SEPTEMBER 1953

FEDERAL RESERVE BANK OF SAN FRANCISCO

TWELFTH DISTRICT STEEL: A "WAR BABY" GROWS UP

In the decade 1943-53, steel capacity in the Twelfth District has grown by more than 400 percent. The bulk of this remarkable growth took place as war investment during World War II, but substantial expansion has also occurred in the postwar period. Since the start of World War II, there have been two major growth periods, the second of which seems now to be at or near a tapering off point. The first growth period occurred in the years 1943-44, when the District's two major wholly integrated steel plants were established to supply plate and structural steel to the Pacific Coast shipbuilding industry. The second growth period has been from 1947 to the present. For two years following cessation of hostilities in 1945, little change took place in facilities for producing steel ingots in the District. That interval was a period of transition for the steel industry in the seven western states. Important financial and technological adjustments had to be made to permit the industry to produce for nondefense purposes and to grow in response to rising industrial demand. Since 1947 the District's capacity to produce steel has risen at a consistently high rate, usually exceeding the rate of growth of the nation's steel industry as a whole (see Chart 1). Production has followed a pattern similar to that displayed by the growth in capacity, declining markedly during the transition phase (1945-47), but remaining high as a percentage of capacity in most of the years following. In 1951, as the diagram shows, production exceeded 100 percent of capacity² as it has in the first half of 1953.

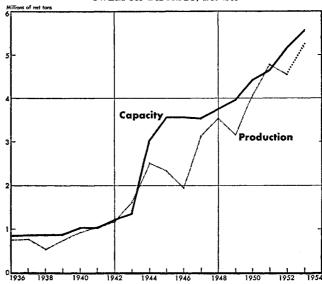
Three producers dominate the Twelfth District steel market.³ The rapid growth in facilities and in production is largely a reflection of their activities. However, the

Percent changes in ingot capacity for 1947-53 are as follows:

	Twelfth			Twelfth	
	District	U. S.		District	U. S.
1946-47	—0.3	0.5	1950-51	 5.0	5.2
1947-48	6.4	3.3			4.2
1948-49	5.3	1.8	1952-53	 7.9	8.2
1949-50	11.5	3.5			

² Capacity, as reported by the steel companies to the American Iron and Steel Institute, is at best an estimate of maximum potential output. Rated capacity is the figure reported by the Institute at the first of each year. Hence, production can exceed capacity either because of underestimation of "true" capacity or because of the addition of new facilities during the year.

Chart 1
ANNUAL STEEL PRODUCTION AND CAPACITY—
TWELFTH DISTRICT, 1936-1953



Note: Although production in the first half of 1953 has been at or above capacity almost continuously, *Iron Age* has anticipated a decline in the latter half of the year of such magnitude that the annual rate is predicted as being about 94 percent of capacity. Since the chart is plotted in terms of annual rates, the connecting lines do not indicate any fluctuations within the year.

Sources: Production for the period 1936-1944 was estimated by the Federal Reserve Bank of San Francisco. The source for all capacity figures and for production figures for the period 1945-1952 is the Annual Statistical Reports of the American Iron and Steel Institute. The 1953 production estimate is from *Iron Age*, July 6, 1953.

smaller firms, whose steel production is based mainly on scrap steel as a raw material, have also lived a healthy economic life for the most part. These mills, which were the backbone of the small prewar steel industry in the District, now find themselves more than ever in the position of the "competitive fringe" of an industry characterized by large-scale operations. Nevertheless, capacity fig-

Also in This Issue

Income Payments in the Twelfth
District, 1952

116

³ The three producers are Bethlehem Pacific Coast Steel Corporation, Columbia-Geneva Division of United States Steel Corporation, and Kaiser Steel Corporation. Bethlehem operates steel mills at Los Angeles, San Francisco, and Seattle; Columbia operates mills at Geneva, Utah, Torrance. California, and Pittsburg, California; Kaiser's mill is located at Fontana, California.

ures show that the rate of growth of the "independent" producers as a group has been slightly greater since 1945 than that of the western big three.1

In 1945 and 1946 there was a good deal of speculation about the meaning of the large, war-built steel facilities to the economy of the West.2 Enthusiasts were quick to conclude that the West would at long last be able to obtain steel at prices comparable to those charged industrial users in the East. Other observers pointed to an imposing list of obstacles that might have left the Fontana, California, and Geneva, Utah, plants idle "white elephants" if the postwar market for steel had been weak. The most imposing obstacles appeared to be heavy fixed financial charges, lack of good coking coal, possible lack of an adequate supply of high quality ore, high intradistrict freight rates, and the need to adapt to a peacetime pattern of demand for products far different from those produced during the war. Those obstacles were met and conquered in various ways, as the following discussion illustrates.

Capital costs

The high cost of construction of facilities at Geneva was largely borne by the Federal Government. In 1946 the plant was sold for private operation at approximately 20 percent of its war-inflated cost of construction. Thus, capital charges against each ton of steel produced with the converted Geneva facilities have not been onerous. The plant at Fontana was privately built with the aid of funds from the Reconstruction Finance Corporation at an interest charge that was favorable at the time. It is conceivable, however, that the payment of the interest and principal might have become a heavy burden in a weak market. Fortunately, Fontana's capital problem was made much easier to cope with by the high sales and revenues of the last several years. The RFC loan was paid in full in 1950, a large portion of it being refinanced from private sources. Debt repayment on these private loans will begin next year, and the amount of repayment scheduled per ton of anticipated production is a large figure. However, very substantial amortization reserves have already been created, in part under fast amortization arrangements.

Raw materials

Although western steel producers in the pre-World War II period enjoyed a favorable scrap steel market which was adequate to meet their need for raw materials, the war-created plants were integrated to the blast furnace level and needed large supplies of coking coal and iron ore. Some concern was expressed over the availability of

1952..... 1953..... 15.5 such supplies. Quality, rather than quantity, of the basic raw materials was the main concern in those early postwar years. Producers now assert that western supplies of coal and ore are not only of adequate quality, but very economical. Coal is blended in the coking furnaces and ore is beneficiated,1 but only to improve performance which is already adequate, they report.

