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# Increasing the Value of the South's Forest Resources through Research

ANOTHER addition has recently been made to the growing number of industrial-research institutions in the Sixth Federal Reserve District. The organization of the Wood Research Institute, Incorporated, of Atlanta, in September 1945 was one more result of a growing recognition on the part of the South's leaders that industrial research will influence increasingly the direction of the region's economic future.

The Wood Research Institute is the fruit of an idea nurtured by the founder, Don Gavan. His idea was to make the benefits of industrial research accessible to the lumber industry of the whole South. The significance of the institute can be appreciated only against a background that points out the changing emphasis science has given to factors of industrial location, the importance of the lumber industry to the South, the importance of science in industry, and the ability of science to change the physical and chemical characteristics of wood.

That the industrialization of the area will not depend solely on the advantages of natural resources and an abundant labor supply is receiving more and more emphasis. Traditional factors affecting industrial location do not influence the location of an industry born out of a test tube in a scientific laboratory to the extent that they influence the location of those industries which merely change the form of raw materials without altering their structure. Since the former type of industry is becoming increasingly important, long-range plans for Southern industrial advancement must include extensive industrial research to provide the bases for new finished-goods industries. Aside from its importance to new industries, this application of science is one of the means by which existing industries learn to adapt their raw materials and products to the demands of an ever advancing technological market and thus retain their importance in the South's economy.

An individual manufacturing establishment encounters competition from similar establishments located not only in the region but in all parts of the country. Its ability to survive is determined by both changing market demands and costs of production. Many factors, including the cost of raw materials, labor costs, efficiency of management, financial costs, and transportation costs, influence the success of an individual establishment and whether or not it will be able to survive in any given location. The natural resources of the Sixth Federal Reserve District and its labor supply were among those important factors influencing the recent expansion of the area's manufacturing. Growing industrialization in the region will eventually reduce whatever differential

advantage may exist in wage costs, and recent scientific and technological advances may reduce in some instances the differential advantages of abundant raw materials. In the future the industries of this region will probably compete more and more upon the basis of technological and managerial efficiency and an efficient utilization of resources. Scientific and technological developments make competitors out of industries that might at first sight seem competitive only in a remote sense.

At one time the petroleum industry would scarcely have been considered a competitor by the producers of natural rubber. Yet today, as the result of scientific and technological advances, synthetic rubber has become so improved and so much cheaper that it is doubtful if natural rubber will ever regain its prewar position.

That seawater would provide a source of raw materials seriously competitive with steel for a part of its market would at one time have been termed fantastic. Yet the production of magnesium derived from seawater has been so reduced in cost that the metal can now be used economically for many purposes traditionally confined to other metals. Costing \$5 a pound in 1915, magnesium ingots were selling at 27 cents a pound in 1939 and recently have been selling at 20 cents. One company expects to be able to market magnesium at an even lower price, and the knowledge and fabrication skills gained during the war years will help to spread the use of the metal.

Plastics, the development of which has long appealed to the public imagination, have an advantage in that they can be specifically created for particular markets and particular uses. Various types have appeared as competitors of a wide range of conventional materials. Many other products that compete with the products of existing industries have already arisen, and they will probably continue to provide competition in the future.

Industrial research, according to many Southern leaders, is consequently essential to continued economic development in the region. Already the Southern Regional Research Laboratory at New Orleans, sponsored by the United States Department of Agriculture, has contributed importantly to the Southeast's economic progress. Private industry realizes, however, the necessity of carrying on independent research that will adapt the findings of Governmental agencies to commercial uses and will at the same time point the way to new scientific developments. One method of the pooling of private resources for industrial research is used by the Southern Research Institute in Birmingham, Alabama, which was discussed in the September 1944 issue of the Review. Now, this

new, wood research institute has been sponsored by private industry to enlarge the possible uses of the forest resources of the District.

The Sixth District's forest resources are the basis for one of its most important industries. Before the war the forests of the Sixth District states, it was estimated, covered 57 percent of the total land area of those states. Almost 98 percent of these resources were commercially owned. About one out of every three manufacturing workers in these states, Alabama, Florida, Georgia, Louisiana, Mississippi, and Tennessee, was employed in a forest industry. Before the war 20 percent of the total value of manufactured products in the District was contributed by the forest industries. Furthermore, the District's forest products constitute a resource that, by proper utilization, is constantly being renewed. Fire is the greatest enemy of sustained yield. Professor Edwin A. Ziegler of the University of Florida believes that if adequate fire protection combined with forest management were practiced, Florida, which is a net importer of wood now, would be able to produce eight times the amount of wood used in all its industries.

#### Lumber's Role in the War

Wartime shortages of metal made the forest-products industry a leading contributor to victory. Engineering and technological advances during the war not only increased the value of wood in its traditional roles but expanded its economic possibilities. The industry's expansion in the District was limited by the availability of labor and other factors. Still, employment in the industry was considerably higher during the war years than in 1939 before the influence of the European conflict was felt. In Alabama, Florida, and Georgia, for which states monthly data are available, the peak of employment in lumber and timber basic industries was reached in 1943, according to the Bureau of Labor Statistics. As indicated on the chart, employment in other forest-products industries also made wartime gains. Lumber production in the Sixth District states during 1945 amounted to more than 380 million board feet, or 20 percent of all lumber production in the United States.

Present shortages of building materials would apparently insure sufficient demand at present for all the lumber the industry could produce. Though the chief concern at present is with production difficulties caused by labor shortages and price problems, it is these difficulties that will stimulate the manufacture of additional wood substitutes, some of which might permanently displace lumber in many of its present uses.

Retention of already-existing markets for wood products is not the only benefit resulting from scientific research. The new processes make it possible to utilize the inferior grades of trees that formerly were considered to have no commercial value. Scientific research makes possible sustained forestry practices. Moreover it increases the value of the region's timber resources by making selective cutting profitable. For example, an owner of a tract of timber will, if the market exists, receives a greater return by selling part of the timber for poles, part for saw logs, and part for pulpwood than he will by selling the timber for any one purpose alone.

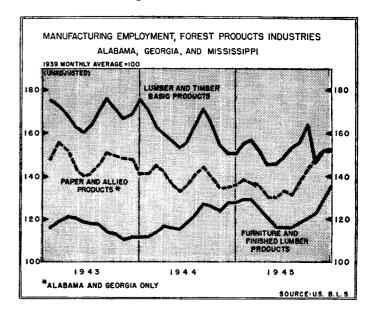
A utilization of the waste products of the lumber industry also represents one of the greatest challenges. It has been stated that only about 25 percent of a tree is used in the materials that go into a house. The branches, slabs, bark, sawdust, and other wastage are not only an economic loss to the

industry but an expense in themselves because of the disposal problem they present. The pulp industry probably utilizes more of the forest material than other forest industries do, but still it rejects the bark, branches, and stumps. If this material could be utilized at a profit, the region's forest resources would provide a much greater return than they do now. Already one company has found it possible to utilize the stumps of trees from which it obtains wood oils and materials for paints, road stabilizers, and explosives, but for the most part the wastage constitutes a liability rather than an asset.

#### The Development of Wood Research

Modern wood research in the United States owes its beginning to the establishment in 1910 of the Forest Products Laboratory of the Forestry Service at Madison, Wisconsin. In the South forestry research has been undertaken by the Southern and Appalachian Forest Experiment Stations, by the Herty Foundation, and by private enterprises. A school of forestry was accredited at the University of Florida in 1943. Research is also being carried on by the region's pulp companies and other organizations. The Wood Research Institute, Incorporated, will receive its support from private industry through a pooling of the resources of individual firms and will in no way compete with existing organizations. Rather, the institute should be able to adapt scientific and technological discoveries to the practical requirements of commercial operation, as well as to create new processes that will utilize the region's timber resources. The accomplishments of the past illustrate some of the possibilities of research in this field.

Wood research has resulted, first of all, in overcoming some of the inherent faults of wood that new materials purport to correct. Wood rots; it shrinks; it swells; it warps; it burns; and it is difficult to dry and bend. Other types of research have enlarged the number of uses for wood without transforming its basic structure. A third type has transformed wood completely, turning it into such products as pulp, paper, rayon, industrial alcohol, and various types of plastics. One of the most recent developments makes wood through impregnation into something better than it was before without changing its essential nature.



Through chemical processes it is possible to treat wood so that it resists fire, termites, and decay. Wood treated against decay was in wide use before the war for dock and railway structures, railway ties, telegraph poles, and bridge foundations. By applying Wohlman salts, it is possible to create an odorless product that is easily painted. Recent improvements utilize other types of chemicals to meet the specific requirements of the market. The war stimulated wood preserving, with special emphasis upon flameproofing. Almost 75 million board feet were so treated in 1943 by the 229 United States wood-preserving plants, 84 of which were in the South.

Enlarging the number of uses to which wood may be put is equally as important as overcoming what are considered to be the inherent defects of wood. Laminated wood, which is made by gluing pieces of wood together with their grains parallel, has been increasingly incorporated in arches for buildings. The idea was gaining acceptance in the United States before the war, since these arches, when treated for insects, fire, and decay, meet many of the requirements of steel and at a lower cost. The use of laminated wood expanded during the war and because of recent technological improvements will probably continue in the postwar period.

In contrast with laminated wood, plywood is made by sandwiching thin sheets of wood together, each sheet laid crosswise to the grain of the other. Relatively little waste results from its manufacture, and it can utilize logs of small size and of a quality not suitable for ordinary lumber. When bound with resinous glues and water the plywood can be molded into many shapes. The manufacture of a waterproof plywood is possible. Plywood tubing was employed extensively during the war for antennas, masts, reinforcing members, large rafts, and various sectional types of construction. A plywood mast produced by one manufacturer can be extended to 90 feet but can be telescoped to eight or six feet. Plywood, it is expected, will be incorporated to a considerable extent in prefabricated homes.

