

MONTHLY REVIEW

BUSINESS CONDITIONS IN THE TWELFTH FEDERAL RESERVE DISTRICT

Federal Reserve Bank of San Francisco

December 1, 1941

ALTHOUGH capacity or near capacity operations in a number of industries and increasing difficulties encountered by many firms in obtaining skilled labor, materials, and equipment as needed are hampering further aggregate expansion, continued gains in the Twelfth District's two major defense industries carried forward district factory employment and payrolls to new records in October. Aircraft manufacture still leads as a source of defense employment by a considerable margin, but shipbuilding is currently expanding more rapidly.

On the whole, activity in industries other than aircraft production and shipbuilding registered a small further gain in October. For some weeks lumber production has been in excess of new orders which have declined considerably since the summer peak, but output in October decreased less than seasonally. Plywood plants and pulp mills operated, as they have for some time, at capacity. Crude petroleum production and refinery operations showed little change in October.

Mining and smelting of non-ferrous metals was maintained at record high levels under the stimulus of the unparalleled demand for these metals. Early in November, the OPM directed an appeal to lead producers to expand output and to operate their plants on a continuous basis where possible. Additional plant capacity or production and fabrication of metals in the Twelfth District, authorized in November, is to be provided through a \$9,000,000 aluminum plant at Spokane, a \$5,500,000 aluminum extrusion plant at Los Angeles, a \$22,000,000 aluminum fabricating plant at Fairview, Oregon, a \$9,000,000 plant for the production of copper at Miami, Arizona, and a \$12,000,000 addition to the magnesium plant in Santa Clara County, California, which will double the capacity of this plant.

Most defense activity in the district is and will continue to be located in California and Washington. Now under construction, however, are a magnesium plant in Nevada and an ordnance plant in Utah. A large expansion of iron and steel facilities in Utah has been proposed. When completed, these and several smaller projects will result in a marked increase in industrial activity in the Intermountain region. Considerable pressure upon the skilled labor supply is expected to develop in that area.

Value of residential building begun in October was no greater than that of the corresponding month last year. This is the first time in 1941 that new housing construction has not been well above that of the like month in 1940. The abrupt decline in private residential building during the two previous months was checked, however,

and value of permits in October was at about the September level. The value of nonresidential building initiated in October rose sharply over September but was below that of August.

Despite rising payrolls, general retail trade in October continued to recede in the Twelfth District, as in the country as a whole, from the August peak. Department store sales, which advanced less than seasonally in September, declined in October although a further slight increase is usual, and approximated a level corresponding to that of last June. Preliminary data on November department store sales indicate, however, that the decline has been halted. Articles sold in October in smaller dollar volume than a year earlier included hosiery, furs, radios and phonographs, and major household appliances.

The number of new automobiles sold at retail was slightly higher in October than in the previous month, but was only about half that of October 1940. In spite of reduced sales and increasing dealer inventories, however, there is little or no evidence of price weakness. Dealers financially able to do so are building up inventories in anticipation of further production cuts after the first of the year.

Recent slackening in consumer buying has resulted from a complex of factors. Obviously significant is the anticipatory buying of immediately preceding months. In the case of automobiles, this anticipatory buying occurred during much of the 1941 model year, some portion of the unusually large sales volume being made up of sales "borrowed" from the current year. Fears of future shortages and quality deterioration, and anticipation of higher prices, higher taxes, and installment credit regulation were instrumental in inducing active buying of automobiles. These factors were also instrumental in varying degree in promoting a peak in retail sales of household appliances, silk hosiery, and other silk and rayon goods in August. The flare up of sales of furs and of radios and phonographs in September largely represented buying prior to October 1, when new taxes became effective. Whatever increase has taken place in consumer inventories, however, probably does not afford a complete explanation for the decline in retail sales. Consumer resistance to higher prices, and regulation of installment credit appear to have had some restrictive effect. Expected reductions in spendable income incident to defense adjustments, particularly higher income taxes, may also have played some part in checking rising consumer demand.