As to quantity of ore, studies made by the State of California Department of Natural Resources² indicate that ore deposits in California are adequate to support present blast furnace capacity well beyond a normal amortization period. Eagle Mountain ore bodies, located in western Riverside County, are believed to be capable of supporting Fontana's three blast furnaces at 75 percent of capacity for thirty-five years. Company estimates are even more optimistic.³ Utah ores, which supply the Geneva plant, are reported to be more than adequate to support production beyond a normal amortization period of 20 years. Utah coal supplies, which supply both of the blast furnace operating plants in the District, are unquestionably adequate as to quantity, and early fears as to its quality as coking coal are reportedly allayed.

Freight rates and the price structure of the Far West

Since 1948 there have been several important changes in freight schedules. The most important single change from the point of view of Twelfth District producers and users of steel occurred in March 1947 when new rates were granted by the railroads for the Geneva-to-coastports haul. This change reduced the formal rates to levels based on revenues per car mile and per ton mile which the Interstate Commerce Commission judged to be comparable to such revenues elsewhere in the nation. The freight charges per ton of steel mill products from Geneva to Los Angeles and San Francisco thus became \$9.60. The rates which had formally prevailed until that time were virtually the same per ton as those charged on the rail and water route from the East Coast through the Panama Canal—about \$15.00 per ton. Those rates, if effective, would have eliminated the locational advantage of the Geneva plant compared with Atlantic seaboard producers. Subsequent rate increases have brought the rates back virtually to the level of the prewar "paper rate," but in the meantime the cheapest rate from eastern mills has risen to \$22.50 per ton. Consequently, considerable differences in freight charges from major producing mills to major far western consuming areas have been

¹Capacity of "independent" steel producers as percentage of total Twelfth District capacity:

There are 10 "independent" steel mills operating in the Twelfth District, all in California, Oregon, and Washington.
Sources: The American Iron and Steel Institute, Iron and Steel Works Directory of the United States and Canada, and Iron Age.

See, e.g., E. T. Grether, et al., The Steel and Steel-Using Industries of California, California State Reconstruction and Reemployment Commission, Sacramento, 1946. Also, Fortune, February, 1945.

Beneficiation is the process of raising the percentage of iron content in ore or otherwise preparing it for blast furnace operation.

2 J. B. Hadley, "Iron-Ore Deposits in the Eastern Part of the Eagle Mountains, Riverside County, California," Iron Resources of California Bulletin No. 129, Part A, issued by the State Division of Mines, June 1945.

³ It appears doubtful, however, that any large expansion of the pig iron base of the Twelfth District could be supported by mineral raw materials within the area. The two groups of ore deposits capable of supplying an integrated mill for the time period required to amortize the investment in such a mill are already fully occupied.

sucn a mill are already fully occupied.

⁴ During the war, a special rate was granted for steel which the Government shipped from Geneva to the Pacific Coast shippards. The postwar rates granted by the railroads in 1947 and approved by the Interstate Commerce Commission in 1949 were roughly comparable to that wartime rate. The formal rate was never an effective rate in the sense that it was never charged on any large quantities of steel shipments. For that reason, it has been referred to by the traffic manager of one of the steel companies as a "paper rate."

established.¹ The difference between the rate from Geneva to Los Angeles and San Francisco and the rate from Sparrows Point, Maryland, to Pacific Coast ports is \$8.01 per ton. Geneva charges mill prices identical with those charged by the major Pittsburgh, Pennsylvania, producers; consequently, those products which Geneva supplies directly to buyers of mill products are sold at a delivered price substantially below those of products being shipped in from eastern mills. A considerable proportion of Geneva's product is intermediate product which is further processed at California mills owned by the same company. These mill products are then sold at what appears to be an approximation of "Geneva plus" (that is, the delivered price that would obtain if the products were completely processed in, and shipped from, Geneva).

However, about 40 percent of the mill products consumed in the District's markets are shipped in from the East. The bulk of this is delivered at the Sparrows Point, Maryland, price plus freight. A relatively small amount of these "imported" products has been shipped overland from inland producers and is delivered at prices that may exceed both "Geneva plus" and "Sparrows Point plus."

The "independent" producers usually follow the price leadership of the larger producers, but in some areas they have been able to charge prices above that range due to the extreme tightness of supply in the last several years. The importance of such premium-priced sales appears to be rather small in the total picture, however. The products of the Fontana mill are delivered in the various District markets at prices which meet the "lowest effective competition."

The producers located on the Pacific Coast are under a substantial freight "umbrella," for although they are located at or near the major market areas of Los Angeles, San Francisco, and Seattle, they charge the same prices as those producers who transport their wares over considerable distances. This means that some high cost producers have been able to operate at a profit and that others in a better cost position would be able to operate profitably even if steel prices should fall. Steel demand has already shown some decline, and, as is noted below, is expected to fall somewhat further. In the event that this decline should reduce the deficit of locally produced steel products sufficiently, eastern producers may reduce their prices and absorb freight in order to maintain their positions in the local market. Freight absorption would bring delivered steel prices in District markets closer to delivered prices in the major industrial areas of the East. But since the shipping distance from Geneva to the Pacific Coast ports is greater than such hauls as Gary, Illinois,

¹ Selected freight rates on steel mill products, effective May 2, 1952 to date, are as follows:

From	То	Rate per tor
Geneva, Utah	Los Angeles and San Francisco	\$14.49
Geneva, Utah	Seattle	16.10
Fontana, California	San Francisco	7.00
Fontana, California	Los Angeles	1.82
Fontana, California	Seattle	17.02
Chicago, Illinois	Los Angeles and San Francisco	34.04
Pittsburgh, Pa.	Los Angeles and San Francisco	38.41
Sparrows Point, Md.	Los Angeles and San Francisco	22.50

to Detroit, Michigan, and Pittsburgh, Pennsylvania, to Cleveland, Ohio, the freight element in local prices is likely to remain high enough so that some East-West price differential will be maintained in the absence of any sharp break in the market.