The growth of the pulp-and-paper industry in the South is a direct result of the type of scientific research that transforms the products of Southern forests completely. Chemistry has made it possible to utilize Southern timber in the manufacture of paper, rayon, and other materials. The pulp-andpaper industry was advancing rapidly prior to the war. In the Sixth District states 2.9 million tons of wood pulp were produced in 1945, approximately 29 percent of the total United States production. An expansion of existing pulp mills and the erection of new ones have constituted one of the most important factors in the postwar growth of the District's industry. If the wastes and by-products of the pulp industry could be profitably employed, however, an even greater return would be realized. Though many possible uses for these by-products have been explored, much additional scientific research will be required before the scientific discoveries become commercially feasible.

Out of experiments originating at the Forest Products Laboratory have grown the processes by which woods, though not transformed completely into other substances, are so improved that they are able not only to compete with modern materials but to enter new fields. A whole new series of words created to describe the products such as impreg, compreg, staypak, papreg, pregwood, superwood, indurated wood, transmuted wood, asidbar, urwood, and uraloy may yet become common words in the layman's vocabulary.

#### Impregnated Woods

The "preg" family of woods originated at the Forest Products Laboratory. Treating wood with resin so that the resin actually penetrated the wood cells produced a material called impreg. This material was found to be almost swell-proof, shrinkproof, and decayproof. Compression of the wood to about half its size during the heating process created a hard dense substance called "compreg." Further improvements resulted in "staypak" and eliminated the springback and swelling of the former types and the brittle qualities of compreg.

A search for a cheap chemical suitable for treating refractory woods prior to the drying process revealed that wood soaked in urea and placed in a drying oven became plastic. It was found that this plastic could be rendered stable when treated with formaldehyde. It was also discovered that after the wood was soaked it was as pliable as a piece of heavy rubber and when dry retained its molded shape permanently. This process in addition made the wood resistant to water. weather, acids, alkalies, insects and fire. Commercial companies have further developed the science of impregnating or transmuting wood.

Each of these processed woods has its own particular advantages for particular uses, but they all have qualities that point to manifold possibilities for the further use of the District's wood resources. So hard are compreg and staypak that they take on some of the qualities of steel. It has been stated that one of the impregnated woods is to ordinary wood what steel is to iron. Through this process such woods as maple become as hard as ebony. Since the process may be applied to soft woods, it makes the little-used woods competitors of such hard woods as oak, walnut, and hard maple. The wide range of uses for these new woods, combined with the abundant supply of raw materials in the South, point to the value that industrial research in this field will have if commercial production is possible.

Some of the new woods have a finish which resembles that of polished marble and at the same time reveals the naturally beautiful grain of wood. Scratches can be removed from the surface by merely smoothing and rubbing, since the material has been impregnated all the way through. This type of lumber can be reduced to the desired thickness by pressure during processing, instead of by sawing, and made to hold that thickness permanently. If special colors are desired, they may be introduced along with the impregnating chemicals. A whole new range of colors is thus possible for furniture and interiors. Drawers and doors in furniture made of this type of wood will not swell and will operate under all types of climatic conditions. As the possibilities for this new type of material are fully explored additional ways in which it may be employed will present themselves.

Between the industrial laboratory and the factory, or mill, there is a large area of experimentation required. Adaptation of scientific developments to the lumber industry of the District and to the needs of an individual enterprise requires systematic and constant research. Since the greater part of the region's forest resources are commercially owned and, also, since the fabricating plants are privately owned and financed, the possibility of applying many of the recent scientific developments in wood inevitably hinges upon their commercial practicability. Whether or not he will utilize any given technique is, for an individual processor, governed by the possible

dollars-and-cents return. Research that will be specifically concerned with the commercial possibilities in the application of advances in chemistry and engineering to wood is therefore needed to supplement the work of public organizations.

#### The Wood Research Institute

For several years Don Gavan has been interested in the possibilities of wood research as a contribution to the region's industrial possibilities. About two years ago he became especially interested in the possibility of commercially adapting recent discoveries for impregnating wood. Since no research institute was then available, the Don Gavan Lumber Company began to explore the possibility of a commercial process for impregnation by the use of Arboneeld, the trade name of Du Pont's demethylolurea. Experiments on a pilot-plant scale were made in the impregnation of gum, poplar, cypress, persimmon, Southern pine, maple, birch, and sycamore.

As a test for the durability of the wood under varying conditions impregnated-wood floors were placed in several industrial plants. Tests were also made of other possible ways in which impregnated wood might be employed. A block of it, in one case, was used as a saw guide. In contrast to a hickory guide, which usually lasts only about 90 days under severe usage, the guide made of impregnated soft poplar was used for eight months. Other possible uses include textile spools and spindles, parts of instruments such as surveyors' transit tripods laundry machines, and tubs, in addition to its use for furniture.

The company became so interested in wood research that it entered into a contract with the Georgia School of Technology. Under this agreement, which was made for the period September 1944-September 1945, the school carried on other types of pilot-plant work.

Meanwhile other persons in the area became interested in the possibilities of wood research, and after preliminary discussions the Wood Research Institute was established. This institute, although aided by the efforts of Mr. Gavan, is entirely divorced from the Don Gavan Lumber Company. Any projects undertaken for that company will be on the same basis as those for any other firm.

The institute has been organized in close association with Oglethorpe University in Atlanta, and co-operation between the two institutions is expected. One of the directors, Dr. Phillip Weltner, is also president of the university. The university has agreed to provide the institute with the use of Faith Hall for a period of 15 years, with the privilege of renewal for another 15 years. Repairing and modernization of the building, 142 by 52 feet, has already begun. Half of the structure will consist of a room two stories high, and the other half will be made up of a main floor and a mezzanine. Conversion of the building should be completed shortly.

In the building the institute will set up pilot-plant equipment and a complete laboratory. Furthermore, it expects to install a number of woodworking machines common to the industry. A machine shop equipped for the building and servicing of laboratory and pilot-plant devices is included in the plans. The staff will have its own library of literature in the field of wood research.

Under the laws of Georgia the Wood Research Institute, Incorporated, has been organized as a nonprofit corporation governed by a board of trustees. The board now consists of seven individuals. As the work progresses it will be enlarged to include representatives of the various lumber, paper, and pulp industries in the Southeast. Present members of the board are Mr. and Mrs. Gavan, G. Tom Bailey, Bruce Anderson, Bruce Woodruff, Phillip Weltner, and Homer M. Meier. The directors of the institute, after consulting with the staffs of the principal schools of forestry and professional societies, have secured the services of S. M. Johnson as director.

#### **Two Types of Problems**

The new organization will devote its resources to two major types of problems. One class will concern long-range developments. The finances for carrying on this type of work will come from the institute's endowment and special grants. An initial endowment of \$50,000 has been made by Mr. and Mrs. Gavan. The second type of project to be undertaken will be made at the specific request of individual businesses. These firms will have access to the services of the institute, but they will be required to meet the actual cost of the work involved in their particular projects.

The institute will lay special emphasis upon the practical solution of the industry's problems. One of its prime purposes will be to locate problems that are of direct interest to the industry itself. It is difficult for persons not in the industry to predict what type of work should actually bear the most fruit. Problems of industrial interest and the possible solutions to these problems, it is believed, can best come from the industry itself. Therefore, the policy of closely integrating the institute's activities with private industry is a sensible one.

As a purely hypothetical example, it might be supposed that a furniture-manufacturing company has a large amount of hardwood slab waste. It is impossible to sell the waste. It is inconvenient to burn it, and in addition, a sizeable expense is involved in disposing of the slab. In the hope of solving its problems the company might first consult with the institute's staff concerning the possible utilization of this waste in some form. The staff, being conversant with published literature and papers delivered at scientific societies and with experiments in the field, may be able to suggest methods of commercial utilization without further experimentation. On the other hand, it may be discovered that although laboratory experiments have suggested a solution it is not known whether this method is commercially feasible. Another possibility is that there is no known method of utilizing the particular type of waste this firm wants to dispose of.

All these possibilities are considered by the institute's staff, and the firm is requested to submit its problem in a complete form. The business firm enters into a contract with the institute under which the latter conducts the project for a specified period at no profit to the institute. The interested firm on its

part agrees to finance the direct cost of the project, including payment for the technicians' time, the cost of materials used, and the costs of any special equipment required. Obviously, the institute cannot guarantee to produce a desired result in an exact period of time, but the company and the institute agree to review the progress of the project at specified intervals and to decide then whether to



continue or discontinue the work.

As the project develops, the company may find it desirable to have one of its own employees participate in the experiments. By this means the company would not only receive benefit from the scientific data derived from the experiment but would at the same time acquire the practical details necessary to apply the process to its own commercial needs. Any information gained from the investigation would be the company's own. The decision of whether or not the company will release the information to the industry generally is made by the company itself.

The availability of the institute's staff, equipment, and experience will, of course, be one of the chief advantages offered the individual firm. Such an institution may afford the only way possible for the relatively small firm to participate in industrial research. For the larger firm the institute's resources will constitute a valuable pool of experience from which it may draw.

Attention to the problems of individual companies will be only one phase of the institute's program. A considerable part of its work will be on various phases of a long-range program, which will change from time to time as problems arise. One of the immediate phases of this program will be an investigation into the chemical treatment of wood as a means of improving its dimensional stability. Another phase that has been suggested for the institute's program concerns the acetylation of wood. Although a great deal of work has been done on wood hydrolysis further work is required to adapt the processes to a commercial basis. Utilization of sulphite waste will also be investigated. There are so many aspects to the problem of complete wood utilization that the field of investigation will be limited only by the institution's resources. The institute will release to the industry generally results of the investigations concerned with its long-range program.

Since the institute is in a formative stage and it has as one of its purposes the creation of practical benefits to the industry, those people responsible for its organization hope that a great part of the program will be the result of suggestions made by the industry itself. The institute is open for the discussion of problems. It welcomes also any contributions in the way of suggestions and ideas that industry may make to it. Only by such close association will the institute fulfill its functions properly. Furthermore, the directors hope there will be close co-operation with other research agencies in the Southeast.

The South's industrial future is linked closely to that of the nation and depends upon a complex of factors, some of which are outside the control of the region's industrialists. Governmental policy, world conditions, the course of the national income, and other factors are matters with which individual industries have only indirect influence. The nation's success in overcoming economic problems on a national basis is, however, no insurance that the South will share in an expansion of the national income unless local problems receive a great deal of attention. The establishment of institutions like the Wood Research Institute, Incorporated, is one means by which the South may insure its full participation in the nation's economic development. Many more such institutions will be required before industry in the South not only will utilize fully its present resources of labor and raw materials but will continually renew itself.

