MONTHLY REVIEW

MAY 1954 FEDERAL RESERVE BANK OF SAN FRANCISCO

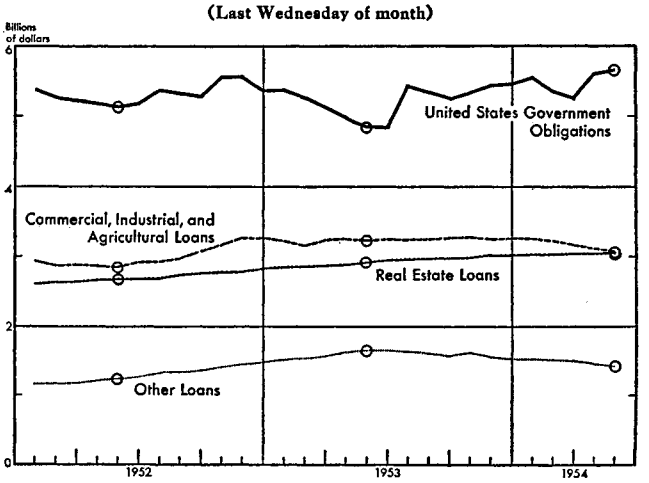
CHANGES IN TWELFTH DISTRICT BANK CREDIT, JANUARY-MAY 1954

RECENT changes in economic activity have been reflected in the course of bank credit in this District and in the nation. The course of bank credit is given weight in the banking and business community because of the wide variety of contacts between banks and the rest of the economy and because of the promptness with which the figures become available. Bankers as businessmen are interested in the course of general business activity but are also directly concerned with the impact of past and expected future changes upon the earnings, portfolio policy, and liquidity of their institutions. It is important, then, to determine what the changes in bank credit have been and whether these changes reflect not only business activity but also changes in the structure of credit extended by all lenders and changes peculiar to the money markets.

Over-all results, January-May 1954

A small increase in total bank credit outstanding at weekly reporting member banks in the Twelfth District during the first five months of this year contrasts sharply with a decline in the same period of last year. Although the magnitude of the difference between the two years is not large, it becomes impressive when the nature of the change is examined. Total loans declined this year in contrast with an increase a year ago, whereas total investments behaved in the opposite manner. This difference is a result of a marked change in economic climate. In early 1953 banks were forced to dispose of large quantities of Government securities and to borrow heavily from the Federal Reserve System in order to meet part of the large demand for loans. This loan demand originated principally in the consumer and real estate sectors, both of which were still being stimulated by their recently achieved freedom from administrative restrictions. Business loans declined less than seasonally during these months and the loans which sustained the total most strongly were those associated with consumer credit—loans to sales finance companies and to wholesale and retail trade. The System pursued a restrictive monetary policy during this period until the tightening of the capital markets appeared incompatible with economic stability.

UNITED STATES GOVERNMENT SECURITY HOLDINGS AND SELECTED LOANS OUTSTANDING—REPORTING MEMBER BANKS IN LEADING CITIES OF THE TWELFTH DISTRICT
1952-1954
(Last Wednesday of month)



Note: The circled points are for May of each year.

The change of pace and direction of business which began somewhat later has been accompanied by a sharp decline in inventory investment and a rise in unemployment. The reaction of the Federal Reserve System to these circumstances was prompt. It reversed its earlier policy of restriction and attempted to promote monetary ease by open market operations and a reduction in reserve requirements. The business decline was nevertheless reflected in the course of bank credit in the last six months of 1953 when loans to business and agriculture held by Twelfth District member banks increased much less than seasonally, real estate loans increased more

Also in This Issue

slowly than in prior months, and consumer loans actually declined.[1] The earlier tight money market and the decline in business activity set up certain trends which promised to carry over into the new year: (1) borrowing habits and practices had been re-evaluated in the direction of less borrowing, (2) consumer and real estate loan repayments were rapidly increasing in magnitude, and (3) borrowers were having increased recourse to other sources of funds than commercial banks.

