



TWELFTH FEDERAL RESERVE DISTRICT

MONTHLY REVIEW

OCTOBER 1949

FEDERAL RESERVE BANK OF SAN FRANCISCO

REVIEW OF BUSINESS CONDITIONS

DIVERGENT trends have marked the various segments of the Twelfth District economy in recent months, and no clearcut over-all tendency is apparent. Industrial employment and payrolls have shown moderate improvement, and construction activity increased during the third quarter, while agricultural marketings and farmers' cash income have generally continued to run below last year's levels and retail trade, except in automobiles, is apparently still lagging somewhat. Preliminary figures for October, however, indicate some improvement in department store sales, after allowing for seasonal variation. Demand for bank credit, as measured by volume of business and agricultural loans, turned upward seasonally in September, and continued to increase through October except for a sharp decline in the first week of the month. Consumer instalment loans outstanding at commercial banks continued to rise. Major categories in this increase are retail automobile instalment paper and repair and modernization loans. The volume of consumer instalment loans made in September by Twelfth District commercial banks, however, was smaller than in August, the first monthly decline since February.

The steel strike

The most threatening cloud on the business horizon at the beginning of the final quarter of the year was the outbreak of the steel strike. This development has exerted a sobering influence on business sentiment which had shown a decided improvement following the moderate recovery from the midsummer lows of industrial output and depressed prices. Settlement of protracted strikes among San Francisco warehousemen at the end of September and Hawaiian longshoremen in mid-October, with promised resumption of normal shipping activity on the West Coast, had raised hopes of rapid improvement in many lines of business. These expectations had to be deferred or at least were overshadowed by apprehensions caused by the nationwide steel strike.

Fortunately for Western industry, the impact of the steel strike was mitigated by the circumstance that not all the steel mills in the District were struck. A large integrated iron and steel plant in Southern California is continuing to operate and, in fact, has just blown in an additional blast furnace which about doubles its pig iron capacity. Several small steel rolling mills, including two in California and one each in Oregon and Washington,

have also been unaffected by the strike. As a consequence, steel mill operations in the West during October were scheduled at about 20 to 25 percent of capacity as compared with less than half that rate for the nation.

Another favorable circumstance was the existence of relatively large warehouse stocks in the hands of western steel distributors at the outbreak of the strike, particularly in San Francisco. Many fabricators were also reported to have had reasonably adequate inventories, except for certain specialty items. However, these stocks were being rapidly depleted in October, especially in such products as galvanized sheets and strip steel. Fabricators engaged in extensive projects, such as the installation of large gas pipe lines and similar quasi-public works, being dependent upon direct mill shipments, were particularly vulnerable. Some of the steel fabricating plants were themselves strikebound by mid-October. Western coal production was only briefly affected by the walkout of coal miners.

Construction and lumber demand turn upward

Individual District industries have responded to various cross currents of demand during the past few months. Residential building, the mainstay of the construction industry, after declining in July turned sharply upward in most states of the District in August; the upturn continued into September. For the United States as a whole, building construction was well maintained in the third quarter—at a level relatively higher than in the Twelfth District—as compared with the volume of a year ago. The demand for construction lumber brought a marked increase in orders to western producers; the mills of the Douglas Fir area shipped out more lumber in September than in any month since early 1948. Export demand also improved somewhat, and prices began to firm again, reversing the long downtrend which apparently reached

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bottom in July. District pulp and paper and plywood mills also experienced a business pickup in September with improved prices for their products.

Nonferrous metals

The District output of nonferrous metals moved generally downward during the third quarter, continuing the trend of previous months. After a price rebound in July and early August, lead weakened again at the end of September, reflecting the effect of substantial foreign offerings. As of October 14, lead was priced around 13 cents per pound, about 1 cent above the low point of last June. Zinc scored a small price increase between July and September, but in consequence of the steel strike fell again in October to about the mid-summer low. Copper has remained relatively stable in price since mid-July at around 17.5 cents per pound; domestic consumption of refined copper in September was reported to be at the highest level since March, and October demand promised to equal September's record. District aluminum mills were forced to cut back production in October because of a seasonal power shortage in the Columbia River area.

Demand for heavy fuel oil remains low

California oil production has been tending downward all year because of slack demand for the heavier refined products. With a record number of motor cars in operation, the demand for gasoline and Diesel oil has held up to approximately the levels of last year, but the lagging consumption of heavy fuel oil, which is a by-product of gasoline refining, has created a serious problem for the industry. Stocks of crude oil and petroleum products in the Pacific Coast area at the end of August reached the highest level since January 1943, 132 million barrels, 40 million of which were fuel oil. Heavy fuel oil prices have been weak all year; a further cut of 35 cents per barrel was made at the end of September, bringing the price down to \$1.25 per barrel in cargo lots. This was well below any previous postwar figure and about 10 cents per barrel under current prices at the Gulf Coast. Shipment of heavy fuel oil to the Atlantic Coast was inaugurated by one large California producer in August and a substantial movement occurred in September, with other producers preparing to follow suit. These are the first shipments of this kind since before the war.

Fruit canning season ends in California

Early October marked the virtual completion of the California fruit canning season. Total fruit packs will run

well below those of recent years but are better balanced as to varieties and are of higher average quality. Because of a heavy carryover of apricots, canners put up the smallest pack of this product since 1940. Restricted supplies of pineapple, due to the Hawaiian dock strike, led to a drastic curtailment of the fruit cocktail pack as compared with the excessive pack of last year. Very large crops, available at low prices, induced large packs of cling peaches and pears. Packs of tomato products are expected to run materially below those of recent years. The Department of Agriculture placed orders with Pacific Coast packers in August for approximately 700,000 cases of canned peaches to be used in the subsidized school lunch program. The tone of the market for canned fruits and vegetables has improved since midsummer and the industry is viewing its prospect somewhat more optimistically at this time.

A late season run of pink salmon in Southeastern Alaska brought the total 1949 Alaska salmon pack to 4,375,000 cases, the largest since 1944. Lower prices, however, with fewer red salmon this year, reduced the value of the pack about 17 percent below that of last season.

No support for California's early potatoes

California's early-potato growers were notified recently that they will not be eligible for price support on their 1950 and subsequent crops. Though the new price support law makes support mandatory for potatoes at from 60 to 90 percent of parity, eligibility for support can be conditioned upon approval of marketing programs. Since \$204 million was lost in the purchase and sale of last year's potato crop, the Government has proposed marketing programs in several producing areas to hold down supplies and thereby limit Government price support outlays. California growers, however, voted against such a marketing program last June.

This action by the Department of Agriculture may be significant as a possible trend in policy with respect to other price-supported commodities, but it is doubtful that it will affect California's early-potato growers appreciably. Since the crop is marketed from April 1 to July 15, growers are faced with little competition from other potato-producing areas and usually obtain prices above support levels. Consequently, these growers are unlikely to put themselves under the marketing program, though the Department's announcement implied that such an action might bring about resumption of price support.

THE FLAX SITUATION

FLAX has been grown in various parts of the world for many centuries. Linen, which is made from the fiber, is one of the oldest textile materials known, and the seed was long used for food. Flax for fiber was among the first crops grown in this country by the colonists and was almost universally cultivated until the invention of the

cotton gin made cotton the more important textile. Oregon is now the only State in which flax for fiber is grown commercially. Flaxseed is no longer important as food, but linseed oil, which is crushed from the seed, is a very important component of a number of industrial products. At the present time Russia and the Baltic countries are

the principal producers of flax fiber, and the United States, Argentina, Russia, and India lead in the production of flaxseed.