CHARLES T. TAYLOR

#### Sixth District Statistics

	CONDITION OF 20 MEMBER BANKS IN SELECTED CITIES (In Thousands of Dollars)										
Item	May 22	April 24	May 23		Percent Change May 22, 1946, from						
1.02	1946	1946	1945	April 24 1946	May 23 1945						
Loans and investments—											
TotalLoans—total	2,214,435 496,305	2,251,677 496,597	1,840,600 319,409	2 0	+ 20 + 55						
Commercial, industrial,	005 105	007.000	100 005	,							
and agricultural loans Loans to brokers and	235,135	237,282	182,665	1	+ 29						
dealers in securities. Other loans for pur-	11,353	11,034	7,639	+ 3	+ 49						
chasing and carrying											
securities	124,518			+ 0 + 4 +126	+254						
Loans to banks	28,232 3,183	27,034 1,408	24,435	¥126	+ 16 + 77 + 39 + 13 + 13						
Other loans	93,884		1,8 <b>0</b> 1 6 <b>7</b> ,716	- 2 - 2 - 3	+ 39						
Investments-total	1,718,130	1,755,080	1,521,191	- 2 - 2 - 3	+ 13						
U. S. direct obligations		1,600,518	1,379,622	_ 3	+ 13						
Obligations guaranteed		1.070	6 100	١,	<b>— 7</b> 3						
Other securities	1,652 158,382	1,676 152,886	6,192 135,377	+ 4	<del> </del> 17						
Reserve with F. R. Bank	363,185			<u> </u>	+ 17 + 4 - 3						
Cash in vault	29,178	30,427	30,116	4	<u> </u>						
Balances with domestic				١							
banks	147,029	146,333 1.331,766		+ 9	+ 14 + 7						
Demand deposits adjusted. Time deposits	1,363,043			I I 2	∓ 2í						
U. S. Gov't deposits	336,483		110,995	+ 0 + 2 + 2 - 12	+ 203						
Deposits of domestic banks	490,880	512,937	489,003	<b>–</b> 4	+ 0 57						
Borrowings	1,500	12,200	3,500	88	<u> </u>						

DEBITS TO INDIVIDUAL BANK ACCOUNTS (In Thousands of Dollars)											
Place	No. of Banks	Āpril	March	April	Percent April 19						
	Report- ing	1946	1946	1945	March 1946	April 1945					
ALABAMA Anniston Birmingham Dothan Gadsden Mobile Montgomery	3 6 2 3 4 3	22,356 225,572 8,165 12,616 93,908 52,367	18,103 227,866 9,569 12,927 98,985 56,596	16,037 198,064 6,583 9,781 103,173 36, <b>0</b> 15	+ 23 - 15 - 15 - 5 - 7	+ 39 + 14 + 24 + 29 - 9 + 45					
FLORIDA Jacksonville Miami Greater Miami* Orlando Pensacola St. Petersburg Tampa	2 3 3	202,061 197,419 289,919 45,437 27,755 46,072 97,631	212,463 231,944 336,340 46,714 29,152 47,577 98,610	170,029 138,137 197,229 35,507 23,113 30,523 85,222	- 15 - 15 - 14 - 3 - 3 - 3	+ 19 + 43 + 47 + 28 + 20 + 51 + 15					
GEORGIA, Albany, Atlanta Augusta Brunswick Columbus Elberton Gainesville* Griffin* Macon Newnan Rome* Savannah	4 3 2 4 2	12,092 586,495 45,776 9,640 42,013 2,883 9,732 8,341 42,502 7,094 16,520 78,658 9,414	12,772 613,913 43,747 8,306 42,202 3,093 10,865 8,067 44,193 9,186 17,054 80,023 8,803	8,845 457,599 34,042 11,955 33,718 1,744 * * * 37,401 4,854 * * * 87,518 6,637	54 + 160 703 + 233 27	+ 37 + 28 + 34 + 19 + 65 + 46 + 46 + 46 + 40 + 41 + 42					
LOUISIANA Baton Rouge Lake Charles New Orleans	3 3 7	55,785 20,032 492,438	55,485 21,086 503,632	43,026 ,15,391 406,537	+ 1 - 5 - 2	+ 30 + 30 + 21					
MISSISSIPPI Hattiesburg Jackson Meridian Vicksburg	2 4 3 2	13,924 81,935 22,184 21,741	15,485 88,019 24,717 25,168	11,497 58,228 16,405 15,142	— 10 — 7 — 10 — 14	+ 21 + 41 + 35 + 44					
TENNESSEE Chattanooga Knoxville Nashville	4 4 6	100,589 96,423 227,174	104,404 104,184 209,879	83,112 120,697 172,973	- 4 - 7 + 8	+ 21 20 -+ 31					
SIXTH DISTRICT 32 Cities	108	3,000,151	3,108,370	2,479,505	<b>—</b> 3	.+ <b>2</b> 1					
UNITED STATES 334 Cities		87,532,000	87,578,000	74,139,000	_0	+ 18					
*Not included in S	Sixth Dis	trict total	**Not a	vailable							

# Secretary Vinson on the British Loan

A statement, somewhat condensed, made by the Secretary of the Treasury before the House Committee on Banking and Currency, May 14, 1946

AM very glad to appear before this Committee and to explain what, in my judgment, the proposed Financial agreement with the United Kingdom means to America and to the world.

With the end of the war we in the Administration and you in Congress have a new responsibility to our people. The sacrifices they have borne will have been largely meaningless unless we do all in our power to achieve lasting peace and sound prosperity. This is the one reward of victory that our people and the people of all the United Nations ask—a world in which countries work and live together in peace and prosperity.

As you are well aware, world peace and prosperity are interlinked. The world cannot have a stable, enduring peace while devastation and hunger stalk the earth. This country cannot prosper in a world torn by fear and strife. No country, no matter how big or strong, can remain either in political or economic isolation.

We must have international co-operation on political problems. That is most important, but it is not enough. The economic causes of conflict must be eliminated. The every-day relations between the businessmen of all countries must be carried on in a fair and friendly way, conducive to good will and mutually beneficial trade.

The Financial Agreement with England, which you are now considering, is above all for the purpose of establishing a sound and fair basis for world trade and in this way lessening the dangers of political and economic warfare.

This Government has advocated a program of international economic co-operation to restore world trade and to eliminate the currency and trade discriminations that divide nations into conflicting economic blocs. No one country can by itself deal with international economic problems, because they are not national in character. They are the responsibility of all countries. We have proposed, therefore, that the United Nations provide the means for continuing co-operation through the International Bank, the International Fund, and through an international trade organization.

The success of this program will mean a good deal to the United States. Our economy has always been dependent on foreign trade. It will be more dependent on exports and imports in the years ahead. We must buy abroad many of the raw materials for our industries and some important goods for our consumers. We must sell abroad a large part of our production, as much as 8 or 10 percent, to keep our agriculture and industry running.

Let's not forget the lesson of the decade before the war when our agriculture and industry suffered severely from trade and currency restrictions. Because of these measures the exports of the United States were harder hit than those of any other country. Our share of world exports, which in 1928 was 15.8 percent of the world total of 32.5 billion dollars, fell in 1934 to 11.5 percent of the much smaller total of 18.5 billion dollars. This decline in our exports contributed to the severe depression in industry and the collapse in agriculture.

Our exports of wheat, cotton, tobacco, and lard were par-

ticularly hard hit. From 1925 to 1928 we sold abroad on the average more than 1,250 million dollars of these four crops annually. From 1931 to 1934, our average sales were only 473 million dollars a year. The difficulty of finding markets abroad for our agricultural surplus was an important factor in the decline of nearly 60 percent in farm prices from 1928 to 1932. The depreciation in currencies was also an important element in this decline in farm prices. When the pound sterling, for example, depreciated from \$4.86 per pound to \$3.20, it put pressure on the prices of all American farm products sold in world markets.

Our trade cannot reach the high levels necessary for American prosperity if the world again resorts to currency and trade restrictions. Unless our exporters have access to world markets on fair and equal terms we will not be able to maintain our production in those fields in which we have long specialized—growing cotton, tobacco, and wheat; making automobiles, machinery, and equipment. In short, we must have a high level of trade between our nation and other nations to have full production, full employment, and a large national income in America. All sections of our country, all sectors of our economy are directly or indirectly dependent upon foreign trade.

International economic co-operation and the expansion of world trade are definitely in the interest of this country and all countries. When countries exchange their surplus products they all gain because it makes possible increased production of their specialized products. This means more production and a higher level of income in the country which sells, as well as more goods and a better standard of living in the country which buys.

This program for the general welfare can be put into effect if the United Nations, and particularly the United States and England, adopt the same fair currency and trade practices. Together these two countries do about one-third of the trade of the entire world. The countries closely linked in trade with England and the United States account for 75 percent of world trade. If these two countries were to adopt the same fair currency and trade practices, the rest of the world would inevitably follow. On the other hand, conflict between the United States and England on currency and trade policies would just as inevitably divide the world into economic blocs.

Consider what would happen if England should have to maintain the present currency and trade restrictions. American goods can be bought by foreign countries only with dollars. The only way to buy American cotton and wheat, American automobiles and machinery is to pay in dollars. If, and only if, sterling is convertible into dollars, can the holders of sterling buy our products. As a matter of fact many countries can get the dollars they need to buy goods in America only with the money England pays them for the goods they sell to her. In brief, American export trade is directly dependent upon the convertibility of sterling into dollars.

If sterling cannot be converted into dollars, England and the sterling area countries must concentrate on their trade with each other, not because their goods are better, but because of monetary impediments. It will mean that Egyptian and Indian cotton will replace American cotton, Rhodesian and Near Eastern tobacco will replace American tobacco, and British automobiles and machinery will replace American automobiles and machinery. In half the trading area of the world, American products would be at a serious disadvantage in competing with the products of the sterling area countries. Our trade with Britain and the sterling area would become a mere trickle.