These trends have continued during the first five months of this year and some new factors have also been important. Expiration of the excess profits tax on December 31, 1953 removed part of the motivation for borrowing and the new Federal budget released in January promised reductions in Federal spending. Although both of these factors have had less impact in the Twelfth District than in the nation, they have been important. As a result of these various pressures, loans to business by weekly reporting member banks in the Twelfth District have declined more sharply than in the comparable periods of the past two years. Real estate loans have increased more slowly than in the same months of last year, and the decline in consumer loans outstanding has accelerated.

It is apparent that the picture of business activity which emerges from considering the course of bank loans is rather gloomy if comparison is made with the corresponding period of 1953. But the more important consideration, since we are concerned with the very short-run, is whether there are signs of improvement over the immediately preceding period. Viewed in this light the picture is less gloomy. The decline in commercial, industrial, and agricultural loans this year is about what could be expected on a seasonal basis. Real estate loans are increasing more rapidly than they were toward the end of last year. Consumer loans outstanding at commercial banks in the nation, on the other hand, have continued to decline at a somewhat faster rate than in the final quarter of 1953. The slowing up of the sharp rate of increase following suspension of Regulation W meant that a greater absolute increase in new loans made each month would be required to keep outstanding consumer loans going up since repayments could be expected to get larger for some months afterward. Since the beginning of this year instalment credit extended by all lenders in the nation has declined more rapidly than repayments have risen. Both forces have acted to reduce outstanding consumer loans, but the first has been more important.

The decline in loans has been approximately offset by an increase in investments so that deposits have not been seriously affected. The increase in investments has been accompanied by a marked lengthening of maturities. Because there are factors other than business activity which influence loans and investments and these factors vary from one kind of loan to another, the following discussion takes up these various categories separately and in more detail.

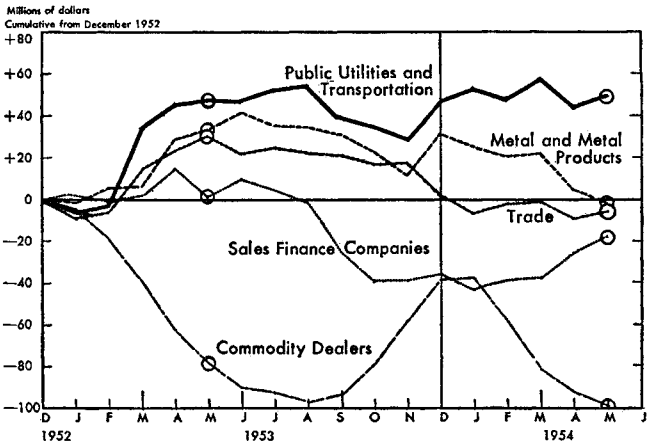
Loans to business and agriculture

The weekly figures for reporting member banks in leading cities, which provide the most current information, lump together business and agricultural loans. In both the Twelfth District and the nation these loans declined in the first five months of this year by about 6.5 percent. The largest change in performance of loans to business this year as compared with last, both nationally and in this District, has been in loans to the metals and metal-products industry. This industry appears to have run its course of expansion, particularly as induced by the Korean war, and the inevitable decline in borrowing has been in process since the end of last September. The second largest decline in this District was in loans to retail trade. The decline this year compares with a sharp increase last year and it is probably a result of the decline in inventory investment and of consumer credit extended directly to buyers. The other major reversal of performance this year is in District loans to the public utility and transportation industries. The borrowings of these industries increased substantially in the first five months of last year but have changed relatively little this year. This may reflect the increased flotation of securities by public utilities, the proceeds of which have been used in many cases to retire indebtedness to banks. Although these various categories of loans have also registered the largest changes in the country as a whole, bank loans to sales finance companies have not declined in this District as they have in the nation. This can be a result either of the local sales finance companies relying less heavily upon the sale of commercial paper in the open market than firms elsewhere, or more probably of banks in this District being larger purchasers of such paper than banks elsewhere in the nation.

