

FEDERAL RESERVE BANK OF SAN FRANCISCO

APRIL 1, 1942

Economic Implications of Japanese Evacuation

Many of the problems created by the current evacuation of all Japanese from the Pacific Coast arise because the Japanese have tended to concentrate in relatively small geographic areas and in certain activities. This concentration tends to make their withdrawal from these areas and occupations more noticeable than would be the case were they more diffused. The Japanese have been engaged for the most part in relatively low paying occupations which return a living income only through long hours of toil. Generally speaking, these occupations are avoided by white workers, with the result that the Japanese have become an important element in a number of specialized lines, particularly in the raising and marketing of truck crops. In recent years they have farmed about one-third of total truck crop acreage, and their production of a number of products, including strawberries, snap beans, celery, cauliflower, spinach, and peppers has constituted between 50 and 85 percent of the total. In 1940, Japanese farmers in the three Pacific Coast states operated 6,118 farms containing 258,074 acres and valued at \$72,641,934, representing about 2 percent of total farming activity. Most of the Japanese operations were confined to comparatively small areas in Los An-

geles and Orange Counties and in the San Joaquin, Imperial, and Santa Clara valleys in California, to the regions around Seattle and Tacoma in Washington, and to the vicinity of Portland in Oregon. The three counties in which the cities of Los Angeles, Seattle, and Tacoma are located contained 33 percent of all Japanese farms in the three Coast states, and within these counties Japanese farmers in 1941 accounted for 63 percent of the truck crop acreage.

Evacuation of all Japanese farmers from designated military areas in the three Pacific Coast states will naturally create certain problems of readjustment, and some loss in production of truck crops is expected. The extent of the loss cannot be forecast at this time. It may be 10 percent; it may be considerably less. Actual losses will depend largely upon the speed and method of evacuation and upon the ability to find and establish other workers with the skills necessary to carry on production. The Federal Government now has in operation a program designed to effect the transfer

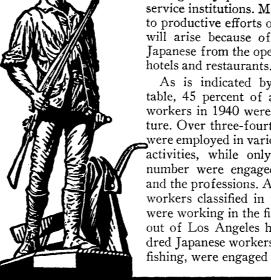
DISTRIBUTION OF JAPANESE WORKERS BY INDUSTRY GROUPS IN PACIFIC COAST STATES, 1940

	-Pacif				
	No.	Percentage of Total	Calif.	Wash.	Oregon
Agriculture	22,027	45	19,289	1,979	759
Food Stores	4,972	10	4,101	659	215
Domestic Service	4,744	10	4,393	313	38
Wholesale Trade	2,190	5	1,880	268	42
Restaurants	2,082	4	1,572	424	86
Other Retail Trade					
Establishments	2,034	4	1,626	353	55
Laundering and Cleaning					
Establishments	1,478	3	1,085	314	79
Hotels and Lodging					
Establishments	1,335	3	787	417	131
Professional and					
Related Services	1,326	3	1,097	181	48
Forestry and Fishery	786	2	727	58	1
All Other Industries	5,717	11	3,817	1,583	317
Total Gainfully Employed	48,691	100	40,374	6,546	1,771

of Japanese-operated farms to other operators with the least possible disturbance to production. In non-agricultural lines, the departure of the Japanese will aggravate

> an already existing shortage of domestic workers and cause other more or less temporary inconvenience as a result of the closing of Japanese-operated stores and service institutions. More significant losses to productive efforts of some communities will arise because of the withdrawal of Japanese from the operation of low-priced hotels and restaurants.

> As is indicated by the accompanying table, 45 percent of all Japanese gainful workers in 1940 were engaged in agriculture. Over three-fourths of the remainder were employed in various trade and service activities, while only a relatively small number were engaged in manufacturing and the professions. A majority of the 786 workers classified in forestry and fishery were working in the fishing fleet operating out of Los Angeles harbor. Several hundred Japanese workers, not in forestry and fishing, were engaged in fish canning.



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Population

The Japanese population on the Pacific Coast during the last thirty years has grown more slowly than the total population of the area, and during the 1930-1940 decade actually declined by 7,898 from 120,251 to 112,353. During the same period the number of Japanese in the entire United States declined from 138,834 to 126,947, or 8.6 percent. In 1940 the Japanese population constituted 1.1 percent of all persons in the Pacific Coast states as compared with 1.4 percent in 1910. The growth of the Japanese population from 1880 to 1940 is shown in the following table:

Japanese	Pop	ULATIO	n in P.	ACIFIC (Coast S	TATES	
	1880	1890	1900	1910	1920	1930	1940
California	86	1,147	10,151	41,356	71,952	97,456	93,717
Washington	1	360	5,617				
Oregon	2	25	2,501	3,418	4,151	4,958	4,071
Pacific							
Coast States	89	1,532	18,269	57,703	93,490	120,251	112,353

A majority of the Japanese population in 1940 was concentrated in relatively small areas in and around the large cities. In Washington, 68 percent of all Japanese were in King County; in Oregon, 59 percent were in Multnomah County; and in California, 39 percent were in Los Angeles County. Seventeen cities had a Japanese population of 500 or more (Los Angeles, Seattle, San Francisco, Sacramento, Oakland, Portland, Berkeley, Stockton, Torrance, Tacoma, San Diego, Fresno, Pasadena, Alameda, Long Beach, Gardena, and Belvedere Township in Los Angeles County), and together contained 46 percent of the total Japanese population in the Pacific Coast states. Only one other city in the United States, New York, had more than 500 Japanese inhabitants in 1940. The three Pacific Coast states contained 89 percent of all Japanese in the country.

Of the Pacific Coast Japanese population of 112,353 in 1940, 71,484 or 64 percent were native-born or citizens and 40,869 or 36 percent were foreign-born or aliens. With regard to this classification, it should be remembered that in most families the parents are aliens while the children are citizens. The average age of the aliens is therefore considerably higher than the average age of the citizens, and a larger proportion of them are gainfully employed. Many have been in this country over forty years, and all of them, with the exception of some who may have entered illegally, have been here since 1924 when the exclusion provision of the Immigration Act passed in that year went into effect. It is probably safe to say that some aliens would now be American citizens were the privilege of naturalization not denied them by law. The proportion of Japanese who are citizens is becoming increasingly larger as the older aliens die.