American exporters ask no special advantages in trading with foreign countries. They do ask that no discriminations be directed against them. Our producers are perfectly willing to sell their products in competition with the products of other countries, provided the buyer has a fair chance to select American goods on the basis of quality and price. But American producers will not have their fair chance to sell their products in the sterling area until the dollar pool is terminated.

The dollar pool is the wartime arrangement made by England to mobilize and conserve the dollar resources of all of the countries of the sterling area. Under this arrangement a country of the sterling area that secures a surplus of dollars from exports to the United States transfers the dollars to England for a sterling deposit in London. The dollars are then allocated by London to the various members of the sterling area for the most essential purchases requiring payment in dollars. In practice, dollars are not allocated for buying American machinery or any other American goods which can be bought in England or anywhere in the sterling area. Some American exporters are in effect excluded from a large part of the world's markets. That is why we want the dollar pool brought to an end.

Another danger to American trade is the large amount of blocked sterling. During the war the countries of the sterling area accumulated large sterling balances held as deposits in London banks or invested in British Treasury securities. These balances were acquired as a result of their wartime exports to England or military expenditures made by England in India and the Middle East which were paid in sterling. Because these sterling balances could not be converted into dollars or used to buy exports from England, they were called "blocked sterling balances."

What is done about the liquidation of these blocked sterling balances will make a big difference to American trade. If England says that these balances can be used only to buy goods in England, then the countries holding more than 13 billion dollars of these sterling balances will, in effect, be compelled to concentrate their purchases in England. American producers will have little chance to export to the countries holding blocked sterling. On the other hand, if the countries holding these balances can get them gradually converted into dollars, our exporters will be in a position to compete on fair and equal terms throughout the sterling area.

The continuation of these wartime restrictions will reduce world trade and force it into uneconomic channels. There is only one desirable way to protect world trade from this result, and that is by establishing the currency and trade practices that we have proposed. These practices are based on the principle that the export markets of the world should remain open on fair and equal terms to the exporters of all countries. It is another application of the old American doctrine of fair play and equal opportunity.

England is a country that must live by imports. Two-thirds of the food consumed by the British people and virtually all

of the basic raw materials, except coal, used in British industry must be purchased abroad. As a consequence, England is a great importing country. She is the best customer of the United States and of a score of other countries. What England does to eliminate wartime currency and trade restrictions will affect our trade and the trade of the entire world.

England's international economic position has been seriously distorted by the war. For five years, England was the principal target of the Luftwaffe, as well as the principal base of operations of the Western allies against Germany. Her life was at stake, and ours. The punishment which she took — and which she handed out — wrote stirring chapters in the history of free men.

I speak of this not as a reason for the Financial Agreement, because the Agreement looks to the present and the future, not to the past, but I speak of it to emphasize that during the war, England had little time to think of her export trade. She devoted every resource which she could mobilize to her defense and to the attack on the enemy. British exports fell until, by 1944, they were only 30 percent of their prewar volume. The men released from the export industries were put to work at war production or were inducted into the armed forces.

Lend-lease from the United States and Mutual Aid from Canada filled part of the gap between her wartime needs — mostly for our common cause — and her current supply of foreign exchange. Nevertheless, she had to draw heavily on her accumulated foreign exchange resources, and strain her credit abroad in order to secure her essential war imports. She sold 4.5 billion dollars of her foreign investments; she reduced her gold and dollar reserves by 615 million dollars; and she incurred foreign debts which now amount to more than 13 billion dollars, very largely blocked sterling balances held by foreigners in London. As a result of her war effort, Britain's international financial position deteriorated by about 17 billion dollars from 1939 to 1945.

Meanwhile, Britain's earnings abroad from shipping and other services have also been sharply reduced. Because of enemy sinkings, the British merchant marine is one-fourth smaller than before the war, in spite of the large building program. The earnings from financial and commercial services have fallen off along with England's trade and shipping. With the recovery of world trade, these services will again expand and become an important part of England's foreign business.

Before the war the British people were able to earn enough from their exports and their services to foreigners to purchase abroad the food and raw materials essential to their economy. In 1938, about one-half of Britain's imports was paid for by the export of British goods. About one-fourth was paid for by services of the British merchant marine, insurance companies, and other financial and commercial institutions. An additional one-fourth was paid for out of the net income of British capital investments abroad.

The British people have industriously set about to restore their international economic position. They are reconverting their war industries to civilian production. They are making a determined effort to increase their industrial efficiency. They are exporting as much as they can without depriving themselves of the essentials of life. These are problems which the British people must work out for themselves over the next few years. But during this transition period, the feeding of the British people and the supplying of British industry will result in a substantial need for foreign credit.

The British can finance this transitional need in one of two ways. One is the road of economic blocs and economic warfare. It is the road of economic isolation. The other is the road of Bretton Woods. It is the road of international eco-

nomic co-operation.

During the war England imposed comprehensive currency and trade restrictions. These restrictions were one aspect, and a very necessary aspect, of Britain's wartime financing. What England did, in effect, was to create an economic bloc composed of the British Empire except Canada, and including a number of other countries, principally in the Middle East. This bloc is now in operation. If England cannot get help in meeting her import needs over the next few years, she will be forced to continue and even extend her wartime restrictions and discriminations.

The great danger before us is the division of the world into conflicting blocs. In the economic sphere, we are trying to meet this problem through co-operation in the World Fund and Bank. If England adopts the fair currency and trade practices we have proposed, it may be possible to avoid the formation of a bloc outside the Fund and Bank under the leadership of a great power. But if England finds it necessary to keep her wartime restrictions, it will result in a British bloc and an American bloc. And it will also act as an encouragement to a Russian bloc. Such a development would be a menace to peace and prosperity everywhere. No country wants this kind of world; no country can afford this kind of world.

The British people have shown clearly their desire to cooperate in building a world in which trade can be carried on fully and fairly. The British people are with us in our effort to secure the widest possible flow of world trade by establishing stable and orderly conditions. They know that restrictions and discriminations stifle world trade and lead to conflicts which can have disastrous consequences. But Britain cannot abandon her wartime currency and trade restrictions unless she secures help, primarily from the United States and Canada. With such help, England would be able to put into effect the fair currency and trade standards which we have proposed and which she supports.

After friendly discussions over several months, the American and British negotiators agreed that England would need a credit of 3¾ billion dollars from the United States. This credit, together with that from Canada, will enable England to continue her essential imports during the next few years, while removing the wartime currency and trade restrictions and discriminations. The Financial Agreement thus provides two things, a commitment to end discriminatory currency and trade practices and a credit to enable England to carry out the commitment.

Here is what the Financial Agreement provides:

1. England will not discriminate against American products in any of her import controls. So long as she buys cotton or fruits abroad, she will not discriminate against the import of American cotton or fruits. If it becomes necessary for England to limit her agricultural or industrial imports, this will be done on a basis fair to all countries, including the United States.

2. For any goods or services purchased in the United States, England will pay in dollars or if payment is made in pounds, American exporters will be able to convert the sterling into dollars. That goes for American movies as

well as American machinery. And it applies to income from American investments in England. No American firm need hesitate to do business with England for fear that its earnings cannot be transferred. American businessmen will be just as sure of payment in dollars from England as they were before the war.

- 3. Within a year, unless we agree to a temporary extension, England will remove all of the restrictions on the convertibility of sterling for ordinary current transactions. In practice, this will mean that the money that England pays to Canada, Australia, and India for her imports will be converted by England into dollars and can be used by these countries to pay for goods they purchase in the United States.
- 4. Within a year, unless we agree to a temporary extension, England will dissolve the Sterling Area Dollar Pool. Each country in the sterling area will be completely free to use any dollars it earns to buy goods anywhere. India, for example, could use the dollars it gets for its exports to the United States and Latin America without turning over any part of them to England.
- 5. A settlement will be made by England with the countries holding blocked sterling balances. England has agreed that any payment in liquidation of these blocked balances can be used to buy goods in any country, including the United States. Instead of being forced to spend the blocked sterling balances in England, the holders of these balances, like India and Egypt, will be free to buy goods wherever they prefer. American exporters will have a fair chance to export in these markets.
- 6. In addition, England has agreed to support the American proposal for an international trade organization to reduce trade barriers and eliminate trade discriminations. With England supporting this proposal, the forthcoming United Nations Trade Conference holds forth every prospect of success.

These six commitments are important commitments. They represent a wholehearted adoption of the letter and spirit of the United Nations program for fair currency and trade practices. To carry out these commitments England will need help during the next few years. That help she will get from the credit under the Financial Agreement with the United States and, it should be added, from the same Financial Agreement with Canada.

If Congress approves, the United States Government will open a line of credit of 3¾ billion dollars in favor of England. This credit can be drawn on by England until December 31, 1951, to purchase goods and services in the United States. It can also be used by England for meeting the transitional postwar deficit in her current balance of payments, and for helping England assume the obligations of multilateral trade.

None of the credit can be used for paying off the blocked sterling balances or any of Britain's wartime debts; these obligations will have to be met from other resources.

Beginning in 1951, England will repay the credit over a 50-year period, with interest at 2 percent. The principal of the credit must be repaid without qualification. Under conditions of severe depression in world trade, the interest due in any given year may be waived under objective standards stated in the Agreement. If such an emergency situation develops, it is clearly in the interest of the United States to ac-

cept the principal and not to force a default which would have serious consequences to the world economy.

Naturally, the interest rate is less than Britain would have to pay on a strictly commercial loan obtained from bankers. The Financial Agreement, however, is much more than a loan. It is an Agreement on the major aspects of financial and commercial policy. When we take into consideration the commitments we receive from England on her currency and trade policies, it becomes clear that the Agreement would amply repay the American people even if no interest were paid. And some would say we would have made a good investment if the whole sum were a gift.

As a matter of fact, the interest is substantial. If the credit were used in five equal annual amounts and all interest payments were met, the effective rate of interest under the Financial Agreement would be 1.83 percent, and over 2.5 billion dollars of interest would be paid. The rate of interest is reasonably close to the average cost of money to the Treasury.

