

MONTHLY REVIEW

BUSINESS CONDITIONS IN THE TWELFTH FEDERAL RESERVE DISTRICT

Federal Reserve Bank of San Francisco

September 1, 1941

UNDER the unremitting pressure of the defense effort, economic activity in the Twelfth Federal Reserve District advanced further in July and early August to better the record levels attained earlier in the year. Important industries in the area were free of work stoppages occasioned by disputes between labor and management, and industrial operations continued to expand. Accompanying the expansion of industrial operations, factory employment and payrolls in the three Pacific Coast states increased 6 percent and 4 percent respectively in July and were 40 and 71 percent higher than a year earlier.

New private residential building continued as active in July as in the preceding three months and for the second successive month overrode the influence of seasonal factors which have customarily made for substantial declines at this time of year. Value of this class of construction initiated during the month approximated \$31,200,000, compared with \$24,200,000 in July 1940. Contract awards for publicly financed residential building, which fluctuate widely from month to month, were valued at \$2,600,000, down considerably from June. Non-residential building jumped sharply to \$93,300,000, the largest total for any month in recent years. Included in the total were awards of \$67,100,000 by the Federal Government for miscellaneous buildings, of \$13,900,000 for aircraft plants, and of \$4,000,000 for shipbuilding establishments.

Expansion in consumer incomes, owing particularly to increased factory employment and to large gains in farm cash receipts, was reflected in further gains in retail trade in July. Value of department store sales in that month in the Twelfth District was 10 percent higher than in January, allowing for seasonal influences, and 21 percent above that of July 1940. Gains in sales of durable goods were again particularly marked, value of sales of departments handling major household appliances such as refrigerators, stoves and the like showing a year-period increase of 58 percent, and that of departments selling radios, phonographs, and records showing an increase of 48 percent over July 1940.

Principally reflecting higher prices, district farm cash income in June was 27 percent higher than a year earlier

and the increase for the second quarter of the year amounted to 20 percent. This compares with the year-period gain of 10 percent during the first quarter of 1941. Further increases in prices paid at the farm since June, suggest gains in farm income in July as large or larger than in the preceding three months.

While loans for commercial and industrial purposes continued to increase from mid-July to mid-August, the increase was less marked than in other recent months. On August 20 these loans reported by district city banks totaled \$450,000,000, a gain of \$111,000,000 over a year earlier. Figures recently made available show that the unpaid balance of retail instalment loans of all Twelfth District member banks increased 32 percent during the first half of the year to a preliminary total of \$215,000,000 on June 30. Later figures are not available for all district member banks, but data for member banks in the larger cities of the area indicate a further gain in these loans.

BANKING AND CREDIT

Personal and retail instalment loans of Twelfth District member banks increased substantially during the first half of the year. In the aggregate these loans increased from \$269,625,000 on December 31, 1940 to a preliminary total of \$329,000,000 on June 30, 1941, a gain of 22 percent.

As shown in the accompanying table, most of the increase took place in retail instalment loans, which represent the unpaid balances of instalment advances arising from the retail sale of automobiles, trucks, tractors, household appliances, furniture, clothing, jewelry, etc., and are secured by these commodities. In the table they are classified into loans made by banks directly to the consumer-purchaser, and paper purchased from or rediscounted for dealers and finance companies. Loans made to dealers and finance companies on their own promissory notes, however, even if secured by the pledge of instalment paper, are excluded.

The total unpaid balances of property improvement loans insured under Title I of the National Housing Act were about unchanged over the six months period.

PERSONAL AND RETAIL INSTALMENT LOANS OF TWELFTH DISTRICT MEMBER BANKS,
DECEMBER 31, 1940 AND JUNE 30, 1941
(in thousands of dollars)

	Retail Instalment Paper Purchased		Paper Direct Loans		F.H.A. Title I Loans		Personal Instalment Cash Loans		Totals	
	Dec. 31, 1940	June 30, 1941	Dec. 31, 1940	June 30, 1941	Dec. 31, 1940	June 30, 1941	Dec. 31, 1940	June 30, 1941	Dec. 31, 1940	June 30, 1941
Arizona	1,299	1,853	834	1,419	1,669	1,700	2,223	2,298	6,025	7,270
California	81,002	107,391	40,940	53,293	48,692	48,376	32,552	38,534	203,186	247,594
Idaho	2,276	2,948	948	775	674	644	341	563	4,439	4,930
Nevada	1,200	1,397	316	283	581	603	501	560	2,598	2,843
Oregon	6,228	8,127	6,452	8,925	2,972	2,856	2,367	2,816	18,019	22,724
Utah	1,153	1,182	1,105	1,686	1,080	1,162	955	978	4,293	5,008
Washington	10,985	14,829	8,004	11,326	6,086	6,358	5,990	6,093	31,065	38,606
Totals	104,143	137,727	58,599	77,707	61,754	61,699	45,129	51,842	269,625	328,975

Note: Figures as of June 30, 1941, except for Arizona, Washington, and Nevada, subject to slight revisions.

Personal instalment cash loans of district member banks increased almost 15 percent during the first half of the year. These loans represent the unpaid cash balances of advances made to individuals which are repayable in instalments but are not included in either of the other instalment loan classifications. The proceeds of these loans are ordinarily used to consolidate debts, to meet medical expenses, and for other general personal expenditures.

Weekly reports of district city banks suggest that since the end of June further expansion has occurred in personal and retail instalment loans. Advances in the "other" loan classification, which consist principally of such loans, were \$4,000,000 larger on August 20 than on July 2.

Loans of district city banks for commercial, industrial, and agricultural purposes continued to increase during the four weeks ending August 20 but the expansion was less marked than in other recent months. On August 20, these loans totaled \$450,000,000, an increase of \$79,000,000 since December 31, 1940 and of \$111,000,000 over a year earlier. Loans to finance securities and real estate transactions remained unchanged in the four-week period. Investments of these banks in Government securities were reduced moderately.

Reserve balances of district member banks advanced sharply during the four weeks ending August 20. From mid-April through mid-July, these balances had fluctuated with little net change, and totaled \$835,000,000 on July 16. During the succeeding two weeks they remained relatively stable, but from the end of July through August 20 they increased to \$892,000,000.

