plainview	5,900	5,014	2,670
Port Arthur	75,255	129,284	80,775
San Angelo	29,700	11,336	29,922
San Antonio	318,518	267,868	309,473
Sherman	21,868	16,120	24,210
Snyder	3,825	2,500	2,150
Sweetwater	12,446	38,160	13,720
Tyler	97,485	225,843	112,245
Waco	131,954	146,725	79,133
Wichita Falls	52,419	51,665	62,005
<b>TOTAL</b>	<b>\$7,531,829</b>	<b>\$6,761,520</b>	<b>\$7,856,705</b>

NOTE: Compiled from reports from Texas chambers of commerce to the Bureau of Business Research.

†Does not include Public Works.

## POSTAL RECEIPTS

	April 1938	April 1937	March 1938
Abilene	\$ 18,733	\$ 17,650	\$ 18,287
Amarillo	35,025	28,438	30,826
Austin	67,934	54,750	58,867
Beaumont	26,261	24,152	26,686
Big Spring	7,248	5,809	6,017
Brownsville	6,408	5,607	6,453
Brownwood	6,262	6,028	5,621
Childress	2,739	2,739	2,296
Corpus Christi	23,789	20,507	24,501
Corsicana	5,695	5,215	5,024
Dallas	354,304	356,236	370,366
Del Rio	3,757	5,057	3,107
Denison	4,774	4,765	4,933
El Paso	47,545	43,511	43,753
Fort Worth	133,154	135,635	139,834
Galveston	27,673	25,238	28,646
Gladewater	3,226	3,171	3,024
Graham	2,334	2,230	2,264
Harlingen	6,220	5,045	5,845
Houston	238,721	227,982	241,053
Longview	11,276	10,044	9,804
Lubbock	16,314	14,103	17,140
McAllen	4,550	4,329	4,573
Marshall	5,934	5,805	5,721
Palestine	4,729	4,493	4,336
Pampa	7,462	6,946	6,169
Paris	5,420	5,133	7,279
Plainview	4,092	3,913	4,265
Port Arthur	13,077	12,775	13,020
San Angelo	11,406	11,059	11,824
San Antonio	117,886	117,043	125,210
Sherman	7,414	7,205	7,250
Sweetwater	4,782	4,780	5,509
Tyler	15,295	16,513	17,803
Waco	32,645	31,356	32,489
Wichita Falls	23,387	20,493	27,051
<b>TOTAL</b>	<b>\$1,307,571</b>	<b>\$1,255,755</b>	<b>\$1,326,836</b>

NOTE: Compiled from reports from Texas chambers of commerce to the Bureau of Business Research.

## CONSUMPTION OF ELECTRIC POWER IN TEXAS

## Power Consumed

(In Thousands of K.W.H.)

	April 1938	April 1937	March 1938	Percentage Change April 1938 from April 1937	
Commercial	40,673	35,585	38,455	+ 14.3	+ 5.8
Industrial	99,301	92,275	93,682	+ 7.6	+ 6.0
Residential	30,179	26,359	28,812	+ 14.5	+ 4.7
All Other	22,712	22,282	21,473	+ 1.9	+ 5.8
<b>TOTAL</b>	<b>192,865</b>	<b>176,501</b>	<b>182,422</b>	<b>+ 9.3</b>	<b>+ 5.7</b>

NOTE: Prepared from reports from 15 electric power companies to the Bureau of Business Research.

## TEXAS COMMERCIAL FAILURES

	April 1938	April 1937	March 1938
Number	17	18†	17
Liabilities‡	\$168	\$366†	\$248
Assets‡	\$104	\$148†	\$169
Average Liabilities per Failure	\$ 10	\$ 20†	\$ 15

†Revised.

‡In thousands.

NOTE: From Dun and Bradstreet, Inc.