This point will bear emphasis: the credit is only a part of the Financial Agreement. The purpose of the Financial Agreement is to enable England to participate fully in our international economic program. The full participation of Britain in this program is necessary if it is to become effective. The approval of the Financial Agreement by Congress will assure the implementation of our whole international economic program.

The credit to Britain cannot be a precedent for a loan to any other country. The National Advisory Council on International Monetary and Financial Problems has issued a statement of our foreign loan policy in which this is made clear. I read from that report:

"The proposed loan to Britain, requiring Congressional authorization, is a special case, but one which is an integral part of the foreign economic program of this Government. No other country has the same crucial position in world trade as England. Because of the wide use of the pound sterling in world trade, the large proportion of the world's trade which is carried on by the countries of the British Empire, and the extreme dependence of England upon imports, the financial and commercial practices of Britain are of utmost significance in determining what kind of world economy we shall have. The early realization of the full objectives of the Bretton Woods program, including the elimination of exchange restrictions and other barriers to world trade and investment, requires an immediate solution to Britain's financial problem. The International Monetary Fund agreement permits the continued imposition of certain of these restrictions for as much as 5 years; in the Financial Agreement of December 6, 1945, the British agree to their removal within 1 year from the effective date of that Agreement. It is the view of the Council that the British case is unique and will not be a precedent for a loan to any other country.'

Other countries will need help. This help will be available to them from the institutions that are now in operation. The International Fund will provide help needed for currency stabilization. The International Bank will be the principal agency to facilitate foreign loans out of private capital for reconstruction and development. In the emergency period, until the International Bank is in full operation, the Export-Import Bank will meet only the most urgent needs for re-

construction aid. It is the policy of this Government to make the agencies established by the United Nations the means for continuing co-operation on currency and investment problems, and to leave to these institutions the task of providing the funds necessary to implement this program.

There are some people who recognize that it is in the interest of the United States to offer England the proposed credit, but they fear that the credit will add to inflationary pressures in this country. I am much concerned about the inflation problem. I know, from first-hand experience, how important the inflation problem is in this country. I believe that the credit to Britain will not materially increase the danger of inflation.

The total amount of credit to England under the Financial Agreement is less than one-half of one percent of the aggregate expenditures in this country in the next five years. A considerable part of the credit will be used in later years when the supply problem is less acute. Some of the credit will undoubtedly be used for goods that are in abundant supply. Inevitably, some of the credit will be needed for goods that are in scarce supply. The Commerce Department estimates that about one-fourth of the proceeds of foreign loans will be spent on such products. In those cases allocation and export controls will prevent any undue drain on our domestic supply and assure the minimum essential needs of other countries.

In the end the way to beat the inflation problem is to produce enough goods. The Financial Agreement will encourage production in this country and abroad by removing the restrictions which hamper trade.

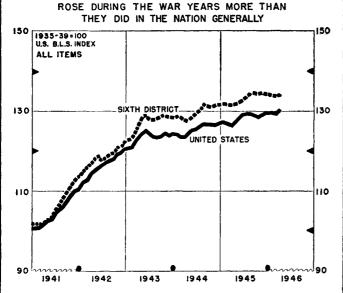
The Financial Agreement with England is an essential part of our whole program of international economic co-operation. This program of the United Nations is concerned with some of the most important problems of everyday life. How we meet these problems will determine in large part whether the United States and the world will again go through devastating cycles of war and depression or whether at long last we realize the hope for peace and prosperity.

If we do not remove the irritations and alleviate the impediments to trade, we feed the greedy god of war and largely nullify the other efforts we make toward a stable enduring peace. But if we meet our problems in the fields of international exchange and world trade and build a sound economic order in the several United Nations and in the world, we create an atmosphere conducive to peace. And good economic relationships between nations can, in themselves, give us more than a fighting chance for lasting peace.

I want to stress the importance of production and employment right here at home. The United States is the greatest single economic force in the entire world. The level of our national income is the determinant of world trade. If we maintain production and employment, world trade will flourish. The greatest contribution the United States can make to the peace and prosperity of the world is to keep America strong and prosperous and the advocate of justice in the council of the nations.

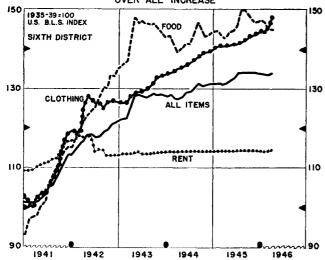
This is a world in which all countries must share the same destiny. It will be peace and prosperity for all, or war and depression for all. We cannot escape from these problems by withdrawing from the world. Political or economic isolation is an anachronism; it is a dangerous policy because it is unreal. There is only one way to assure the security and welfare of this country. That is to face the world's problems and deal with them in co-operation with other countries.

### CONSUMER PRICES IN THE SIXTH DISTRICT



Prices paid by consumers were 32.2 percent higher in March of this year than in March 1941. This measurement is based on an average of the consumers' price indexes for moderate income families in six large cities of the Sixth Federal Reserve District. In the index for all cities in the United States the advance was 28.7 percent. The advance of 2.2 percent in the District since March 1945, however, is less than the increase of 2.7 percent for the United States.

# FOOD AND CLOTHING PRICE INCREASES ACCOUNTED FOR THE GREATER PART OF THE OVER-ALL INCREASE



The index for all items is a weighted average of the prices of several types of commodities and services bought by families of wage earners and moderate-income workers in large cities. The price of food and clothing bought by these families increased 47.9 and 44.1 percent respectively above prices paid by them for such items in March 1941 and 1.7 and 4.9 percent above those paid a year ago. The cost of rent advanced 4.0 percent during the five-year period. Not shown on the chart but included in the index are the costs of fuel, electricity, and ice, which advanced 13.6 percent; of housefurnishings, which advanced 46.2 percent; and of miscellaneous items, which advanced 29.6 percent in the same period.

### Consumers' Price Index

INDEXES of the cost of living are useful devices for economic analysis. In addition they are interesting to most persons because of the effects that consumer-price changes have on their economic welfare. The indexes are sometimes used, however, to perform functions of measurement of which they are incapable and for which they were never intended. Misunderstandings often arise as a consequence.

The consumers' price index, published each month in the Review and formerly called the cost-of-living index, is based upon the consumers' price indexes prepared by the Bureau of Labor Statistics of the United States Department of Labor. The District index is a weighted average of the indexes for the various large cities in the District, for which the B.L.S. collects data. For Savannah and Birmingham the Bureau issues indexes monthly and for Atlanta, New Orleans, Jacksonville, and Mobile quarterly. Food-price indexes are issued each month for all these cities and, in addition, for Jackson, Mississippi.

Every month the regional office of the B.L.S. at Atlanta sends out a release giving changes in indexes for all those cities covered in the District with the exception of New Orleans. A release including the New Orleans index may be obtained from the Bureau's Dallas office. These releases not only indicate the price changes by cities but show the price changes for selected commodities.

The District index cannot be regarded either as an absolute measure of variations in consumers' prices within the Sixth District or as a perfect means of making a regional comparison with other parts of the United States. In the first place, the index is an average of only a small number of the large cities in the District, and there are, of course, many variations not measured. An adequate index for the District would require a sample of cities equal to the number now covered in the national series. Despite these deficiencies the District index, as the most comprehensive available, makes some contribution toward measuring contrasting changes in consumers' prices.

Preparation on a national basis of the B.L.S. index on the cost of living was first instituted in 1919. The index was based on a study of budgets for the years 1917-19. By the use of family-budget studies made for the years 1934-36, weights have been adjusted on a more recent basis, and minor adjustments are made from time to time. The index at present measures the purchasing power of the dollar for moderateincome groups in any given year against the purchasing power for the average years 1935-39. The annual income of this group averaged \$1,524 in 1934-36. Expenditures for the items included in the index made up approximately 70 percent of the total expenditures of these families. The index thus does not measure the consumer expenditures of other income groups, nor does it indicate how much more all families spent on an average in 1945 than in the base period. So far as the prices of the goods purchased by other income groups change in the same manner, the indexes are a guide to changes in the prices paid by other groups.

The average income of families in the United States has increased greatly in recent years. As a result the family in some cases may have moved to better living quarters, may have adopted a different pattern of consumer expenditures, or, in the process of increasing its income, may have trans-

ferred from one community to another, where the pattern of consumption differs. During the war period the average per capita income in the Sixth District expanded greatly. It is a well-known principle of consumption that as a family's income grows the proportion of its expenditures going for fresh vegetables and fruits and more expensive food items increases. Moreover, the purchase of food is a day-to-day occurrence. Since the prices of this type of commodity rose substantially, an impression often received is that the increase in all items going into the index was equally great.

The index for "all items" is a weighted average of the prices paid for commodities classified in the following groups: food; clothing; housefurnishings; fuel, electricity, and ice; rent; and miscellaneous. Thus the index covers some expenditures that have remained relatively fixed during the

It is designed to measure changes in consumers' prices between periods and is not designed to indicate variations in the cost of living between cities. The index does not tell whether it cost more or cost less to purchase a given amount of consumers' goods in one city than in another. It is entirely possible that even though the index may have risen higher in one city than in another, the actual dollar cost of living might be lower in that city in which the price rises have been the greatest.

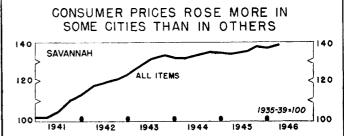
It was contended in some quarters in 1943 that the B.L.S. index failed to measure accurately the advances in the cost of living. In an effort to determine the validity of these criticisms, a special committee of the American Statistical Association, whose membership is composed of leading statisticians of the country, conducted an independent appraisal of the index. In general, the committee found that the index was a reasonably accurate device for measuring what it was designed to measure.

The association's committee concluded that the prices reported to the Bureau were those actually paid by the customers, although the index did not accurately measure blackmarket operations. It concluded that there was probably an error, of not more than 2 percent, in the index caused by underreporting of above-ceiling prices. Regarding the charge that the index failed to measure the hidden price increases resulting from quality deterioration, the committee stated that although it believed there had been some lowering of quality during the war not reflected in reported prices, no

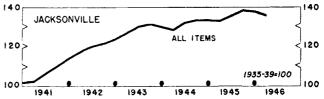
dollar value could be assigned to the loss.

