

FEDERAL RESERVE BANK OF ATLANTA

Monthly Review

Volume XXV

Atlanta, Georgia, August 31, 1940

Number 8

District Summary of Business Conditions

Trade and industrial activity in the Sixth District improved in July, erasing most of the slight declines noted in June, and recording a substantially higher level of activity than that experienced in July 1939. Of 12 indicators, covering trade, construction, industrial activity, and banking developments, only 1 failed to reach a higher level than that of a year ago, and only 2 failed to improve relative to the United States.

► Consumer buying at department stores, as indicated by the index of daily average sales, increased 6 per cent over the month of June, and 5 per cent over July last year. The gain for the January-July 30 period over the same part of 1939 was nearly 8 per cent. Wholesale distribution declined 2 per cent from June but was 5 per cent above July last year.

► Construction contracts awarded in July increased 37 per cent over June, and were 66 per cent greater than a year earlier. Building permits in the District were lower than last July.

Steel mill activity in the Birmingham area continued at a high level, and July production of pig iron in Alabama was at a rate that had been exceeded only twice in the last twenty years. Coal output declined slightly in July, but was 11 per cent above July 1939. Both coal and pig iron, however, did not increase over last year as much as those items in the entire country.

► Cotton production in the six states of this District is estimated by the United States Department of Agriculture at about 10 per cent less than in 1939. The lower estimate reflects the condition of the crop, not the planted acreage, which is somewhat larger this year.

Reconnaissance

PER CENT DECREASE ▼ PER CENT INCREASE

- Retail Sales
- Wholesale Sales
- Building Permits
- Contracts Awarded
- Cotton Consumption
- Pig Iron Production
- Coal Production
- Employment
- Payrolls
- Bank Debits
- Bank Loans and Investments
- Demand Deposits—adjusted

Revision of Retail Sales Index

The results of an extensive revision of the Bank's indexes of retail sales are presented in this number of the *Review*. Back figures will be found on pages 1 and 3, and a chart of the new and old series appears below.

From the chart three things are immediately apparent: (I) when plotted on bases that make the two indexes equal in 1919, the two remain almost identical to 1929; (II) the new series then falls progressively further below the old index in every year after 1929; and (III) the revised index is markedly smoother in all recent years.