The proportion of alien Japanese who were engaged in some gainful occupation amounted to 70 percent, while among the American born the proportion of gainful workers amounted to only 28 percent. The higher proportion of gainfully employed among aliens is explained by the fact that the group contains relatively few women and no children under 18 years of age. The number of aliens exceeded the number of citizens engaged in agriculture, in fishing, and in restaurants; while the reverse was true in domestic service, in wholesale trade, and in food and dairy products stores. In all activities combined,

the number of alien workers (28,456) exceeded the number of citizen workers (20,235). With regard to sex of the gainful workers, 35,940 were males and 12,751 were females. A majority of the women workers were engaged in the service occupations or as unpaid family workers. For the entire Japanese population, 62,854 or 56 percent were males and 49,499 or 44 percent were females. For the alien population alone, the proportion of males amounted to 61 percent.

Agriculture

Economic Characteristics. Intensive farming is the general practice among Japanese agriculturists. In 1940 the average size of Japanese farms in the Pacific Coast states was 42 acres as compared with an average of 231 acres for all farms. Of this 42 acres, however, 76 percent was under cultivation in contrast to an average of only 20 percent for all farm land. Further evidence of the intensive character of Japanese farming is found in the fact that the value of Japanese farms, including build-

Japanese Operated Farms, April 1, 1940

CALIFORNIA	Unit	Japanese Operators	Percent. of Total	All Operators
Farms	.acres	5,135 226,094 44	3.9 0.7	132,658 30,524,324
Cropland harvested, 1939. Value of farms		174,942	2.7	230 6,534,562
(land and bldgs.) Average per farm	dollars dollars	65,780,572 12,810	3.0	2,166,452,648 16,331
Value of buildings Value of machinery Average per farm	dollars dollars dollars	7,568,459 5,910,441 1,151	2.0 4.5	379,708,056 132,337,109 998
WASHINGTON				
Farms	. acres	706 20,326 29	0.9 (*)	81,686 15,181,815 186
Cropland harvested, 1939. Value of farms		12,046	(*)	3,569,803
(land and bldgs.) Average per farm	dollars dollars	4,313,757 6,110	0.7	593,366,445 7,264
Value of buildings Value of machinery Average per farm	dollars dollars dollars	1,099,505 561,588 795	0.7 1.0	154,520,136 56,101,147 687
OREGON				
All land in farms Average per farm	. acres	277 11,654 42	0.5 (*)	61,829 17,988,307 291
Cropland harvested, 1939. Value of farms		8,318	(*)	2,824,316
(land and bldgs.) Average per farm	dollars	2,547,605 9,197	0.5	476,817,354 7,712
Value of buildings Value of machinery Average per farm		418,395 356,571 1,287	0.8	115,245,583 44,607,932 721
TOTAL PACIFIC COAST STATES				
Farms	. acres	6,118 258,074 42	2.2 (*)	276,173 63,694,446 231
Cropland harvested, 1939. Value of farms		195,306	1.5	12,928,681
(land and bldgs.) Average per farm	dollars dollars	72,641,934 11,873	2.2	3,236,636,447 11,220
Value of buildings Value of machinery	dollars dollars	9,086,359 6,828,600	1.4 2.9	649,473,775
Average per farm	dollars	1,116	2.9	233,046,188 844

^(*) Less than one-half of one percent. Source: United States Census, 1940.

ings, was higher than the general average, \$11,873 against \$11,220, while the value of farm implements and machinery per Japanese farm was \$1,116 against an average of \$844 for all farms on the Pacific Coast. The average value per acre of Japanese farms including buildings was \$281 compared with an average of \$51 per acre for all farms. The higher per acre value of Japanese operated land reflects in part the fact that much of it is located near large cities and its evaluation is therefore influenced by expectations of urban use.

A large majority of the Japanese did not own the farms on which they lived. According to the United States Census of Agriculture, of the 6,118 Japanese farm operators in the Pacific Coast states in 1940, 1,197 were full owners, 378 were part owners, 261 were managers, and 4,282 or 70 percent were tenants. Among the three states, Washington had the largest proportion of tenants, 72 percent, followed by California with 70 percent, and Oregon with 63 percent. In some counties, such as Hood River in Oregon and Merced and Sonoma in California, over one-half of the Japanese owned their own land. For the valuable land in Los Angeles County, the proportion of ownership fell to 5 percent. The Alien Property Act of 1913 prohibits Japanese aliens from owning land. Some aliens are reported to have purchased land in the name of relatives born within the United States, thus circumventing the purpose of this legislation. In cases where the ownership by whites of Japanese operated farms is purely nominal, the extent of Japanese control of land as evidenced by ownership is understated by the census.

Because of their large families and relatively small acreage, a majority of Japanese farmers were able to operate their farms most of the time without outside help. An unusually large number of Japanese workers, amounting to 4,832 or 10 percent of all those gainfully employed, were classified by the 1940 occupational census as unpaid family workers. Farms entirely operated by family help are especially characteristic of the small "gardenfarms" of from one to five acres surrounding large cities. Chief exceptions occur among the large scale Japanese farmers who sell to vegetable processing companies. Around Portland, for example, several thousand additional workers are needed during harvest. Most of the non-Japanese workers hired by Japanese operators are Mexicans and Filipinos. Since the outbreak of war, Filipinos generally have refused to work for Japanese and some trouble has also been reported with Mexican laborers.

Distribution by States. In California as a whole, Japanese agriculturists are estimated to have produced approximately 35 percent of all truck crops during recent years. The proportion for many market truck crops, including strawberries, snap beans, celery, cucumbers, spinach, and southern tomatoes was much higher than this, with Japanese farmers in 1938 growing between 75 and 90 percent of the total. For cauliflower, fall market peas, garlic, Imperial cantaloupes, and beans, spinach, and cucumbers for processing, Japanese production constituted between 50 and 60 percent of total acreage.