During this three week period ending August 20, disbursements of the United States Treasury were \$85,000,000 in excess of collections in the area. The direct increase in local banking reserves caused by these large net disbursements was offset, however, by drains upon district member bank reserves resulting from an

increase of \$18,500,000 in demand for currency and by a net outflow of \$10,000,000 from the district arising from interdistrict commercial and financial transactions.

DEFENSE CONTRACT AWARDS BY COMMUNITIES

Considering the Twelfth District as a whole, the course of economic activity has been one of uninterrupted and substantial expansion since last fall. As might well be expected, the extent of the expansion has not been uniform in all communities and areas. The immediate stimulus to the increase in economic activity has been the defense program, and the most marked impetus to business generally has been in areas in which defense contract awards have tended to be concentrated. It must be emphasized, however, that this does not imply that communities have benefited under the defense program only in proportion to their receipt of defense contracts awarded directly by the Government. The Government, for example, has entered into contracts for the purchase of only relatively small quantities of the nonferrous metals, but a large increase in demand for these metals has developed as a result of the defense program. Sub-contracting by firms receiving prime contracts from the Government likewise results in some communities benefiting directly under the defense program to a greater extent than is suggested by a strict consideration of the relative volume of contracts awarded directly in the community.

In the case of agriculture, strictly farming communities in many cases have received few if any defense contracts directly from the Government. These communities, however, have benefited materially from the sharp increases since last fall in cash farm income. These increases are largely traceable to expansion in demand for farm products originating in government purchases to feed and clothe the armed forces and in expanding consumer incomes incident to increased employment and payrolls because of defense activity.

One other important point remains to be made on the

ESTIMATED VALUE OF NATIONAL DEFENSE CONTRACTS—TWELFTH DISTRICT

To July 31, 1941

(000,000 omitted)

Area	Defense Plants ¹	Aircraft and Parts	Merchant and Combat Vessels	Defense Housing	Army Building	Army Const. ² Other	Navy Building	Navy Const. Other	Supplies and Equipment	Total	
										Actual (millions of dollars)	Per Capita ³ (dollars)
San Diego.....	\$ 21	\$ 330	\$ 1	\$ 16	\$ 5	\$(*)	\$ 24	\$ 6	\$ 1	\$ 404	\$1,600
Los Angeles-Long Beach.....	30	1,620	254	1	1	(*)	14	19	21	1,961	700
Other So. California.....	..	..	2	1	9	9	2	..	(*)	23	50
So. Central Valley—Calif.....	..	..	2	1	9	6	..	..	2	21	30
Central Coast—Calif.....	..	..	..	2	43	11	..	..	1	58	400
S. F. Bay Region.....	48	..	687	17	16	4	49	4	19	845	500
No. Central Valley—Calif.....	..	..	..	..	5	3	..	..	1	9	30
Other No. California.....	..	..	..	..	..	..	1	..	(*)	1	2
Portland-Vancouver.....	8	..	115	..	3	(*)	..	..	3	129	300
Other Western Oregon.....	4	..	3	..	1	4	4	1	3	19	40
Eastern Oregon.....	..	..	..	..	12	5	..	..	1	18	80
Seattle-Tacoma.....	37	255	449	6	22	6	19	5	4	805	1,300
Other Western Wash.....	..	..	..	..	2	3	1	2	2	10	20
East. Wash.-No. Idaho.....	..	..	..	(*)	1	4	..	..	1	7	10
Salt Lake-Ogden.....	30	..	..	(*)	26	4	..	..	(*)	60	200
Other Utah-So. Idaho.....	..	..	..	(*)	3	2	..	..	1	6	9
Phoenix.....	..	..	..	..	2	3	..	..	(*)	5	40
Other Arizona-Nevada.....	..	..	..	(*)	4	7	2	(*)	(*)	13	40
Twelfth District.....	\$179	\$2,205	\$1,513	\$47	\$165	\$70	\$116	\$37	\$61	\$4,393	\$ 400

Note: This table has been compiled from several sources, public and private, and while the figures are not all-inclusive they probably cover well over 90 percent of all defense contracts awarded by public agencies up to July 31, 1941 for work to be done in the Twelfth District. Available figures of army and other force-account work included. The following contracts are not included: (1) Navy contracts awarded after June 2, 1941, except construction contracts, (2) indefinite contracts on which purchases are to be made if and where needed, where contract value is also indefinite, (3) secret contracts, (4) contracts not available on state basis, (5) defense training allotments, (6) government loans for working capital, development of mining properties, etc. Because all figures have been rounded to the nearest million, amounts in columns do not necessarily agree with totals.

¹Includes plants operated by private interests which are either government-owned or financed through emergency plant facility contracts. Navy yard ship-building facilities, and munitions plants both owned and operated by Federal agencies excluded.

²Includes airports sponsored by the Civil Aeronautics Administration.

³Per capita figures should be regarded as rough approximations.

⁴Less than \$500,000.

question of the stimulus to economic activity in the several communities of the district from defense contract awards. Depending upon the character of the items purchased, expenditures in a community under a given value of contract awards may be much more or much less than in another community during a specified period. Thus contracts in one community during a specified period may be for ships to be constructed over a period of 18 months. The proportion of the actual outlays under those contracts during the three months immediately following the date of their announcement is much smaller than say the proportion of expenditures under contracts for blankets or for construction of a cantonment. Again, a contract awarded in a community for army trucks may for that community mean little more than an assembly job with all the materials and equipment fabricated elsewhere, while on the other hand an award for aircraft may mean a complete job of assembly and fabrication of materials and parts, except the engine and propeller, in the immediate area.

The accompanying table shows the value of contracts awarded directly by the Government for defense purposes in the Twelfth District according to types and segregated by communities and areas. The figures shown are accurate within the limitations of the data, and these limitations are outlined in the footnotes to the table.