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Aircraft Expansion and Industrial Diversification - Supplement

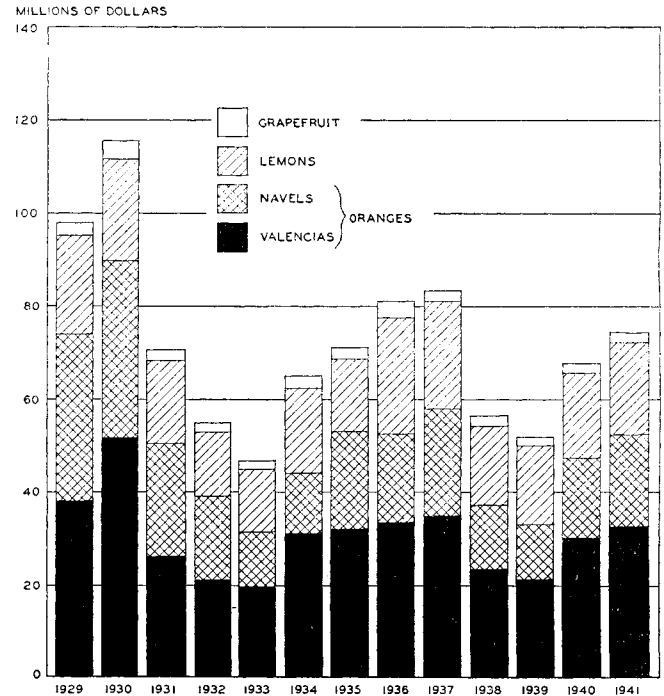
Agriculture

Prices paid farmers for their products in the Twelfth District and throughout the United States, after declining from mid-September to mid-October, have since resumed the upward trend of recent months. Latest available market quotations indicate, however, that the recent increases in prices at the farm have been more moderate than those of last spring and summer. Notwithstanding the moderate gains during the fall, prices of the principal farm products produced in the district averaged over 35 percent higher in mid-November than a year earlier, and were the highest since 1930.

Reflecting the substantially higher prices, the active domestic demand, and sharply increasing exports, chiefly to Great Britain under the Lend-Lease program, district farm cash income rose during the fall months. Based upon income received during the first three quarters and preliminary estimates for the remainder of the year, district farm income for the entire year 1941 is expected to total about \$1,498,000,000. Last year farmers received \$1,153,000,000, and 1937 returns of \$1,226,000,000 were the highest received since the late 1920's. All states in the Twelfth District shared in the estimated 30 percent gain in farm cash income, increases ranging from 24 percent in Idaho to 38 percent in Arizona. Markedly higher returns from cotton were chiefly responsible for the increase in total returns to Arizona farmers. Elsewhere in the district, the record wheat crop, which is being marketed or placed under Federal loan at relatively high prices, and larger receipts from most other field and fruit crops have been important factors in the increases in total farm income. Livestock and such livestock products as eggs, butter, milk and other dairy products, and wool are now selling at levels

considerably above those of a year ago, and total income for this group of commodities has made about the same gain over the year-period as income from crops.

The market for Arizona-California citrus fruits, which earlier in the year had not responded as distinctly to expanding consumer incomes as had markets for most other farm products, has recently reflected expanding retail demand. During the late summer and fall months, prices paid growers for oranges, lemons, and grapefruit either declined less than is usual at this season of the



VALUE OF SALES OF CITRUS FRUITS—Twelfth District
Data are for crop years ending October 31 of years shown.

Production and Employment—

Index numbers, 1923-1925 average=100	With Seasonal Adjustment— (1941—1940)			Without Seasonal Adjustment— (1941—1940)		
	Oct.	Sept.	Oct.	Oct.	Sept.	Oct.
Industrial Production¹						
Manufactures (physical volume)						
Lumber	113	108	92	123	127	100
Refined oils	—	—	—	188	176	165
Cement	169	180	117	195	191	135
Wheat flour	97	106	117	115	126	139
Minerals (physical volume)						
Petroleum	—	—	—	99	98	93
Lead (U. S.) ²	—	120	117	—	120	117
Copper (U. S.) ²	150	154	141	154	153	146
Construction (value)						
Residential building permits ³						
Twelfth District	82	89	94	83	99	95
Southern California	88	97	98	92	106	103
Northern California	59	73	102	58	79	100
Oregon	71	39	37	73	46	38
Washington	111	112	67	92	121	55
Intermountain states	112	133	105	114	175	106
Public works contracts	—	—	—	572	820	576
Miscellaneous						
Electric power production	271	269	241	270	281	240
Factory Employment and Payrolls⁴						
Employment						
Pacific Coast	197	188	133	205	197	139
California	237	225	158	248	233	160
Oregon	137	145	111	143	157	115
Washington	148	138	103	154	145	107
Payrolls						
Pacific Coast	257	240	139	272	238	147
California	307	284	162	323	289	170
Oregon	171	176	111	183	196	118
Washington	197	181	106	210	192	113