Some additional light is shed on the performance of commercial, industrial, and agricultural loans by exam-

CHANGES IN BANK LOANS IN SELECTED INDUSTRIES—TWELFTH DISTRICT, 1953-54

(Last Wednesday of month, December 31, 1952=100)



Note: Data reported by selected member banks in leading cities. The circled points are for May of each year.

[1] A more detailed review of the course of bank credit in 1954 may be found in the August and December 1953 issues of this *Review*.

ination of the recently available Call Report of April 15, 1954, which provides a separation of business from agricultural loans. This year, loans to business appear to have fallen twice as rapidly in this District as in the nation. The decline in this District is over three times as large as in the same period of 1953 and twice as large as in 1952. All states in the District except Nevada and Utah show a decline. The reason the weekly reporting series does not show as sharp a change is because agricultural loans other than on real estate have increased this year. All of this increase is in CCC guaranteed loans, mostly in the form of CCC certificates sold to the banks. Purchases of such certificates initially were heavier in this District than in the nation, and the largest increases in CCC loans outstanding within the District were recorded in California, Arizona, and Oregon. Non-guaranteed loans to farmers, on the other hand, declined in this District but increased in the nation. This decline is not uniform within the District, the large declines in California and in Arizona being more than enough to offset the substantial increases in Washington and Oregon.

Real estate loans

Statistics on loans on real estate have attracted considerable interest because they not only provide some reflection of the performance of the vitally important construction industry but also because they represent an area in which the policy of active ease pursued by the Federal Reserve System might be expected to have a marked influence. Such loans are also more important to Twelfth District banks than for banks elsewhere in the nation. Real estate loans held by member banks in this District at the end of last year were greater than loans to business and amounted to nearly 40 percent of all loans outstanding. For all banks in the United States such loans represented only a little more than half the loans to business and constituted only 23 percent of total loans.

The weekly figures of reporting banks in this District show that real estate loans increased at a very slow rate during the first five months of this year. The increase was slightly below that of the United States and far below that of the comparable period of last year. Call Report data for April 15 show a roughly similar picture but their greater detail reveals a slightly larger increase in the Twelfth District than in the nation for all real estate loans, at least during the first 3½ months of this year. This is particularly due to the larger increase in this District of loans on farm land and on residential properties, since loans on other properties have increased much more sharply elsewhere in the nation. Real estate loans on farm land in this District are up substantially from the comparable period of any of the prior three years. This increase occurred in all states in the District except Nevada and Utah. The increase in farm mortgages is not related to a rise in the value of farm land, which has actually been falling, but rather is an indication of a need for additional collateral for bank financing.

Loans on residential property have increased most strongly in California and Oregon but have declined in Arizona. Although the increase for the District as a whole is proceeding at a slower rate than in recent years, a most noteworthy development is the recovery of VA mortgages. Outstanding VA mortgages declined at District banks in every quarter of the past two calendar years but increased slightly in the first quarter of this year. The increase is attributable wholly to the large increases in Oregon and Nevada, the other states in the District continuing to show a decline. The large increase in VA mortgages in Oregon is associated with a spurt