On the other hand, the President's Committee on the Cost of Living decided that changes in the quality and availability of consumer goods and other factors would add a maximum of from three to four points for large cities between January 1941 and September 1944. It was also decided that if small cities were included in the national average, another half point would be added. Taking account of continuing deterioration of quality and disappearance of low-priced merchandise, the over-all adjustment for the period from January 1941 to September 1945 would total an approximate increase of 5 points. The B.L.S. believes that when prewar quality merchandise comes back to the market this adjustment factor will greatly decrease and finally disappear.

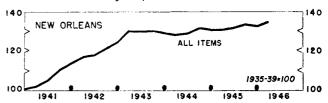
This is the first of a series of short articles that will appear from time to time in the Review, describing the composition and possible use of some of the Sixth District statistical series.



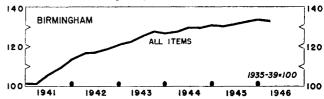
The index of all items for Savannah in March of this year had increased 36.5 percent since March 1941 and 2.5 percent since March 1945. Since March 1941 the percentage rise in food had been 53.6; clothing 50.7; rent 9.6; fuel, electricity, and ice, 16.7; housefurnishings 62.3; and miscellaneous 29.5.



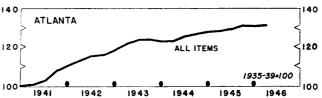
The index for Jacksonville had increased 32.9 percent since March 1941 and 1.9 percent since March 1945. Since March 1941 the percentage rise in food had been 48.0; clothing 43.3; rent 3.5; fuel, electricity, and ice 19.6; housefurnishings 47.5; and miscellaneous 33.1.



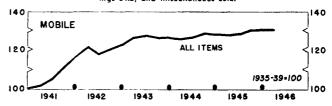
The index for New Orleans had increased 31.3 percent since March 1941 and 2.3 percent since March 1945. Since March 1941 the percentage rise in food had been 47.2; clothing 42.7; rent 3.0; fuel, electricity, and ice 6.8; house-furnishings 36.5; and miscellaneous 24.7.



The index for Birmingham had increased 31.1 percent since March 1941 and 2.2 percent since March 1945. Since March 1941 the percentage rise in food had been 49.8; clothing 43.3; rent 3.9; fuel, electricity, and ice 15.3; house-furnishings 40.8; and miscellaneous 26.9.



The index for Atlanta had increased 30.9 percent since March 1941 and 2.3 percent since March 1945. Since March 1941 the percentage rise in food had been 42.4; clothing 43.8; rent 2.7; fuel, electricity, and ice 9.7; housefurnishings 54.2; and miscellaneous 35.2.



The index for Mobile had increased 29.1 percent since March 1941 and 2.3 percent since March 1945. Since March 1941 the percentage rise in food had been 48.0; clothing 46.4; rent, 2.1; fuel, electricity, and ice 7.4; housefurnishings 42.8; and miscellaneous 18.8.

# **Bank Announcements**

DURING the month of May one bank was admitted to membership in the Federal Reserve System. This was the First National Bank of West Point, West Point, Georgia, which was certified by the Comptroller of the Currency to begin business on May 1. This bank, formerly the Citizens Bank and Trust Company, represents a conversion from state-bank status to National-bank status. It was originally organized in 1906 with a capital stock of \$100,000 and a surplus of \$20,000. At present its capital amounts to \$200,000, its surplus and undivided profits amount to \$140,000, and its deposits to \$8,000,000.

The chairman of the board of the bank is H. H. Greene, who has been a resident of West Point for 40 years and a cotton buyer for the West Point Manufacturing Company for the past 20 years. The president, Willis Johnson, began his banking career in 1908 and has spent most of his life in West Point. From 1928 to March 1930 he served as vice president, cashier, and director of the National Bank of Athens, Athens, Georgia. Between that time and 1932, when he returned to West Point, he served as vice president and cashier of the North Carolina Bank and Trust Company, Greensboro, North Carolina. Mr. Johnson was elected president of the West Point bank in 1937. George H. Lanier is vice president of the bank. He is also president of the West Point Manufacturing Company, a position he has held for more than 25 years. In addition, Mr. Lanier serves as president of the Lanett Bleachery and Dye Works and has many other business connections. The cashier of the bank is J. E. Robinson, who has been connected with the institution since 1937.

West Point is an important center for cotton-textile manufactures. It is located 84 miles southwest of Atlanta on the Chattahoochee River, at the Alabama state line. The 1940 population of West Point was 3,692, and that of the adjacent town of Lanett, Alabama, was 6,152. The population of the trade area is estimated at something more than 30,000.

The past month has also seen the addition of four banks to the Federal Reserve Par List. On April 22 the Bank of Lexington, Lexington, Alabama, a nonmember located in the territory served by the Birmingham branch began remitting at par. The capital stock of this bank is \$15,000, its surplus also is \$15,000, its undivided profits are \$17,941, and its deposits \$1,523,000. The bank is officered by L. M. Foster, president; J. H. Belew, vice president; Charles P. McMeans, cashier; and B. A. Porter, assistant cashier.

The Bank of Lexington is situated in one of the richest sections of the Tennessee valley. The Tennessee Valley Authority's Wilson and Wheeler Dams are in the vicinity, as are the Reynolds Company alloys, metals, and metallurgical plants. Farmers in the region, or members of their families, in many cases supplement their incomes by working in these plants. Wheeler and Wilson Dams provide excellent fishing facilities, and some well-equipped fishing camps are to be found there. The bank serves more than 4,000 customers in the area.

Another nonmember bank, the Claiborne County Bank, Tazewell, Tennessee, began remitting at par on May 1. This bank is located in the territory served by the Nashville branch. Its officers are G. S. McCollough, president; William I. Davis and William I. Davis, Jr., vice presidents; Glenn

Yoakum, cashier, now on military leave; and Archie Jennings, assistant cashier. The bank has capital of \$25,000, surplus of \$25,000, undivided profits of \$31,000, and deposits of \$1,776,000.

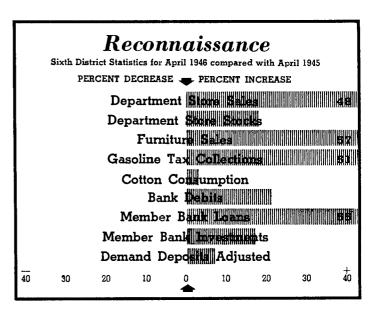
The City Bank and Trust Company, Natchez, Mississippi, also began remitting at par on May 1. This is a nonmember located in the territory served by the New Orleans branch. The City Bank and Trust Company was incorporated in 1909 and was originally known as the Southern Banking and Investment Company. At the time of its incorporation, the bank's capital stock amounted to \$15,000. With the amendment of the bank's charter in February 1914 its name was changed to the City Bank and Trust Company. On April 29 of this year its capital stock was \$175,000, surplus \$180,000, its undivided profits were \$38,104, and its deposits \$8,250,121. The president of this bank is H. M. Alexander. J. B. Kellogg is active vice president, and J. N. Carpenter and C. S. Sherrouse are vice presidents. The cashier is L. R. Martin, and the two assistant cashiers are F. D. Perrault and William S. Burns.

A third bank to begin remitting at par on May 1 was the Mechanics-State Bank, McComb, Mississippi. This is a nonmember bank located in the territory served by the New Orleans branch. On December 31, 1945, the capital stock of this bank amounted to \$72,500, surplus to \$107,000, undivided profits \$2,808, and deposits \$4,851,882.

On May 30 the Valley National Bank of Lanett, Alabama, opened for business as a new member bank. This bank has capital stock of \$100,000 and surplus of \$20,000.

It is officered by J. H. Morgan, president, and J. L. Reese, executive vice president and cashier. The directors of the bank are J. H. Morgan, J. L. Reese, W. W. Bradfield, C. E. Combs, Weyman A. Darden, C. E. DeLoach, Clarence H. Hill, G. E. Goggans, George L. Johnson, J. W. Johnson, T. H. Kirby, R. W. McClendon, Basil B. McGinty, W. H. Scott, and O. G. Skinner.

This bank will serve the 7,000 people of Lanett and the almost 40,000 people living in the Chattahoochee Valley.



## The District Business Situation

In the Sixth District during May department store sales have apparently declined less than they usually do in that month. They increased in April less than might have been expected, but in both these months they have continued well above the figures for the corresponding periods of earlier years. Wholesale distribution, also, increased somewhat in April. Reports indicate that life insurance sales were greater in that month than they have been in any month for which statistics are available. Gasoline consumption, as reflected in tax collections, increased 19 percent over the March consumption. Moreover, it was 51 percent greater than it was in April of last year, when gas rationing was still in effect.

Though much of the District's industry has been crippled by the coal strike, in April the effects had then been felt neither by the textile mills, which were able to operate at a slightly higher rate of activity than they were in the preceding month, or in April of last year, nor, according to reports, by the lumber industry, which also was able to increase its output. Coal mining, of course, had virtually ceased the last of March, and as a result activity in the steel mills dropped more than a half between early April and the middle of May. It is too early, at the time the *Review* goes to press, to appraise the effects of the 48-hour railroad strike.

#### **Department Store Trade**

That Sixth District department store sales have continued in May, as in other recent months, to break all previous sales records for the corresponding month in other years is indicated by sales figures reported to this bank for the first three weeks in May by more than thirty stores located throughout the District. The figures show an increase of 35 percent over the figures for those weeks last year. If this comparison holds good for the entire month, it will mean, when reports for more than ninety stores are received, a decline from April sales of 5 percent, a reduction smaller than might have been expected in May. It will also result in a 3 percent rise in the sales index after allowance is made for seasonal tendencies.

The daily average rate of sales in the District in April rose 7 percent over the rate for March. It was, furthermore, 43 percent higher than the rate in April 1945. The difference in the March and April figures, however, was only a little more than half as great as might have been expected on the basis of past experience. When allowance was made for seasonal factors and the changing date of Easter, the adjusted index declined 5 percent. The adjusted index of 318 percent of the 1935-39 average was up 36 percent from that for April last year. A comparison of April sales this year with those of last year showed the change to be somewhat less favorable than the comparison of the first two weeks' sales given in the April Review had indicated it would be. The principal reason for this is that the first two weeks of April came before Easter this year and after Easter in 1945. The index for April this year is about two and a third times as high as it was for the last prewar April, in 1941, and it is more than five times as high as it was in April 1933.