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.

year or advanced, and in October averaged 67 percent higher than a year earlier. In October, prices paid for fruit on the tree averaged \$1.74 per box for lemons and \$2.45 per box for oranges, compared with \$1.34 and \$1.36 respectively, in October a year ago. For the citrus year ending October 31, shipments of oranges were only slightly larger than those of the previous season, while prices averaged about 5 percent higher. Preliminary estimates place the value of sales of Arizona-California oranges at approximately \$53,000,000, compared with \$48,000,000 in the 1939-40 season. While lemon prices for the crop year ending October 31 averaged below those of the previous season, heavy shipments from the record

Distribution and Trade—

Index numbers, 1923-1925 average=100	With Seasonal Adjustment— (1941—1940)			Without Seasonal Adjustment— (1941—1940)		
	Oct.	Sept.	Oct.	Oct.	Sept.	Oct.
Retail Trade¹						
Automobile sales (number) ²						
Total	—	—	—	78	68	141
Passenger	—	—	—	68	54	138
Commercial	—	—	—	183	215	176
Carloadings (number) ²						
Total	99	103	90	116	119	106
Merchandise and misc.	106	114	97	129	135	117
Other	90	89	82	101	99	92

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

²Daily average.

crop more than offset the lower prices, and value of sales is estimated at about \$20,000,000, compared with \$18,400,000 a year earlier. Returns to lemon growers in recent years have been depressed by three consecutive record crops, although the value of sales during the recently ended crop year has been exceeded in only four previous years. As an outgrowth of the recent record lemon crops a constantly expanding proportion of the crops has been diverted to by-products plants. Almost 50 percent of the past year's production has been utilized in other than fresh form in an attempt to maintain prices. Grapefruit production is estimated to have had a value of \$2,000,000, or about the same as in the previous season.

Banking and Credit

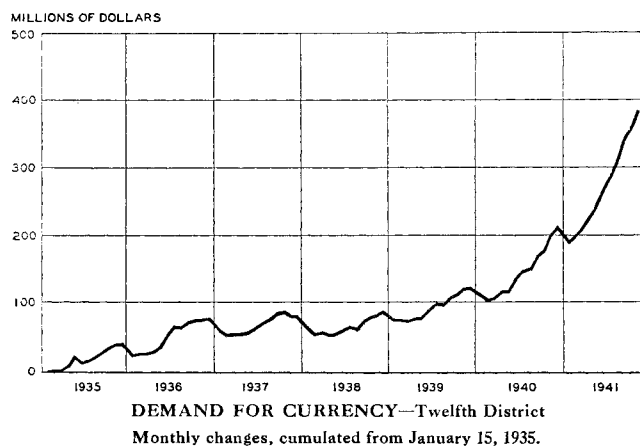
Reserve balances of member banks in the Twelfth District increased sharply in the first three weeks of November, and on November 19 were \$52,000,000 higher than a month earlier. This recent increase, while unusually abrupt, was a continuation of the somewhat intermittent but nevertheless substantial expansion of reserves of local member banks during much of 1940 and during the current year. From January 1 through November 19, 1941 these balances have increased from \$754,000,000 to \$981,000,000, a gain of \$227,000,000 or 30 percent.

The large increase in member bank reserve balances during the current year has been occasioned by heavy United States Treasury disbursements in the district in excess of local collections. These net disbursements through November 19 totaled \$852,000,000, considerably larger than in any like period during previous years. During the corresponding period in 1940 they amounted to \$392,500,000, and in the comparable period in 1939 they were \$228,300,000. Net disbursements of the Treasury are met from funds transferred to this district from other sections of the country where receipts from taxes and other revenues and from the sales of securities exceed collections. The transfer of these funds and their disbursement locally result in additions of like amount to reserves of banks in the district.