LOANS OF MEMBER BANKS ON APRIL 15, 1954 AND THE CHANGE FROM DECEMBER 31, 1953
TWELFTH DISTRICT AND UNITED STATES

	Twelfth District			United States		
	April 15	Change from December 31, 1953		April 15	Change from December 31, 1953	
	(in thousands of dollars)		Percent	(in thousands of dollars)		Percent
Commercial and industrial loans, including open-market paper..	2,901,246	—157,519	— 5.2	24,835,647	—683,661	— 2.7
Loans to farmers						
Directly granted by CCC and certificates of interest.....	214,676	+ 57,309	+ 36.4	1,874,541	+337,724	+ 22.0
Other	354,546	— 12,765	— 3.5	1,776,462	+ 50,657	+ 2.9
Loans on securities						
To brokers and dealers	44,278	— 11,307	— 20.3	1,938,930	—382,067	— 16.5
Other	32,695	— 161	— 0.8	1,035,919	— 24,084	— 2.3
Real estate loans	3,660,467	+ 54,756	+ 1.5	13,196,123	+176,206	+ 1.4
On farm land	109,486	+ 4,241	+ 4.0	601,253	+ 15,866	+ 2.7
On residential property	3,153,694	+ 43,314	+ 1.4	10,307,164	+ 82,840	+ 0.8
Insured by FHA	1,521,600	+ 33,639	+ 2.3	3,390,109	+ 25,752	+ 0.8
Insured or guaranteed by VA	788,140	+ 1,037	+ 0.1	2,598,042	+ 34,668	+ 1.4
Not insured or guaranteed by FHA or VA	843,954	+ 8,638	+ 1.0	4,319,013	+ 22,420	+ 0.5
On other properties	397,287	+ 7,201	+ 1.9	2,287,706	+ 77,500	+ 3.5
Other loans to individuals	1,836,149	— 97,611	— 5.1	11,645,642	—264,922	— 2.2
Retail automobile instalment paper	850,357	— 61,158	— 6.7	3,471,661	—138,382	— 3.8
Other retail instalment paper	284,092	— 30,200	— 9.6	1,639,910	—150,855	— 8.4
Repair and modernization instalment	230,909	— 9,050	— 3.8	1,436,582	— 37,589	— 2.6
Instalment cash loans	205,685	— 2,652	— 1.3	1,554,385	+ 35,773	+ 2.4
Single-payment loans	265,106	+ 5,449	+ 2.1	3,543,104	+ 26,131	+ 0.7
Loans to banks	56,393	+ 46,383	+463.4	608,859	+447,910	+278.3
All other loans (including overdrafts).....	118,218	+ 1,745	+ 1.5	1,349,289	— 8,257	— 0.6
Loans—gross	9,218,668	—119,170	— 1.3	58,261,412	—350,494	— 0.6
Reserves	118,043	— 247	— 0.2	859,213	+ 9,344	+ 1.1
Loans—net	9,100,625	—118,923	— 1.3	57,402,199	—359,838	— 0.6

in tract-home construction sparked by easy financing from life insurance companies and savings and loan associations. The larger increases in the District as a whole are in FHA and conventional loans. This is the opposite of the national pattern where by far the largest increase was in real estate loans insured or guaranteed by the VA.

Although the increase in residential real estate loans held in the District is substantially below the increase in the same quarter of the prior year, it is nearly twice as large as the increase in the last quarter of 1953. In this earlier period the tightness of the money markets for the first half of 1953 was communicated with a lag, because of the commitment process, to the real estate market. The easier money conditions of the latter half of 1953 filtered through to the mortgage markets by the first quarter of this year, thus partly accounting for the sharp rise from last-quarter 1954 figures. This change is most evident in VA and uninsured loans.

There is some ground for assuming that the pattern shown above may persist. Banks in this area appear to be more fully "loaned-up" as far as real estate is concerned than banks elsewhere. Bankers often use the relation of real estate loans to their time deposits as a rough guide to their portfolio policies. As of December 31, 1953, member banks in this District had real estate loans equal to 50 percent of time deposits of individuals, partnerships, and corporations. All member banks in the United States had a 40 percent ratio. Within this District California and Idaho exceeded 50 percent, while Oregon and Washington were below 45 percent. To put it differently, member banks in this District held only 22 percent of all time deposits of individuals, partnerships, and corporations in the United States but held over 31 percent of all real estate loans. The implication of these figures is that it may prove increasingly difficult for the commercial banks in this District to service the needs for construction growth in this District unless their time deposits grow very rapidly. There is a larger margin available for growth in the rest of the country in the form of "unutilized" time deposits. Furthermore, during the postwar period there has been so large and rapid an increase in FHA and VA loans in this District as compared with the nation as to raise the question in the minds of many District bankers whether portfolios should not be better balanced by concentration on increasing conventional mortgage loans.