In Los Angeles County, where 1,523 of the 5,135 Japanese farms in California were located, the Japanese accounted for 68 percent of all acreage in vegetable and berry crops in 1941. For those products which require the greatest amount of "stoop labor," the proportions were somewhat higher, amounting to 81 percent of the berry crops and 87 percent of the market garden type of truck crops. Outside of Los Angeles County, the greatest concentrations of Japanese farmers in California were located in the San Joaquin Valley and in Santa Clara, Orange, and Imperial Counties.

In Washington, with the exception of an important concentration in the Yakima Valley (78 farms) and a smaller one around Spokane (14 farms), most of the 706 Japanese farms were located west of the Cascade Mountains. Here they accounted for approximately 30 percent of the total acreage in fruit and truck crops. Of the 598 farms in western Washington, 407 were in King County, which includes Seattle, and 111 were located in Pierce County, which includes the City of Tacoma. Japanese farmers in 1941 grew 56 percent of all truck crops in King County and 39 percent of such crops in Pierce County. Japanese production accounted for 95 percent of the total output in the important Puyallup and White River Valley vegetable producing areas. Green peas for market, lettuce, strawberries, celery, snap beans, carrots, cabbage, and cauliflower were among the most important products. For these products as well as for beets, onions, spinach, and cucumbers, Japanese acreage in 1941 constituted 60 percent or more of the combined acreage of each product in the two counties.

Over one-half of the 277 Japanese farms in Oregon were located in the vicinity of Portland, with smaller concentrations around Salem, 51 miles to the south, and around Hood River, 67 miles to the east of Portland. The Japanese in the Portland area engaged primarily in the production of berries, broccoli, spinach, carrots, and other fresh vegetables. In the important Gresham area just east of Portland, Japanese growers accounted for approximately 90 percent of the vegetables grown and 35 percent of the berry crop. Around Salem and Independence, emphasis was placed on production of celery, lettuce, carrots, beets, spinach, and onions, with Japanese farmers accounting for approximately 90 percent of the local production of these vegetables. The Hood River Valley differed from the usual pattern in that the Japanese acreage there was about equally divided between orchard and vegetable products. Japanese orchard land constituted approximately 15 percent of all orchard land in the valley while vegetables grown by the Japanese constituted a somewhat larger proportion of the total. Of the 35 Japanese farms in eastern Oregon not located in Hood River County, 25 were in Malheur County and 7 in Wasco County.

Economic Dislocations Resulting From Evacuation

Agriculture. The greatest dislocations arising out of the evacuation of all Japanese will be in the growing of truck crops. Reductions in the output of certain crops are expected, the extent of which will depend upon the relative importance of Japanese production and upon the ability to find other workers with the skills necessary to carry on production. Generally speaking, the greatest losses may be expected in middle-class dinner table products such as strawberries rather than in cheap vegetables such as cabbage and lettuce. Actual losses will depend largely upon the speed and method of evacuation, and developments which cannot now be foreseen may alter the picture considerably. At the present time the Federal Government has numerous field agents whose purpose it is to facilitate and supervise the transfer of property from Japanese to other operators. Continued operation

of farms is necessary not only from the standpoint of output but also from the standpoint of pest control. In the Hood River Valley, for example, orchards must be sprayed eight times a year to prevent the coddling moth from breeding and spreading.

The evacuation of all Japanese will affect poultry producers in a rather unique way, since Japanese predominate in the esoteric occupation known as chick-sexing. At the present time, out of the 138 certificates granted in California by the International Baby Chick Association, 96 are held by Japanese. All of them are citizens since certificates are not issued to aliens. The importance of chick-sexing arises from the fact that the sex of the baby chicks can be determined during the first two weeks rather than two or three months later when characteristic sex features develop, thereby allowing male chicks to be disposed of immediately by those growers primarily interested in egg production.

Non - Agricultural Activities. In segments of the economy other than agriculture, loss of the Japanese population will not be as keenly felt, largely because smaller numbers are involved and because the lost workers can be more easily replaced. Japanese are important in activities closely linked with farming and virtually control the distribution of fresh vegetables in the Los Angeles market. Evacuation of Japanese will also create dislocations and problems of readjustment in certain communities where they constitute an important part of

a local activity. An example of this is the hotel situation in Seattle. According to testimony presented before the Tolan Congressional Committee on National Defense Migration, Japanese operated almost two-thirds of the hotels in Seattle. For the most part, these were the lower priced hotels patronized mainly by the laboring class, and their continued operation was deemed necessary in view of the housing shortage arising out of the defense boom. Many Japanese in Seattle also operated restaurants serving moderately priced meals to defense workers. Evacuation of the 4,700 Japanese engaged in domestic service occupations would create a "servant problem" for the households involved. Some readjustments would also be required to replace the 7,000 Japanese workers normally engaged in retail trade and the 1,500 operating laundering, cleaning, and dyeing services.

* * * * *

The Japanese community which has grown up in the Pacific Coast states has found its place in the economic life of this area largely in low-paying occupations generally shunned by white workers. The bulk of the Japanese enterprises return a living income only through long hours of toil. Under present conditions, with expanded employment opportunities in defense industries on the Pacific Coast, it is doubtful whether other workers will be available to carry on under the same conditions the enterprises of the Japanese who must now be evacuated.

Review of Business Conditions—Twelfth District

Industrial activity continued to increase in the Twelfth District during February with the construction of ships and aircraft and production of other war materials accounting for an increasing proportion of the total. Construction of additional facilities for the production of military equipment and supplies continued active and further plant conversions were made during the month. While it appears that local facilities still available for the war effort have not been exploited as fully as possible, the rise of war production will continue to be the result of expansion rather than conversion of plant facilities to a greater extent in the Twelfth District than in the country as a whole. Progress is being made in the effort to utilize existing plant and equipment more intensively through more nearly full time operation.