## TEXAS CHARTERS

	April 1938	April 1937	March 1938
<b>Domestic Corporations—</b>			
Capitalization	\$1,889	\$2,297	\$2,097†
Number	160	141	143†
<b>Classification of new corporations:</b>			
Banking-Finance	2	4	5
Manufacturing	44	24	30†
Merchandising	40	36	34
Oil	36	31	29
Public Service	—	—	1
Real Estate-Building	11	11	8
Transportation	4	3	5
All Others	23	32	31
Number capitalized at less than \$5,000	58	60	47
Number capitalized at \$100,000 or more	5	5	4
<b>Foreign Corporations (Number)</b>	<b>20</b>	<b>43</b>	<b>36</b>

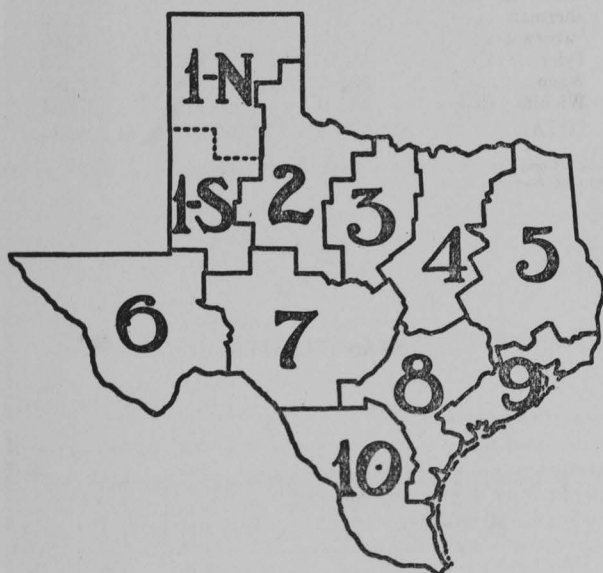
†Revised.

‡In thousands.

NOTE: Compiled from records of the Secretary of State.

## APRIL RETAIL SALES OF INDEPENDENT STORES IN TEXAS

	Total Number of Firms Re- porting	Percentage Change in Dollar Sales	
		April 1938 from April 1937	April 1938 from March 1938
TOTAL TEXAS	1,324	- 9.2	- 3.2
TEXAS STORES GROUPED BY PRODUCING AREAS:			
DISTRICT 1-N	76	- 23.7	- 10.6
Amarillo	16	- 9.0	- 2.0
Pampa	13	- 38.9	- 23.4
Plainview	14	- 22.5	- 16.7
All Others	33	- 26.0	- 3.1
DISTRICT 1-S	23	- 11.5	- 15.2
Big Spring	7	- 11.5	+ 0.9
Lubbock	11	- 10.1	- 14.6
All Others	5	- 26.2	- 36.1
DISTRICT 2	116	+ 1.3	- 3.3
Abilene	17	+ 2.0	- 5.8
Childress	4	+ 7.9	+ 10.7
Snyder	6	- 1.8	+ 3.8
Vernon	6	+ 12.6	- 3.0
Wichita Falls	14	+ 20.2	+ 13.2
All Others	69	- 12.0	- 13.8
DISTRICT 3	41	- 16.5	- 7.2
Brownwood	8	- 4.2	+ 6.7
Eastland	7	- 0.5	- 6.3
Stephenville	6	- 11.8	- 7.4
All Others	20	- 21.1	- 10.7



	Total Number of Firms Re- porting	Percentage Change in Dollar Sales	
		April 1938 from April 1937	April 1938 from March 1938
DISTRICT 4	327	- 5.9	- 2.1
Cleburne	11	- 4.9	- 3.4
Commerce	5	+ 0.3	- 3.8
Corsicana	11	- 1.2	- 8.9
Dallas	58	- 2.7	+ 1.1
Denison	9	+ 6.3	+ 1.9
Ennis	7	- 23.6	+ 10.6
Fort Worth	63	- 4.2	- 8.5
Gainesville	5	+ 14.9	+ 15.8
Marlin	4	- 24.4	- 0.1
Sherman	9	- 0.6	+ 3.6
Taylor	6	+ 3.4	- 15.7
Temple	11	- 18.2	+ 1.1
Waco	32	- 14.7	+ 5.6
All Others	96	- 21.4	- 8.8
DISTRICT 5	127	- 16.6	- 2.9
Bryan	10	- 10.4	- 6.8
Longview	11	- 21.8	+ 0.1
Marshall	12	+ 12.3	+ 15.4
Nacogdoches	5	- 23.7	- 11.6
Palestine	5	+ 5.1	+ 5.8
Tyler	20	- 20.8	- 8.2
All Others	64	- 16.9	- 1.5
DISTRICT 6	45	- 17.8	- 10.5
El Paso	30	- 17.1	- 11.4
Pecos	3	- 21.1	- 7.1
All Others	12	- 23.6	- 1.8
DISTRICT 7	67	- 10.8	- 4.9
Brady	8	- 33.9	- 30.6
San Angelo	15	- 0.4	- 4.4
All Others	44	- 14.4	+ 0.6
DISTRICT 8	235	- 11.2	- 6.8
Austin	23	- 7.2	+ 1.7
Corpus Christi	13	- 15.1	- 2.4
Cuero	9	+ 1.6	- 2.6
Lockhart	10	- 26.8	- 27.2
San Antonio	89	- 10.0	- 5.1
San Marcos	6	- 22.6	- 27.3
Yoakum	6	- 25.0	- 26.7
All Others	79	- 15.3	- 14.6
DISTRICT 9	191	- 3.7	+ 5.9
Beaumont	24	+ 2.6	+ 12.6
Galveston	23	- 12.7	- 3.4
Houston	65	+ 0.2	+ 11.9
Port Arthur	21	- 19.1	- 6.5
Victoria	8	- 6.2	- 17.3
All Others	50	- 7.6	- 8.7
DISTRICT 10	76	- 20.6	- 14.5
Brownsville	15	- 12.1	- 4.7
Harlingen	13	- 38.0	- 21.0
Laredo	6	- 22.2	- 14.0
All Others	42	- 12.0	- 15.5