There is also evidence of some shift in the source of borrowing to finance home purchases. For a number of years the recordings of mortgages by commercial banks have advanced at a slower rate than for all types of lenders, and this has been accentuated in the last two years. The same phenomenon is reflected in the growth of mortgage loans outstanding at commercial banks as compared to other lenders. These changes are evident both nationally and in this District. Within the District the most marked changes away from commercial bank financing in the first quarter of 1954 have occurred in Arizona and Washington. There is an increasing share of total savings flowing into life insurance companies, savings banks, and savings and loan associations, and these other lenders have become increasingly aggressive in seeking mortgage loans as the return from available alternative investments, particularly United States Government securities, have declined. It is natural that the share of mortgage lending done by commercial banks should decline under these circumstances. It should also be noted that the pressure of repayments is greater for commercial banks than for other lenders because of the generally shorter term of their mortgages.

Consumer loans

The most outstanding change from prior experience is apparent in the decline of "other" loans, which are principally loans to individuals to finance purchases of consumer goods. Within the District there has been a decline in each month of the year as compared with an increase in every month of 1953. The net result is a decrease of $122 million this year as compared with an increase of $127 million last year. It should be recalled, however, that at this time last year there was considerable apprehension over the very rapid growth of consumer credit and the very large amount outstanding. The tightening of the money markets in the first half of 1953 and the dropping off in sales of consumer durables, particularly automobiles, caused outstanding consumer loans in this District to decline beginning in July, 1953. This decline was very small in the third quarter, but in the fourth quarter of 1953 the decline exceeded $38 million at Twelfth District member banks and the decline from the end of 1953 to the April 15 Call Report was over $97 million. Roughly two-thirds of the decline is accounted for by the falling off of outstanding retail automobile instalment loans and most of the rest by the decline in other retail instalment loans. Personal instalment cash loans declined by much less in this quarter than in the last quarter of 1953, but single payment cash loans continued to increase at the rate of the prior quarter. Repair and modernization loans, on the other hand, decreased substantially in the first quarter after a small decline in the last quarter of 1953. These are the first recorded declines in this category since the end of the war.

Total consumer loans outstanding have dropped twice as rapidly in this District as in the nation, either on the basis of experience of the weekly reporting banks through May or of all member banks through April 15. The sharpest percentage decline both locally and nationally was in retail instalment paper other than on automobiles. The next sharpest percentage fall was in retail automobile instalment paper, although the magnitude of outstanding automobile paper is so great in this District that the decline in dollar amount was twice as great as for other retail instalment paper. Repair and modernization instalment loans also fell off more sharply in this District than elsewhere in the nation. Similarly, while instalment cash loans increased in the nation, they declined in this District. The only gain recorded in con-

sumer loans in the Twelfth District was in single-payment loans, an increase more rapid than that which occurred elsewhere in the nation.

As in the real estate lending area, some downturn in the national share of consumer credit held by commercial banks has been evident. Consumer credit outstanding at commercial banks actually began to decline last November, while total consumer credit outstanding continued to increase. Since then commercial bank outstandings have declined a little faster than the total. It may be that the decline in commercial bank participation in the consumer loan field will continue more rapidly than elsewhere because of the probably shorter-term paper held by the commercial banks and the consequent greater pressure of repayment. This is more likely, however, for financial institutions as a whole as compared with retail outlets than for commercial banks versus other financial institutions. It is also possible that the turning away of customers for consumer credit by banks as part of the process of credit rationing in early 1953 may have alienated some of these customers for a time, even though the rates they pay other lenders are higher than bank rates.