Diversification of District finishing capacity

It was often noted in the early postwar studies of the western steel industry that the war-built facilities were not designed for peacetime production, in that they were equipped to produce primarily heavy plate for shipbuilding. Since the end of the war, shipbuilding on the Pacific Coast has all but ceased. However, continued production of heavy plate has been in part supported by the large demand for pipe resulting from extensive pipeline construction. But still a major conversion to a diversified list of finished products more in line with the types of demand characteristic of the Twelfth District has been necessary. That conversion has been accomplished to the point that Twelfth District finishing facilities are now able to handle virtually all of the ingots and semi-finished steel products that can be produced in the area. Of the approximately 5.25 million tons of product from steel furnaces that will probably be produced in 1953, about 3.9 million tons should appear on the market as finished product. No adequate statistics are available which show the way in which those 3.9 millions will be divided. However, some indication of the structure of supply in the seven western states can be obtained from the following computations on receipts of steel mill products in 1951, a peak year:

Product group	1951 receipts (net tons)	Percent of total
Plates, sheared and universal	1,155,000	19.1
Structural shapes	468,000	7.8
Hot rolled bars and bar sized shapes	1,088,000	18.0
Sheets and strip	925,000	15.3
Standard and line pipe	453,000	7.5
Tin mill products	876,000	14.5
All other	1,075,0001	17.8
Total	6.040,000	100.0

¹This group was estimated to be divided roughly as follows: 50 percent wire and wire products and rods for sale; 20 percent in the form of rails and rail accessories; 20 percent in tubular products other than standard and line pipe; 10 percent miscellaneous.

Source: Kaiser Steel Corporation, A Report to Far Western Steel Purchasers, 1952.

Somewhat less than two-thirds of total demand for mill products can be fulfilled by mills operating within the District. Nevertheless, these figures reflect a remarkable increase over potentialities of western steel finishing facilities in the prewar period, when probably no more than one-third of total demand for mill products could be so supplied. At the same time, figures from the source just cited indicate that the total of mill products purchased and received in the District increased from an annual average of 2.13 million net tons for the years 1936-1940 to 6.04 million net tons for 1951, an increase of 184 percent. In 1951 a number of products were still being supplied predominantly by mills outside the District. In some measure such deficits were reflections of economic factors which led western producers to prefer expansion in production of other products. Other deficits were in the process of being removed by expansion programs, some of which are still in progress. For example, during 1953 tinplate production in the West is expected to exceed 50 percent of local demand for the first time in history. The gain is due to the start of operation of a 38-inch electrolytic continuous tinning mill at Fontana and to a 10 percent expansion of capacity at Pittsburg, California. These increases in capacity will not be fully felt until late in the current year. As soon as new and expanded facilities reach full production, the District's mills will be able to produce about 70 percent of current local demand. To indicate further the nature of the process of conversion, in the years 1945-51 the following changes in finishing capacity may be cited: (1) sheared plate capacity, which manufactured the main product of wartime operations, was reduced about 25 percent; (2) pipe and tube capacity was increased almost seven times; (3) hot rolled strip capacity increased about ten times; (4) tin and terne plate capacity increased about six times.1

In recent years, the following major changes in rolling and finishing facilities have been reported by Twelfth District manufacturers:

Year	Location	Facility	Explanation
1950	Fontana, California	86-inch ¹ hot strip finishing mill	For production of light gauge flat- rolled products—pipe skelp, hot bands for tin plate, and light gauge plates for various uses. In con- junction with the 110-inch plate mill, Fontana now has annual ca- pacity to produce 840,000 tons of this type of product.
1950	Pittsburg, California	21-inch ¹ and 50-inch x 60-inch 4-stand 4-H ² tandem mill	This mill is part of the 10 percent expansion of tinning capacity at Pittsburg, California.
1951	Provo, Utah	86-inch 2-H ² temper mill	For metallurgical rolling.
		Conversion of 132-inch plate mill to 80-inch semi-continuous hot strip mill	Produces hot rolled coils for many light gauge products.
1952	Fontana, California	38-inch electro- lytic continuous tinning mill	These additions give Fontana tinning facilities with annual capacity of 200,000 tons.
		7 hot dip pots	
		44-inch 4-H, 2-H temper mill and 44-inch 4-H 5-stan cold mill	d
1952	Geneva, Utah	Shear line	This facility shears sheets from coils for ease in handling and for further processing.

¹The dimension usually given in descriptions of rolling mills refers to the length of the rolls. In the case of the Pittsburg mill, the 21-inch refers to the distance between stands; 50-inch x 60-inch is the diameter and length of the rolls.

² "4-H" should be read "four-high." It indicates that the rolling stand contains four rolls. "2-H" indicates a stand of two rolls.

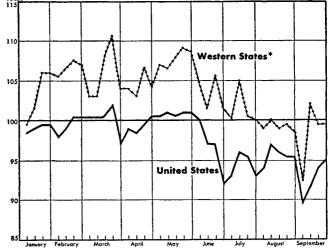
These additions represent near completion of a set of large conversion and modification plans that were only beginning to get under way in 1948. Further programs are in progress to increase finishing capacity and to improve the balance of the large integrated mills. This increased diversification is likely to give the District's steel industry greater flexibility than the capabilities of a more specialized industry might allow. In periods of falling demand, not all components of steel demand fall at the same rate. Diversified plants are able to change the rela-

tive proportions of various products and thereby retain greater stability in total output.