In a table on page 54 of this issue of the *Review* are shown percentage comparisons of total dollar sales in April and stocks at the end of April with those for March this year and for April of last year. Macon had the largest increase in sales over April last year, a gain of 73 percent. Other cities that re-

ported gains larger than the average for the District were Augusta, Nashville, Jacksonville, Atlanta, Baton Rouge, Bristol, and Chattanooga. The increase in New Orleans was the same as that for the District as a whole, and there were smaller increases at Tampa, Orlando, Birmingham, Miami, Jackson, Montgomery, Columbus, Mobile, and Knoxville.

At those stores that classified their sales figures, cash sales in April accounted for 58 percent of the total this year, compared with 62 percent a year ago. Open-book credit sales accounted for 38 percent of the total this year against 35 percent last April. Though instalment sales were only 4 percent of the total, the percentage was higher than it was in April last year, when they amounted to 3 percent.

April inventories showed increases over inventories held a month earlier at almost all reporting cities. They were also greater than those of a year ago.

#### **Wholesale Trade**

Though wholesale distribution of merchandise in April was only slightly higher than the March total, it was 27 percent greater than the distribution in April one year ago. Of the 18 groups of reporting firms, only four reported decreases compared with sales in April 1945. They were the groups selling lumber and building materials; machinery, equipment, and supplies; farm supplies; and beer. April inventories were about the same as March inventories but were 14 percent larger than those held a year ago.

#### Life Insurance Sales

According to statistics released by the Life Insurance Agency Management Association, the record-breaking sales of ordinary life insurance in the Six States during April totaled \$98,879,000, a rise of 10 percent over the March total and a figure 82 percent higher than the total for April 1945. Increases over the figures for April of last year in the various states ranged from 53 percent in Louisiana through 68 percent in Florida, 77 percent in Georgia, 88 percent in Alabama and Tennessee to 91 percent in Mississippi. Nationally the increase over the April 1945 sales averaged 75 percent.

#### **Agricultural Prospects**

Spring weather was generally favorable in most parts of the Sixth District during April and early May. There has been too much rain in some parts of Georgia, Louisiana, and Tennessee, however, and too little in parts of southern Alabama and Mississippi.

According to the May I Crop Report of the United States Department of Agriculture, potatoes and strawberries in the southern part of Alabama suffered from the lack of rain, but corn, cotton, and some peanuts are up to a good stand. Field work and crop growth on the whole are about up to normal. Reports indicate the labor situation to be tight, but complaints are not as numerous as they were in the war years. A wheat crop in Alabama amounting to 196,000 bushels, compared with 240,000 bushels in 1945, was indicated. The 1934-44 average wheat production in Alabama was 101,000 bushels. Only twice has the indicated yield of 14 bushels an acre been exceeded—in 1944 and in 1945. The condition of oats in Alabama on May 1 was reported at 83 percent of normal, three points under the condition of a year ago. Early potatoes declined three points in April to 78 percent on May 1. Digging

#### Sixth District Statistics

instalment cash loans										
Lender	Number of Lenders	Percent March 1946	Change to April 1946							
	Reporting	Volume	Outstandings							
Federal credit unions State credit unions Industrial-banking companies Industrial-loan companies Small-loan companies Commercial banks	23 10 20	+ 222 + + 226 5 5 10 + 19	+ 4 + 4 + 7 - il + 1 + 10							

RETAIL FURNITURE STORE OPERATIONS									
Item	Number oi Stores	Percent April 19	Change 346 from						
	Reporting	March 1946	April 1945						
Total sales	100	+ .1	+ 57						
Cash sales	92	+ 5	+ 89 + <b>4</b> 9						
Instalment and other credit sales	92	+ 0	+ 49						
Accounts receivable, end of month	99	+ 3	+ 18 + 36						
Collections during month	92 92 99 99	1							
Inventories, end of month	81	+ 10	l + 18						

WHOLESAL	E SALES	AND IN	VENTORII	es* — Ai	PRIL 1946	
		SALES			VENTOR	IES
Item	No. of Percent Change Firms April 1946 from		No. of Firms	Percent April 19	Change 46 from	
	Report- ing	March 1946	April 1945	Report- ing	March 1946	April 1945
Automotive supplies. Shoes and other	7	+ 4	+ 59	5	+ 3	+ 25
footwear	3 9 10	+ 1 2 + 19	+ 44 + 7 + 51	 4 4		+ 4 + 36
vegetables Confectionery Groceries—full-line	5 6	+ 15 - 4	+ 27 + 76			••••
wholesalers Groceries—specialty-	37	— 6	+ 31	18	- 4	+ 6
line wholesalers Beer Hardware—general. Hardware—industrial Machinery, equip-	12 4 12 6	- 5 - 21 + 6 + 5	+ 28 + 29 + 37 - 5	8 3 6 	- 4 12 0	+ 19 - 1 + 6
ment and supplies, except elect Paper and its	3	<u> </u>	+ 56			
products	3	— 1	+ 59			
products Miscellaneous Total	7 1\1 144	_ 2 + 1	+ 35 + 32 + 27	iġ 66		+ 26 + 14
*Based on U. S. Depar	tment of	Commerc	e figures			

DEPARTMENT STORE SALES AND STOCKS											
		SALES		INVENTORIES							
Place	No. of Stores	Percent Change April 1946 from		No. of Stores	Percent April 30,	Change 1946, from					
	Report- ing	March 1946	April 1945	Report- ing	March 31 1946	April 30 1945					
ALABAMA Birmingham Mobile Montgomery FLORIDA		+ 7 + 14 + 9	+ 51 + 42 + 47	4 .;	+ 10 + 9	+ 11 6					
Jacksonville Miami Orlando Tampa GEORGIA	4 3	+ 10 - 4 + 4 + 4	+ 65 + 49 + 52 + 53	3 3 	+ 5 + 13 + 14	+ 9 + 19 + 1i					
Atlantan Augusta Columbus Macon	4	+ 1 + 4 + 9 + 19	+ 60 + 69 + 46 + 73	5 3 	+ 13 - 17 + 6	+ 15 + 10 + 27					
LOUISIANA Baton Rouge New Orleans	4	+ 7 + 20	+ 60 + 55	4 3	+ 5 + 4	7 + 45					
MISSISSIPPI Jackson TENNESSEE	4	+ 11	+ 48	4 3	+ 8 + 3	+ 13 + 6					
Bristol Chattanooga. Knoxville Nashville OTHER CITIES* DISTRICT		+ 12 + 12 + 5 + 2 + 6	+ 59 + 57 + 34 + 68 + 46 + 55	3  5 22 72	+ 10  + 5 + 8 + 8	+ 26 + 17 + 22 + 18					

\*When fewer than 3 stores report in a given city, the sales or stocks are grouped together under ''other cities.''

has been under way in the southern commercial counties since the third week in April. Yields are running lighter than they were last year, and insufficient rainfall has retarded growth. Although hail on April 7 reduced prospects for peaches in some northern counties, the commercial area escaped damage. Prospects pointed to a crop of 2,048,000 bushels, a large crop but, even so, one about 16 percent smaller than last year's.

Dry, cool weather prevailed over most of Florida during April. Showers during the early part of May, however, relieved drought conditions in the citrus and vegetable sections, and in a few North Florida areas the rainfall has been excessive, causing some damage to the vegetable crops that were being harvested. Staple crops, cotton, corn, peanuts, and tobacco, made good progress during April. By the fourth of May about 41.5 million boxes of oranges, of an estimated 49.5 million, had been marketed. Canners had used almost 15 million boxes. Of the 32 million boxes of grapefruit estimated, 26.5 million had been utilized by May 4, 18.3 million of them by canners. Recent rains have been favorable for the newly set citrus crop of the 1946-47 season. Grinding of sugarcane for sugar was completed by the first of May after a record output in the Everglades. In the 1945-46 season 30,900 acres of cane were harvested, and 1,112,000 tons of it were ground. The production of sugar amounted to 106,000 tons, compared with 68,000 tons last season.

Favorable weather during March and April made it possible for Georgia crops to be planted earlier than usual, and prospects generally were good in most areas on May 1. Because cool weather has retarded growth some replanting has been necessary in local areas. Harvesting of commercial vegetables in southern parts of the state was in full swing at the middle of May, with good yields reported. Peaches are moving to market in carload lots, and the crop is expected to total 6,580,000 bushels. Though this will be a reduction of 19 percent from the large 1945 crop, it will be larger than crops in other recent years. In addition to winter injury to trees reported in some orchards in the area south of Macon, some damage has been caused by spring hail in local areas.

Good progress in planting and cultivating was made in Louisiana during April. Dry weather retarded germination and crop growth in some sections the first three weeks of the month, but general rains occurred in almost all areas the last week. Temperatures for the state averaged slightly higher than normal. By May 1 most of the corn had been planted and was up to good stands. Most of the rice acreage had been seeded, with many of the fields also up to good stands. Although sugarcane was about normal for May 1, it was not so far advanced as it was at that time last year. The condition of oats in Louisiana, at 77 percent of normal on May 1, was better than at that time a year ago. Compared with a sown acreage of 225,000 acres last year, the estimate this year is for only 180,000 acres. The Louisiana peach-crop estimate on May 1 for 384,000 bushels, is 9 percent under last year's production of 422,000 bushels.

Dry conditions in the main potato-producing areas of Mississippi were relieved by rains during the last week of April. Although the dry weather delayed maturity, prospects have improved. Some early-planted acreage was expected to be dug the second week in May, with the general movement to be started the next week. The Mississippi tomato crop held up well under the dry conditions in April, but they caused

some bad watermelon stands and retarded growth of this crop in the southern part of the state. The prospects for the crop improved, however, when rains fell during the last week of the month. In the northern part of the state the crop is in good condition. Cotton, it is reported, is also in good condition, and progress in cultivation is being made.