The large additions to banking reserves because of net Treasury disbursements in the district during the current year through November 19 were partly offset, however, by other factors which depleted reserves. These factors were principally a large net outflow of funds arising from interdistrict payments because of commercial and financial transactions, and a further substantial increase in demand for currency by the public. Other factors were relatively insignificant in their effect upon reserve balances. Outgoing transfers of funds for the accounts of banks and their customers to pay for the purchase of goods, services, and securities or to add to cash balances with banks in other parts of the country were \$465,000,000 larger than transfers of funds into the district for similar purposes. This net outflow of funds drew down local banking reserves just as net transfers of funds into the district by the Treasury added to those reserves.

As shown in the accompanying chart, demand for currency this year has assumed large proportions, net payments of coin and currency into circulation by the Federal Reserve Bank of San Francisco and the San Francisco Mint already exceeding that for any recent full year. Through November 19, these net payments into circulation amounted to \$163,500,000 and were a

charge of like amount against local member bank reserve balances. Currency and coin are obtained by the public through cashing checks drawn on deposit accounts. Banks finding their supplies of cash drawn down, replenish these supplies from the Federal Reserve Bank which charges the withdrawals of cash to the re-



serve accounts of the member banks making the withdrawals. Through this process, expansion in demand of the public for cash reduces member bank reserves.

The increase in member bank reserves was accompanied by a substantial expansion in deposits against which the banks are required to maintain minimum fractional reserves. Net demand deposits of district member banks averaged \$2,342,000,000 during the last half of December 1940, and had risen to \$2,863,000,000 during the first half of November 1941. Of this increase of \$521,000,000, banks in the seven reserve cities together with their branches, many of which are located in outlying cities and towns, accounted for \$451,000,000, while banks in other cities and towns, accounted for \$70,000,000. Between the same periods, time deposits of district member banks increased \$13,000,000, a decline of \$7,000,000 at banks in the seven reserve cities being more than offset by an increase of \$20,000,000 at banks in smaller cities.

As a result of this expansion in deposits and the increase in reserve requirements ordered by the Board of Governors of the Federal Reserve System, effective November 1, the reserves which member banks are obliged to maintain against deposits increased from an average of \$514,500,000 in the last half of December 1940 to \$702,200,000 in the first half of November 1941. In the latter period, excess reserves averaged \$243,900,000. Based on deposits outstanding during those two weeks, the order of the Board increased required reserves and reduced excess reserves by \$100,000,000.

District demand for bank credit through the medium of loans continued to expand in the four weeks ending November 19. Loans of banks in the seven reserve cities increased \$13,000,000, an average weekly increase of \$3,250,000. During the preceding 16 weeks the increase averaged \$3,560,000. Loans for commercial and industrial purposes advanced \$14,000,000 further, and on November 19 had expanded \$130,000,000 or 35 percent since the first of the year. Loans secured by real estate, and advances in the "other" loan classification, which consist principally of retail and personal installment loans, fluctuated with little net change. Investments of city banks in Government securities increased further.

Summary of National Business Conditions

Released November 21, 1941—Board of Governors of the Federal Reserve System

INDUSTRIAL activity continued to increase in October and the first half of November and there was some further advance in prices of industrial materials and finished products. Distribution of commodities to consumers declined in this period following an unusually large volume of trade in the preceding three months

PRODUCTION

Volume of industrial production increased further in October and the Board's seasonally adjusted index advanced from 161 to 164 percent of the 1935-39 average. Increases in activity occurred mainly in industries producing machinery, armament, and other durable manufactures required under the defense program. In the meatpacking industry activity also advanced considerably and output of other manufactured food products, which has been unusually large in recent months, declined less than seasonally.

Automobile production increased during October, and in the first half of November was sustained at about the rate reached at the beginning of the month. Production in October approximated the quota permitted for the month, whereas in August and September output had been considerably below the quotas set owing in part to delays incident to the changeover to new model production and to difficulties in obtaining certain materials. Since the beginning of the model year production has been substantially in excess of retail sales and dealers' stocks have risen sharply. In October as compared with October 1940, car and truck output declined about 25 percent but man-hours worked in the entire industry changed little, apparently reflecting a shift to defense activity.

In most other manufacturing industries output in October was maintained at or near the rates prevailing in other recent months. At cotton mills activity increased, following some reduction in the previous month, while at wool mill there was a slight decline from the peak reached in September. Steel production rose to an average rate of about 99 percent of capacity during October but declined slightly in the first half of November.