Flaxseed in the United States

Flax grown for seed is sown thinly, is short in straw, and produces heavy branches and a large quantity of seed. It grows best in areas having either annual rainfall of 20 inches or more or effective irrigation, and it should not be exposed to hot dry winds or extremely high temperatures. Flax grows to best advantage in rotation with crops which will help clear the land of weeds and provide good soil food. It is a shallow-rooted crop and prefers a firm seedbed on heavy soil.

The quality and value of flaxseed are dependent on weather conditions during the growing season, especially the soil-moisture supply, temperature, and length of the season, and on the inherited factors in the variety grown. The major producing area of the United States is in the north central States of Minnesota, North and South Dakota, and Montana. In these States flax is grown as a spring crop—planted after the danger of severe frost is over and harvested early enough to avoid the midsummer heat and insects. In California, Arizona, and Texas, flaxseed is planted in the late fall and is harvested early the following summer. In these areas flaxseed is grown under irrigation so the dangers of drought during the growing season and rain during the maturing season are largely eliminated.

Flaxseed is grown principally for linseed oil, which is extracted by crushing the seed in heavy hydraulic presses. The seed yields about one-third oil by weight (about 70 percent of the value) and two-thirds meal, the proportions varying somewhat with the variety, growing conditions, and efficiency of the extracting operation. There is an ever-continuing search for new varieties of seed having higher oil content combined with high drying-quality oil. Linseed oil is considered the most important natural drying oil because of its inherent property of absorbing oxygen from the atmosphere, making a protective coating on the surface of the material being covered. The paint and varnish industries, then, absorb the greatest amounts of linseed oil. The manufacture of linoleum, oil cloth, and printing ink also take considerable quantities, and smaller amounts are used in the production of patent leather, cooking fats, soaps, and lubricants.

The other important product of the seed, linseed meal or cake, is a valuable concentrate feed used as a protein supplement in livestock feeding. The tow fiber of the flax straw is used in the manufacture of cigarette and other fine paper; and shive, the woody portions left after the fiber is removed, is used for packing material and organic fertilizers and in the manufacture of wallboard and container-board.

U. S. sources of supply

From early in the century until the beginning of World War II, nearly half the supply of flaxseed in the United

FLAXSEED PRODUCTION—UNITED STATES, CALIFORNIA, AND ARIZONA—1941-49

(in thousands of bushels)

	United States	Calif.	Arizona
1935-39 average	10,990	846	110*
1941	32,133	3,267	294
1942	40,976	3,534	425
1943	50,009	4,688	484
1944	21,665	2,788	456
1945	34,557	1,921	391
1946	22,585	1,938	336
1947	40,536	2,623	530
1948	52,533	4,851	1,064
1949 (Sept. est.).....	41,569	3,382	950

*1939.

Source: United States Department of Agriculture.

States came from foreign sources, largely Argentina. Up to the recent war period, there was no apparent trend in domestic production. But with the war came a sharply increased demand for fats and oils, cessation of imports from enemy-occupied countries, and curtailment of flaxseed shipments from Argentina because of transportation shortages. Beginning in 1942, the Government, by means of price supports, encouraged the expansion of flaxseed production. The support price that year was \$2.20 a bushel, and it was gradually increased through 1946. From a high in 1943, however, production declined and remained at lower levels through 1946. With the removal of Government restrictions on domestic usage, demand exceeded domestic supplies and considerable quantities had to be imported. In order to escape the increased prices asked by Argentina and to encourage production here, the United States Department of Agriculture announced a support price for the 1947 crop of \$6.00 a bushel. While this price was considerably above the \$3.60 support offered in 1946, it was felt necessary in order to meet the competition from other crops for the farmers' acreage and to secure sufficient production to meet our domestic requirements. This support level was continued for the 1948 crop and with favorable weather and improved cultural practices, a record 52.5 million bushels were produced. With this increased domestic production in recent years, dependence on foreign supplies has lost much of its prewar significance.

Twelfth District Flaxseed

During the past fifteen years, flaxseed has developed in significance from a minor specialty and experimental crop into one of considerable importance in several areas of the Twelfth District. Commercial production was first recorded in the Twelfth District in 1934. Since then small quantities have been produced in Washington, Oregon, and Idaho, but the big increases have been in California and Arizona where acreages are much larger. By 1948, District production had increased to over 11 percent of the total domestic output and 1949 production should also account for about 11 percent of the national total.

California an important flaxseed producer

In California, the largest District and the fourth ranking national producer, flaxseed was not raised commercially until 1934. Tests had been carried on for some years

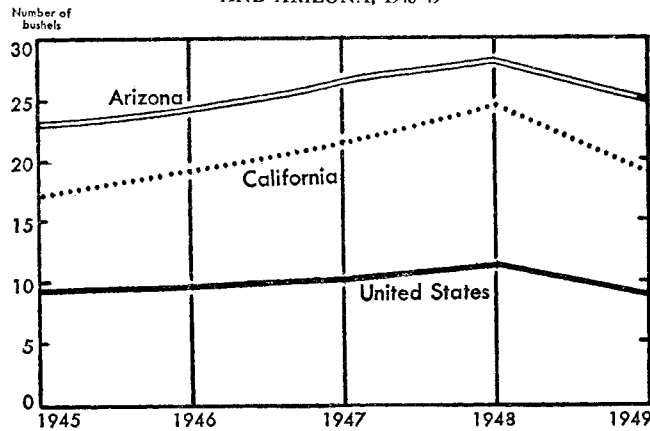
before at the Imperial Valley Field Station. Many varieties of flax were tested, and the Punjab variety which had been imported from India stood out as superior to all others. In 1933, 350 acres were harvested and all the seed was saved for commercial planting the following year when 11,000 acres were put in flax. By 1939, plantings had increased to 114,000 acres and in 1943 a record 310,000 acres were planted. In 1948, planted acreage was down to 201,000 but because of a record yield of 24.5 bushels per acre, production reached an all-time high of 4,851,000 bushels. During the last five years California production has averaged about 8 percent of the United States output.

Several factors have contributed to the recent rapid expansion of commercial flaxseed production in California: (1) The Punjab variety has been developed and has demonstrated its adaptability to Imperial Valley conditions and to other parts of the state. (2) The relatively low price of other grains has encouraged flaxseed production. (3) A market for domestic production was fairly well assured since so much of the national supply was imported. (4) Cottonseed-oil mills, located in the cotton-growing areas of the state, were readily available for use in crushing the oil from the flaxseed. Since flaxseed is harvested during May, June, and July, and cotton from November through January, these mills can be used during a time when there is little demand for crushing cottonseed. (5) Little additional equipment is needed since the tillage and harvesting equipment needed by flax is practically the same as for other small grains.

The Punjab variety of flaxseed was developed for use where flax is raised as a winter crop under irrigation. It is planted in late fall or early winter and is ready for harvest the following summer. The full season extends from May to September but the main harvest period is in June and July. An important factor in the success of the industry has been the extensive use by farmers of improved cultural methods of seeding, weeding, harvesting, and crop rotation. As with so many other crops, yields are extremely high in California with an average about twice that of the country as a whole, normally 18 or 19 bushels per acre as compared with a United States average of 9 bushels. The seed is of a higher quality—high oil content of good drying quality—than is raised generally in the United States; and that, along with its earlier marketing than in the midwest, accounts to a large extent for the higher average prices paid for California and other western flaxseed.

Flaxseed production in California is largely concentrated in the San Joaquin and the Imperial valleys. In 1943 when a record state acreage was planted, the San Joaquin Valley had slightly more acreage than the Imperial. Since then, San Joaquin acreage has decreased to about one-third that of 1943. Plantings in the Imperial Valley decreased for several years, but in recent years have risen again to the 1943 level, making it the most important flaxseed area in the state.