The pressure of repayments should be emphasized in evaluating the decline in consumer credit outstanding. Instalment credit extended by all sources in the United States in 1953 averaged about $2,480 million per month while repayments averaged $2,220 million per month. However, on a seasonally adjusted basis the average monthly extension of credit was lower in the second than in the first half of 1953, while average monthly repayments were higher in the second half than in the first. Behind the growth in repayments lies a structure of maturities which determines the shape of repayments for months to come. The huge increase in consumer credit extended in the year following removal of selective credit controls in May 1952 made for a large bulge in outstandings and significantly altered the relationship between extensions and repayments. The ratio of repayments to extensions has been increasing since May 1953 because extensions have not been increasing as rapidly as repayments. In the first four months of this year the ratio exceeded 1 as the increase in extensions was less than seasonal while repayments continued their upward trend. The result was a drop in consumer instalment credit outstanding in the United States of $898 million as repayments of $9,231 million exceeded extensions of $8,333 million. Outstandings have been under the pressure of a decline in new credit extended and of rising repayments, although the decline in extensions has been more important. The implication is clear—unless there is a positive spurt in extensions of consumer credit, outstandings will continue to decline because of mounting repayments.

Investments and reserves

The decline in total loans outstanding for Twelfth District reporting member banks has been accompanied by an almost corresponding increase in investments. Except for a certain volume of investment in Government securities which is considered desirable for portfolio balance, investment by commercial banks ordinarily plays this residual role in the short run. This was obviously the case in the postwar period when loans were financed by the proceeds of sales of Governments purchased during the war. The residual character of investments was again evident in this District in the first four months of last year when loans increased and investments declined. The inverse relation between loans and investments results in imparting stability to the level of demand deposits held by banks to the extent that reserves are available.

The course of holdings of United States Government securities over the first four months of this year has been molded principally by the offerings of the Treasury. The first offering was made in early February when two new securities in the form of 1⅝ percent one-year certificates and 2½ percent bonds with a 7-year 9-month maturity were offered in exchange for nearly $21 billion of outstanding certificates, notes, and bonds. Exchanges were made in this District for nearly $195 million of certificates and $1,304 million in bonds. Since over $490 million of certificates and notes were exchanged for the bonds, the maturity of outstanding United States securities in District portfolios necessarily increased. This offering is heavily reflected in bank holdings in this District. In January the principal increase in holdings was of notes, perhaps in anticipation of the exchange which was first announced late in the month. By the end of February a very sharp reduction in holdings of bills, certificates, and notes had occurred, mainly because of the offerings for the exchange, but holdings of bonds increased sharply. During March the largest increase was in bills, a result of a new Treasury offering of 94-day tax anticipation bills, and holdings of bonds continued to increase. There was an even heavier liquidation of certificates, however, probably of those secured in the prior month's offering. The dominant increase of the first five months of the year in holdings of Governments was recorded in April. Most of this increase was in bills but there was also net buying of bonds. The increase in bills was particularly marked toward the end of the month when a new offering of 52-day tax anticipation bills was made available.

Although there was not as large an increase in holdings of Governments in May, there was a further lengthening of portfolios. This resulted from another large exchange offering as well as a cash offering during the month. Holders of the 2⅝ percent certificate maturing June 1 were offered a choice of either a 1⅛ percent one-year certificate or a 1⅞ percent 4-year 9-month note. Holders of any of three bonds maturing in June were only offered the certificate in exchange. The result was an exchange in this District of nearly $202 million for notes and $187 million for certificates. Since nearly 60 percent of the outstanding certificates were exchanged for notes, there was a necessary lengthening of maturities. In addition, over $190 million in notes were sold

for cash in this District. These offerings are fully reflected in the course of bank investments in May where the outstanding change, of course, is a substantial increase in holdings of notes.