Coal production declined somewhat in October and early November, while output of crude petroleum increased further to new record levels. Lake shipments of iron ore were high and shipments of 71,600,000 gross tons for the season to the end of October are already larger than for any previous full season.

Value of construction contract awards decreased slightly in October, according to figures of the F. W. Dodge Corporation. Declines in awards for publicly financed work were partly offset in the total by an increase in privately-financed projects. Awards for residential building showed little change, although an increase is customary in this month. Contract awards in October continued a larger volume than a year ago. Total awards were 60 percent larger, reflecting increases of 13 percent in private construction and of 112 percent in public work.

DISTRIBUTION

Distribution of commodities to consumers declined in October following an unusually large volume of trade in the preceding three months. During the third quarter, sales had been stimulated considerably by several factors, notably apprehension that there might be shortages and higher prices of many consumer goods later on, as well as desire to avoid stricter installment credit terms, effective September 1, and higher taxes on many products, effective October 1.

Railroad freight-car loadings declined somewhat from September to October owing principally to decreased shipments of grain products and coal. Shipments of livestock increased and ore loadings showed less than usual seasonal decline.

COMMODITY PRICES

Prices of agricultural commodities, which had declined from the early part of September to the middle of October, have advanced somewhat since that time and prices of industrial commodities have increased further. Recent advances for industrial raw materials and finished products have been more restricted than in earlier periods, reflecting partly an extension of Federal maximum price action particularly to petroleum and selected metal, chemical, and textile products.

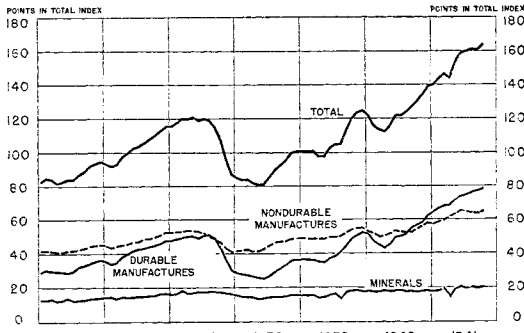
Prices in retail markets have continued to advance sharply. In September the cost of living, as measured by the Bureau of Labor Statistics index, increased 2 points to 108 percent of the 1935-39 average and was 7 percent above the level of last March. Since September retail food prices, which usually decline at this season, have increased further and preliminary data indicate that retail prices of other commodities have continued to rise.

BANK CREDIT AND GOVERNMENT SECURITY MARKETS

Total loans and investments at reporting member banks rose further during October and the first two weeks in November. Holdings of United States Government securities increased and commercial loans continued to advance.

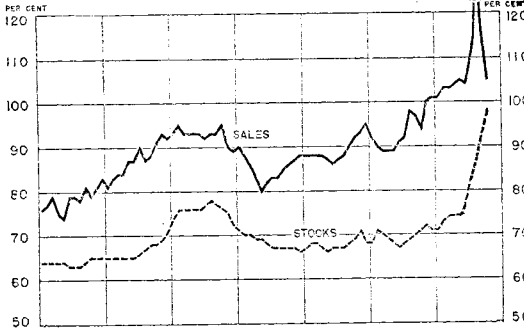
Excess reserves of member banks declined from 4.7 billion dollars to 3 billion on November 1, reflecting the increase in reserve requirements previously announced by the Board to be effective on that date.

Long-term Treasury bonds declined slightly in price during the early part of November, following a relatively sharp increase after the middle of September to a record high level around November 1. Yields on short-term issues have firming since early in September, the yield on Treasury notes of December 19-advancing from 0.62 percent on September 15 to 0.83 on November 15, and the bill rate rising to 0.258 percent.



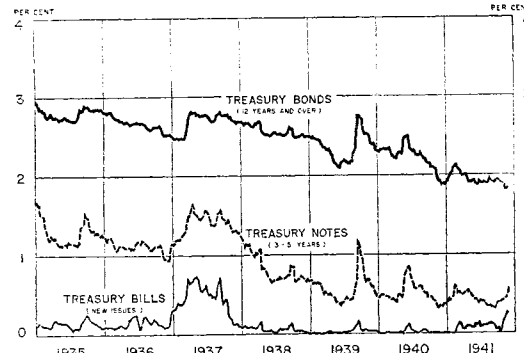
INDUSTRIAL PRODUCTION

Federal Reserve index of physical volume of production, adjusted for seasonal variation, 1935-39 average=100. Subgroups shown are expressed in terms of points in the total index. By months, January 1935 to October 1941.