FLAXSEED YIELD PER ACRE—UNITED STATES, CALIFORNIA, AND ARIZONA, 1945-49



Most of the crop in the San Joaquin Valley is grown in Fresno and Kings counties where farming is on a large commercial scale. In 1945, the average flaxseed acreage of flax-growing farms was 741, indicating that total acreage in flaxseed would be markedly affected by the actions of a few farmers. Wheat, barley, and cotton are the main competitors for flax in this valley and were largely responsible for limiting flaxseed acreage in recent years.

In the Imperial Valley, flaxseed must compete for land with grain, alfalfa, and the highly specialized fruit and vegetable crops. But in the Imperial Valley, flax fits well into the crop rotation, following alfalfa. This cropping sequence tends to make for higher and more stable yields with less risk of crop loss. The excellent yields of the last few years as well as favorable prices have led to the recent expansion in acreage. In contrast to the San Joaquin Valley, flaxseed acreage per flax-growing farm is small in the Imperial Valley, averaging 135 acres in 1945.

Arizona leads the nation in yield per acre

Commercial plantings of flaxseed began in Arizona in 1939, and expansion of the industry since then has been similar to that in California, though on a smaller scale. Production has increased faster than acreage because of increases in yields per acre. Arizona's yields are higher than any other flax-producing state, the 1948 yield being three times the national average. Even so, Arizona raises only 1 to 2 percent of the nation's crop each year. Nearly all the state's flaxseed is grown in Yuma County where growing conditions are very much the same as in California's Imperial Valley. Average flax acreage per farm, however, is somewhat less, running only 75 acres in 1945.

Flaxseed of little importance in other District states

Small amounts of flaxseed are produced in several other District states. It has been grown on a limited scale in Washington, Oregon, and Idaho for more than 40 years. As a spring crop, it competes for land with the spring-sown grains, which probably accounts for the marked fluctuations in production. Over the last ten years there has been no increasing trend in production in any of these states, indicating that flaxseed has not attained the importance that it has in California and Arizona.

Present Supply Situation

The high level of support offered for the 1947 and 1948 crops, \$6.00 a bushel, was designed to make the United States independent of foreign sources of supply. The record 1948 crop resulted in supplies considerably in excess of demand. Hence reduced production was recommended for 1949 and the support price for the 1949 crop was reduced to 90 percent of parity or about \$3.99 per bushel. Instead of the 3 million acres recommended, however, plantings for the 1949 crop totaled nearly 5 million, slightly larger than last year. In the District, California farmers planted the same acreage as in 1948, but Arizona put in one-third more acreage. In spite of increased acreage, a less favorable growing season reduced the nation's crop about 20 percent from last year's bumper production. This reduced production, estimated at 41.5 million bushels, will be added to a record July 1 carryover of 19.2 million bushels to produce a prospective record United States flaxseed supply of almost 61 million bushels. To further aggravate the over-supply situation was a very large carryover of linseed oil in crushers' hands on July 1, the equivalent of 19 million bushels of flaxseed.

The total supply of flaxseed and linseed oil, equivalent to 80 million bushels, is more than enough for two years' domestic requirements. It is doubtful that this total will be swelled appreciably by imports during the 1949-50 season since increased domestic production in recent years has changed this country from a leading importer to that of an exporting area. An additional deterrent to imports is provided by the recent restoration of the 50 cents per bushel import duty on flaxseed.

Though the excessively large 1949-50 supply of flaxseed will provide an exportable surplus, it is doubtful that exports will be large enough to appreciably ease the over-supply. Last year's exports of oil and seed amounted to well over 5 million equivalent bushels, the third largest export quantity on record. World flaxseed production, however, has increased in recent years, and two leading exporting areas have large surpluses. Canada's present supply is large but 1949 production is estimated at 86 percent below last year. Argentina likewise has an over-supply; a recent reduction in the price of linseed oil should make her exports move into world markets more readily.

Reflecting large prospective supplies, moderate demand, and the lower support for this year's crop, flaxseed prices are starting the 1949-50 crop year at materially lower levels than last season. At mid-September, the per bushel price quoted in San Francisco was \$3.90 compared with \$6.25 a year ago and a support price for the California crop of \$4.14.

Outlook

Prospects for flaxseed over the next few years are difficult to analyze because of the many variable factors affecting the crop. Being a minor crop and seldom representing the major source of a farmer's income, it is not grown so extensively year after year. Since it competes with major crops for production resources, the factors

affecting these competitive crops influence the outlook for flaxseed. In many areas, it is used as a nurse crop or has a definite place in a cropping sequence. Until recently, dependence upon foreign sources of supply made world flaxseed conditions of vital importance to domestic producers. With current excessive domestic supplies, world trade in flaxseed now will offset our ability to market some of this exportable surplus. A final complication is presented by the fact that the price of flaxseed is presently supported. As a result, flaxseed prices are largely dependent upon Government price support policies.

Yields

The acreage planted to flaxseed in any year is largely affected by the per acre returns from flaxseed and from competing crops. These returns, of course, are dependent upon the respective yields, costs, and prices. Flaxseed yields per acre have not increased so much over the last 30 years as have yields of competing grain crops in the major flaxseed areas. Over the next few years, crop specialists have estimated that greater proportional increases in yields of flaxseed may be attained than for most of the competing crops. Recent improvements and cultural practices have not yet had time to show up in increased yields. A recent study has shown that the variation in flaxseed yields from year to year does not appear to be any greater than the variation in wheat yields. Variability in yields is usually considered to be the most important factor in measuring risk.

Production costs

Costs of producing flaxseed and other competing crops vary considerably throughout the flaxseed producing areas. Production costs per acre for flaxseed were highest, according to a survey in 1945, in California and Minnesota. In fact, they were higher than for competitive crops. In other areas, the per acre cost of producing wheat and flaxseed was about the same. Since the methods of producing flaxseed and competing crops are so similar, however, the present relationship between these respective costs of production can be expected to continue. The use of flax as a nurse crop or in a specific rotation plan could reduce the per acre costs in some areas and result favorably for flaxseed where production costs are about equal to those for competing crops. Certainly the cost factor is not so important in determining plantings as prospective yields or prices.

Prices and competing crops

For the immediate future, the price farmers may expect to receive for flaxseed is in the hands of the Government. But it is not so much the actual price which influences a farmer's actions but rather his expectations of the relationship between the prices of flax and competing crops, usually based on current prices. Over the last 20 years, flaxseed-wheat price ratios have ranged from 1.7 to 3.0, averaging 2.2. It now appears that ratios the next few years will be much lower than they have been in the past.

For 1950, the United States Department of Agriculture has announced that flaxseed, for which support is non-mandatory, will be supported at 60 percent of parity as against a level of 90 percent in 1949 and 140 percent in 1948. Wheat, the principal competing crop in the north central states, is a basic crop, however, and support is mandatory. In view of the passage of recent farm legislation, it appears that wheat will be supported at 90 percent of parity in 1950. If we assume that the index of prices paid by farmers will be 240 (1910-14 = 100) in mid-1950 (it was 243 on August 15), then the flaxseed-wheat ratio would be about 1.3.

This low price ratio would seem to favor increased plantings of wheat at the expense of flaxseed if farmers were able to increase or even maintain their wheat acreages next year. But acreage allotments have been proclaimed for wheat in 1950 so that acreages probably will be reduced, leaving considerable land that could be put in flaxseed. For the next few years, it is likely that a low flaxseed-wheat price ratio will exist favoring a reduction, in the north central states at least, in flax acreages. But it is also likely that Government controls over wheat will limit wheat acreages and consequently favor at least a maintenance of flaxseed plantings at present levels.