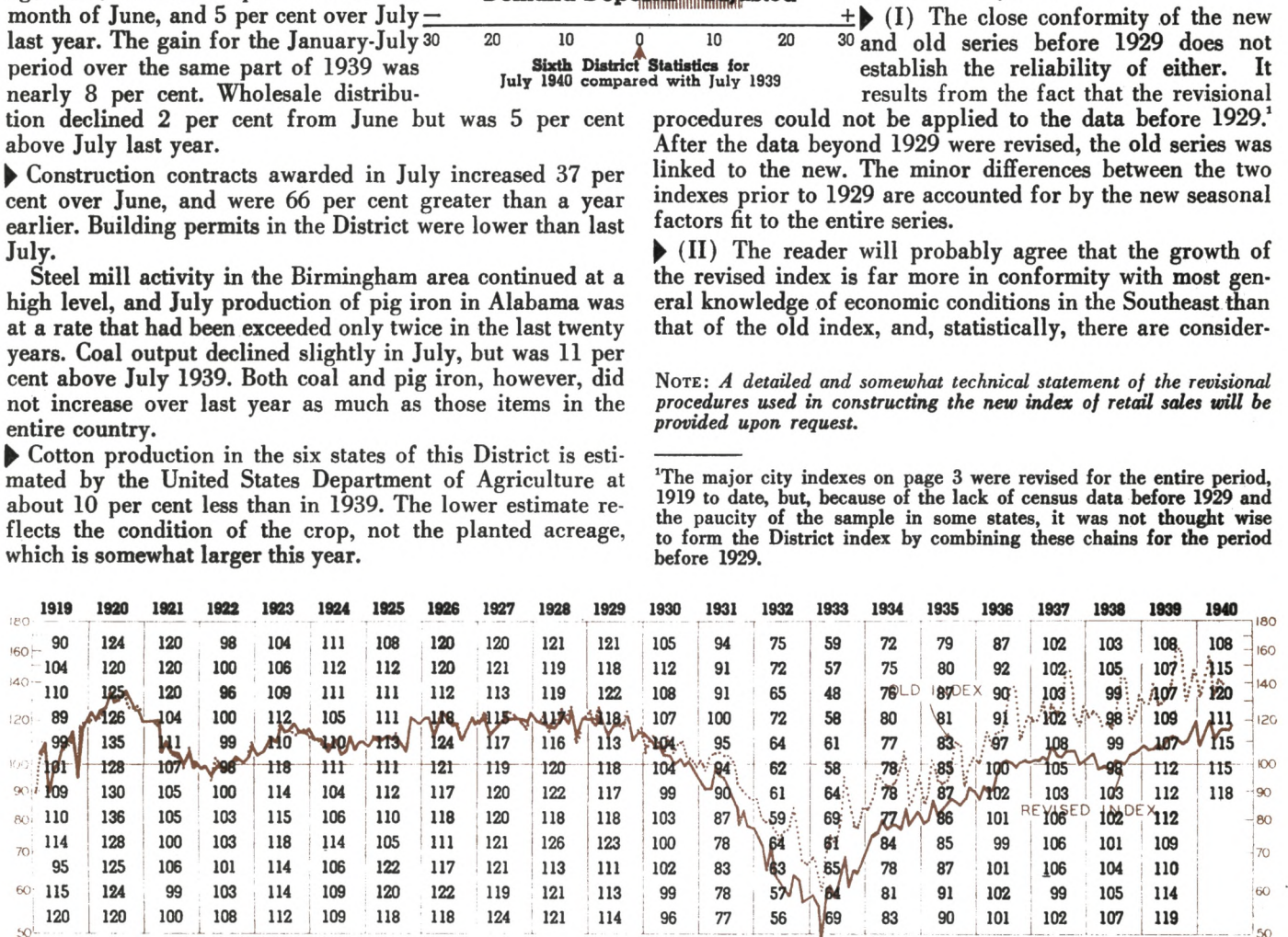
► (I) The close conformity of the new and old series before 1929 does not establish the reliability of either. It results from the fact that the revisional

procedures could not be applied to the data before 1929.¹ After the data beyond 1929 were revised, the old series was linked to the new. The minor differences between the two indexes prior to 1929 are accounted for by the new seasonal factors fit to the entire series.

► (II) The reader will probably agree that the growth of the revised index is far more in conformity with most general knowledge of economic conditions in the Southeast than that of the old index, and, statistically, there are consider-

NOTE: A detailed and somewhat technical statement of the revisional procedures used in constructing the new index of retail sales will be provided upon request.

¹The major city indexes on page 3 were revised for the entire period, 1919 to date, but, because of the lack of census data before 1929 and the paucity of the sample in some states, it was not thought wise to form the District index by combining these chains for the period before 1929.



REVISED INDEX OF RETAIL SALES, SHOWING COMPARISON WITH OLD INDEX

Data are seasonally adjusted monthly values of the revised index. New index is plotted on 1935-39 base; base of old index has been shifted to make new and old indexes equal at origin, 1919. Logarithmic scale.

2 Monthly Review of the Federal Reserve Bank of Atlanta for August 1940

CONDITION OF FEDERAL RESERVE BANK OF ATLANTA (In Thousands of Dollars)

	August 14, 1940	Change from:	
		July 17, 1940	Aug. 16, 1939
Bills discounted.....	\$ 223	+ 39	+ 69
Bills bought.....	—	—	— 19
Industrial advances.....	209	— 22	— 546
United States securities, direct and guaranteed.....	89,707	— 136	—13,441
Total bills and securities.....	90,139	— 119	—13,938
F. R. note circulation.....	171,659	+ 4,165	+18,300
Member bank reserve deposits.....	230,706	+ 4,070	+21,878
U. S. Government general deposits.....	32,841	+19,362	— 8,622
Foreign bank deposits.....	29,416	+ 3,936	+19,616
Other deposits.....	5,076	— 30	— 1,333
Total deposits.....	298,040	+27,338	+31,539
Total reserves.....	384,976	+30,478	+62,334
Commitments to make industrial advances.....	510	— 1	+ 371

CONDITION OF 22 MEMBER BANKS IN SELECTED CITIES (In Thousands of Dollars)