In general, the transition of western steel from a small, specialized industry to one that is adequate to provide the bulk of the steel mill products of the District has been accomplished. It is conceivable that when the sellers' market has given way to greater competition for orders, this development might mean steel prices in the area more nearly comparable to those charged to buyers in eastern markets. Thus far, 1953 has been a year of unsurpassed levels of production in the nation's steel industry. According to weekly estimates of production, the American steel industry has produced at or above 100 percent of rated capacity in 13 weeks of the year to the date of this writing and has produced below 90 percent of capacity in only one week (see Chart 2). Midyear estimates indicate that the nation will produce more than 110 million tons of steel ingots this year. The preceding high was 105.2 million tons produced in 1951. This high level of prosperity has been more than shared by Twelfth District producers. Iron Age's weekly series on steel operations by percent of capacity shows that the West as a district has produced at or above 100 percent of rated capacity in 31 of 39 weeks from the first of the year to the end of September. The lowest rate was 98.5 percent until the week of September 6, when it fell to 92.5 percent. On one occasion, the week of March 22, the rate of western production rose to 110.5 percent of rated capacity. Large quantities of orders are already reported for the fourth quarter, although the backlogs are said to be considerably smaller than the industry has become accustomed to in the past several years. The consensus in the industry is that the present high levels of operation will not continue into the last three months of the year. However, there seems to be little feeling that the decline will be sharp.

CHART 2

STEEL OPERATIONS: PERCENT OF CAPACITY—UNITED STATES AND WESTERN STATES Weekly, January-September 1953



*Includes eleven western states, while the Twelfth District includes only seven. However, of the four states outside the District, only Colorado is of significance so far as steel operations are concerned. Source: Iron Age, 1953 (weekly series).

Digitized for FRASER http://fraser.stlouisfed.org/ Federal Reserve Bank of St. Louis

American Iron and Steel Institute, Iron and Steel Works Directory of the United States and Canada, 1945 and 1951. As was noted at the beginning of the article, reporting of capacity is quite arbitrary. Hence, anything more than approximate use of such statistics to indicate patterns of growth might imply more precision than is possible.

EARNINGS AND EXPENSES OF TWELFTH DISTRICT MEMBER BANKS FIRST HALF 1953

Provision for substantially larger income tax payments caused the net profits after taxes that Twelfth District member banks earned in the first half of 1953 to fall 4 percent below those of the corresponding period a year ago. This decline was confined, however, to the large banks in the District. The net profits after taxes of the fifteen largest banks as a group were 6 percent below a year ago. The remaining District member banks, on the other hand, earned 7 percent more after taxes than a year ago, which is larger than the gain of 5 percent for member banks in the country as a whole. The amount set aside for income taxes by member banks in the Twelfth District was 44 percent greater than in the corresponding period of 1952, compared with a national increase of only 17 percent. Both large and small banks in the Twelfth District made provision for substantial increases in their income tax

Operating income and expenses

The much greater increase in provision for income taxes in the Twelfth District probably reflects primarily the fact that the earnings before taxes of member banks rose more in the Twelfth District than in the country as a whole. Profits before income taxes were 17 percent larger than in the first half of 1952 for District member banks compared with 10 percent for all member banks.

Total earnings before deduction of expenses of District member banks were 17 percent larger than in the first half of 1952. The major element in the rise in earnings was a 21 percent increase in interest and discounts on loans received by member banks in the District compared with 16 per cent nationally. This increase was due in part to higher interest rates charged by banks but probably the greater impetus came from the larger volume of loans outstanding. Especially significant were the increases in volume of consumer and real estate loans which carry higher interest rates than do business loans.

Although member banks in both the Twelfth District and the nation had larger average loan portfolios and smaller average holdings of Government securities than in the first half of 1952, they earned more interest on Government securities in the first half of this year than in the corresponding period a year ago. The increase was 14 percent in the District and 12 percent in the country as a whole. This growth in income reflects the higher yields on Government securities that have prevailed this year. Within the District, the decline in average holdings of Government securities was confined to the fifteen largest banks. The smaller member banks increased their average holdings with the result that their earnings from Governments were 28 percent larger than in the corresponding period of 1952. The fifteen largest banks decreased their holdings of Government securities and expanded their loans, while the smaller banks increased both their loans and their holdings of Governments.

"Other earnings," which include interest and dividends on securities other than United States Government, service charges on loans and deposits, income from trust departments, and other miscellaneous income, also showed greater gains in the Twelfth District than in the country as a whole. The fifteen largest banks accounted for the better performance of the District in this regard since the smaller District banks fell below the national increase in this category.

Expenses of Twelfth District member banks were 10.8 percent higher than in the first half of 1952, only slightly more than the increase for member banks in the country as a whole. The increase for the fifteen largest banks in the District, 9.6 percent, was substantially below the 15.7 percent increase for the other District banks. A breakdown of expenses of the fifteen largest banks indicates that their wage and salary payments were 11 percent higher than in the first half of 1952, and interest on time deposits was 10 percent higher. Similar data for the other District banks have not been compiled.

Net losses and charge-offs

In the first half of 1953 District member banks had smaller recoveries and profits on loans and securities than in the corresponding period a year ago. Their losses and charge-offs, on the other hand, were nearly twice as large as a year ago. Their net losses and charge-offs, after deduction of recoveries and profits, were seven times greater than a year ago.

SELECTED EARNINGS AND EXPENSE ITEMS OF MEMBER BANKS—TWELFTH DISTRICT AND UNITED STATES,

JANUARY-JUNE, 1952 AND 1953

	——————————————————————————————————————								
	—All Ist half 1953p	U.S. percent change							
Interest and discount on	(in m	illions)	All	largest	Other	all banks			
loans ¹	\$238.3	\$197.8	+20.5	+19.7	+23.6	+15.5			
Interest on Government									
securities	63.4	55.8	+13.6	十 9.5	+27.8	+12.0			
Other earnings	74.0	68.1	+ 8.7	十 9.7	+ 4.4	+ 6.7			
Total earnings	375.7	321.7	+16.8	+15.9	+20.3	+12.8			
Total expenses	229.2	206.8	+10.8	+ 9.6	+15.7	+10.6			
Net current earnings	146.5	114.9	+27.5	+27.0	+29.6	+16.2			
Total recoveries and profits	5.5	8.6				• • • •			
Total losses and charge-offs	20.5	10.8							
Net losses and charge-offs	15.0	2.2							
Profits before income taxes	131.5	112.7	+16.7	+15.6	+22.1	+10.4			
Taxes on net income	68.7	47.6	+44.3	+45.0	+42.4	+16.6			
Net profits after taxes.	62.8	65.1	- 3.5	5.8	+ 7.0	+ 5.3			
Cash dividends declared ²	34.4	32.8	+ 4.9	+ 4.5	+ 7.3	+ 3.8			
Undistributed profits	28.4	32.3	-12.1	-17.5	+ 6.8	+ 6.6			

¹United States loan earnings figures include service charges and other fees on loans; Twelfth District figures include interest and discount only. Service charges and fees on loans in Twelfth District included in "other earnings."