In California and Arizona, where flax competes more with barley than with wheat, flaxseed-barley price ratios have varied from 2.7 to 4.7 in recent years. Like flaxseed, barley support is at the discretion of the Secretary of Agriculture. Barley prices would have to drop to around 90 cents next year, which seems unlikely, to result in a ratio of even 2.7, and prices any higher would lower the ratio still further. Flaxseed, therefore, will probably not be able to compete well with barley, at least price-wise, since production costs are considerably greater for flaxseed. The 33 percent drop in flaxseed support will also put this crop in a much less favorable position with other competing cash crops in these areas. Though the flaxseed-barley price outlook appears unfavorable to flaxseed, respective yields are favorable. While barley yields are similar to the United States average, flaxseed yields in both California and Arizona have been running at least twice the United States average. Another factor possibly favorable to flaxseed production in these two states is the probability of marketing quotas being imposed on cotton next year; and cotton competes for land with flaxseed.

Output may decline, but carryovers assure adequate supplies for several years

These various factors which could influence flaxseed plantings make future acreage and production prospects very uncertain. Price prospects for flaxseed and competing crops would indicate appreciable reductions in acreage over the next few years. On the other hand, Government restrictions on wheat and cotton would allow increased acreages which could be put into flaxseed. And in California and Arizona, high flaxseed yields give this crop a relative advantage over competing crops. The use

of flaxseed as a nurse crop and as an intermediate crop in rotations should also restrict somewhat any sharp reduction in acreage.

Though some reduction in United States plantings is probable the next few years, primarily because of lower prices, no sharp drop in production is anticipated. Plantings will be shifted to the highest producing land and farmers who know how to get high yields will probably grow it. Cultural improvements and better varieties should also result in higher average yields. Even with a reduction in production, total domestic supplies should be adequate for domestic consumption for several years. With the 1949-50 total supply of seed and oil equal to two years' domestic requirements, the carryover for the next few years should be sufficient to offset even a sharp drop in production.

Demand for linseed oil

Since the chief use of flaxseed is for linseed oil and since most linseed oil is used as a drying oil, the demand for domestic flaxseed is largely dependent upon the demand for linseed as a drying oil. Several economic factors will affect this demand. The use of linseed and other drying oils seems to follow closely the ups and downs in industrial production and building activity, more closely with the former than the latter. Because there is still a backlog of needed construction, however, building activity may be the stronger factor in the demand for drying oils during the next several years. Increased new construction would also increase the demand for linoleum and oil-cloth making the immediate outlook for drying oils in the United States bright.

Even though the immediate demand for drying oils may be favorable, the demand for linseed oil may not be because of increasing competition from substitute oils. The extent of this competition in recent years is clearly shown in the table below. Much of this substitution came as the result of the relatively high prices of linseed oil, particularly when compared with soybean oil. Not only was the use of soybean as a drying oil sharply increased, but substantial quantities of dehydrated castor oil as well as fish oil are being used. As long as the price differential between soybean and linseed oil continues, increasing competition can be expected even though linseed oil is preferred over most other oils because of its greater adaptability for diversified uses.

Foreign sources of supply which were so important before the war could again become a strong competitive factor. At present, however, the import duty of 50 cents per

UTILIZATION OF OILS AND FATS IN DRYING-OIL PRODUCTS
(percent of total drying oils)

	Linseed	Tung	Castor	Fish	Soybean	All other
1921-40	78.1	12.6	0.6	3.4	1.8	3.5
1946	71.1	3.8	4.1	4.9	7.1	9.0
1947	55.9	10.5	4.3	4.4	15.7	9.2
1948	55.0	12.0	5.3	3.3	15.0	9.4

Source: United States Department of Agriculture.

bushel on flaxseed and 4½ cents per pound on linseed oil discourages imports.

Twelfth District prospects

Though demand prospects appear favorable for all domestic producing areas, lower prices and large stocks in Government hands may cause some production shifts between flaxseed producing areas. Some reduction in plantings is anticipated in the north central states, but a greater decrease will probably occur in California and Arizona because of the differences in competitive crops. In the former states, most of the competition for land comes from grains; in the two Twelfth District states, flaxseed also must compete with highly specialized fruit and vegetable crops. Consequently, plantings are more sensitive to price fluctuations. With a 33 percent drop in the support price for 1950, plantings in California and Arizona are likely to be substantially reduced.

Because of the extremely high yields obtained, California and Arizona will continue to have an advantage compared with other producing areas. But strong competition from many specialized cash crops will make relative prices very important. When flaxseed prices are relatively high, as they have been recently, acreage will be large, but when prices are relatively low, sharp cuts in acreage can be expected.

Flax for Fiber

Almost all the fiber flax produced commercially in the United States is grown in Oregon, especially in the Willamette Valley where records on the crop date back to 1844. Flax raised for fiber requires an abundance of moisture, cool weather during the growing season, and deep, fertile, well-drained soil. In Oregon it is seeded in March and April and harvested in late July and in August.

Flax processing in this region is carried on in plants located near the producing areas. Most of the resulting fiber is used for various kinds of thread and twine, though some of it is suitable for weaving coarser linen fabrics. In other parts of the country linen mills depend almost entirely on foreign-grown supplies whose very effective competition as to both costs and quality of fiber has had a limiting effect on the Oregon industry.

Production of flax fiber increased greatly during the war when imports were cut off, and in 1942 a record 37,000 tons were grown. Since then there has been a considerable decline each year, and in 1948 only 3,400 tons, somewhat below the prewar average, were produced. The future of the industry in Oregon depends to a large extent on the ability of growers to produce ever more efficiently a fiber of high quality which can better compete with foreign-grown fiber.

THE DEVALUATION OF THE POUND

THE oft-rumored and much-denied devaluation of the British pound finally became a reality on September 18, 1949. As had been freely predicted when the devaluation was still in the rumor stage, many other countries followed in Great Britain's footsteps. Within three or four days, some two dozen other nations devalued their currencies. Subsequent action by still other countries raised the total to 28 in all that had devalued their currencies in terms of the dollar within a month from the initial date. This was the most widespread and rapid movement of currency devaluation ever known.

The following is a list of the countries that had devalued their currencies within the month following September 18:

Sterling area	Europe	Other
Australia	Belgium-Luxembourg	Argentina ²
Burma	Denmark	Canada
Ceylon	Finland	Egypt
Iceland	France ²	Israel
India	Greece	Jordan
Iraq	Italy	Thailand
Ireland	Netherlands	Uruguay ³
New Zealand	Norway	
South Africa	Portugal	
United Kingdom ¹	Sweden	
	Western Germany	

¹ All local currencies of British dependencies, except British Honduras, have been devalued by the same ratio as the British pound, namely, 30.5 percent.

² All local currencies of French dependencies, with two exceptions, are pegged to the French franc.

³ The rate changes in these countries apply to specified commodity transactions.

Pakistan is the only country in the sterling area that has not devalued its currency. This has created trading difficulties between the closely allied economies of Pakistan and India, since the latter country followed the lead of Great Britain and devalued its rupee.

In most cases, the percentage devaluation in terms of dollars corresponded closely to that for the British pound, namely, 30.5 percent. There were a few exceptions, however. The devaluation from the former official rate of the Canadian dollar, and from the former effective rates of the Israelian pound and the Italian lira was about 9 percent. The dollar value of the French franc was allowed to decline about 6 percent below its former "free" market rate, but it had, of course, been sharply devalued in January 1948. The devaluation in Belgium-Luxembourg and Portugal ranged between 12 and 13 percent, and in Western Germany and Thailand it was about 20 percent. Argentina and Uruguay retained multiple rate structures.

The devaluation obviously resulted in no change in the exchange rates between the British pound and the other currencies that were devalued in the same proportion. Exchange rates for those currencies that were devalued less in terms of dollars than was the pound, however, rose in terms of sterling.