	August 14, 1940	Change from:	
		July 17, 1940	Aug. 16, 1939
Loans and Investments—Total.....	\$634,360	+15,593	+55,794
Loans—Total.....	312,073	+ 4,150	+30,072
Commercial, industrial and agricultural loans.....	151,928	+ 232	— 649
Open market paper.....	2,839	— 520	— 201
Loans to brokers and dealers in securities.....	4,514	+ 50	— 1,093
Other loans for purchasing and carrying securities.....	10,568	— 211	— 641
Real estate loans.....	32,597	+ 359	+ 1,728
Loans to banks.....	2,033	+ 1,027	+ 656
Other loans.....	107,594	+ 3,213	+30,272
Investments—Total.....	322,287	+11,443	+25,722
U. S. direct obligations.....	148,815	+ 5,792	+ 7,171
Obligations guaranteed by U. S.....	67,077	+ 4,054	+ 2,291
Other securities.....	106,395	+ 1,597	+16,260
Reserve with F. R. Bank.....	148,137	+ 6,521	+11,569
Cash in vault.....	14,434	+ 1,264	+ 3,024
Balances with domestic banks.....	202,190	—31,048	+ 3,203
Demand deposits—adjusted.....	436,602	+ 6,322	+53,470
Time deposits.....	191,221	+ 154	+ 4,304
U. S. Government deposits.....	42,089	+ 5,232	+ 3,601
Deposits of domestic banks.....	272,207	—18,854	+15,482
Borrowings.....

DEBITS TO INDIVIDUAL ACCOUNTS (In Thousands of Dollars)

	July 1940	June 1940	July 1939	Percent Change from:	
				June 1940	July 1939
ALABAMA—					
Birmingham.....	\$ 93,615	\$ 92,012	\$ 84,459	+ 1.7	+10.8
Dothan.....	2,717	2,229	2,376	+21.9	+14.4
Mobile.....	43,613	41,333	34,870	+ 5.5	+25.1
Montgomery.....	21,946	19,671	21,701	+11.6	+ 1.1
FLORIDA—					
Jacksonville.....	79,110	73,108	71,156	+ 8.2	+11.2
Miami.....	46,893	50,370	42,808	— 6.9	+ 9.5
Pensacola.....	10,700	9,393	8,156	+13.9	+31.2
Tampa.....	30,258	29,272	26,718	+ 3.4	+13.2
GEORGIA—					
Albany.....	4,808	4,878	3,848	— 1.4	+24.9
Atlanta.....	228,993	210,404	192,974	+ 8.8	+18.7
Augusta.....	18,224	17,514	16,779	+ 4.1	+ 8.6
Brunswick.....	2,943	2,896	2,429	+ 1.6	+21.2
Columbus.....	15,872	15,521	13,400	+ 2.3	+18.4
Eiberton.....	1,080	1,135	940	— 4.9	+14.9
Macon.....	15,010	14,713	14,597	+ 2.0	+ 2.8
Newnan.....	1,952	1,559	1,884	+25.2	+ 3.6
Savannah.....	28,076	28,862	25,705	— 2.7	+ 9.2
Valdosta.....	3,330	3,415	4,737	— 2.5	—29.7
LOUISIANA—					
New Orleans.....	213,853	202,399	202,332	+ 5.7	+ 5.7
MISSISSIPPI—					
Hattiesburg.....	4,461	4,648	4,389	— 4.0	+ 1.6
Jackson.....	30,070	25,486	26,480	+18.0	+13.6
Meridian.....	12,231	12,443	10,665	— 1.7	+14.7
Vicksburg.....	7,152	7,012	6,542	+ 2.0	+ 9.3
TENNESSEE—					
Chattanooga.....	46,054	43,134	42,855	+ 6.8	+ 7.5
Knoxville.....	32,096	30,000	28,363	+ 7.0	+13.2
Nashville.....	83,850	81,671	81,842	+ 2.7	+ 2.5
SIXTH DISTRICT—					
26 Cities.....	1,078,907	1,025,078	973,005	+ 5.3	+10.9
UNITED STATES—					
274 Cities.....	\$35,947,000	\$35,005,000	\$33,245,000	+ 2.7	+ 8.1