P Preliminary.

² Figures include common stock dividends only.

Entries under the category of losses and charge-offs may include not only actual losses and charge-offs but also transfers *to* valuation reserves created for future losses. Similarly, entries under recoveries and profits may include transfers *from* valuation reserves.

Since the bulk of the increase in total losses and charge-offs was accounted for by the fifteen largest banks in the District, detailed data were compiled for these banks, indicating their losses after adjustment for transfers to and from reserves. Similar data were not compiled for all District member banks. These data indicate that the "adjusted" losses on securities, after allowance for transfers to and from reserves, of the fifteen largest banks were \$2 million during the first half of 1953, compared with "adjusted" recoveries of \$1 million in the corresponding period a year ago. This marked difference reflects the fact that these banks sold substantial amounts of Government securities in the first half of 1953 when prices of such securities were falling, whereas a year ago the decline in their holdings of Governments was relatively

small and occurred at a time when security prices were rising. In contrast, the experience with loans in the fifteen largest banks was more favorable this year than last. They had "adjusted" recoveries on loans amounting to \$212 thousand this year compared with "adjusted" losses of \$645 thousand in the first half of 1952.

Profits and dividends

As has already been indicated, net profits after taxes for District member banks fell below the first half of 1952 as a result of the substantial increase in the amount set aside for income taxes. Stockholders, however, received cash dividends that were 5 percent larger than in the first half of 1952. The upward trend in dividend payments that has prevailed since World War II was thus continued. The smaller banks increased their dividend payments relatively more than did the fifteen largest banks, which would be expected since the smaller banks fared much better with respect to net profits after taxes than did the fifteen largest.

INCOME PAYMENTS IN THE TWELFTH DISTRICT, 19521

NCOME payments to individuals in the Twelfth District during 1952 rose 8 percent above the 1951 figure compared with 5 percent in the country as a whole. The increases in Nevada, 15 percent, and Arizona, 12 percent, were the second and third largest in the nation, while the other District states had gains ranging from 5 to 9 percent. The greater growth in the District's total income payments resulted from a relatively smaller decline in farm income and a larger percentage increase in nonfarm income payments than occurred nationally. Owing to a relatively larger population growth in the District, the rise in per capita income was only slightly larger in the District than in the country as a whole, 5 percent compared with 4 percent. In general, the percent changes in total, in per capita, and component sources of income payments during the year were in keeping with the over-all postwar pattern.

Nonfarm income rises more in District in 1952

The rise in income from the nonfarm sectors of the economy during 1952 was relatively greater in the District than in the country as a whole. Manufacturing payrolls in the District increased 15 percent compared with 8 percent nationally. Arizona had the largest relative increase, 38 percent, in this sector of any state in the nation, and although it is among the least industrialized states in the country, the gain was sizable, \$25 million. The increase in manufacturing payrolls in California was in part the result of a continued upsurge of total wages and salaries in the aircraft industry. Wage payrolls in the aircraft and parts industries in California increased 49 percent above the 1951 figure. These payrolls alone accounted

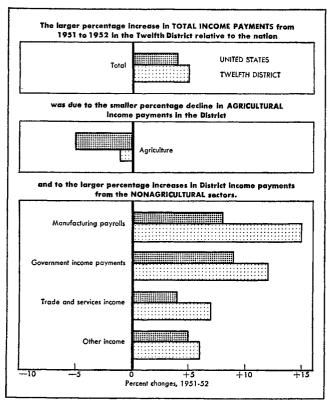
for approximately 21 percent of California's total manufacturing payrolls.

Among the other income increases in the nonfarm sector, government payments rose relatively more in the District than in the nation owing primarily to the greater than average rise in defense establishment expenditures in the West. However, Oregon's 20 percent increase in government payments during the year was in large part the result of a state bonus paid to veterans. Trade and service payrolls also showed a larger increase in the District than nationally. The highest percentage increase in this sector occurred in Nevada where trade and service income normally accounts for the largest proportion of income payments. Nevada also had an upsurge in construction payrolls, 63 percent, and in mining payrolls, 36 percent, which helps to explain why the state had a 15 percent increase in its total income payments despite an 11 percent decline in agricultural income.

Agricultural income declines in 1952

The smaller percentage increase in total income payments in the nation than in the District during 1952 resulted in considerable part from a greater decline nationally in agricultural income. Farm income payments in the District declined 1 percent below the previous year compared with 5 percent in the country as a whole. This percentage difference was largely due to the fall in livestock prices relative to crop prices during the year coupled with the fact that livestock provides a smaller proportion of farm income in the District than in the nation. During 1952 cash receipts from crop marketings rose by 12 percent in both the District and the nation, whereas the drop in receipts from livestock and livestock products was less in the District than in the country as a whole. Since cash

¹ This discussion is based primarily upon the estimates which appear in the United States Department of Commerce, Survey of Current Business, August 1953, pp. 7-15.



Source: United States Department of Commerce, Survey of Current Business, August 1953, pp. 7-15.

receipts from livestock marketings during the year accounted for 40 percent of total cash farm marketing receipts in the District compared with 57 percent in the nation, the declining livestock prices had a more pronounced effect upon national than upon District farm income receipts. This decline in cash receipts from livestock marketings combined with increased operating expenses to the farmers during the year resulted in a decline in agricultural net income.