The fundamental purpose of these currency devaluations is to effect changes in price relationships that will stimulate exports from the devaluing countries to the

United States and diminish their volume of imports from the United States. Only by such a shift of trade can these countries hope to reduce in the longer run the dollar shortage which has confronted them since the end of World War II. Their postwar dollar shortage has been due to a complexity of factors which have made it necessary for them to buy far more from the dollar area than they have been able to sell to it. Because Great Britain has been under the greatest strain in this respect, it is worth while to discuss the British situation in somewhat greater detail.

Devaluation—a stimulus to British exports

The devaluation already has produced some decline in the prices of certain British goods in the dollar area, and this should stimulate the sales of these goods in that area. Only time will tell what the amount of the increase will be. It will, of course, vary considerably from one type of commodity to another.

The extent to which the sales of each commodity will be increased will depend in part upon the pricing policy followed by the British subsequent to the devaluation, in part upon the willingness of Americans to buy more of the British product in response to the lower price, and in part upon the ability of the British to increase their output of each commodity. The same considerations apply to British services to Americans, which, like commodity exports, provide dollars. The most important of these are shipping and American tourist travel in Great Britain.

Assuming no increase in the pound prices prevailing before devaluation, the prices of British goods in the dollar area would be about 30 percent lower as a consequence of the devaluation. In reality, only relatively few prices are likely to decline that much for the consumer. In the first place, if pound prices are increased above those prevailing before the devaluation, the drop in dollar prices will be less than 30 percent. Secondly, a large portion of the retail price of British goods to the American consumer consists of import duties and selling costs in this country, which are little if at all affected by devaluation.

In the case of Scotch whiskey, for example, the pound price has been increased sufficiently to leave dollar prices unchanged. This action was taken because the British believe that all the Scotch whiskey available for export can be sold at the dollar price prevailing before devaluation, and consequently there is nothing to be gained from a lower dollar price. Since the devaluation of the pound, the British have adjusted the price of tin from the Malaya states, the world's largest producer of tin, so that the new dollar price is only 8 percent less than before, instead of the 30 percent less which would have resulted from the devaluation of itself. This is an interim price which may be subject to change when the London Metal Exchange is reopened for trading in tin on November 15, 1949. The pound prices of copper, lead, zinc, and cotton have also been raised sufficiently to offset the effect of the devaluation upon dollar prices. In the case of English china, for which there is a large backlog of unfilled orders, the

pound prices have been increased almost enough to offset the 30 percent decline in dollar prices which would have resulted from the devaluation alone. As for services, passenger rates were increased by the shipping companies to the dollar level, but ocean freight rates were not raised.

In other cases, pound prices have remained unchanged and dollar prices have been reduced substantially. The dollar prices of British automobiles, for example, have been reduced from 20 to 25 percent on the average. Reductions have also occurred in the dollar prices of numerous other commodities, including textiles, wearing apparel, shoes, and handbags. On imported raw materials, however, most price reductions so far have ranged only between 5 and 10 percent.

In brief, in those cases where pound prices are subject to their control, the British policy has been to raise them where lower dollar prices are not needed to sell more goods, and thereby maintain dollar prices, and to permit a drop in dollar prices for goods whose sales have been lagging.

The extent to which lower dollar prices will stimulate the sales of British goods in the United States will vary from commodity to commodity. Matters of style, quality, and other characteristics will have an important bearing upon the outcome. The sales of British automobiles in the United States have been lagging for many months now that domestic makes are readily available. It seems rather unlikely that even the reduction of 20 to 25 percent in price will greatly stimulate the sales of British makes in our market, because for reasons of style and size a British car does not have so much appeal to the average American buyer as does a domestic make, either new or used, that is roughly equivalent in price. Similarly, some of the British wearing apparel does not compete favorably on a style basis with domestic products.

More sales required to yield same number of dollars

In general terms, it needs to be stressed that the volume of British goods sold in the United States will have to increase in order to earn as many dollars as before the devaluation. If the level of pound prices had not changed, the physical volume of sales would have to increase by about 44 percent in order to provide the same number of dollars as before. Actually, as we have already seen, many pound prices have been raised, so that on the average substantially less than a 44 percent increase in physical volume will be required to yield the same dollar proceeds as before.

Even so, the needed increase in physical volume will place a great strain upon Great Britain's capacity to produce. The countries that resorted to devaluation in the early 1930's were suffering from acute unemployment. They hoped to increase their sales abroad, and hence their employment at home, through devaluation. Great Britain today is in a far different position. Even if the sales of British goods in the dollar area could increase by as much as 44 percent as the result of lower prices, Great Britain does not have the resources to provide for such a

PRINCIPAL BRITISH EXPORTS OF MERCHANDISE TO THE UNITED STATES IN 1948¹
(in millions of dollars)

Beverages	41.3
Vehicles	30.8
Machinery	25.6
Nonferrous metals and manufactures	19.8
Wool manufactures	19.4
Other textile manufactures (chiefly linens; excludes cotton, silk, and synthetics)	17.5
Cotton textile manufactures	12.9
Pottery and earthenware	7.3
Apparel (chiefly of wool)	6.5
Silk and artificial silk manufactures	2.1
Other	83.4
Total exports, including re-exports	266.6

¹In different order, these items also constituted Britain's principal exports to Canada in 1948.

large increase in production except perhaps for a very few export commodities (see accompanying table for principal British exports to United States). She has virtually full employment now and cannot greatly expand total output of goods and services at the present time. Increased sales of goods in the dollar area will require, consequently, a diversion of present sales from other areas, including the British domestic market, to the dollar area. It is unlikely that such a diversion can be large enough to permit of a substantial (25 percent, for example) increase in physical sales to the dollar area. Diversion of goods from the British domestic market would mean, of course, a further reduction in their already austere standard of living.

In the long run, cost of British imports will rise, with consequent upward pressure upon export prices

Devaluation of the pound, taken by itself, will mean an increase in the cost of British imports from the dollar area by about 44 percent. Or conversely, it lessens any competitive advantage which goods produced in the dollar area may have in the British market, and in the markets of the other countries which also devalued their currencies. Since Great Britain is trying to achieve a reduction in her imports from and an increase in her exports to the dollar area, the increase in the price of these imports will help to accomplish this end. Because of her great reliance upon imported foodstuffs and raw materials, however, higher prices for such imports from the dollar area will, over a period of time, result in higher costs of production. These higher costs may result in higher pound prices for British exports, which will diminish the advantage in the export market in the dollar area which was gained through the change in the exchange rate.

Although the dollar countries supplied Great Britain with only about one-fifth of her imports during the first half of 1949, the particular commodities involved were all goods essential to the maintenance of British production. Dollar imports during that period provided Great Britain with a large part of her food, about two-fifths (by value) of her non-ferrous metals, one-third of her raw cotton, about one-fourth of her petroleum, nearly one-fifth of her timber, one-eighth of her paper-making materials, and one-tenth of her hides. In addition, Britain relied upon the United States and Canada for some of

her steel requirements and for special types of machinery not obtainable elsewhere.

Devaluation only a limited solution to Britain's dollar shortage

The conclusions suggested by the foregoing analysis are that, in the long run, the devaluation of the pound will be of only very limited usefulness in relieving the dollar shortage confronting Great Britain, but that, in the short run, there probably will be some stimulus to the sale of British exports in the dollar area. Several factors will contribute to this stimulus. The lower dollar prices which will exist for many British products will undoubtedly have an effect upon their sales. There has also been some reluctance in recent months to place orders for British goods because of the prospect of devaluation. These orders will now be placed, with the result that there should be a temporary upsurge in orders for British goods during the next few months.

In the longer run, however, the increased prices which Great Britain will have to pay for raw materials and imported consumer goods will increase costs of production for British goods. Unless these higher costs are offset by increased efficiency of production, there will be an upward pressure upon the pound prices of British commodity exports. Increases in pound prices would, of course, diminish the advantage in the export market which Great Britain hoped to gain through devaluation.