Industry and Trade

The further increase during February in industrial activity in the district is indicated by the greater than seasonal gain in factory employment. Following the sharp increase in January, this bank's adjusted index for the three Pacific Coast states advanced slightly further in February and was 54 percent higher than a year ago. Layoffs because of curtailment in production of civilian goods continued in February. In the preceding month, these layoffs were concentrated in automobile and rubber plants, while in February they occurred principally in job foundries and other metal working plants which had not obtained war contracts. These layoffs, however, were more than offset by additions to employment, largely in

the aircraft and shipbuilding industries, which have provided opportunities for prompt reemployment of workers having usable skills. Outside the strictly industrial field, curtailment in employment has occurred in retail automotive, motion picture, and general contracting lines.

To an extent greater than in recent months, further increases in physical output of goods will be dependent more upon availability of personnel and materials than upon production facilities. Growing shortages of skilled workers in the aircraft, shipbuilding, and metalworking industries are being reported. Available figures on enrollment in the defense training program raise some doubt that the shortage can be adequately met in the immediate future from this source. By and large, however, no lack of unskilled labor has developed. Production of some finished products has been retarded to a limited extent by the restricted availability of a few essential parts and materials.

Expansion of production facilities continues most marked in the shipbuilding, aluminum, and chemical industries. Plans for an additional iron and steel plant in southern California are reported to have received approval, while actual construction on the \$126,000,000 iron and steel plant in Utah for which contracts were recently announced is expected to begin shortly.

Building construction is now largely confined to that undertaken for the use of the Army and Navy, to defense plant and defense housing construction, and to privatelyfinanced dwelling construction in designated defense housing areas. Despite priorities on materials, private construction of a nonessential character has not been completely stopped, but the current volume of that type of building comprises only a small percentage of the total. Privately-financed residential building in February increased considerably more than seasonally after having been severely depressed during the preceding two months, but declines in March are reported.

The February upturn largely reflected the response of builders to the WPB order of February 16 prohibiting delivery in California and some other states, effective March 1, of natural gas and mixed natural and manufactured gas to new homes and other buildings "unless the heating equipment is installed prior to March 1, 1942, or the equipment was specified in the construction contract and the foundation under the main part of the building is completed prior to March 1".

Federally-financed defense housing projects initiated in February increased abruptly. Announcements, some of which were delayed, of contract awards indicate that construction of 13,700 dwelling units undertaken during the month had a value of \$36,900,000, exceeding the value of privately-financed dwelling construction begun in the district by a considerable margin. Total publicly-financed residential building in this district now exceeds 41,000 units costing \$125,000,000.

Recent gains in employment have been accompanied by even greater increases in consumer purchasing power. Since the greater part of this addition to money income has been immediately exchanged for goods, retail trade, which expanded sharply late last year, has increased further, seasonal influences considered. As discussed elsewhere in this Review, department store sales in the Twelfth District advanced to 167 percent of the 1935-

Production and Employment-

Index numbers, 1923-1925 average==100			easona		Without Seasonal				
			stment		Adjustment—				
* 1			- 19						
Industrial Production		Jan.	Dec.	Feb.	reb.	Jan.	Dec.	reb.	
Manufactures (physical volu		110	114	101	0.2	0.4	0.7	0.1	
Lumber	125	116	114	121	92 160	84 148	87 167	91 158	
Refined oils	176	218	211	127	156	154	156	113	
Cement Wheat flour	124	112	112	119	124	112	112	119	
Minerals (physical volume)									
Petroleum			_	_	98	95	96	93	
Copper (U. S.)2	153	162	155	153	160	158	156	155	
Construction (value)									
Residential building permit	ts³								
Twelfth District	136	74	57	88	121	45	44	76	
Southern California.	141	81	63	75	124	64	54	66	
Northern California.	86	43	32	60	91	34	22	64	
Oregon	54	97	40	47	52	45	24	45	
Washington	332	85	65	271	275	63	37	225	
Intermountain States	186	150	166	205	. 87	60	108	96	
Public works contracts	_	_		_	1,571	495	323	377	
Miscellaneous									
Electric power production	311	306	294	255	285	284	278	234	
Factory Employment and Pays	olls4								
Employment									
Pacific Coast	241		r221	156	227	220	r215	147	
California		279	264	182	272	263	260	174	
Oregon			r170	127	188	180	r162	114	
Washington	172	172	r161	122	158	155	r153	112	
Payrolls									
Pacific Coast	357	346	r292	178	332	312	r286	165	
California		408	348	202	402	380	346	192	
Oregon			r229	144	254		r206	127	
Washington	252	243	т208	145	227	206	r200	130	

1939 average in January and were maintained at that level in February. Preliminary data indicate some decline in March. The most recent figures (January 30) on department store stocks by departments indicate that with few exceptions inventories in individual lines have kept pace with sales. Some curtailment has occurred during the past few months, however, in inventories of apparel containing silk and rubber.

Agriculture

Except in Washington and Arizona, precipitation during the past winter months was generally above normal in the Twelfth District. December was a particularly wet month, with precipitation ranging from 19 percent above normal in Washington to 122 percent above normal in California. In January and February, it was somewhat below normal, particularly in Washington and in southern California.

Precipitation—Winter of 1941-1942

		Perce	ntage of N	ormal
	Dec.	Jan.	Feb.	Winter Dec Feb.
Arizona	166	51	81	95
California	222	89	92	123
Idaho	167	62	99	107
Nevada	200	74	83	106
Oregon	155	67	101	106
Utah	178	85	100	116
Washington	119	50	76	82

Snow packs at the end of the winter were heavy in the higher elevations, and abundant water for irrigation purposes is forecast for the current year. Soil moisture in range and pasture areas is good except in a few local sections of the district and should result in excellent feed conditions with warmer weather.

In many regions, temperatures were unusually low in the late winter and ranges deteriorated, increasing the necessity of supplemental feeding of livestock. Citrus fruits were damaged by frosts, and truck crops were likewise damaged or their growth retarded.