Announcement

We are pleased to announce that two new member banks have recently been added to our rolls. On July 27 the Manatee River Bank and Trust Company, of Bradenton, Florida, was admitted to membership, and on August 24 the St. Bernard Bank and Trust Company, of Arabi, Louisiana, was admitted.

able grounds for believing that the methods used in preparing the new series are better equipped to measure the growth of trade in this area. These reasons are:

► 1. The formula with which the basic indexes for each major city and each state are constructed has been changed in order to eliminate a strong upward bias inherent in the old formula² and also in order to utilize in the indexes a larger proportion of reported information.³

► 2. In constructing the new District index the indexes of each major city and each state were combined in accordance with the importance of the city or state as a retail trade center.⁴ In the old index the sales of all stores included in the index were lumped together and compared *en masse* with the sales of the same group of stores in the base years. This resulted in attributing undue importance to some areas and, reciprocally, insufficient importance to others.

► 3. The principal reason both for the difference in the levels of the old and new indexes, and for the greater reliability of the new index, is that in the new series the basic indexes for each city and state, and the final index for the District as a whole, were adjusted to the Censuses of Distribution for the years 1929, 1933, and 1935.⁵ It is important to note that the index was made to agree with census totals for *retail* sales in the respective areas, not with census totals for department store sales. The new index thus endeavors to measure retail sales as currently indicated by the sales of department stores in the District.

► (III) The noticeable improvement in the smoothness of the new index in all recent years is the result of new seasonal factors, and the selection for seasonal adjustment of a method that is prepared to take account of changes in the seasonal pattern with the passage of time.

It would, of course, be meaningless for this Bank to report each December that sales had increased over November. Sales will always increase in December, and the relevant question is: have sales increased this December more than they usually do? Similarly, each month of the year has a peculiar behavior that must be eliminated if one is to know whether or not sales are improving. This is the job that seasonal adjustment must do.

²The old index was constructed with the "fixed-base" method, i. e., the current sales of a group of stores were related to the sales of the same group for the base years, 1923-1925. The new index is constructed with the "chain" method, i. e., the current sales of the group are related to the sales of the same group in the previous year, and the relative thus obtained is multiplied by the index for the previous year. Because of the fact that stores ceasing to report are likely to be stores whose sales are declining more than other stores in the region, while new reporting stores are likely to be those whose sales are growing more than others, the fixed-base method as previously used by this bank has an inherent upward bias that appears in jumps every time a new store is included in the index or an old store dropped.

³For instance, the chain method has made it possible to use 46 stores in the index for 1939, while only 27 were used in the fixed-base index. This increase in sample is possible because new reporting stores may be included in the sample even though reports on their sales in the base year are not available.

⁴Weights used were those of the 1935 Census of Distribution.

⁵Census adjustment was accomplished with a method developed by V. L. Bassie, "Interpolation Formulae for the Adjustment of Index Numbers," unpublished paper presented to the Annual Meeting of the American Statistical Association, Philadelphia, December 30, 1939.

► In the old index seasonal adjustment was accomplished by eliminating from each month's data the average seasonal movement of the years 1919-1929. But with the accumulation of years since that date, conditions have changed sufficiently to make the average seasonal behavior of that decade no longer representative. Notably, August has become a much more important month in recent years, and consequently the old index rises in every recent August. For this reason new seasonal factors were necessary. But the new factors are changing seasonals, i. e., factors that, rather than being a constant (as the average of a decade's behavior) are variable, and move gradually in accordance with changes in seasonality.

► Finally, the base of the index was shifted from an average of the years 1923-1925 to an average of the years 1935-1939. This was done because, being a more recent period, the new base will permit the index to fluctuate more nearly around the 100 mark, and because, having been recommended by the Central Statistical Board and adopted by many government departments, the new base will permit more direct comparison of the index with other economic series. The Review intends gradually to put all its indexes on this base.