The economic effect upon an individual community of contract awards of a given value are likely to be more pronounced in a smaller than in a larger community. Contract awards have been expressed, therefore, on a per capita basis in order to afford a better basis for interpreting changes in economic activity as shown by other available measures such as retail sales. Since department stores

handle a wide variety of merchandise, the course of sales of these stores provides a broad indication of changes in the general run of retail trade. Year-period comparisons of the value of sales of department stores in a number of district cities and areas in July and during the first seven months of 1941 are shown in an accompanying table.

DEPARTMENT STORE TRADE—TWELFTH DISTRICT
Percentage increase in value of net sales 1941 compared with 1940

	July	Jan. 1 to July 31
San Diego.....	+44	+37
Los Angeles-Long Beach.....	+21	+15
Other So. California.....	+12	+14
So. Central Valley—Calif.....	+13	+3
S. F. Bay Region.....	+15	+11
Sacramento.....	+17	+9
Portland.....	+16	+15
Seattle-Tacoma.....	+39	+28
Other West. Washington.....	+39	+20
East. Wash., N. Idaho.....	+15	+11
Salt Lake City.....	+17	+14
Other Utah-So. Idaho.....	+16	+7
Phoenix.....	+36	+25

In relation to the size of the community at the time of the April 1, 1940 Census count, it will be seen that direct contracts awarded in the San Diego area substantially exceed those of any other community for which segregated data have been compiled, and the gain in value of department store sales during the first seven months of the year has been marked, exceeded only by the gain reported by Vallejo-Napa stores. These two cities, located in the San Francisco Bay area, have experienced a sharp increase in business principally as a result of the large increase in activity at the adjacent Mare Island Navy Yard. At the other extreme, will be noticed the relatively modest gains in sales of department stores in towns in the central California valleys, in eastern Washington, and much of Utah and southern Idaho.

Production and Employment—

Index numbers, 1923-1925 average=100	With Seasonal Adjustment			Without Seasonal Adjustment		
	1941 July	1940 June	1940 July	1941 July	1940 June	1940 July
Industrial Production¹						
Manufactures (physical volume)						
Lumber.....	112	100	90	118	112	97
Refined oils.....	—	—	—	159	183	145
Cement.....	165	147	118	180	167	130
Wheat flour.....	138	161	118	121	142	104
Minerals (physical volume)						
Petroleum.....	—	—	—	97	97	93
Lead (U. S.) ².....	..	117	120	..	116	112
Silver (U. S.) ².....	..	107	122	..	107	113
Copper (U. S.) ²	166	155	150	148	152	133
Construction (value)						
Residential building permits ³						
Twelfth District.....	97	114	70	94	118	68
Southern California.....	98	111	75	95	111	73
Northern California.....	93	143	61	83	145	55
Oregon.....	64	59	45	61	65	43
Washington.....	128	87	62	138	94	66
Intermountain states.....	109	92	121	119	145	133
Public works contracts.....	—	—	—	..	407	509
Miscellaneous						
Electric power production.....	249	250	221	278	268	247
Factory Employment and Payrolls⁴						
Employment						
Pacific Coast.....	175	165	125	177	167	126
California.....	212	201	142	213	201	143
Oregon.....	127	129	106	132	134	110
Washington.....	126	111	99	127	115	100
Payrolls						
Pacific Coast.....	215	199	126	213	204	125
California.....	261	240	146	258	244	145
Oregon.....	157	163	100	160	171	102
Washington.....	150	132	96	147	139	94

¹Daily average.
²Prepared by Board of Governors of the Federal Reserve System. (1935-1939=100).
³Includes figures from 197 cities and Los Angeles County, unincorporated.
⁴Excludes fish, fruit, and vegetable canning.

AGRICULTURE

Farm cash receipts in the seven western states totaled \$550,000,000 in the first half of 1941, an increase of 16 percent over the total for the like period in 1940. As shown in the accompanying table, year-period gains in cash income were on an ascending scale during the period.

FARM CASH INCOME IN THE SEVEN WESTERN STATES, BY MONTHS
(in millions of dollars)

Year	Jan.	Feb.	Mar.	Apr.	May	June	Total
1940.....	70.3	68.2	69.4	85.0	83.3	98.6	474.8
1941.....	78.9	67.1	83.7	91.5	103.1	125.7	550.0
Percent increase	12.2	-1.6	20.6	7.6	23.7	27.4	15.8

For the first three months of 1941 the increase over a year earlier was 10 percent, while in the second quarter it was 20 percent. The largest increase for any month occurred in June.

Distribution and Trade—

Index numbers, 1923-1925 average=100	With Seasonal Adjustment			Without Seasonal Adjustment		
	1941 July	1940 June	1940 July	1941 July	1940 June	1940 July
Retail Trade¹						
Automobile sales (number) ²						
Total.....	—	—	—	183	232	153
Passenger.....	—	—	—	170	225	148
Commercial.....	—	—	—	313	306	206
Carloadings (number) ²						
Total.....	110	104	85	112	112	87
Merchandise and misc.....	113	118	91	121	125	98
Other.....	105	86	76	99	96	72

¹Department and furniture store indexes, customarily shown in this table, are in the process of revision.
²Daily average.

Much higher prices paid for farm products this year largely account for the substantial gain in cash income. Prices paid at the farm increased moderately, on the average, last fall and winter, and during the second quarter of this year advanced sharply. With prices continuing to rise since June, a year-period increase in cash receipts during July and early August as large or larger than in the immediately preceding months is indicated. Of the more important district crops, only oranges were sold by growers in June at prices substantially lower than a year ago. In July, prices of this fruit advanced considerably, but again averaged below those paid a year earlier.