Freezing temperatures affected the quality rather than the volume of oranges, leading to the diversion of more fruit to by-products channels. The lemon crop was reduced by the frost and the 1941-42 crop is now expected to be 10 percent less than indicated earlier in the season

Distribution and Trade-

Index numbers, 1935-1939 daily average=100			easons itment		Without Seasonal Adjustment				
	-194	2-	~19	41	<u>1942</u>				
Retail Trade	Feb.	Jan.	Dec.	Feb.	Feb.				
Department store sales (val-	ue)1								
Twelfth District	167	167	138	131	132	129	235	103	
Southern California		172	144	134	140	172	246	113	
Northern California		145	117	114	115	112	211	91	
Portland	172	164	143	128	141	134	219	105	
Western Washington		215	164	154	163	158	286	115	
Eastern Washington									
and Northern Idaho	153	148	117	134	101	94	179	87	
Southern Idaho and Utah		165	142	134	121	112	246	86	
Phoenix		173	138	130	153	141	244	114	
Automobile Sales (number)2									
Total	_					14	92	155	
Passenger						9	81	148	
Commercial	_	_		_		64	207	226	
Carloadings (number)2									
Total	125	130	114	106	103	103	100	88	
Merchandise and misc		141	132	113	112	118	117	94	
Other		117	91	99	92	84	79	81	
Otha	114	11/	21	27	74	01	17	0.1	

¹Revised series. Tabulations of back figures for these and other cities and areas will be made available upon request.
²1923-1925 daily average = 100.

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. Excludes fish, fruit, and vegetable canning. rRevised.

and 4,319,000 boxes less than in the previous year. California grapefruit has generally escaped frost injury, but some loss from this cause may have occurred recently in the Salt River Valley of Arizona.

CITRUS FRUIT PRODUCTION—TWELFTH DISTRICT*

Oranges	Average 1930-39	1939	1940	Indicated 1941
California, all	21,395	44,425 26,904 17,521	49,478 30,006 19,472	50,016 29,520 20,496
Arizona	252	520	500	600
Grapefruit Arizona California	1,505 1,768	2,900 1,992	2,650 1,983	3,000 2,040
Lemons California	8,815	11,983	17,099	12,780

^{*}Data are for crop years beginning November 1 of the years indicated.

Truck crops in general were retarded and some of the less hardy vegetables were damaged by frost. Potatoes in Kern County of California were frozen back but plants were not sufficiently damaged to cause other than a delay in harvest. Peas in the Imperial Valley were sufficiently damaged, however, to lead to abandonment of some fields, and the first crop of strawberries in the coastal areas of southern California was destroyed. Cauliflower in Oregon was damaged and production is now estimated at 6,000 crates compared with a 10-year average of 58,000, while the average size of this vegetable in California will be smaller as a result of low temperatures. Growth of early lettuce was retarded in California and Arizona, and harvest of asparagus was delayed. In Arizona, rains endangered cantaloupe plantings and it is expected that a considerable amount of replanting will be necessary.

In late February the winter wheat crop of Washington was reported in excellent condition. The California crop suffered from excessive moisture during and after seeding and is forecast at less than the small harvest of 1941. Rice areas of California were favored by dry February weather which made advanced preparations for seeding possible. Growers generally were planning to start seeding around the middle of April since more certain germination is probable at that time. Supplies of high germination seed were scarce because of the relatively poor quality of the 1941 crop. The heavy rains of December and January halted the picking of the San Joaquin cotton crop, causing losses as well as injuries to seed and fiber of the unharvested one-third of the crop. The most favorable start in recent years is reported for the barley crop in California, heavy subsoil moisture and recent rains having been particularly beneficial.

Banking and Credit

First quarter income tax collections in the Twelfth District have been sharply higher this year than last. Deposits of income tax receipts made to the Treasurers' account with the Federal Reserve Bank of San Francisco from March 2 through March 25, inclusive, totaled \$184,608,400. Included in this total were receipts in the form of Treasury notes (tax series), the face value of which amounted to \$19,532,400. These deposits of income tax receipts were more than twice the deposits of \$76,673,000 made in the like period of last year. This large increase reflects both the application of the provisions of the Revenue Act of 1941 and the substantial increases in

personal and corporate incomes in the district in 1941 as compared with 1940.

The large deposits of income tax receipts made to the Treasurer's account with the Federal Reserve Bank of San Francisco constituted a substantial drain upon local member bank reserve balances, particularly in mid-March. Despite this heavy drain, however, district member bank reserves increased considerably during the first three weeks of March, continuing the expansion of the two preceding months. On March 18, these reserves totaled \$1,054,000,000, a gain of \$22,000,000 over a week earlier and of \$76,000,000 over the total reported on February 25. During the following week, however, they declined sharply to \$988,000,000 on March 25.

The increase in reserves of district member banks from February 25 through March 18 is explained by the unusually heavy disbursements of the United States Treasury in this area. These disbursements exceeded local collections, including income tax collections, by \$221,000,000. Any collection by the Treasury (other than in securities such as the tax series of Treasury notes) reduces banking reserves, any disbursement increases them. The net disbursements of \$221,000,000 during the three week period consequently added that amount to district member bank reserves. Additions from this source, however, were partly offset by a net outflow of \$133,600,000 from the district because of payments arising from commercial and financial transactions with other parts of the country. Another offsetting influence was an increase of \$7,700,000 in currency in circulation. In the following week the heavy net outflow of funds because of interdistrict commercial and financial transactions continued and in this week Treasury collections in the district exceeded dis-

Loans of district reporting member banks, which had declined moderately earlier in the year, revived from mid-February to mid-March. This increase occurred entirely in advances for commercial, industrial, and agricultural purposes. Investments of these banks declined somewhat during the same period. Holdings of United States Government obligations were reduced slightly, largely reflecting smaller investments in 91-day Treasury bills. A substantial reduction took place in holdings of all other securities from \$343,000,000 on February 18 to \$306,000,000 on March 25. This decrease largely reflected retirement of California State warrants late in February, a portion of which was held by local banks.

Certain changes in Regulation W, relating to the control of consumer instalment credit, became effective March 23. Clocks and watches, floor coverings, bicycles, lawn mowers, silverware, and photographic equipment were added to the list of items subject to control. The maximum maturity for credits was reduced to 15 months for all articles except household plumbing and heating equipment, and pianos, and for residential modernization. The minimum down payment is now one-third of the base price except for household heating and plumbing equipment, stoves, floor coverings, furniture, clocks and watches, pianos, and residential modernization. Down payments required for these items are 10 and 20 percent, except in the case of residential modernization for which there is no minimum.