SIXTH DISTRICT BUSINESS INDICATORS

Indexes
(1923-1925 average = 100, except as noted)

	Adjusted			Unadjusted		
	July 1940	June 1940	July 1939	July 1940	June 1940	July 1939
RETAIL SALES* (1935-1939 Av. = 100)						
DISTRICT (45 Firms).....	118	115	112	81	98	77
Atlanta.....				81	98	76
Birmingham.....				88	104	84
Nashville.....				73	93	74
New Orleans.....				86	100	82
RETAIL STOCKS						
DISTRICT (23 Firms).....	72	73	70	67	69	64
Atlanta.....	139	129	131	126	124	119
Birmingham.....	65	66	68	62	65	65
Nashville.....	53	53	47	50	52	44
New Orleans.....	58	63	59	55	59	56
WHOLESALE SALES						
TOTAL.....				60	61	63
Groceries.....				50	50	49
Dry Goods.....				40	36	43
Hardware.....				100	102	93
Drugs.....				98	92	90
CONTRACTS AWARDED						
DISTRICT.....				115	84r	69
Residential.....				132	128	82
All Others.....				104	55	61
Alabama.....				160	77	67
Florida.....				127	73	64
Georgia.....				96	63	88
Louisiana.....				101	142	39
Mississippi.....				117	58	109
Tennessee.....				79	64	122
BUILDING PERMITS						
20 CITIES.....				90	124	95
Atlanta.....				134	160	62
Birmingham.....				24	107	49
Jacksonville.....				98	196	73
Nashville.....				27	278	38
New Orleans.....				69	50	77
PIG IRON PRODUCTION*						
Alabama.....				122	115	100r
COTTON CONSUMPTION*						
THREE STATES.....				162	158	141
Alabama.....				190	185	160
Georgia.....				150	146	133
Tennessee.....				158	156	139
EMPLOYMENT (1932 Av. = 100)						
SIX STATES.....				125	126	127
Alabama.....				135	132	128
Florida.....				83	89	97
Georgia.....				139	139	137
Louisiana.....				120	120	125
Mississippi.....				97	98	104
Tennessee.....				128	129	130
PAYROLLS (1932 Av. = 100)						
SIX STATES.....				174	173	163
Alabama.....				230	225	193
Florida.....				83	87	83
Georgia.....				195	192	176
Louisiana.....				151	147	144
Mississippi.....				128	130	129
Tennessee.....				165	164	162
ELECTRIC POWER PRODUCTION*						
SIX STATES.....				400	399	352
Alabama.....				509	534	450
Florida.....				509	522	440
Georgia.....				192	203	240
Louisiana.....				684	618	611
Mississippi.....				83	79	80
Tennessee.....				339	314	225

REVISED INDEXES OF RETAIL SALES

Sixth Federal Reserve District
Unadjusted Index—1935-1939 daily average = 100

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
1919	75	84	96	99	98	95	84	80	104	115	138	192	105
1920	103	97	120	130	134	122	100	99	117	150	149	193	126
1921	99	99	117	105	111	101	80	77	91	127	118	163	107
1922	81	83	86	108	99	93	75	75	94	121	123	177	101
1923	86	89	107	111	110	111	85	84	108	136	134	185	112
1924	91	96	99	113	110	104	77	78	104	126	128	182	109
1925	89	96	104	115	114	103	82	81	96	144	139	198	114
1926	98	104	110	117	126	111	85	88	102	137	141	199	118
1927	97	105	105	121	119	109	87	91	111	141	136	211	120
1928	97	104	117	117	121	108	88	91	117	131	137	207	119
1929	96	104	125	114	115	106	84	91	116	128	128	195	117
1930	83	98	101	113	106	93	71	81	96	117	111	163	103
1931	74	79	93	98	97	83	64	69	76	94	87	130	87
1932	58	62	67	68	65	55	44	47	64	71	64	95	64
1933	45	49	47	60	61	51	45	57	62	74	71	117	61
1934	55	64	80	76	77	68	55	64	87	88	90	141	78
1935	60	69	82	85	82	73	61	72	90	98	101	155	85
1936	66	79	88	91	96	86	71	85	105	113	112	174	97
1937	78	88	106	96	107	90	72	90	114	118	109	175	104
1938	79	90	94	100	98	84	71	88	110	116	115	185	103
1939	83	92	105	107	106	95	77	98	118	122	125	206	111
1940	83	100	123	104	114	98	81						

Cities of the Sixth Federal Reserve District
Annual Indexes—1935-1939 daily average = 100