LAMB AND WOOL PRODUCTION—TWELFTH DISTRICT
(in thousands)

	Lamb Crop (head)			Wool Clip (pounds)		
	Average 1930-39	1940	Indicated 1941	Average 1930-39	1940	Indicated 1941
Arizona	505	448	463	5,061	4,471	4,740
California . . .	2,243	2,388	2,460	25,869	27,280	28,598
Idaho	1,656	1,546	1,587	17,895	16,627	16,800
Nevada	527	530	522	6,704	5,840	5,905
Oregon	1,610	1,453	1,502	18,973	16,446	16,647
Utah	1,462	1,554	1,617	20,546	20,581	19,917
Washington . . .	561	546	554	6,073	5,804	6,138
Twelfth District	8,564	8,465	8,705	101,121	97,049	98,745
United States	30,573	32,885	34,549	366,488	387,763	399,941

Harvesting and processing of the district pear crop was proceeding actively by mid-August. The three Pacific Coast states have produced two-thirds of all pears grown in the United States during the past decade and a much higher proportion of the Bartlett variety. As this variety is preferred for processing, over 90 percent of the country's total output of canned pears and its entire output of dried pears is produced in these states.

August 1 estimates point to a somewhat smaller crop of pears in the three Coast states this year than last. Bartletts, however, are expected to total 13,730,000 bushels, slightly larger than the 1940 crop of 13,400,000 bushels. Prior to the present conflict the foreign market, particularly Great Britain, constituted an important outlet for canned pears, taking an average of more than 30 percent of the pack in the five seasons ending June 30, 1939. More recently this market has been sharply curtailed, although it is expected by the trade to revive somewhat under the influence of Lend-Lease purchases. Over 75 percent of the dried pear pack was exported prior to the present war, but this outlet has also been reduced sharply.

AVERAGE PRICES RECEIVED BY GROWERS FOR LAMBS SOLD

	February through July (cents per pound)					
	1930	1932	1937	1939	1940	1941
Arizona	11.0	5.3	8.7	9.1	8.1	9.0
California	9.5	5.0	9.2	7.8	8.3	9.4
Idaho	8.6	4.2	9.6	7.5	7.7	8.9
Nevada	10.1	4.6	8.7	7.7	8.1	9.5
Oregon	8.4	4.2	8.8	7.4	7.7	8.9
Utah	9.0	4.5	8.4	7.2	7.8	8.8
Washington	9.6	4.7	8.5	7.5	7.8	8.6

Despite current curtailment of foreign sales, district canners foresee a good market for canned pears this season and have been actively buying the raw fruit at prices more than half again as high as in 1940. Returns from fresh fruit shipped to eastern and midwestern cities have also been better than a year ago. As a result, district pear growers expect a cash income considerably larger than the \$13,000,000 received last season despite a slightly smaller crop this year.

AVERAGE PRICES RECEIVED BY GROWERS FOR WOOL SOLD

	February through July (cents per pound)					
	1930	1932	1937	1939	1940	1941
Arizona	16.7	9.2	29.7	19.8	25.7	32.7
California	17.7	8.8	32.2	21.1	26.8	35.0
Idaho	21.5	9.7	32.5	21.0	28.2	33.5
Nevada	19.7	10.0	30.3	19.7	25.3	31.8
Oregon	19.7	9.3	31.3	20.7	27.0	33.8
Utah	20.2	8.8	30.5	18.7	25.3	31.5
Washington	17.5	9.2	29.5	19.3	25.0	33.5

With the peak marketing season for lambs and wool drawing to a close, it is possible to arrive at reasonably accurate estimates of cash receipts from the sale of sheep, lambs, and wool in the Twelfth District during 1941. Total cash receipts are expected to exceed \$83,000,000 this year, compared with \$68,600,000 in 1940. In 1937 returns were higher than in any other year during the decade of the thirties, and totaled \$77,500,000. Weather conditions were favorable during the lambing season, and with winter losses of new-born lambs lower than in most recent years, the crop in every state except Nevada was larger than in 1940. Ample range feed permitted growers to hold lambs longer than is usually the case, with resulting gains in weight.

Prices paid growers for lambs in local and eastern markets averaged 14 percent higher than in 1940. The wool clip, which was somewhat larger than a year earlier but slightly below the average of the preceding decade, brought prices 26 percent higher than in 1940.

Measures of Changes in the Cost of Living in the Twelfth Federal Reserve District

FLUCTUATIONS in the cost of living affect the material well being and comfort of every family in the community. Recent increases in living costs have provoked mounting interest and concern, and the following discussion has been prepared to meet inquiries of the character which have been received in increasing number during recent weeks. This discussion briefly describes the available current measures of changes in costs of living in the Twelfth District, and summarizes the uses and limitations of these measures.

CURRENT MEASURES OF CHANGES IN COST OF LIVING

Perhaps the most widely used measures of changes in the cost of living are those prepared by the Bureau of

Labor Statistics, United States Department of Labor. Indexes for individual cities are available back to 1914 and have been published regularly on a quarterly basis since 1937. Beginning with October, 1940, the Bureau has released monthly indexes for 20 of the 34 cities for which quarterly data are published. Cities in the Twelfth District for which monthly data are now available include Los Angeles, San Francisco, and Seattle, while data for Portland continue available on a quarterly basis. In addition to a composite index for each city, series are also released for six sub-groups; (1) food, (2) clothing, (3) rent, (4) housefurnishings, (5) fuel, electricity, and ice, and (6) miscellaneous.

The indexes are prepared primarily to measure changes

in the cost of living of wage earners and lower-salaried workers and are consequently based upon prices and rentals paid by these groups for the goods and services they typically purchase. The price of each item included in the index for a city is weighted according to the relative importance of expenditures on the item, determined by workers' purchasing habits representative of the city for which the index is computed. The items included and the weights assigned each of them have been revised recently on the basis of annual family expenditures for one year in the period 1934 to 1936.

In addition to the measures of changes in the cost of living discussed above, the Bureau of Labor Statistics also publishes monthly indexes of retail food prices for Portland and Salt Lake City which correspond to the sub-index for food in the other cities.

Cost of living indexes for a number of cities, beginning in January 1939, are also compiled on a monthly basis by the National Industrial Conference Board. These indexes are likewise designed to measure changes in living costs of the wage earner and lower-salaried groups and, while differing in detail, the method of compilation is not essentially different from that followed by the Bureau of Labor Statistics. National Industrial Conference Board indexes are available for seven Twelfth District cities, Los Angeles, Portland, San Francisco, Seattle, Oakland, Sacramento, and Spokane.