Changes in Twelfth District Banks—1941

As in other recent years, the number of active banks in the Twelfth District declined in 1941. At the year-end the number of member banks was unchanged from a year earlier but there were seven fewer nonmember banks. The number of branch offices operated by local banks increased further to 1090 compared with 1086 on December 31, 1940, and the number of banks operating branches increased by two. Assets of branch banks accounted for 80.5 percent of total assets of all district banks, a moderate increase over the 79.2 percent reported a year earlier.

Two member banks were absorbed during the year, but the decrease was offset by the admission of two former nonmember banks to the System. In addition to the reduction because of the change in status of these two banks, the number of nonmember banks was further reduced by the voluntary liquidation of one bank, the

Branch Banks in Operation—Twelfth District

No of Bks		Nat.	nches State Mem	Non-	~_	Oper Nat. I	ated b State Mem.	Non- Mem.	In (cated— Outside Home City
December 31, 1940										
Arizona 8	3	2	0	1	25	21	0	4	1	24
California 226		9	8	16	850	681			230	620
Idaho 50		5	1	1	37	22			0	37
Nevada 11	2	2	0	0	10	10		0	1	9
Oregon 73	2 5 5 9	2 9 5 2 2	0	0 3 3 2	67	64			11	56
Utah 60	5	2	0	3	12	8	0	4	1	11
Washington.139	9	6	1	2	85	82	1	2	15	70
Total567	64	28	10	26	1,086	888	140	58	259	827
December 31, 1941										
Arizona 8	3	2 9	0	1	25	21	0	4	1	24
California220	32	9	7	16	850	683	125		229	621
Idaho 50	7	6	0	1	37	35	0	2	0	37
Nevada 12		2	0	1	11	10			1	10
Oregon 73	6	2	0	4	68	64	. 0	4	11	57
Utah 60	- 5	6 2 2 2	0	4 3 3	12	8	. 0	4	1	11
Washington.137		6	1	3	87	83	1	3	17	70
Total560	66	29	8	29	1,090	904	126	60	260	830

absorption of four by other banks, and the closing of five, all affiliates of foreign institutions, early in December. Offsetting these changes in part were the establishment of two new nonmember state banks, one in Nevada and one in Washington, and the conversion of three

branches of a California institution, classified as a bank but having no deposits, to independent offices.

The number of banking offices in the Twelfth District totaled 1,650 at the end of 1941, compared with 1,653 a

BRANCH BANK ASSETS—TWELFTH DISTRICT
(in thousands of dollars)

				Katio I	Sranch	
M	lember	Nonm	ember	Bank Assets to		
-Bran	ch Banks-	-Branch	Banks	All Bank Assets		
1940	1941	1940	1941	1940	1941	
Arizona 70,67	5 78,854	5,338	6,020	89.6	89.7	
California3,977,38	0 4,436,506	415,518	432,350	83.2	83.3	
Idaho 81,33	9 93,758	3,829	3.792	69.7	70.2	
Nevada 41,99	0 47,000	0	120	81.9	82.3	
Oregon 314,19	0 385,022	4.568	5,128	81.7	82.0	
Utah 47,23	1 57,374	3,327	3,662	25.4	26.8	
Washington 460,04	9 571,106	5,327	79,156	63.7	75.7	
Twelfth District . 4,992,85	4 5,669,620	437,907	530,228	79.2	80.5	

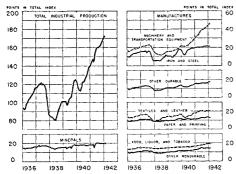
year earlier. This decrease was smaller than the decline in the number of banks and reflected the net increase of four in the number of branches in operation. During the year six *de novo* branches were established, three of which were in California, and one branch was established when an independent bank was absorbed and its office operated as a branch of the bank with which it was merged. Three branches were discontinued in 1941.

Each of three banks previously operated as unit institutions established one branch in 1941, in one instance through absorbing a bank and thereafter operating the office of the absorbed bank as a branch. In the other two instances, the branches were of the *de novo* type. At the same time, a bank in California closed the one branch it had previously operated. The net result of these changes was an increase of two in the number of banks operating branches in the district.

While the number of banks which were members of the Federal Reserve System at the end of 1941 was unchanged from a year earlier, these banks accounted for a slightly larger proportion of total district banking resources. On December 31, 1941 they held 88.2 percent of all assets of district banks compared with 87.5 percent at the end of 1940.

BANKS IN OPERATION—TWELFTH DISTRICT (Figures as of December 31. Assets in thousands of dollars)

,	Member Banks				Nonmember Banks				All Banks			
	-Num	ber-\	Assets-		~Num	-Number - Assets		~Number~		Assets-		
	1940	1941	1940	1941	1940	1941	1940	1941	1940	1941	1940	1941
Arizona	5	5	73,399	82,045	3	3	11,437	12,518	8	8	84,836	94,563
California	115	113	4,655,451	5,191,111	111	107	623,156	650,997	226	220	5,278,607	5,842,108
Idaho	27	28	103,911	118,051	23	22	18,319	20,967	50	50	122,230	139,018
Nevada	8	8	49,171	54,908	3	4	2,118	2,318	11	12	51,289	57,226
Oregon	32	32	356,292	436,925	41	41	33,696	38,741	73	73	389,988	475,666
Utah		34	163,470	189,407	27	26	35,392	37,997	60	60	198,862	227,404
Washington	£ 77	57	599,316	719,034	82	80	131,560	140,050	139	137	730,876	859,084
Twelfth District	277	277	6,001,010	6,791,481	290	283	855,678	903,588	567	560	6,856,688	7,695,069



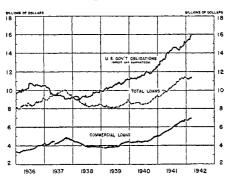
INDUSTRIAL PRODUCTION

Federal Reserve monthly 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. Latest figures shown are for February 1942.

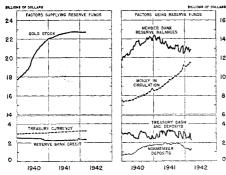


WHOLESALE PRICES

Bureau of Labor Statistics' weekly indexes, 1926 average=100. Latest figures shown are for week ending March 21, 1942.