Though there have been rains in Tennessee, the spring weather has been generally favorable in the state, which has meant that planting operations have made good progress in most areas despite difficulties caused by the limited number of farm workers and the scarcity of repair parts for machinery. With the exception of frost damage to fruits and tender plants in some localities, the state has escaped cold damage. The yield of wheat on the 356,000 acres for harvest is estimated at 14 bushels an acre. The crop is expected to total 4,984,000 bushels, 6 percent less than last year's production of 5,325,000 bushels.

This year the winter crop of strawberries in Florida was much larger than it was a year ago. Increases are also indicated for Louisiana, Tennessee, and Alabama. Florida production was estimated at 224,000 crates, an increase of 56 percent over the 144,000 crates produced in 1945. In Louisiana the crop was expected to be 967,000 crates, a gain of 27 percent; in Tennessee 660,000 crates, an increase of 22 percent; and in Alabama 234,000 crates, an increase of 8 percent.

#### Industry

A slight improvement in the District's lumber production during May is indicated by press reports. Apparently there is a slow but rather steady improvement in the labor supply. Retail dealers are, however, unable to get the stocks they need to meet the constantly increasing demand.

Textile mills in Alabama, Georgia, and Tennessee used 292,245 bales of cotton in April, a monthly total larger than any reported for more than a year. The daily rate was up one percent from the March rate and almost 3 percent from the April 1945 rate.

Steel-mill activity in the Birmingham-Gadsden area, reported by the *Iron Age* at 95 percent of capacity in each week of the four-week period ended April 2, began to decline the following week as a result of the coal strike. In the first two weeks of May it was down to 46 percent of capacity.

When a truce in the coal strike was declared approximately all of the 23,000 miners in Alabama and most of the 2,000 miners in southeastern Tennessee returned to their jobs.

#### **Federal Reserve Note Circulation**

In the early part of December 1941, just prior to the entry of the United States into the war, the total amount of Federal Reserve notes of this bank's issue was 263 million dollars. During 1942 this amount more than doubled to reach a total of 547 million dollars, in 1943 it rose further to 955 million, and further increases in 1944 and 1945 raised it to 1,494 million dollars. This peak was reached just before Christmas last year. Since that time the bank's net circulation of Federal Reserve notes has declined to 1,425 million dollars. In the first four months of 1946 the net circulation of notes of the 50-dollar denomination rose slightly, and the circulation of 100-dollar notes increased about 24 million dollars, but circulation of notes of other denominations declined. By far the greater part of the decrease was in 5-, 10-, and 20-dollar notes, which constitute about two thirds of the total.

#### Sixth District Statistics

RETAIL JEWELRY STORE OPERATIONS									
Item	Number of Stores Reporting	Percent Change March 1946 to April 1946							
Total sales Cash sales Credit sales Accounts receivable, end of month Collections during month	24 23 23 24 24	0 + 3 3 7 + 4							

	DEP	ARTMENT	STORE S	ALES*		
		Adjusted**		1	Jnadjusted	l
	April 1946	March 1946	April 1945	April 1946	March 1946	April 1945
DISTRICT Atlanta Baton Rouge Birmingham Chattanooga Jackson Jackson Macon Miami Montgomery Nashville New Orleans Tampa	318 355 336 325 335 299 426 345 300 319 292 388 280 373	335r 392r 387 307 328 310 404r 372 294 268 328 396 278r 402	234 256 240 233 243 222 286 295 184 222 224 254 253	337 376 362 318 350 325 427 355 337 324 320 399 302 420	315r 372r 337 298 312 292 387r 339 282 337 293 393 253r 402	227 245 238 206 230 228 269 277 197 226 226 246 246 203 280

	DEPA	RTMENT	STORE ST	OCKS		
I.		Adjusted**	,	1	Unadjusted	ı
	April	March	April	April	March	April
	1946	1946	1945	1946	1946	1945
DISTRICT	219	200	186	2:17	200	184
	317	293	275	3:37	299	293
	161	148	145	167	152	151
	199	186	187	2:15	197	202
	311	317	267	3:45	330	296
	145	141	100	1:55	149	107

	COTTO	CONSUN	APTION*	COAL	PRODUC	TION*
	April	March	April	April	March	April
	1946	1946	1945	1946	1946	1945
TOTALAlabama	159	157	155	12	193	95
	164	162	161	14	202	95
Georgia Tennessee	160 128	159 113	155 130	8	173	95

	MANUFACTURING EMPLOYMENT***				SOLINE T	
	Mar. 1946	Feb. 1946	Mar. 1945	Apr. 1946	Mar. 1946	Apr. 1945
SIX STATES Alabama Florida Georgia Louisiana Mississippi Tennessee	123 155 86 127 116 136	117r 126r 89r 128r 115r 140r 102r	148 177 146 138 156 137	157 155 164 142 137 154	132 ,136 ,153 ,125 ,121 ,122 ,128	104 1,15 108 107 94 94

CONSUM	ERS' PR	CE IND	EX	ELECTRIC PO	OWER P	RODUC	TION*		
	<b>M</b> ar. 1946	Feb. 1946	Mar. 1945		Mar. 1946	Feb. 1946	Mar. 1945		
ALL ITEMS	134 145	134 145	131 143	SIX STATES.	253	247	284		
Clothing Rent	148 115	146 114	141 114	generated Fuel-	310	295	303		
Fuel, elec-				_ generated	178	185r	260		
tricity, and ice Home fur-	111	1.11	109	ANNUAL RATE OF TURNOVER DEMAND DEPOSITS					
nishings. Miscel-	(148	144	141		Apr. 1946	Mar. 1946	Apr. 1945		
CRUDE PETR IN COASTA		ISIANA	CTION	Unadjusted Adjusted** Index**	63.1	15.9 16.3 63.1	14.5 14.7 56.8		
	Apr. 1946	Mar. 1946	Apr. 1945						
Unadjusted Adjusted**	204 200	207 207	204 201	indexes, 1935-39 = 100 r=revised					

### The National Business Situation

INDUSTRIAL output declined somewhat in April and the early part of May owing to the coal strike. Employment in the economy as a whole, however, continued to expand in April. The value of retail trade was maintained at record levels, and commodity prices rose further.

#### **Commodity Prices**

Price ceilings on grains were increased substantially on May 13, and ceilings for a number of nonagricultural products have also been raised during the past month. Recent price increases for industrial products have usually been between 10 and 20 percent. Recent advances announced for automobiles were smaller than these amounts, but they were in addition to price increases made earlier this year.

Retail prices of most groups of commodities continued to show small advances in April, and the consumers' price index increased one-half percent to a point 3 percent higher than in April 1945.

#### **Distribution**

Retail sales continued at a high rate in April and the first half of May. During the past four weeks department store sales have been one third larger in value than in the corresponding period of 1945.

Freight carloadings declined sharply in April, reflecting chiefly the drop in coal shipments. Shipments of most manufactured products continued to increase until the week ended May 18. In that week interruptions in freight service resulted in large decreases in loadings of manufactured products but bituminous coal shipments were resumed, and total loadings increased slightly.

#### **Industrial Production**

The Board's seasonally adjusted index of industrial production declined 2 percent in April and was at 164 percent of the 1935-39 average. The drop in coal output after April 1 and the resultant curtailment in operations in some industries were offset in part by substantial increases in activity in the automobile and electrical-machinery industries following settlement of wage disputes in the latter part of March.

#### **Durable Goods**

Production of durable manufactures as a group rose 3 percent in April. Iron and steel production declined about 6 percent; decreased output of pig iron and open-hearth and Bessemer steel was partly offset by a sharp rise in electric-steel production. In May activity at steel mills continued to decline as a result of coal shortages and during the past two weeks has averaged only about 50 percent of capacity.

The number of passenger cars and trucks assembled in April was 80 percent greater than in March, and there also were substantial increases in activity in the railroad equipment industry and in output of many types of electrical equipment. Production of lumber and stone, clay, and glass products was maintained at the March level, which was above the same period last year.

#### **Nondurable Goods**

Output of most nondurable goods was maintained in April at about the March level. Activity at cotton mills declined

slightly, owing to reduced coal supplies, but output at other textile mills advanced further. The number of animals slaughtered under Federal inspection continued to decline sharply in April. Output of flour and bakery products decreased somewhat in April and is expected to decline substantially in May as a result of the stringent wheat-supply situation.

Minerals production declined by a fourth from March to April, reflecting primarily the drop in bituminous coal output. There was also a further reduction in output of metals, while crude-petroleum production increased in April and early May. On May 13 bituminous coal production was resumed under a temporary work agreement, and during the week ending May 18 output was 70 percent of the prestrike weekly rate.

Value of construction contracts awarded rose sharply in April, according to reports of the F. W. Dodge Corporation. The increase reflected a very large expansion in awards for private residential construction to a record level; awards for most other types of private construction were maintained at recent high levels.

#### **Employment**

Nonagricultural employment continued to gain in April notwithstanding the bituminous coal strike, and unemployment decreased by about 350,000. Manufacturing employment rose by about 400,000, largely because of settlement of major labor disputes, and construction employment showed a further large gain.

#### **Bank Credit**

Treasury deposits declined, reflecting disbursements in excess of receipts, and deposits subject to reserve requirements increased during April and the first three weeks of May. Reserve balances increased less than required reserves, and excess reserves declined to about 700 million dollars on May 22. Federal Reserve holdings of Government securities, which declined substantially in the early months of the year, have increased somewhat since the middle of April.

Member bank holdings of Treasury bills, certificates, and notes declined in April and the first half of May, while holdings of Treasury bonds increased further. Loans at member banks in leading cities declined, reflecting largely reductions in loans for purchasing and carrying Government securities.

#### **Government Obligations**

Yields of Government securities, which declined in the early weeks of the year, rose sharply in the latter part of April and early in May.

In the latter part of April the Reserve Banks, with the approval of the Board of Governors, eliminated the wartime preferential discount rate of about one half of one percent on advances to member banks secured by Government obligations due or callable in not more than one year. The regular discount rate on advances secured by Government obligations or eligible paper remains at one percent.

THE BOARD OF GOVERNORS