USES AND LIMITATIONS ON THE USES OF THE INDEXES

While living costs of families at all income levels move more or less together, a given percentage change in the index for a city does not necessarily indicate an identical change in the cost of living of families in higher income groups. The index cannot be used as a close measure of changes in living costs of the latter groups for several reasons. First, the relative importance of commodities differs materially in the pattern of expenditures of wage earners and of higher income groups. An increase in food prices, for example, means a greater relative increase in the cost of living of wage earners than of higher income recipients, since wage earners spend a larger proportion of their income for food. Food expenditures as a proportion of total expenditures vary inversely with income. Again, many items of standard consumption among higher income families are largely absent from the typical budget of wage earners and lower-salaried workers. The second major reason is to be found in the fact that the higher the income level, the greater is the variation in expenditure patterns among families, and consequently any index would be less typical of a higher income group.

The application of the indexes to areas other than the particular city for which any one index is constructed must also be qualified. Expenditure patterns differ between cities, between cities and towns, and particularly between cities and rural areas. Consequently, even if movements of individual prices were identical in any two areas, an index for one area would not necessarily be an accurate measure of changes in living costs in the other because of differences in the relative importance of expenditures on individual items. More important is the possibility that price changes themselves may differ significantly between localities. This depends upon the degree to which retail markets are independent of one another. Such differences, where they exist, are likely to

be most marked in the case of rent, because housing facilities are immobile. Thus, while a cost of living index for a particular city is usually indicative of the situation in the immediately adjacent area, it may not be at all representative of more distant and dissimilar areas. In particular, because the local character of the housing market is so pronounced, special care must be exercised in applying rent indexes even to contiguous areas. Such precaution is especially necessary in those areas experiencing greatly increased demand for housing arising from the influx of workers attracted by employment opportunities in defense industries.

One other point regarding the use of the indexes warrants specific comment. The purpose of these indexes is to measure *changes* in the cost of living. They do not provide bases for comparisons of the level of costs in the several cities. In other words, if the index is 105 for one city in a particular month and 101 for another city in the same month, this does not mean that cost of living in the former is 4 percent higher than in the latter. It merely means that relative to costs of living in the base period of the index (i.e., average costs in the 1935-1939 period in the case of the Bureau of Labor Statistics index) there has been an increase of 5 percent in the first and 1 percent in the second city. In fact, if living costs were lower in the first city during 1935-1939, they might well be lower, even after increasing 5 percent, than in the city experiencing an increase of only 1 percent.

To meet the need for intercity comparisons, however, the Bureau of Labor Statistics makes quarterly estimates of living costs in the same cities for which indexes are regularly prepared. These consist of estimates of the cost of living for a four-person manual worker's family at maintenance level in each of the several cities.

EFFECT OF ALTERATIONS IN CONSUMPTION PATTERNS UPON COST OF LIVING

A change in the cost of living index from one time to another represents the change in money expenditure necessary to purchase an identical list of commodities and services in the two periods. To measure this change, each price in the index must be weighted similarly or assigned the same relative importance in both periods. The adequacy of indexes as measures of actual changes in the cost of living is influenced by the fact that kinds and quantities of goods consumed are not constant but vary with the passage of time and with changes in price relationships.

As long as changes in the kinds and quantities of goods purchased result only from price changes, that is, as long as there are no significant changes in consumers' tastes, and the same selection of commodities remains available, the change in the cost of a given bill of goods over the period will reflect satisfactorily the change in living costs. Under these conditions, reasonable accuracy of measurement is achieved by using a representative list of fixed items purchased by consumers.

On the other hand, if changes in the kinds and quantities of goods actually purchased should result from defense restrictions, changes in tastes, or other non-price factors, the variation in the cost of a given bill of goods over the period loses some of its significance as a measure of the change in the cost of living. Under these conditions a fixed list of goods cannot reflect accurately the kinds

and quantities of goods both obtainable and wanted by consumers in both periods. Ordinarily, shifts of this character are gradual and need not be considered except in regard to comparisons over fairly long periods of time. Current prospects indicate however, that defense requirements may necessitate sufficient diversion of many items from consumption channels and sufficient alteration of consumption patterns to require consideration of these factors when using cost of living indexes for relatively short term comparisons.

COST OF LIVING INDEXES AND REAL WAGES

For many purposes, it is not the behavior of living costs as such but the relation between changes in living costs and changes in money incomes that is significant. Money wages may be translated into so-called "real" wages, which are money wages corrected for changes in dollar purchasing power, by dividing dollar earnings by the appropriate cost of living index. It is the changes in "real" wages which give some indication of whether the scale of living is rising or falling.

When, however, consumption patterns are altered because of shortages that are not fully reflected in price increases, living standards may be lowered without significant reductions in "real" wages as evidenced by the relation between money wages and prices. By way of illustration: under present circumstances it will be possible to obtain a substantial diversion of resources to defense purposes and to restrict consumption only by means of higher consumers' goods prices, which will reduce "real" wages, or by restricting consumer purchases by higher taxes*, or rationing, both of which could reduce living standards without reducing "real" wages, or by some combination of these devices. Price control by itself is not a factor. If more goods are wanted by consumers at a given price than are available because of defense or for any other reason, rationing must take place, whether done through official action, by the sellers, or on the basis of who buys first. While price control may prevent undesirable increases in living costs, it cannot prevent the lowering of living standards that would be concurrent with severe restrictions on consumption.

RECENTLY DEVELOPED AND MISCELLANEOUS DATA ON LIVING COSTS

The preceding discussion has made reference only to the more widely known and used cost of living indexes available for a period of many years. Other data on the subject of changes in living costs are also available, or are to become available shortly. The Bureau of Labor Statistics plans to compute indexes for 20 small cities throughout the country. Two of these cities, Walla Walla, Washington, and Globe, Arizona, are in the Twelfth District. A release on the change in cost of living in Walla Walla from June 1939 to December 1940 is already available and it is planned to publish periodic comparisons for this city and for Globe. The Bureau is also surveying costs of living in five defense cities, one of which is San Diego, and has published information on the change in living costs in these cities from October 15, 1940 to January 15, 1941. Special surveys of changes in rents have been made during the past year by the Bureau for a number of cities

*To the extent that tax levies are included as part of the cost of living in computing the indexes they tend, of course, to reduce "real" wages as well as living standards.

throughout the country. Among these are Tacoma and Bremerton, Washington. The regular collection of rental data for San Francisco and Los Angeles has been expanded to cover suburban areas surrounding those cities. Releases covering the results of these surveys have become available recently.