Total income payments, 1946-51

Owing to the varied movements in both the farm and nonfarm sectors described above, total income payments rose relatively more in the District than in the nation in 1952. This contrasted to the postwar period 1946-51 in which income payments increased 41 percent in the District compared with 42 percent in the country as a whole. The relatively smaller percentage growth in the District during this longer period was due in large part to the decline in California's percentage of national income payments, which resulted primarily from an absolute decline in farm income in California during the years 1946-48. In this three-year period, agricultural income payments in California declined 11 percent compared with a 25 percent increase in the nation. They surged upward, however, from 1949 to 1951. During the postwar period, farm income from field crops in California became a larger percentage of total crop receipts whereas income from fruits, nuts, and truck farm crops underwent a relative decline. Along with California, Idaho and Washington

also had a decline in their percentage of total national income payments in the period 1946-1951.

Arizona, on the other hand, had one of the larger percentage income increases in the nation during these postwar years, and consequently its share of national income payments increased. Income payments in the state rose from \$644 million in 1946 to \$1,145 million in 1951—an increase of 78 percent. As shown in Table 1, Nevada, Oregon, and Utah also had percentage increases in their total income payments during these years which were above the national 42 percent rise.

Changing sources of income, 1946-52

The changing importance of the various sources of income is one of the more interesting factors in observing income payments over time. Among the many social and economic consequences of these changing income sources is that geographic differences in economic structure often help to explain regional differences in per capita and total income payments. If, for example, there appears to be a decline in the relative importance of low earnings industries in favor of a relative increase in importance of high earnings industries, then we would anticipate a rise in total income payments to the area. A shift in sources of income payments is also an indicator of a changing market in which different types of goods and services can be sold.

Over the entire postwar period, 1946-52, the agricultural sector, as a source of income payments in the District, declined relative to the nonagricultural sectors. Table 2 indicates that the percentage of total income arising from agriculture declined from 11 percent in 1946 to 7.3 percent in 1952. This decline of 3.7 percentage points

Table 1
Total Income Payments to Individuals, Twelfth District 1946, 1951, 1952
(in millions of dollars)

	•	Total	Percent —change——			
Area	1946	ome payme 1951	1952	1946-51	1951-52	
Arizona	644	1,145	1,287	78	12	
California	15,180	21,214	23,146	40	9	
Idaho	608	808	874	33	8	
Nevada	239	3 5 3	405	48	15	
Oregon	1,779	2,595	2,763	46	6	
Utah	694	1,019	1,069	47	5	
Washington	3,139	4,217	4,466	34	6	
Twelfth District	22,281	31,351	34,010	41	8	
United States	170,962	242,529	255,367	42	5	

Per Capita Income Payments, Twelfth District 1946-1952

(in dollars)

	I	er capita		Percent				
		me paymei		cha —	nge ——			
Area	1946	1951	1952	1946-51	1951-52			
Arizona	985	1,421	1,498	45	5			
California	1,504	1,915	2,032	27	6			
Idaho	1,148	1,547	1,618	35	5			
Nevada	1,626	2,064	2,250	27	9			
Oregon	1,268	1,670	1,733	32	4			
Utah	1,048	1,439	1,450	37	1			
Washington	1,310	1,738	1,810	33	4			
Twelfth District	1,403	1,819	1,914	30	5			
United States	1,211	1,581	1,639	31	4			

Note: The above figures supersede others previously published in this Review. State income statistics for 1950 and 1951 were revised by the Department of Commerce and the census estimates for 1946 were revised in light of the 1950 census.

Table 2

Percentage Distribution of Total Income Payments by Major Components 1946, 1951, 1952

											A I auc				
	A	gricult	ure—	-Mai	ıufactu	ring-	,—Gc	vernm	ent—	an	d Serv	ices—		-Other	
Area	1946	1951	1952	1946	1951	1952	1946	1951	1952	1946	1951	1952	1946	1951	1952
Arizona	16.9	21.6	18.5	4.8	5.8	7.1	20.1	18.3	19.1	28.2	24.7	25.4	30.0	29.6	29.9
California		6.9	6.0	13.7	17.1	18.7	17.9	18.2	18.7	32.4	28.7	28.4	26.5	29.1	28.2
Idaho	3 0 .0	20.7	22.5	7.2	11.0	10.9	16.0	15.3	15.9	24.6	23.7	22.5	22.2	29.3	28.2
Nevada	10.4	10.9	8.2	3.5	4.1	4.3	16.6	17.5	17.3	32.6	32.5	31.8	36.9	35.0	38.4
Oregon	13.5	8.0	8.7	18.5	22.5	22.0	15.0	14.1	16.2	28.9	27.4	26.5	24.1	28.0	26.6
Utah	12.1	9.2	7.4	7.2	10.5	10.5	25.5	22.2	23.1	26.5	24.6	24.5	28.7	33.5	34.5
Washington	11.8	6.6	6.7	15.4	18.5	18.6	21.9	20.8	21.1	28.1	26.5	26.3	22.8	27.6	27.3
Twelfth District	11.0	8.0	7.3	13.6	16.8	17.9	18.5	18.3	18.9	31.0	27.9	27.6	26.0	29.0	28.3
United States	9.8	7.6	6.7	21.3	23.9	24.5	17.0	15.3	15.9	26.6	25.9	25.6	25.3	27.3	27.3

Note: Figures may not add to 100 percent due to rounding. The above figures for 1951 supersede others previously published in this *Review* in accord with the revisions of the Department of Commerce state income statistics.

in the proportion of farm income to total income payments compares with a decline of 3.1 percentage points for the nation. All District states conformed to this pattern except Arizona where agricultural income became a larger proportion of its total income payments. California's farm income, which accounts for approximately 58 percent of the District's total, contributed 6 percent to total income payments in the state during 1952 compared with 9.5 percent in 1946.