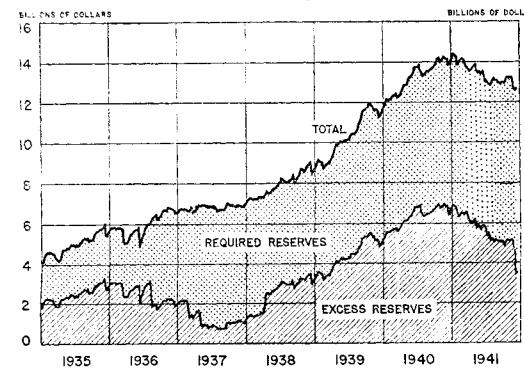
DEPARTMENT STORE SALES AND STOCKS

Federal Reserve indexes of value of sales and stocks, adjusted for seasonal variation, 1923-25 average=100. By months, January 1935 to October 1941.



MONEY RATES IN NEW YORK CITY

Weekly averages of daily yields of 3- to 5-year tax-exempt Treasury notes, Treasury bonds callable after 12 years, and average discount on new issues of Treasury bills offered within week. For weeks ending January 5, 1935 to November 15, 1941.



MEMBER BANK RESERVES

Wednesday figures, January 2, 1935 to November 12, 1941. Required and excess reserves, but not the total, are partly estimated.

Aircraft Expansion and Industrial Diversification

WIDESPREAD attention has been directed to the record industrial expansion occurring on the Pacific Coast as a result of the defense program. Often less recognized, however, are the fundamental qualitative changes taking place in the basic pattern of West Coast economic life. While final details are still lacking, it is clear that the industrial picture now emerging will differ greatly from that existing in 1939. Developments stimulated by the defense program, including the establishment of such new industries as aluminum and magnesium, the geographic integration of others such as iron and steel, and the enormous increase in the production capacities of some others will exercise a profound influence on post-war events.

Without attempting a general survey of the implications of the current economic transition, the significance of one important trend may be pointed out, namely, the extent to which certain industrial areas are becoming dependent upon the single activity of aircraft manufacturing. Until the impact of the rearmament program, the three areas most vitally affected, Los Angeles, San Diego, and Seattle, possessed relatively high degrees of diversification in their industrial patterns. In 1939, for example, no single industry in Los Angeles County, apart from food manufacturing, accounted for as much as 11 percent of total factory employment.¹ A similar situation existed in San Diego, but the importance of lumbering in the Pacific Northwest made for less diversification in the industrial pattern of Seattle.

With the stimulus to airplane manufacturing arising out of the present war, however, the picture began to change. Confronted with almost insatiable demands, West Coast aircraft companies undertook gigantic expansion programs which soon catapulted them into outstanding positions within their respective localities. In Los Angeles County the number of aircraft workers has increased from 13,300 in January 1939 to approximately 113,000 at the present time. During the year 1939, aircraft production accounted for two-thirds of the increase in all manufacturing employment, becoming the largest single source of employment by the spring of 1940. Upon completion of present expansion programs, aircraft companies will employ approximately 40 percent of all factory workers.

On a relative basis, aircraft manufacturing is even more important to San Diego than to Los Angeles, accounting for roughly two-thirds of all manufacturing employment. From June 1940 through September 1941, 99 percent of the total value of all defense supply contracts awarded to San Diego County plants went to air-

craft companies. The comparable figure for Los Angeles County is 83 percent. These percentages are based upon contracts announced by the War and Navy Departments which exclude all awards for foodstuffs and other awards having a value of less than \$50,000.

Until Consolidated Aircraft Corporation moved to San Diego in 1935, the industry there was represented by only a few small firms. Within the past three years employment has increased from less than 2,000 to over 33,000. More than four times as many workers are now engaged in aircraft as were engaged in all manufacturing activities combined during 1939.