For San Francisco, the Heller Committee for Research in Social Economics of the University of California publishes complete and extremely detailed quantity and cost budgets. Budgets are compiled for a wage earner's family of five, a clerk's family of five, an executive's family of four, a single working woman with no dependents, and for dependent families or children. These are priced in March of each year, and all but the last budget are constructed to present an estimate of the cost of a "health and decency" standard of living. They are influenced by, but are not a record of, actual expenditures of these groups.

The primary purpose of these budgets, the content of which changes from time to time, is to measure the cost of a "health and decency" standard of living at a given time. These budgets also may be used to estimate changes in the cost of living from year to year, providing allowances are made for changes in the budget content which may have occurred since previous years.

The Department of Social Welfare of the State of California prices a minimum adequate budget in each California county in connection with the aid-to-needy-children program. These data include figures for groups of items such as food, clothing, and utilities, but their present usefulness as indicators of changes in the cost of living and of intercounty differences in living costs is limited because they are compiled only at irregular intervals. The future usefulness of the data will depend upon the frequency of collection and the extent to which the budget is altered from one date to another. While the dollar totals are applicable only to the groups concerned and those in similar circumstances, the relative figures should be indicative for lower-income groups generally. These figures apply to town and city rather than to rural families.

Recent Changes in Living Costs in Twelfth District Cities

Living costs of wage earners and lower-salaried workers, as measured by the Bureau of Labor Statistics indexes, rose about 6 percent from June 15, 1939 to July 15, 1941 in San Francisco, Los Angeles, Seattle, and Portland.* Immediately after the outbreak of the war, the cost of living advanced in all four cities, largely because of a sharp rise in food prices, but in the last quarter of that year both food and general living costs declined. Through 1940 and the first quarter of 1941, living costs in these District cities fluctuated narrowly, the net change by March 15, 1941 having amounted to a rise of about 2 percent over December 1939. Since March of this year, however, the rise in the cost of living has been accelerated and the increase in each city has been approximately half that of the entire period from the middle of 1939 to mid-July 1941.

Food, the most important item in living costs, has increased most sharply in price, the advance amounting to about 14 percent in the past two years. This increase is sig-

*Quarterly figure for June 15 latest available for Portland.

nificant, not only because of its effect upon over-all costs of living, but also because of the interpretation given it by consumers, who are more constantly aware of food prices than of any other prices, and who tend, consequently, to assume that changes in those prices reflect changes in living costs as a whole. Prices of the other groups of items, except fuel, electricity, and ice, have increased moderately over June 1939, the largest percentage increase being a 6.2 percent rise in housefurnishings in Los Angeles. While indexes of rents increased less than 1 percent, except for Seattle where the rent index advanced 4.1 percent, gains have been definitely more marked on properties commanding the lower rentals. The fuel, electricity, and ice index for each city as of July 15, 1941 was lower than it had been in the middle of 1939.

Recent changes in living costs in the four cities, as measured by the Bureau of Labor Statistics indexes, are shown in the accompanying table.

Turning to somewhat less current and more fragmentary data for other district cities, living costs in Walla Walla, Washington, followed a course similar to that of the four larger Coast cities from June 1939 to December 1940. Except for foods, prices of most items showed little net change, and the over-all increase in living costs approximated 1.5 percent. During the first quarter of 1941,

however, retail costs of foods (the only data collected) increased 3.7 percent, somewhat more than in Seattle and the other larger cities.

Rent surveys indicate that in the Bremerton area and in Tacoma, Washington, where a large influx of workers has recently occurred because of employment opportunities in defense industries, rents have advanced considerably more than in Seattle. On the average, rents rose 5.9 percent in the Bremerton area and 4.5 percent in Tacoma from October 1939 to April 1941. In both cases, by far the largest percentage increases occurred among the lower rent properties, and rent advances were more general among these properties.

The over-all figure of the percentage change in rents in these two areas, however, obscures a striking feature of the situation in both cities and one which is found in other areas as well. On something over half the rented properties, rents were not raised during the period while increases in cases where rents were advanced averaged about 15 percent. The following table summarizes, by rental groups, the percent of properties on which rents were raised and the average of the rent increases.

PERCENT OF PROPERTIES ON WHICH RENTS WERE RAISED AND AVERAGE OF RENT INCREASES BETWEEN OCTOBER 1939 AND APRIL 1941, BY RENTAL GROUPS

Rental Group*	Tacoma		Bremerton Area	
	Percent of Cases Increased	Average Percent Rent Increases	Percent of Cases Increased	Average Percent Rent Increases
Less than \$20.....	43	25.0	64	25.3
\$20 to \$29.....	44	14.9	52	20.6
\$30 to \$49.....	37	11.1	36	12.1
\$50 and over.....	23	8.0	28	11.4

*Rents as of October 1939.

In the Los Angeles suburban area, rents have been surveyed over the same period. Average rents in Inglewood and Hawthorne advanced 4 percent during the 18 months, but in the Glendale and Burbank area, in the Huntington Park, Pasadena and Santa Monica section, and in Culver City the average increase was less than 1 percent, while in Long Beach and Torrance a decrease of 0.8 percent was reported.

In San Diego, one of the defense areas where living costs have been surveyed by the Bureau of Labor Statistics, cost of living of wage earners and lower-salaried workers increased by about 1 percent from October 1939 to January 1941, the latest date for which information is available. In other cities, it will be recalled, most of the increase over the past two years has occurred since the first quarter of this year, and indications point to a similar acceleration of the upward movement in San Diego since that time.