It should also be noted that less than one-fifth of Great Britain's total exports go to the dollar area. In 1948, for example, only 4 percent of her total exports went to the United States, 4 percent to Canada, and 9 percent to other parts of the Western Hemisphere.

Since the devaluation of the currencies of many other countries has been in the same degree as that of the pound, Great Britain's position in the United States' market, and in the world market, will be no better off than it had been before with respect to competition with the products of these other foreign countries. Devaluation of the pound alone, of course, would have given Great Britain a greater competitive advantage in this regard.

Loans and grants from the United States constitute the most important single feature which has enabled Great Britain and several other European countries to maintain as large a volume of dollar purchases as they have. Since these loans or grants are made directly in terms of dollars, the devaluation will not affect the volume of dollar-area goods which the recipient countries can buy with a loan or grant of given dollar size.

Over a period of time, devaluation may be conducive to the relaxation of trade restrictions between the devaluing countries. The frequent inability of countries to convert the currencies of the countries to which they can sell into the currencies of the countries from which they wish to buy has hampered trade in the postwar period. It has led, moreover, to greater use of restrictive measures, such as direct limitations upon imports and exports, exchange control devices, and bilateral trade agreements. Devalua-

tion may serve to increase confidence in the currencies, and may enable the devaluing countries to begin to build up to some extent their currency reserves, which was difficult for them to do before devaluation. Such developments would permit the devaluing countries to initiate relaxations of their restrictions and controls. While devaluation by itself will not insure the restoration of currency convertibility and multilateral trade, anything, no matter how small, which it can do to facilitate these developments will be a worthwhile contribution.

The altogether proper concern with the current difficulties in which Great Britain finds herself has served to conceal some of her longer run accomplishments in the face of adversity. Before her crisis arose earlier this year, she had reduced her total imports to about 85 percent of their prewar physical volume and expanded the physical volume of her exports to 50 percent over prewar. Moreover, her industrial production was 33 percent and her agricultural production 25 percent above the prewar levels. This is indeed a remarkable performance in view of the great economic sacrifices which Great Britain had to make as a consequence of the war.

Effect of the devaluation upon United States' industry

The devaluation will also have important consequences for United States' industry. Unless they can get their dollar prices down, our exporters will be faced with the necessity of selling their products at much higher foreign-currency prices (44 percent higher in the sterling area, for example) than before the devaluation. Producers for the domestic market, on the other hand, will be confronted with competition from lower-priced goods imported from the areas of currency devaluation. Both exporters and producers for the domestic market will benefit to the extent that they use imported raw materials available at lower prices as a result of the devaluation.

It is, of course, too early to estimate what the probable effects will be with respect to specific commodities or lines of business. With respect to the Twelfth District, lower prices for French wines and cognacs will offer increased competition to the corresponding products of the California wine industry. In time, the California pottery, textile, and clothing industries may also experience

increased competition as a result of the lower prices on similar imported products.

Devaluation is likely to produce a relatively greater change in our national volume of exports than in our volume of imports. Our exports of machinery, automobiles, and other durable goods may suffer because of the substantially higher foreign-currency prices that the devaluing countries will have to pay for these products. This is especially true for sales to countries not receiving aid from the European Recovery Administration and for countries in which there have not been effective import controls.

The Bureau of Agricultural Economics has stated that the short-run effects of devaluation upon farm product prices is not expected to be great. The devaluing countries took about 70 percent of our total agricultural exports in 1948, mostly wheat, cotton, and tobacco. The prices for these three commodities are close to support levels, however, and hence cannot decline significantly even though foreign demand for them should decline somewhat. In reality, most of our recent exports of wheat, cotton, and tobacco have been financed under the ECA program, and consequently foreign takings of these products are not likely to be reduced much in the near future.

In a fundamental sense, our prospect of greater competition from imported products and a diminution in our exports, at least in the short-run, cannot be avoided, unless this country is prepared to continue indefinitely to finance our export surplus and the Western European import surplus by direct Governmental aid. Otherwise, we must either buy more foreign goods or give up a substantial amount of our sales abroad.

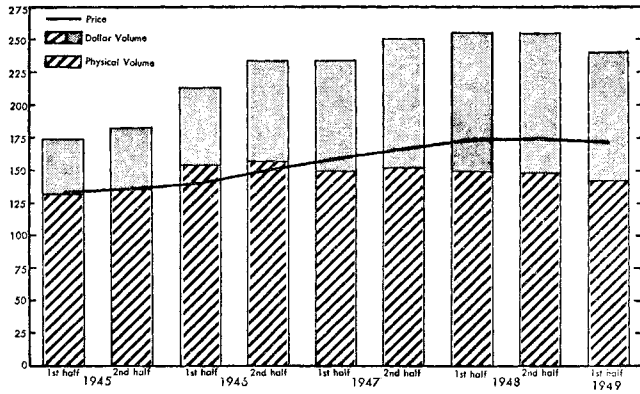
Certainly some domestic industries will be adversely affected, and considerable downward pressure will be placed upon some prices. There is no basic contradiction, however, between a high level of domestic production and a balanced foreign trade position with a large volume of goods moving into and out of the United States. While certain producers may not survive the adjustments, the final result could be a considerable increase in the volume of goods and services available for domestic use. If a start in the right direction can be made, the United States will benefit along with other countries.

DEPARTMENT STORE SALES: DOLLAR VOLUME VS. PHYSICAL VOLUME

THE volume of sales at Twelfth District department stores—measured in dollars and cents—increased sharply during the period 1945 to mid-1948. The same sales, measured in physical volume, remained relatively stable. Since mid-1948, the dollar volume of sales has declined substantially, while the physical volume has fallen only slightly. Price changes, then, have been primarily responsible for the wide fluctuation in total dollar sales since the end of the war. Although 1948 was the high year for dollar sales, 1946 appears to have been the high year in terms of actual goods sold.

These findings are based on estimates of changes in total physical volume of department store sales made by adjusting this bank's dollar volume sales indexes for price changes. The Bureau of Labor Statistics' department store inventory price index was used for this purpose, although it has definite limitations. The index is available only for January and July of each year. It is weighted departmentally by estimated dollar amounts of inventories rather than of sales, being designed to assist retailers in using the LIFO method of inventory accounting for tax purposes. It is related to the United States as a

INDEXES OF DEPARTMENT STORE PRICES, DOLLAR VOLUME, AND ESTIMATED PHYSICAL VOLUME SALES—TWELFTH DISTRICT, 1945-49
(Semi-annual, 1941=100)



Note: Price index is BLS inventory price index.

whole, not the Twelfth District. Regardless of these shortcomings, it does furnish a means of obtaining rough estimates of department store sales in terms of physical volume.¹

Department store prices, after rising steadily for three years or so, turned down in the latter part of 1948. The drop has not been sharp—the index for July 1949 was 2.7 percent below January 1949 and 3.4 percent below July 1948. Nevertheless, the price drop does mean, as

¹ Other price indexes that might be used are the apparel and housefurnishings components of the Bureau of Labor Statistics index of consumer prices and the Fairchild Publications retail price index.