NOTE: Prepared from reports from independent retail stores to the Bureau of Business Research, cooperating with the United States Department of Commerce.

### LUMBER

(In Board Feet)

	April 1938	April 1937	March 1938
Southern Pine Mills:			
Average Weekly Production per unit	261,258	343,315	278,053
Average Weekly Shipments per unit	244,970	316,309	281,770
Average Unfilled Orders per Unit, End of Month	516,271	785,130	576,563

NOTE: From Southern Pine Association.

### STOCK PRICES

	April 1938	April 1937	March 1938
Standard Indexes of the Securities Markets:			
419 Stocks Combined	70.7	124.5	77.9
347 Industrials	84.2	146.5	92.7
32 Rails	20.9	60.1	25.5
40 Utilities	64.0	100.7	68.5

NOTE: From Standards Statistics Co., Inc.

## BANKING STATISTICS

(In Millions of Dollars)

	April, 1938		April, 1937		March, 1938	
	Dallas District	United States	Dallas District	United States	Dallas District	United States
DEBITS to individual accounts.....	740,113	30,978,488	798,243	36,927,210	773,710	30,530,522
Condition of reporting member banks on—	April 27, 1938		April 28, 1937		March 30, 1938	
ASSETS:						
Loans and investments—total.....	475	20,844	490	22,202	489	20,810
Loans—total.....	231	8,587	217	9,428	231	8,771
Commercial, industrial, and agricultural loans:						
On securities.....	10	546	*	*	10	568
Otherwise secured and unsecured.....	137	3,641	*	*	137	3,731
Open market paper.....	2	393	*	*	2	418
Loans to brokers and dealers in securities.....	3	652	3	1,297	2	680
Other loans for purchasing or carrying securities.....	15	591	*	*	14	605
Real estate loans.....	20	1,149	23	1,156	21	1,150
Loans to banks.....	—	104	—	84	—	96
Other loans:						
On securities.....	10	695	*	*	11	714
Otherwise secured and unsecured.....	34	816	*	*	34	809
U.S. Government obligations.....	167	7,987	185	8,370	175	7,778
Obligations fully guaranteed by U.S. Government.....	28	1,199	30	1,175	33	1,156
Other securities.....	49	3,071	58	3,229	50	3,105
Reserve with Federal Reserve Bank.....	101	6,060	103	5,425	106	5,755
Cash in vault.....	11	372	9	354	11	330
Balances with domestic banks.....	201	2,256	154	1,964	173	1,898
Other assets—net.....	26	1,274	29	1,345	26	1,285
LIABILITIES:						
Demand deposits—adjusted.....	394	14,598	392	15,388	393	14,268
Time deposits.....	130	5,230	120	5,158	130	5,218
U.S. Government deposits.....	25	585	12	272	26	696
Inter-bank deposits:						
Domestic banks.....	178	5,632	176	5,437	170	5,083
Foreign banks.....	—	337	—	507	—	355
Borrowings.....	—	—	—	3	—	11
Other liabilities.....	5	794	6	944	5	827
Capital account.....	82	3,630	79	3,581	81	3,620

\*Not available.

NOTE: From Federal Reserve Board.

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