By June 1940 the index of living costs in San Diego had fallen 0.8 percent below the level of October 1939 but it rose 1.8 percent over the next seven months. Changes from October 1939 through January 1941 were largest in rents which increased 4.8 percent over the period. Most of this increase occurred after October 1940. The largest proportion of increases was reported in the \$30 to \$50 per month rent group, but the largest average percentage increase in rent occurred in dwellings renting for less than \$20 per month. During the seven months, June 1940 to January 1941, the index of rents was the only one of the six commodity group indexes that rose appreciably more in San Diego than in Los Angeles.

COST OF LIVING OF WAGE EARNERS AND LOWER-SALARIED WORKERS IN FOUR TWELFTH DISTRICT CITIES
Percentage change from June 15, 1939

City	Month	Year	All Items	Food	Clothing	Rent	Fuel, Elec- tricity and Ice	House- fur- nish- ings	Miscel- laneous
San Francisco	July	1936	-1.3	7.1	-5.6	-6.3	5.5	-6.8	-5.3
	June	1937	2.3	11.5	.3	-3.2	2.2	.4	-2.7
	June	1938	2.2	5.2	1.3	-.5	-.1	2.5	1.5
	September	1939	1.8	5.9	.4	.1	-3.8	.2	.3
	December	1939	1.0	2.8	1.0	.5	-3.7	1.5	.1
	June	1940	.9	3.4	1.5	.4	-3.7	-.4	-.7
	December	1940	2.4	4.7	1.3	.4	-4.0	-.3	2.8
	March	1941	3.2	7.6	1.4	.6	-4.0	.7	2.2
	April	1941	4.3	10.7	1.6	.8	-4.0	1.7	2.4
	May	1941	5.0	12.2	1.7	.8	-4.0	2.2	2.9
	June	1941	6.3	14.5	3.4	.7	-3.9	3.8	3.5
	July	1941	6.5	14.7	4.3	.7	-3.9	5.7	3.7
Los Angeles	July	1936	-3.1	4.7	-5.9	-14.3	.7	-4.1	-3.5
	June	1937	2.6	11.6	-.6	-3.8	.4	4.2	-1.1
	June	1938	1.5	3.3	.5	.2	.0	4.4	.5
	September	1939	1.6	5.4	.1	.0	-3.3	.2	.2
	December	1939	.1	.5	1.2	-.4	-3.3	1.6	-.2
	June	1940	.5	3.5	1.4	-1.1	-3.3	-.2	-1.1
	December	1940	1.9	6.2	1.4	-1.3	-3.3	.7	.6
	March	1941	2.2	7.1	1.6	-1.3	-4.5	2.2	.6
	April	1941	2.9	9.1	1.6	-1.3	-4.5	3.0	.7
	May	1941	4.1	12.1	1.7	-1.3	-4.5	3.0	1.6
	June	1941	5.4	14.8	3.6	-1.1	-4.7	4.7	2.2
	July	1941	5.3	13.9	4.3	-1.1	-4.7	6.2	2.2
Seattle	July	1936	-3.1	4.3	-6.1	-12.5	-3.7	-2.2	-4.6
	June	1937	1.4	9.6	1.1	-7.1	.2	2.9	-2.2
	June	1938	.4	1.0	.1	.1	1.4	3.4	-.6
	September	1939	1.8	6.4	.0	-.1	-3.1	-.3	.3
	December	1939	.1	.7	1.0	-.1	-2.5	1.4	-.2
	June	1940	.9	4.0	1.7	-.1	-2.4	-1.2	-1.0
	December	1940	1.2	4.5	1.5	.1	-6.0	-2.1	.4
	March	1941	2.2	6.8	1.6	1.1	-5.7	-1.2	.5
	April	1941	3.2	9.2	1.6	2.0	-5.8	-.7	.7
	May	1941	5.1	12.6	3.9	3.3	-5.0	.4	1.5
	June	1941	6.3	14.4	4.3	3.6	-4.8	2.3	3.3
	July	1941	6.4	14.0	5.1	4.1	-5.0	3.5	3.3
Portland	July	1936	-2.3	3.3	-3.0	-11.6	-1.4	-3.9	-3.2
	June	1937	2.5	10.6	1.2	-3.9	-.6	2.3	-1.3
	June	1938	1.2	2.3	.9	.6	1.9	1.3	.6
	September	1939	1.6	4.5	.2	.3	.6	.6	.2
	December	1939	.4	.7	.9	-.2	.6	2.4	-.3
	June	1940	.2	2.7	2.5	.0	-6.9	-.2	-1.3
	December	1940	1.3	3.6	2.1	.5	-3.9	.3	.5
	March	1941	2.2	5.8	2.2	.7	-3.7	1.4	.8
	April	1941	(1)	8.5	(1)	(1)	(1)	(1)	(1)
	May	1941	(1)	9.9	(1)	(1)	(1)	(1)	(1)
	June	1941	(1)	13.4	3.2	2.2	-3.2	5.7	2.7
	July	1941	(1)	14.8	(1)	(1)	(1)	(1)	(1)

¹Data not available. Source: United States Bureau of Labor Statistics.

Summary of National Business Conditions

Released August 20—Board of Governors of the Federal Reserve System

INDUSTRIAL activity in July and the first half of August was maintained at the high level reached in June. Wholesale commodity prices advanced further and distribution of commodities to consumers was in exceptionally large volume.

PRODUCTION

Volume of industrial output showed little change from June to July. Reductions in activity at automobile factories and steel mills were largely offset in the total by further increases in the machinery, aircraft, shipbuilding, and lumber industries. The Board's adjusted index, which includes allowance for a considerable decline at this season, advanced from 157 to 162 percent of the 1935-1939 average.

Steel production, which in June had been at about 98 percent of capacity, declined to 96 per cent in July, owing in part to holiday shutdowns at some mills. In the first half of August steel output was again at about 98 percent of capacity. Automobile production in July declined less than usual but in the first half of August there was a sharp reduction as most plants were closed to prepare for the shift to new model production. Activity in the nonferrous metals industries continued at a high rate. Early in August copper, pig iron, and all forms of steel were placed under complete mandatory priority control as it became evident that actual demand for these metals could not be fully met.