In addition to the availability of longer-term securities in these five months, banks were under pressure to lengthen maturities because of the relatively low yields obtainable from Treasury bills. In the last quarter of 1953 the rate on new issues of bills averaged 1.486 percent. In the first quarter of 1954 the average was 1.084 percent, and by the end of April the average rate on the last issue of bills sold was 0.886 percent. This decline continued through May, the last issue of the month bearing an average rate of 0.718 percent, the lowest rate on a new issue of bills in nearly seven years. It might be observed at this point that the rate on bills presently gives less of an indication of how easy the money markets are than it did a year ago. There has been a very large change in the maturity structure of securities outstanding, which was accomplished primarily by the exchanges discussed above. The net result is that by the end of May the supply of maturities within one year has been decreased by about $17 billion. Thus, to the increased demand for liquidity and the increased availability of funds resulting from the decline in bank loans there must be added a sharp reduction in the supply of short-term securities.

The pattern of investment operations of banks in the country as a whole differs somewhat from that of Twelfth District banks. Investments in United States Government securities did not increase but rather decreased by a small amount. This may be a result of a different reserve position for banks elsewhere in the United States. The alteration of the pattern within holdings toward intermediate as opposed to shorter-term securities, however, is as pronounced on a national as on a District basis. Most of the increase in bonds nationally was accomplished during the February exchange offering.

It is clear that there has been a definite easing of the money markets. This is reflected in the record of indebtedness to the System, both nationally and in this District. Member bank borrowings from all Reserve Banks dropped from a daily average during the month of December of $441 million to $101 million in January. These borrowings increased to $293 million in February and averaged $189 million in March. They dropped again in April to $139 million and advanced slightly to $155 million in May. Borrowings of Twelfth District member banks have followed a generally similar pattern, except that the decline in amount from December to May has been relatively much greater in the District than in the country as a whole.

The decline in borrowing at the Reserve Banks increased the amount of "free" reserves, which are equal to excess reserves minus member bank borrowing. The net result of operating transactions also yielded an increase in reserves for member banks. These transactions reflect the net effect upon bank reserves of Treasury operations, and of changes in Federal Reserve float, currency in circulation, gold and foreign accounts, and other deposits in the Federal Reserve Banks. They also include the effect on required reserves of changes in deposits. The major difference between the first five months of this year and last is that the return flow of currency was greater this year than last and the loss of gold in the country as a whole amounted to only a fraction of the loss last year.

While member banks lost in reserves in the first five months of last year from operating transactions, they gained substantially from that source during the same period this year. This gain was more than offset by a loss in reserves arising from a reduction of $1.2 billion (on a monthly average basis) in Federal Reserve Bank credit (excluding float) during the first five months of this year. The System reduced its holdings of Government securities that it had bought outright by over $500 million. Much of the remaining reduction in Reserve Bank credit occurred in January when dealers in Government securities reduced substantially their outstanding credit obtained from the System through repurchase agreements on Treasury bills and member banks also reduced their borrowings. The decline in borrowings, of course, has been at the initiative of the member banks since System policy over this period was directed toward active ease in the money markets. In the last two weeks of May the System again began adding to reserves through open market operations. The volume of free reserves furnishes one indication of the greatly changed conditions in the money markets. In the first five months of this year member banks had on the average somewhat more than $500 million of free reserves, whereas in the corresponding period a year ago their borrowings exceeded their excess reserves by an average of about $600 million.

Within the Twelfth District there was a similar sharp increase in the return flow of currency as compared with last year. The increased loss in reserves because of interdistrict clearings was offset by increased Treasury transfers so that the net effect was a smaller reduction in reserves this year than last. Reserves here were not adversely affected by reduced Treasury expenditures as they were in the United States. Consequently banks in the District were able to increase their holdings of investments when confronted with a decline in demand for loans.