Aircraft manufacturing in Seattle dates from 1917, three years before the first permanent aircraft organization was established in southern California. Growth during the first 20 years was slow, with total employment still below 2,000 by the end of 1937. Most rapid expansion has occurred during the present year, with employment increasing from 8,500 in January to over 24,000 at the present time. Completion next year of the new \$16,000,000 Boeing plant at the southern end of Lake Washington will require the services of at least an additional 10,000 workers.

Sales of the major Pacific Coast aircraft manufacturing companies amounted to a quarter of a billion dollars during the first six months of 1941. Average *monthly* sales of this period were over 50 percent larger than *annual* sales of five years ago. Rate of output has doubled in the past few months, indicating a current production pace in the neighborhood of \$1,000,000,000 a year. Almost overnight, aircraft manufacturing has become the number one industry in each of the three areas in which it is located, producing more goods and employing more workers than any other industrial activity.

From \$60,000,000 at the close of 1936, the backlog of orders held by major Pacific Coast aircraft companies has increased fifty-fold to \$3,000,000,000 at the present time. At the 1940 rate of output, it would take the industry over sixteen years to produce the airplanes now on order. There is every indication that, regardless of the amount of unfilled orders on hand, the aircraft industry will operate at maximum capacity as long as the present emergency lasts, hence backlog statistics have lost some of their usual significance.

In order to meet these unprecedented demands, the aircraft industry has been engaged in a rapid expansion program. Floor space in use by West Coast plants

¹Employment data used throughout this report include salaried employees as well as wage-earners.

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doubled during 1940 to approximately 9,000,000 square feet and has already more than doubled again during the present year. Upon completion of plants now under construction or planned, the total will exceed 27,500,000 square feet. Total assets of the major firms during the five-year period ending December 31, 1940 increased from \$35,000,000 to \$332,000,000, with over four-fifths of the increase occurring during the last year considered. Regardless of the test applied, whether it be employment, backlogs, floor space, or total assets, aircraft is shown to be a young industry already grown to such stature that, for the present at least, it crowds into the background all other activities in the areas in which it has been planted.

With the armament program still expanding, it is as yet too early to state what the maximum output of airplanes

will be, or to indicate the degree of contraction which will be necessary in the post-war period. The purpose of this note has been the narrower one of emphasizing the extent to which the economic life of certain areas has become dependent upon the aircraft industry. In the amazingly short space of less than three years a new industry has grown to the point where it now employs a proportion of workers undreamed of a short time ago. The implications which this resulting industrial imbalance bears to the problem of maintaining economic stability are only too obvious. The domination of a community by a single industry is always a potential source of danger, and especially so when that industry is subject to such wide fluctuations in demand as may later be the case in the aircraft manufacturing industry.

SALES, BACKLOG, AND ASSETS OF MAJOR PACIFIC COAST AIRCRAFT MANUFACTURING COMPANIES
(in thousands of dollars)

	Sales				Backlog (end of year)				Total Assets (end of year)			
	Los Angeles	San Diego	Seattle	Total	Los Angeles	San Diego	Seattle	Total	Los Angeles	San Diego	Seattle	Total
1936	\$15,577	\$ 4,336	\$2,293	\$22,206	\$ 32,006	\$ 18,470	\$ 8,922	\$ 59,398	\$24,581	\$5,870	\$4,156	\$34,607
1937	29,630	12,198	5,546	47,374	46,388	14,230	14,112	74,730	32,566	5,026	8,305	45,897
1938	53,270	12,689	2,006	67,965	66,746	3,097	14,895	84,738	31,897	7,413	11,024	50,334
1939	92,714	4,449	11,847	109,010	173,087	43,642	23,003	239,732	66,724	11,229	9,254	87,207
1940	150,677	12,391	19,391	182,459	936,786	329,148	196,523	1,462,457	232,386	65,954	33,669	332,009
1941*	161,309	38,831	26,883	227,023	1,634,328	1,457,600		3,091,928				

Note: The fiscal year for two of the companies considered ends on November 30. Sales are estimated for one company in 1940 and for two companies for the first six months of 1941.

*Sales are for six months ending June 30. For two Los Angeles companies, the period covers the six months ending May 31; production for the first six months of the calendar year would be considerably larger. Backlog data are latest estimates, with San Diego and Seattle combined to avoid disclosure. The amount of subcontracting and the extent to which orders will be filled in plants of West Coast companies located outside the Twelfth District are not available.