MEMBER BANKS IN 101 LEADING CITIES
Wednesday figures. Commercial loans, which include industrial and agricultural loans, represent
prior to May 19, 1937, so-called "Other loans"
as then reported. Latest figures shown are for
March 11, 1942.



MEMBER BANK RESERVES AND RELATED ITEMS

Wednesday figures. Latest figures shown are for March 11, 1942.

Summary of National Business Conditions

Released March 20, 1942-Board of Governors of the Federal Reserve System

I trade was sustained at high levels and commodity prices continued to advance.

PRODUCTION

In February the Board's seasonally adjusted index of industrial production rose from 171 to 173 percent of the 1935-1939 average. As in other recent months, activity in the durable goods manufacturing industries, where the majority of military products are made, continued to advance, while in industries making nondurable goods and at mines activity was maintained at about the levels reached last autumn.

Steel production rose to 96 percent of capacity in February and increased further to 98 percent in the third week of March—which corresponded to an annual rate of nearly 87 million net tons. Lumber production also increased, following less than the usual seasonal decline during the previous two months. In the machinery and transportation equipment industries, now engaged mainly in armament production, activity continued to advance rapidly as plant utilization increased and capacity expanded. Conversion to armament production in the automobile industry, where output of civilian products was discontinued in early February, is apparently being effected much more rapidly than had been anticipated earlier.

There were further increases in output at cotton textile mills and at chemical factories, reflecting an increasing amount of work on military orders. At meatpacking establishments activity was maintained near the high rate reached in January. Shoe production increased by less than the usual seasonal amount. Anthracite production rose sharply in February and bituminous coal production was maintained near the high rate of other recent months. Output of crude petroleum, which had been at record levels in December and January, declined somewhat in the latter part of February and in the first half of March, reflecting transportation difficulties.

Construction

Value of construction contract awards increased considerably in February, according to figures of the F. W. Dodge Corporation, owing mainly to a sharp rise in awards for public projects. Total awards in February were half again as large as last year, and public awards were about three times as large.

In nonresidential building, awards for public projects increased materially, while those for private projects continued to decline. There was a slight rise in awards for public utility construction.

In residential building, contracts for private work changed little from January, while those for publicly-financed projects increased sharply and amounted to about half of the total for the first time on record. For the past six months there has been a noticeable shift in privately-financed housing activity from building for owner-occupancy to building for sale or rent; in February, awards for the former constituted only about one-fifth of the small-homes total. This shift is attributable mainly to the activity in defense areas and to legislation enacted last spring making possible the insurance of mortgages taken out by builders.

Value of retail trade continued large in February. Sales at general merchandise stores and variety stores increased more than seasonally, while sales at department stores declined. In the first half of March department store sales increased by about the usual seasonal amount.

Freight-car loadings, which in January had been unusually large for this time of year, declined somewhat in February owing to smaller shipments of coal, grain, and miscellaneous freight.

Commodity Prices

Wholesale prices continued to advance from the middle of February to the middle of March, particularly those for finished consumer goods such as meats, fruits and vegetables, shoes, clothing, and household items. Temporary maximum price orders were issued covering wholesale prices of some of these products, including pork, canned fruits and vegetables, finished cotton and rayon fabrics, cotton rugs, and bedding equipment. These orders, according to statute, used as maximums the prices prevailing within five days prior to issuance. They are effective for only 60 days and may be replaced by regular schedules.

In March income tax receipts by the Treasury for the first time reflected the higher schedule of rates. The effect of these receipts on the money market was largely offset by redemption of Treasury bills previously issued to mature during the tax collection period, by tax-anticipation notes turned in on payment of taxes, and by continued heavy Treasury expenditures. As a consequence a record volume of Treasury operations was effected with little influence on conditions in the market. Excess reserves of member banks showed no large change and on March 18 amounted to about \$3.2 billion.

United States Government obligations held by member banks in leading cities showed little change during the first three weeks of March following a sharp rise in February. Commercial loans increased further.

United States Government Security Prices

Prices of United States Government bonds advanced steadily from the middle of February to the middle of March. Long-term taxable bonds yielded 2.35 percent compared with an average of 2.39 percent in February. Prices on short-term securities have held steady since the first of the year, with Treasury bills selling at around .20 percent.

Revision of Indexes of Department Store Sales in the Twelfth District

REVISION of this bank's indexes of department store sales in the Twelfth District and in various cities and regions of the district has recently been completed. The new indexes are broader in their coverage than those previously released and provide a more accurate measure of recent changes in department store trade.

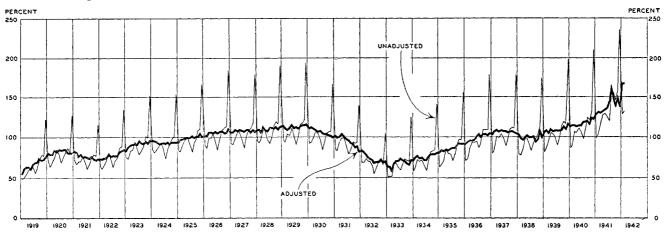
Principal improvements in the indexes are threefold. First, the revised indexes are based upon sales data of a substantially larger number of stores, particularly of units of national chain organizations, thus giving a better balance between chain and independent stores. Second, the indexes have been adjusted to levels indicated in the 1939 census reports of department store sales. Third, factors used in adjusting for seasonal influences have been brought up to date. In addition, the new indexes have been placed upon a 1935-1939 base and several minor technical improvements have been incorporated in the series.

Until 1941 a disproportionate number of department stores participating in this bank's trade reporting service consisted of independent stores or units of sectional chain organizations. It was recognized that the lack of more adequate reperesentation of units of national chain companies was a deficiency of the series. In 1941, however, this deficiency was overcome by obtaining monthly sales data on a current basis from about 50 additional retail units of national chain organizations. At the same time back figures through 1935 were obtained from these stores and have been included in the indexes beginning with January of that year. Cooperation of a number of additional independent stores, particularly of recently established stores in westside Los Angeles, was also secured, and figures of these and other independent firms are also incorporated in the series.