Year	Atlanta	Birmingham	Chattanooga	Nashville	New Orleans
1920	88	120	177	121	138
1921	67	100	144	106	125
1922	64	99	130	102	116
1923	73	126	143	106	123
1924	73	123	147	101	120
1925	78	127	123	101	126
1926	83	135	126	100	128
1927	96	137	128	104	124
1928	106	142	122	109	119
1929	109	137	118	106	113
1930	102	113	104	98	105
1931	86	92	89	84	93
1932	62	62	65	59	73
1933	57	59	66	60	72
1934	73	75	83	77	84
1935	83	78	90	88	86
1936	95	99	96	99	98
1937	103	109	103	104	102
1938	104	102	102	100	104
1939	115	112	110	108	110

Statistics
(000 Omitted)

	July 1940	June 1940	July 1939	Year to Date 1940	Year to Date 1939
COMMERCIAL FAILURES					
Number.....	64	48	48	414	412
Liabilities.....	\$ 466	\$ 555	\$ 608	\$ 4,098	\$ 4,921
COAL PRODUCTION—Tons					
Alabama.....	1,242	1,230	988r	9,100	6,065
Tennessee.....		417	430r		2,702
FARM INCOME**					
SIX STATES.....	\$ 39,253	\$ 63,030	\$ 41,675	\$317,024	\$331,013
Alabama.....	4,181	7,917	5,910	41,754	42,633
Florida.....	4,875	24,114	8,071	70,699	85,396
Georgia.....	8,940	6,966	7,619	46,531	46,015
Louisiana.....	9,306	9,261	6,078	49,098	45,028
Mississippi.....	4,434	5,705	4,797	50,296	52,990
Tennessee.....	7,517	9,067	9,200	58,646	58,951

*Indexes of retail sales, electric power and pig iron production, and of cotton consumption are on a daily average basis.

**Includes Government benefit payments.

r = revised.

National Summary of Business

Prepared by the Board of Governors of the Federal Reserve System

VOLUME of industrial output was steady during July and the first half of August, after a rapid expansion in May and June. Employment continued to increase. Reflecting mainly awards for national defense projects, construction contracts rose to the highest level in ten years. Prices of basic commodities declined somewhat further.

Production

In July the Board's revised index of industrial production stood at 121 per cent of the 1935-39 average, according to preliminary data. This is the same as in June and 17 points above the level prevailing a year ago before the outbreak of war. In most lines activity was maintained at the levels reached in June or increased further.

Steel production in July was at about 85 per cent of capacity and in the first half of August there was an increase to about 90 per cent. Production of pig iron and coke and output of nonferrous metals were also in large volume. In the machinery, shipbuilding, and aircraft industries, where new orders had been large during the first half of the year and a considerable backlog of unfilled orders had accumulated, activity was maintained at high levels in July, although ordinarily there are declines at this season. Lumber production declined sharply early in July but has subsequently increased accompanying a considerable rise in new orders.

In the automobile industry output declined sharply in July and the first half of August as plants were closed to prepare for the shift to new model production. The decline was greater than at this season in other recent years, reflecting the fact that production had been at high levels during the first half of 1940 and large stocks had accumulated. These stocks were reduced considerably in July as production was curtailed and retail sales continued large.

Textile production increased considerably further in July, reflecting chiefly a marked rise in activity at woolen mills where output is still below the levels of a year ago. Production of cotton and rayon textiles was maintained in July and was in larger volume than last summer, while activity at silk mills increased somewhat from the exceptionally low level reached in June. Shoe production increased seasonally, while output of manufactured foods, which in June had been unusually large for that time of year, showed less than the customary increase in July.

Coal production has risen further and shipments of iron ore down the Lakes have continued at near-capacity rates. Petroleum production has been curtailed sharply, however, reflecting partly a continued high level of stocks of petroleum products.

Value of new construction work undertaken increased sharply in July, owing mainly to a further rise in public construction, and was at the highest level in the past decade, according to reports of the F. W. Dodge Corporation and the Federal Reserve Bank of San Francisco.

Distribution

Distribution of commodities to consumers was sustained in July at about the levels prevailing in the first half of the year. Sales at department stores declined more than seasonally, while sales at variety stores showed little change, although a decline is usual in July.