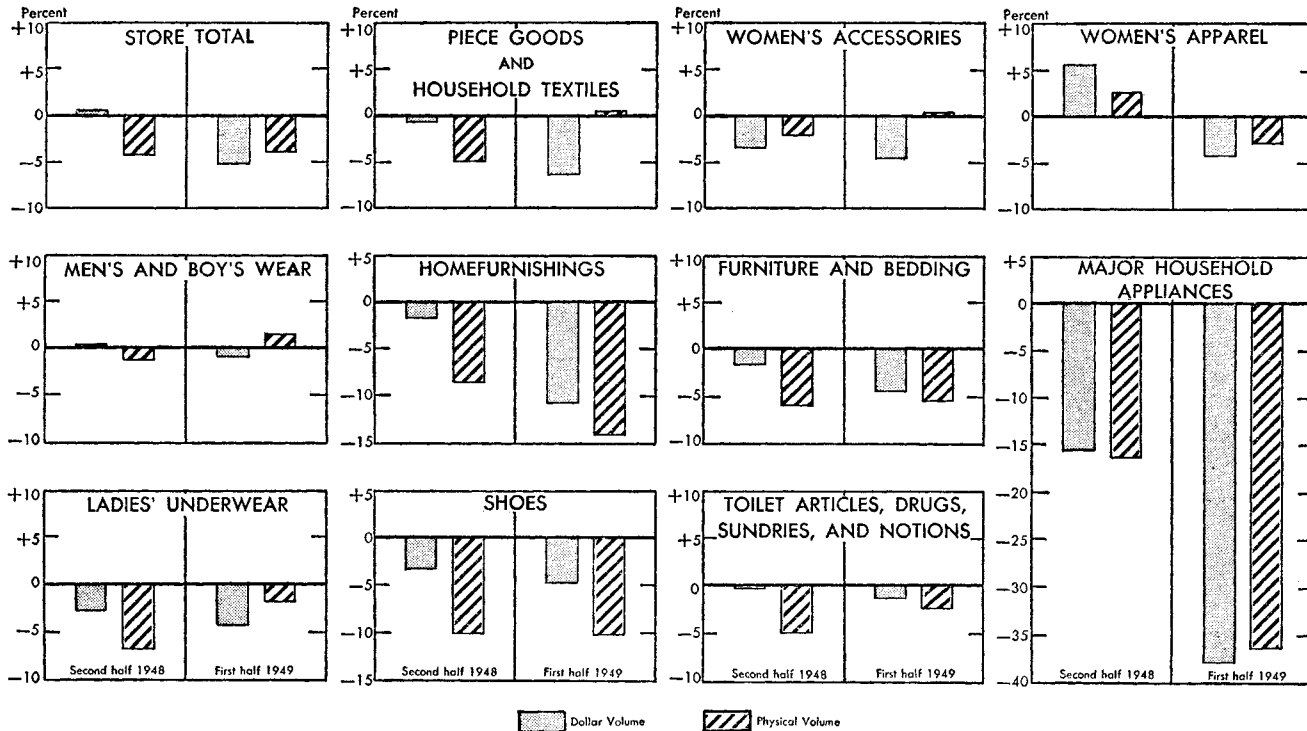
shown in the accompanying chart, that the decline in physical volume has not been as marked as in the dollar volume of sales. While dollar sales in the first half of 1949 were down about 6 percent both from a year earlier and, after seasonal adjustment, from the second half of 1948, the decline in physical sales volume was about 5 percent from a year ago and about 4 percent, after allowance for seasonal factors, from the second half of 1948. While there is a somewhat similar disparity between the behavior of dollar volume and physical volume of total retail sales, there has been little or no decline in the physical volume of total retail sales this year as compared with 1948. The relatively worse showing of department store sales is explained primarily by the fact that automobiles, gasoline, and food, sales of which have held up well, are not sold by department stores.

Sales by department

Since data on price changes and dollar sales are also available for major departmental groups, comparisons of dollar and physical volume sales have been made for these groups as well as for total store sales. Year-period comparisons for the second half of 1948 and the first half of 1949 are shown in the accompanying chart.

Prices in all groups, except women's accessories, were higher in the second half of 1948 than a year earlier. Consequently, the physical volume of sales either declined more (piece goods and household textiles) or increased less (women's apparel) than dollar volume.

ESTIMATED DOLLAR VOLUME AND PHYSICAL VOLUME OF DEPARTMENT STORE SALES BY DEPARTMENTS
(Percent changes, second half 1948 and first half 1949 compared with corresponding periods of the preceding years)



Note: Estimates of total sales in this chart will not agree exactly with those in the chart above, since this chart covers only those stores reporting sales by department. In addition, the total includes some departments not shown separately, the most important of which is the basement store.

Year-period comparisons for the first half of 1949 reveal the opposite situation for most departmental groups, especially soft goods. Prices were below those of the first half of 1948 except for shoes, toilet articles and notions, furniture and bedding, and homefurnishings. The dollar sales volume of all groups for the first half of 1949 was below that of a year earlier, but those declines overstated the declines in physical sales volume except for the four groups mentioned above. In fact, after allowance for lower prices, sales of men's and boys' wear and of piece goods and household textiles appear to have been greater in the first half of 1949 than a year earlier.

Physical volume index only approximate

Estimates of changes in physical sales volume were obtained by dividing the dollar sales index by the price index. (Half-year price indexes were computed by taking a simple average of the January and July indexes for the first half and of the July and subsequent January indexes for the second half of the year.) For example, declines of 10 percent in dollar sales and 5 percent in prices would be presumed to indicate a 5.3 percent decline in physical volume ($90/95 \times 100 = 94.7$).

This measure of changes in the physical quantity of goods sold can only be approximate for a number of reasons. Changes in the physical volume of sales of

a single commodity of given quality are obvious, but changes in the physical volume of sales of as varied a list of commodities as are sold by department stores are not so clear. Department stores not only sell shirts and refrigerators; they sell many different types of shirts and refrigerators. New lines are continually being added and others discontinued. The distribution of sales between shirts and refrigerators is not constant; this month consumers may be buying twice as many shirts for every refrigerator as they did a year ago. The dollars received for shirts and those received for refrigerators can be added together, but there is no common physical unit in which one can add these items.

These same difficulties of changes in the list of goods offered for sale, changes in their quality, and changes in the relative distribution of consumer purchases also beset anyone constructing an index of prices. Nevertheless, the only practicable method of approximating changes in the physical volume of department store sales is to correct the dollar sales figures for price changes with the best available department store price index; that is to say, to attempt to measure physical volume of goods sold, not by the dollars but by the purchasing power given up by department store customers. The results may well correct mistaken impressions gained from an examination of dollar sales alone, but the limitations implicit in the problems of measurement must be kept in mind.

BUSINESS INDEXES—TWELFTH DISTRICT¹

(1935-39 average = 100)