While agriculture as a source of income in the District declined in relative importance, the proportion contributed by the manufacturing and government income sectors increased. Manufacturing payrolls as a source of income accounted for 17.9 percent of total income in 1952 compared with 13.6 percent in 1946. As Table 2 indicates, income payments from the government sector showed

Table 3

Percentage Distribution of Total Income Payments
By Type of Payment
1946, 1951, 1952

	ages and salaries	Proprietors'	Property income	Other income
Arizona1946	58	25	8	8
1951	58	27	9	6
1952	62	23	9	6
California1946	62	21	10	6
1951	66	17	11	6
1952	68	15	11	6
Idaho1946	49	38	7	7
1951	59	27	8	6
1952	58	28	9	6
Nevada1946	58	25	10	5
1951	62	21	12	5
1952	65	19	12	4
Oregon1946	61	25	7	7
1951	67	18	9	6
195 2	66	18	9	7
Utah1946	60	24	7	9
1951	68	20	7	6
195 2	69	16	8	6
Washington1946	62	22	8	8
1951	68	17	9	6
1952	69	16	9	7
Twelfth District.1946	62	23	10	7
1951	66	18	11	6
1952	68	16	10	6
United States 1946	62	20	10	7
1951	67	17	11	6
1952	69	15	11	6

Note: The above figures supersede others previously published in this *Review*. State income statistics for 1951 were revised by the Department of Commerce.

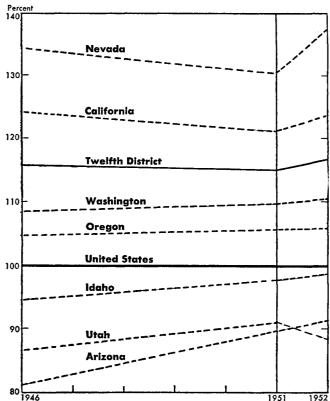
only a small increase in relative importance during these years, but it was and still remains a larger proportion of total income payments in the District than in the nation.

Trade

Trade and service payments, like agricultural income, have become a declining source of income to the District. However, unlike agricultural payments, none of the states in the District had an absolute decline in this source of income payments in the period 1946-1952.

Looking at a percentage breakdown of total income payments by type (Table 3) we have a further indication that the agricultural sector is a relatively declining income segment in the Twelfth District. Proprietors' in-

PER CAPITA INCOME PAYMENTS OF TWELFTH DISTRICT AND STATE AS A PERCENTAGE OF NATIONAL AVERAGE 1946-1951 and 1951-1952



Source: United States Department of Commerce, Survey of Current Business, August 1953, pp. 7-15.

come which comprises the income of unincorporated enterprises (including farms) declined during the postwar years. On the national level, approximately 43 percent of proprietors' income is accounted for by farm proprietors' net returns. Assuming this breakdown to be approximately the same for the District, the decline in income from this source appears to conform to the change in agricultural income. During the 1946-52 period, both proprietors' income and agricultural income in the District declined as proportions of total income payments. All states in the District shared in the declining importance of proprietors' income during this postwar period. The outstanding change occurred in Idaho where proprietors' income as a proportion of total income payments declined from 38 percent in 1946 to 27 percent in 1952. This paralleled a decline of 7.5 percentage points in the proportion of agricultural income in the state.

Per capita income payments

The effect on total income payments of changes in income sources has been gradual and therefore overshadowed by the effect of the more dramatic population movements into the District. Between July 1, 1940 and July 1, 1952, population increased in the District at an average annual rate of 4.7 percent compared with a national rate of 1.5 percent. The larger annual percentage

rate of increase in the District relative to the nation resulted primarily from the rapid growth in District population during the 1940-46 period. In the postwar period, the difference in the rates of population growth in the District and the nation has been significantly smaller.

The effect of these population movements on the relative economic welfare of the District is shown in part by the changes in per capita income payments to the District and its states. The differences in percentage changes in income and population movements in the District and nation has meant a nearly equal percentage change in per capita income payments in the two areas. During the 1946-52 period, per capita income payments for the District increased 36 percent compared with a national increase of 35 percent. In 1952, per capita income payments in the District rose 5 percent above 1951 compared with a 4 percent national increase. This relative increase in per capita income during 1952 is striking when we note that the District had a population percentage increase nearly double that of the United States. The nation's population increased by 1.6 percent between July 1, 1951 and July 1, 1952 compared with a 2.9 percent increase in the District. Just how the states in the District conformed to this pattern is shown in the accompanying chart in which state and District per capita income changes are compared with those of the United States for the postwar years.

BUSINESS INDEXES—TWELFTH DISTRICT¹

(1947-49 average = 100)

Year		Industrial production (physical volume) ²									Car- loadings	Dep't	food	Waterborne foreign trade ^{3, 6}	
and	Lumber	Petro	leum¹	C	Lead	Coppers	Wheat	Electric				sales (value)²	prices	Exports	
month				Cement				ļ <u>. </u>	ment	ment.		(value).			
1929 1931 1933 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1947 1949 1950 1951	97 51 41 54 70 74 58 79 93 93 90 90 72 85 97 104 99 112 114	87 57 52 62 62 64 71 75 67 67 67 74 85 93 97 100 101 199 98 106	78 550 560 661 663 663 663 663 683 71 833 98 981 991 103 103 112 116	54 36 36 33 58 56 45 61 81 96 79 63 65 81 104 100 112 128	165 100 72 86 96 914 92 93 109 114 100 90 78 70 94 105 101 109 89	105 49 17 37 64 88 88 80 94 107 123 125 112 97 106 101 115 115	90 86 75 87 81 84 81 91 87 88 98 98 112 108 113 98 88 88 86 95	29 29 26 30 34 38 36 40 43 49 60 76 82 78 78 90 101 108 119 136 144	100a 101a 96a 95a 102a 99a 102a 112a 116a	474 600 515 63 83 121 164 158 122 97a 100a 102a 97a 105a 122a 130a	102 68 52 66 77 81 72 95 102 99 105 100 101 106 100 94 97	30 25 18 24 24 28 30 28 31 33 40 59 65 72 91 99 105 105	64 50 42 48 48 48 50 47 47 47 52 63 69 68 70 80 96 103 100 103 115	190 138 110 135 131 170 164 163 132 89 129 86 85 91 186 171	124 80 72 109 116 119 87 95 101 57 81 98 121 137 157 200
July August September October November December 1953 January February March April May June July	108 106 109 116 105 99 116 117 120 120 112 120 111	107 107 107 107 107 108 109 108 109 110	116 122 122 117 118 114 115 117 123 122 127 121	125 131 131 142 133 126 105 131 126 132 142 134 140	68 81 78 80 85 78 77 85 85 83 75 78 66	106 105 112 115 116 111 109 113 116 114 115 105	90 103 99 96 97 96 97 99 99 99 91 99	150 153 145 146 141 138 141 154 142 165 179	116a 119a 119a 118a 118a 118a 119a 119a 119	130a 131a 134a 134a 135a 136a 136a 136a 137a 137a 137a 138a	96 101 108 98 102 100 94 102 102 104 102 101 102 104 109	111a 116a 114a 118a 117a 117a 116a 116a 119a 116a 124ar 120ar	114 114 113 113 114 115 114 112 113 113 113 113	144 153 142 145 135 148 151 158 179 164	187 293 253 319 194 232 195 187 336 336 336