Commodity Prices

Prices of basic commodities declined somewhat further from the middle of July to the middle of August, with decreases chiefly in prices of commodities influenced by foreign supplies, such as lead, rubber, cocoa, and coffee. Prices of steel scrap and zinc, on the other hand, advanced somewhat in this period.

Agriculture

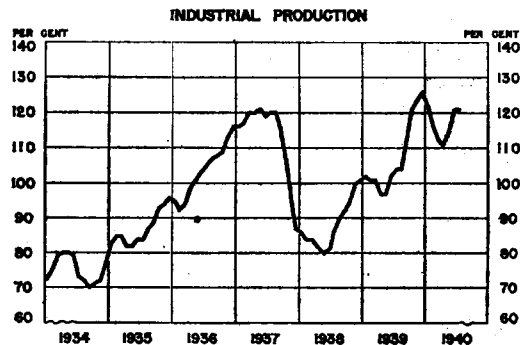
Prospects for most crops showed little change in July, according to the Department of Agriculture. Production this year is expected to approximate the 1929-38 average and, considering carryovers, supplies of most crops will be large. Conditions for wheat and oats improved during July, while the corn crop showed some deterioration. A cotton crop of 11,429,000 bales was indicated for this season as compared with 11,817,000 bales last season.

Bank Credit

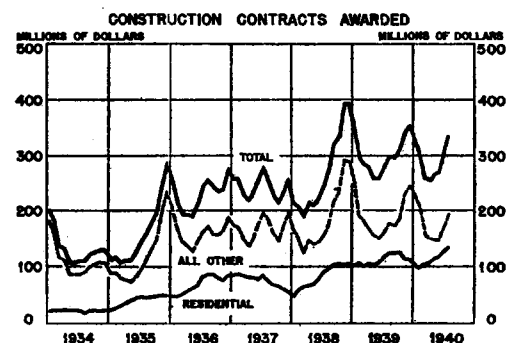
Total loans and investments at reporting member banks in 101 leading cities increased substantially during the five weeks ending August 14, owing mainly to purchases of direct and guaranteed securities newly issued by the United States Government. Sale of these securities caused a large increase in Treasury balances with the Federal Reserve Banks. As a result of this temporary development, excess reserves declined by \$450,000,000 in this period despite an increase of over \$500,000,000 in monetary gold stock.

Government Security Market

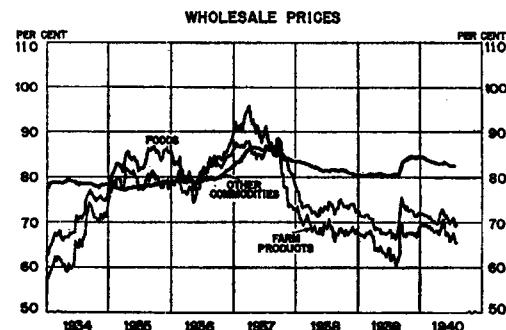
Prices of United States Government securities were relatively steady during July and the early part of August but declined slightly around the middle of August accompanying news of intensification of European warfare. The yield on the 1960-65 bonds increased to 2.39 per cent on August 14 compared with 2.34 per cent on July 1 and 2.26 per cent on April 2 at the year's peak in prices.



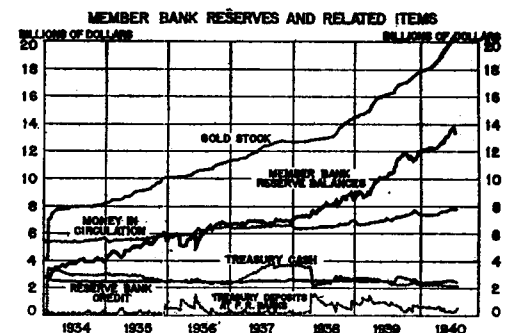
Index of physical volume of production, adjusted for seasonal variation. 1935-1938 average = 100. By months, January, 1934, to July, 1940.



Three-month moving average of F. W. Dodge data for value of contracts awarded in 37 Eastern States, adjusted for seasonal variation. Latest figures based on data for May, June, and estimates for July.



Indexes compiled by U. S. Bureau of Labor Statistics. 1925 = 100. By weeks, 1934, to week ending Aug. 10, 1940.



Wednesday figures, January 3, 1934, to August 7, 1940.