Year and Month	Industrial production (physical volume) ²								Total mfg employment ⁴	California factory payrolls ⁴	Car-loadings (number) ²	Dep't store sales (value) ⁵	Dep't store stocks (value) ⁵	Retail food prices ⁶
	Lumber	Petroleum ³		Cement	Lead ³	Copper ³	Wheat flour ³	Electric power ³						
	Crude	Refined												
1929	148	129	127	110	171	160	106	83	....	111	135	112	134	132.0
1930	112	101	107	96	146	106	100	84	....	93	116	104	127	124.8
1931	77	83	90	74	104	75	101	82	....	73	91	92	110	104.0
1932	46	78	84	48	75	33	89	73	....	54	70	69	86	89.8
1933	62	76	81	54	75	26	88	73	....	53	70	66	78	86.8
1934	67	77	81	70	79	36	95	79	....	64	81	74	83	93.2
1935	83	92	91	68	89	57	94	85	88	78	88	86	88	99.6
1936	106	94	98	117	100	98	96	96	100	96	103	99	96	100.3
1937	113	105	105	112	118	135	99	105	112	115	109	106	108	104.5
1938	88	110	103	92	96	88	96	102	96	101	96	101	101	99.0
1939	110	99	103	114	97	122	107	112	104	110	104	109	107	96.9
1940	120	98	103	124	112	144	103	122	118	134	110	119	114	97.6
1941	142	102	110	164	113	163	103	136	155	224	128	139	137	107.9
1942	141	110	116	194	118	188	104	167	230	460	137	171	190	130.9
1943	137	125	135	160	104	192	115	214	306	705	133	203	174	143.4
1944	136	137	151	128	93	171	119	231	295	694	141	223	179	142.1
1945	109	144	160	131	81	137	132	219	229	497	134	247	183	146.3
1946	130	139	148	165	73	109	128	219	175	344	136	305	238	167.4
1947	141	147	159	193	98	163	133	256	184	401	142	330	300	200.3
1948	144	149	162	211	107	153	116	284	189	430	134	354	348	216.1
1948														
July	153	152	167	211	99	159	123	290	190	440	137	358	336	218.1
August	159	153	171	214	108	166	124	289	192	456r	141	361	332r	218.0
September	155	123	110	219	106	161	123	294	192	454	146	350	351	217.6
October	149	151	155	229	107	152	114	291	192	452	131	345	346	217.1
November	145	153	173	217	115	109	126	295	191	449	132	342	340	215.6
December	141	153	171	196	111	104	122	298	189	444	131	358	320	216.5
1949														
January	104	151	174	176	112	108	128	300	185	430	105	343	321	217.9
February	111	152	170	173	107	129	118	297	185	423	103	309	327	214.1
March	131	153	176	195	120	169	102	295	185	412	118	325	342	213.3
April	142	152	169	212	124	167	82	303	186	412	126	339	331	215.6
May	138	149	170	215	126	159	100	304	186	415	134	340	320	211.0
June	137	148	174	219	118	138	104	315	185	419	139	336	313	209.9
July	133	146	162	217r	98r	131	108	299	182	423r	120	323	302	206.3
August	138	144	165	209	94	122	109	310	184p	429	138	335	309	205.7

BANKING AND CREDIT STATISTICS—TWELFTH DISTRICT

(amounts in millions of dollars)

Year and month	Condition items of all member banks ⁷				Bank rates on short-term business loans ⁹	Member bank reserves and related items ¹⁰					Bank debits index 31 cities ^{8,11} (1935-39 = 100) ²
	Loans and discounts	U.S. Gov't securities	Demand deposits adjusted ⁸	Total time deposits		Reserve bank credit ¹¹	Commercial operations ¹²	Treasury operations ¹²	Coin and currency in circulation ¹¹	Reserves	
1929	2,239	495	1,234	1,790	.....	- 34	0	+ 23	- 6	175	146
1930	2,218	467	1,158	1,933	.....	- 16	- 53	+ 89	+ 16	183	126
1931	1,898	547	984	1,727	.....	+ 21	- 154	+ 154	+ 48	147	97
1932	1,570	601	840	1,618	.....	- 42	- 175	+ 234	+ 30	142	68
1933	1,486	720	951	1,609	.....	- 2	- 110	+ 150	- 18	185	63
1934	1,469	1,064	1,201	1,875	.....	- 7	- 198	+ 257	+ 4	242	72
1935	1,537	1,275	1,389	2,064	.....	+ 2	- 163	+ 219	+ 14	287	87
1936	1,682	1,334	1,791	2,101	.....	+ 6	- 227	+ 454	+ 38	479	102
1937	1,871	1,270	1,740	2,187	.....	- 1	- 90	+ 157	- 3	549	111
1938	1,869	1,323	1,781	2,221	.....	- 3	- 240	+ 276	+ 20	565	98
1939	1,967	1,450	1,983	2,267	.....	+ 2	- 192	+ 245	+ 31	584	102
1940	2,130	1,482	2,390	2,360	.....	+ 2	- 148	+ 420	+ 96	754	110
1941	2,451	1,738	2,893	2,425	.....	+ 4	- 596	+ 1,000	+ 227	930	134
1942	2,170	3,630	4,356	2,609	.....	+ 107	- 1,980	+ 2,826	+ 643	1,232	165
1943	2,106	6,235	5,998	3,226	.....	+ 214	- 3,751	+ 4,486	+ 708	1,462	211
1944	2,254	8,263	6,950	4,144	.....	+ 98	- 3,534	+ 4,483	+ 789	1,706	237
1945	2,663	10,450	8,203	5,211	.....	- 76	- 3,743	+ 4,682	+ 545	2,033	260
1946	4,068	8,426	8,821	5,797	.....	+ 9	- 1,607	+ 1,329	- 326	2,094	298
1947	5,358	7,247	8,922	6,006	.....	- 302	- 443	+ 630	- 206	2,202	326
1948	6,032	6,366	8,655	6,087	.....	+ 17	+ 472	- 482	- 209	2,420	355
1948											
August	5,743	6,712	8,555	6,005	.....	- 23	+ 1	+ 12	+ 17	2,065	356
September	5,848	6,394	8,661	6,003	3.20	+ 17	+ 427	- 98	+ 2	2,409	359
October	5,910	6,440	8,647	6,018	.....	+ 12	- 8	- 35	+ 8	2,351	363
November	5,984	6,358	8,658	5,998	.....	- 25	- 40	+ 7	- 8	2,323	355
December	6,032	6,366	8,655	6,087	3.16	+ 11	- 2	+ 45	- 61	2,420	376
1949											
January	6,009	6,382	8,664	6,082	.....	+ 2	- 101	- 58	- 54	2,329	356
February	5,910	6,306	8,330	6,097	.....	- 4	- 7	- 19	- 4	2,303	344
March	5,899	6,208	8,147	6,102	3.27	- 15	- 34	+ 6	- 31	2,299	364
April	5,811	6,230	8,157	6,109	.....	+ 6	- 127	+ 109	+ 11	2,264	354
May	5,738	6,357	8,154	6,112	.....	- 8	- 202	+ 94	+ 37	2,128	345
June	5,762	6,330	8,006	6,179	3.24r	0	- 53	- 5	0	2,063	351
July	5,707	6,548	8,139	6,179	.....	+ 20	- 213	+ 130	- 16	1,997	344
August	5,729	6,846	8,221	6,170	.....	- 30	- 194	+ 40	+ 1	1,832	332
September	5,853	6,863	8,273	6,186	3.14	+ 13	+ 41	- 37	+ 9	1,837	336

¹ All monthly indexes but wheat flour, petroleum, copper, lead, and retail food prices are adjusted for seasonal variation. Excepting for department store statistics, all indexes are based upon data from outside sources, as follows: Lumber, various lumber trade associations; Petroleum, Cement, Copper, and Lead, U.S. Bureau of Mines; Wheat flour, U.S. Bureau of the Census; Electric power, Federal Power Commission; Manufacturing employment, U.S. Bureau of Labor Statistics and cooperating state agencies; Factory payrolls, California State Division of Labor Statistics and Research; Retail food prices, U.S. Bureau of Labor Statistics; and Carloadings, various railroads and railroad associations. ² Daily average. ³ Not adjusted for seasonal variation. ⁴ Excludes fish, fruit, and vegetable canning. Factory payrolls index covers wage earners only. ⁵ At retail, end of month or year. ⁶ Los Angeles, San Francisco, and Seattle indexes combined. ⁷ Annual figures are as of end of year; monthly figures as of last Wednesday in month or, where applicable, as of call report date. ⁸ Demand deposits, excluding interbank and U.S. Gov't deposits, less cash items in process of collection. Monthly data partly estimated. ⁹ New quarterly series beginning June 1948. Average rates on loans made in five major cities during the first 15 days of the month. ¹⁰ End of year and end of month figures. ¹¹ Changes from end of previous month or year. ¹² Minus sign indicates flow of funds out of the District in the case of commercial operations, and excess of receipts over disbursements in the case of Treasury operations. ¹³ Debits to total deposit accounts, excluding interbank deposits. p—preliminary. r—revised. *Seasonal factors for recent years revised.