BANKING AND CREDIT STATISTICS—TWELFTH DISTRICT (amounts in millions of dollars)

	Conditi	on items of	all membe	er banks?	Bank	ħ.	10	Bank debits			
Year and month	Loans and discounts	U.S. Gov't securities	v't deposits time		rates on short-term business loans!	Reserve bank credit ¹¹	Commercial operations ¹²		Coin and currency in circulation 11	Reserves	Index 31 cities ^{3, 18} (1947-49= 100) ²
1929 1931 1933 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950	2,239 1,898 1,486 1,537 1,682 1,871 1,869 1,967 2,130 2,451 2,170 2,106 2,254 2,663 4,068 5,358 6,032 7,866 8,839	495 547 720 1,275 1,334 1,270 1,450 1,482 1,738 3,630 6,235 8,263 10,450 8,426 7,247 6,366 6,415 6,415 6,463 6,619	1,234 984 951 1,389 1,791 1,781 1,983 2,390 2,390 4,356 5,998 6,950 8,203 8,821 8,922 8,655 9,254 9,937 10,520	1,790 1,727 1,609 2,064 2,101 2,187 2,221 2,267 2,360 2,425 2,609 3,226 4,144 5,211 5,797 6,086 6,255 6,302 6,777 7,502	3.20 3.35 3.66 3.95	- 34 + 21 - 2 + 6 - 1 - 3 + 2 + 21 + 21 + 21 + 21 + 21 + 39 - 302 + 17 - 302 + 13 + 21 + 7	0 - 154 - 110 - 163 - 227 - 90 - 240 - 192 - 148 - 596 - 1,980 - 3,751 - 3,753 - 3,743 - 1,607 - 510 + 472 - 930 - 1,141 - 1,582 - 1,912	+ 23 + 154 + 150 + 219 + 454 + 157 + 276 + 245 + 420 +1,000 +2,826 +4,486 +4,483 +4,682 +1,329 + 698 - 482 +378 +1,198 +1,1983 +2,265	- 6 + 48 - 18 + 14 + 38 - 3 + 20 + 31 + 96 + 227 + 643 + 708 + 745 - 326 - 209 - 65 - 14 + 189 + 132	175 147 185 287 479 565 584 754 930 1,232 1,462 2,033 2,094 2,202 2,420 1,924 2,026 2,269 2,514	42 28 18 25 30 32 29 30 32 39 48 60 66 72 86 95 103 102 115 132
1952 August September October November December	8,270 8,444 8,605 8,805 8,844	6,469 6,473 6,765 6,808 6,627	9,679 9,908 10,125 10,281 10,504	7,197 7,249 7,336 7,331 7,498	3.96	+ 213 - 230 + 236 + 72 - 299	- 126 - 176r - 294 - 29 - 240	$\begin{array}{c} + & 163 \\ + & 237r \\ + & 267 \\ + & 79 \\ + & 422 \end{array}$	+ 49 + 4 + 32 + 34 - 12	2,535 2,363 2,527 2,616 2,514	134 144 146 141 157
1953 January February March April May June July August	8,816 8,838 8,983 9,054 9,092 9,156 9,167 9,229	6,633 6,474 6,299 6,173 6,020 5,997 6,675 6,589	10,390 9,911 9,937 10,011 9,843 9,899 10,005 9,950	7,490 7,551 7,560 7,597 7,627 7,703 7,729 7,749	4.01	+ 138 + 83 - 220 + 16 - 12 - 39 + 75 - 100	- 263 - 119 - 147 - 277r - 174r - 531 - 184 - 99	$\begin{array}{c} + \ 136 \\ - \ 13 \\ + \ 240 \\ + \ 239r \\ + \ 294r \\ + \ 435 \\ + \ 274 \\ + \ 177 \end{array}$	- 77 + 22 - 18 + 11 + 22 + 39 + 3 + 36	2,565 2,491 2,394 2,378 2,463 2,275 2,450 2,397	146 150 164 153 150 155 148 142

¹ Adjusted for seasonal variation, except where indicated. Except 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; nonagricultural and manufacturing employment, U.S. Bureau of Labor Statistics and cooperating state agencies; retail food prices, U.S. Bureau of Labor Statistics; carloadings, various railroads and railroad associations; and foreign trade, U.S. Bureau of the Census.

2 Daily average.

3 Not adjusted for seasonal variation.

4 Excludes fish, fruit, and vegetable canning.

4 Los Angeles, San Francisco, and Seattle indexes combined.

5 Commercial cargo only, in physical volume, for Los Angeles, San Francisco, San Diego, Oregon, and Washington customs districts; starting with July 1950, "special category" exports are excluded because of security reasons.

7 Annual figures are as of end of year, monthly figures as of collection. Monthly data partly estimated.

8 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.

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.

12 Debits to total deposit accounts prior to 1942, debits to demand deposit accounts from 1942 on, excluding interbank deposits.

2 —New revised series.