In view of the fact that the indexes are not based upon sales of all department stores in the district but rather upon sales of a sample of stores, a bias tends to develop in the series over a period of time. This occurs because sales of reporting stores which constitute the sample do not maintain indefinitely a fixed proportion to total department store sales in an area. Particular stores may cease operations, for example, or may lose business permanently to competitors, and new stores may be established. The bias may be corrected periodically by adjusting the data to levels indicated by census reports which purport to include sales of all department stores. The latest complete census report covered sales in 1939 and the revised indexes have been adjusted to levels indicated in that report.

The third principal improvement in the indexes was made by bringing up to date the factors by which the series are adjusted for seasonal variation. Sales of department stores are affected to a pronounced extent by influences that recur year after year at about the same time. For example, in the several weeks immediately before Christmas, sales expand sharply each year, while, to take another extreme example, sales decline considerably in July, a month when many persons are on vacation. It is consequently helpful for many purposes to be able to determine what sales have done in a particular month, in relation to other months, after allowing for the effects of purely seasonal changes. This is made possible by adjustment of the series for such influences, and a seasonally adjusted index is simply one from which changes traceable to these regularly recurring influences have been removed. Over a period of time, the degree to which seasonal considerations affect sales in particular months to some extent undergoes shifts and it becomes necessary to revise the seasonal adjustment factors. A new set of such factors were developed and were used in computing the revised seasonally adjusted index series.

The base of the old index was the 1923-1925 sales



DEPARTMENT STORE SALES-Twelfth District

Indexes of value of sales, unadjusted and adjusted for seasonal variation, 1935-1939 daily average ≈ 100.

By months, from January 1919 to February 1942.

average. In other words, daily average sales in that period were taken as 100 and daily average sales in all subsequent and prior months for which indexes were computed were expressed as percentages of sales in that base period. Recently most agencies have adopted the years 1935-1939 as a common index base period, and this procedure was followed in the present revision.

Of the minor technical improvements incorporated in the indexes, the most important was in the method followed in computing daily averages of monthly sales for several of the principal cities. If an index is to provide a reasonably accurate measure of changes in department store sales from one month to the next, the monthly sales totals which are the basic data must be converted to daily averages to allow for variations in the number of trading days from month to month. Otherwise a change in sales from one month to the next may merely reflect the fact that the one month has more trading days than the other. In addition, some days of the week are more important than others in terms of sales volume, for example, sales on Saturdays usually far exceed those on any other day. Because an important sales day, Saturday for example, may occur five times in one month and only four times in the next, although the total number of trading days may be the same in both, it is desirable to make allowance for this circumstance. In the recent revision the relative importance of each day of the week was calculated for several cities from daily sales figures submitted by a number of stores, and the weights so determined were used in arriving at daily averages of monthly sales figures from which the actual indexes were computed.

Previously, indexes were published not only for the district but for a number of larger cities and for several regions within the district. These city and regional indexes were revised along with the district index, and, in addition, series were prepared for other important com-

LOCALITIES COVERED BY INDEXES

	Initial Year
City or Area	of Series
Twelfth District	1919
California	1919
Southern California	1919
Los Angeles Area	1919
Downtown Los Angeles	
Westside Los Angeles	
Long_Beach	1935
San Diego	
Northern California	
Bay Region	
San Francisco	
Oakland-Berkeley	
Downtown Oakland	
Central Valley	
Bakersfield Fresno	
Sacramento	
San Tose	
Santa Rosa	
Vallejo-Napa	
Pacific Northwest	
Western Washington	, -,
Bellingham	
Everett	
Seattle	1919
Tacoma	1923
Eastern Washington and Northern Idaho	
Spokane	
Walla Walla	
Yakima	
Portland	
Southern Idaho and Utah	
Salt Lake City	1919
Phoenix, Arizona	1929

munities for which sufficient data were available. The accompanying table indicates cities and areas for which separate indexes were prepared and also indicates the period covered by each index.

The indexes are a reasonably close measure of the long-term and current behavior of department store sales in the district and in the several cities and regions of the district for which they have been prepared. In view of the wide variety of goods handled by department stores, they may also be used, with reservations, as an indicator of changes in the broader field of retail trade. Their use in this capacity, however, is necessarily restricted because the original data do not, among other items, cover sales of automobiles, do not adequately represent sales of automotive fuel and supplies, and do not include sales of food and building materials to any appreciable extent. Limitations such as these preclude a too-broad interpretation of the coverage of the indexes, even during the current period when sales of automobiles are almost negligible and heavy restrictions are being placed upon retail sales of building materials and a variety of other goods.

The chart on the preceding page shows the unadjusted and the seasonally adjusted indexes of department store sales in the Twelfth District by months from 1919 to date. This chart brings out the marked gain in value of sales of these stores in recent months. In 1940, sales rose to levels exceeding those of the highest month in 1929, the previous record, although prices were generally much lower in 1940 than they were 11 years earlier. Since 1940, sales have expanded considerably. This recent gain reflects largely the increased payrolls incident to the marked expansion in employment opportunities which has induced large migrations of workers and their families to several sections of the district, but has also resulted from recent substantial increases in prices of many goods carried by department stores. The chart also shows the erratic behavior of department store trade in recent months. Sales rose sharply in August 1941 to 168 percent of the 1935-39 average, on a seasonally adjusted basis, from 144 in the preceding month. They subsequently declined, the adjusted index falling to 138 in October. The peak in August reflected a buying rush by consumers to purchase apparel containing silk, particularly hosiery, and major household appliances and radios. Another sharp rise in sales occurred in January and February of 1942, allowing for seasonal influences, reflecting a rush to buy woolen and silk goods and apparel containing rubber. Some slackening in sales, however, is indicated by preliminary data for March.

* * * * *

Tabulations of the revised indexes have been prepared and will be made available upon request. Because of space limitations, current indexes for major regions only will be shown in the Distribution and Trade table regularly published in the Monthly Review. Current indexes for all the series listed will be published, however, in this bank's monthly summaries of retail trade. A brief technical description of the series is currently being prepared and copies will likewise be made available upon request.