In the wool, cotton, and rayon textile industries and at shoe factories activity in July was maintained at or near the peak levels of other recent months and production of chemicals rose further. Output of manufactured foods increased less than seasonally from the high level reached in June.

Coal production declined slightly in July but as in June was unusually large for this time of year. Crude petroleum production was maintained at about the high rate that had prevailed in the previous two months.

Value of construction contract awards in July increased further to a level more than two-fifths higher than a year ago, according to F. W. Dodge Corporation reports. The rise reflected chiefly a continued increase in contracts for public construction, mostly defense projects. Private residential building contracts increased somewhat, although there is usually some decline at this season, while awards for other private building declined further from earlier high levels.

DISTRIBUTION

Sales at department stores and in rural areas declined by much less than the usual seasonal amount in July and variety store sales increased further. In the first half of August department store sales rose sharply.

Total loadings of revenue freight in July and early August showed little change from the advanced level reached in June. Grain shipments, which had been larger than usual in May and June, increased less than seasonally and loadings of coal declined somewhat.

COMMODITY PRICES

The general index of wholesale prices advanced about 2 percent further from the middle of July to the middle of August, reflecting sharp increases in prices of a number of agricultural and industrial commodities. Federal action to limit price increases was extended to additional basic materials, including burlap, silk, rayon fabrics, rubber, and sugar, and in the early part of August prices of these commodities in domestic markets showed little change or were reduced. On the other hand, prices for paper-board, automobile tires, and cotton yarns and gray goods were advanced with Federal approval; prices of textile products not under Federal control continued to rise; and there were considerable increases in prices of lumber, other building materials, and chemicals. On August 16 it was announced that for Southern pine maximum prices somewhat below recent high levels would become effective on September 5.

AGRICULTURE

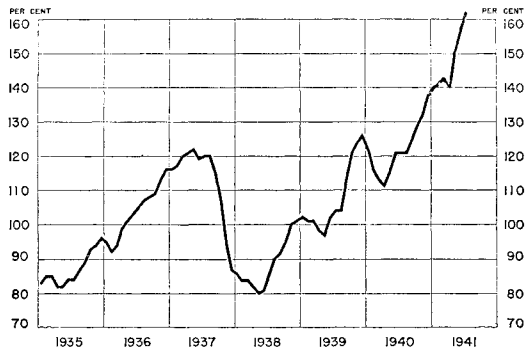
Agricultural production in 1941 may exceed that in any previous year, according to indications on August 1, and carryovers of major crops are unusually large. Crops of wheat and other leading foodstuffs are expected to be exceptionally large, while substantial declines in production are indicated for the major export crops—cotton and tobacco. Although the cotton crop is estimated at 10,600,000 running bales, or 1,800,000 bales less than last season, total supplies of cotton will be about the same owing to a larger carryover on August 1. Marketings of livestock and livestock products, except hogs, will be substantially above last year.

BANK CREDIT

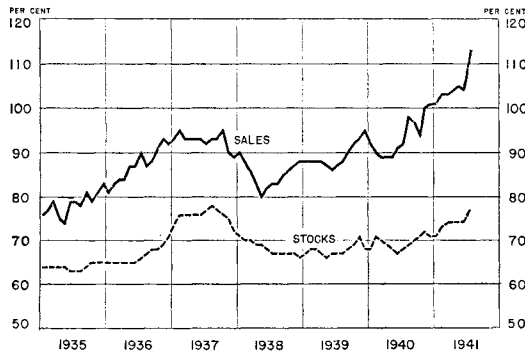
Total loans and investments at reporting banks in 101 leading cities rose further during the five weeks ending August 13. Commercial loans continued to increase substantially, while holdings of United States Government obligations showed little change. Bank deposits remained at a high level.

UNITED STATES GOVERNMENT SECURITY PRICES

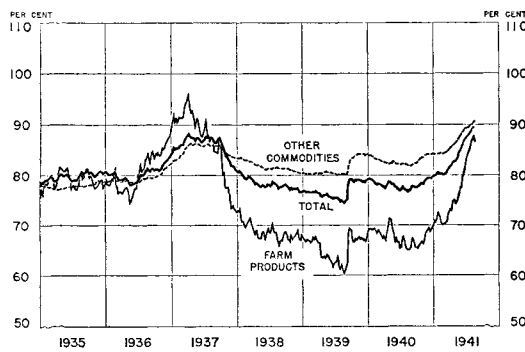
After advancing to the highest levels on record, prices of both taxable and partially tax-exempt Treasury bonds declined somewhat in the first part of August. On August 15 the partially tax-exempt 2¾ percent 1960-65 bonds yielded 2.06 percent, compared with the all-time low of 2.02 percent on July 29. Yields on Treasury notes showed little change in the period.



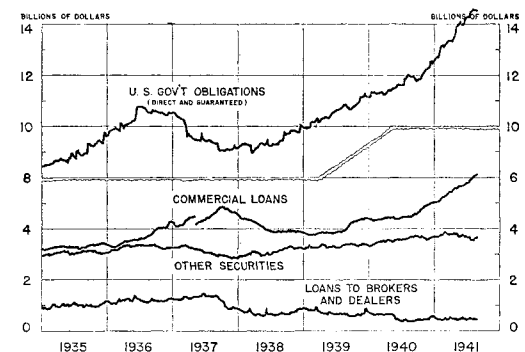
INDUSTRIAL PRODUCTION
Federal Reserve index of physical volume of production, adjusted for seasonal variation, 1935-39 average=100. By months, January 1935 to July 1941.



DEPARTMENT STORE SALES AND STOCKS
Federal Reserve indexes of value of sales and stocks, adjusted for seasonal variation, 1923-25 average=100. By months, January 1935 to July 1941.



WHOLESALE PRICES
Bureau of Labor Statistics' indexes, 1926=100. "Other" includes commodities other than farm products and foods. By weeks, January 5, 1935 to week ending August 16, 1941.



MEMBER BANKS IN 101 LEADING CITIES
Wednesday figures, January 2, 1935 to August 13, 1941. Commercial loans, which include industrial and agricultural loans, represent prior to May 19, 1937, so-called "Other loans" as then reported.