Conclusion

If the pace of business activity noticeably quickens during the remainder of this year, the patterns of changes in loans and investments will be the more familiar ones of the postwar period. This may be a realistic assumption in light of the international situation, new thinking on the new look in defense expenditures, and the slowing down in the rate of inventory disinvestment. These factors may point, however, to a plateau in the level of

business activity rather than to expansion. In this event, or in the event that there is a further decline in the level of business activity, developments in bank credit will be less familiar. It may be useful, therefore, to draw together at this point some of the trends which have developed over the past nine or ten months.

In the absence of a noticeable recovery in the pace of business activity, it is reasonable to expect a further slow decline in consumer loans outstanding in this District. The volume of repayments is very large and tending to increase and, although extensions remaining at the present level would not add to deflationary pressures, outstandings would further decline. Real estate loans may be expected to continue to increase, and the rate of increase may well rise, particularly if VA loans prove more attractive to District banks. Loans to business should experience some seasonal quickening, but it would not be surprising if they show no change or actually decline on a seasonally adjusted basis. Agricultural loans will depend upon the sale of CCC loan certificates to the banks, much of the ordinary seasonal expansion in such loans being taken up in CCC direct loans or being disguised as farm mortgages. It is investments which promise the largest growth in the next six months. Not only will banks be desirous of employing available funds, but the Treasury is faced with financing a deficit variously estimated as up to $10 billion.

The diversion of borrowers to lenders other than banks may also continue. In the real estate field there not only exists the more generous terms offered by other lenders, but the strong rise in savings flowing to these other institutions may continue. In consumer lending the more generous terms are also in evidence and, although rates may be higher, there is probably less rationing of credit by other lenders. In business lending, the rate structure maintained by commercial banks has already promoted a resurgence of commercial paper and bank acceptance borrowing. This may be further supplemented by other forms of recourse to the open market—particularly the capital markets—to profit by the differential in rates and to pay off bank loans. Under these circumstances it is possible that bank credit may become somewhat more easily available, although rates paid may not decline appreciably.

POSTWAR TRENDS IN DISTRICT DOWNTOWN INDEPENDENT DEPARTMENT STORE SALES

THE nation's downtown "independent"[1] department stores, despite a postwar rise in dollar sales, are claiming a declining share of the country's retail markets. This decline of the central city independents reflects, in part, a changing pattern of consumer expenditures among different goods and between goods and services. Consumers have allocated a larger share of their increased postwar incomes to services and to goods generally not handled by the nation's independent department stores. In particular, the rise from 1947 to 1953 in consumer expenditures on apparel and household furniture and appliances—the principal commodities sold by independent department stores—has not kept pace with the increase in either consumer expenditures on goods or disposable income. Instead, a larger proportion of increased consumer purchases in the retail durable and nondurable goods market is now being allocated to automobiles and food.

The national trend of suburbanization has been a second—and perhaps more important—factor contributing to the declining sales position of the downtown independent department stores. The population movement into the suburbs has brought with it new areas of competititon. Large chain department and specialty stores have found fertile ground in the growing suburbs. Also, many independents have opened suburban branches which draw business away from their downtown stores.

Centrally located department stores in the Twelfth District, the primary concern of this article, have from all apparent indications followed the pattern of the country as a whole. Confronted with consumer shifts away from the major commodities they sell and the rising importance of large chain stores, District downtown department stores have generally suffered a decline in their relative sales position.

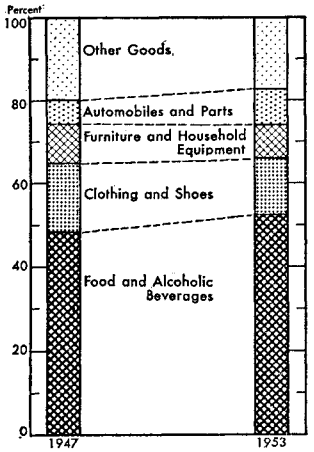
Postwar years witness a change in consumer expenditures

The declining importance of the nation's independent department stores over the postwar years reflects in part a change in consumer spending. As shown in Chart 1, combined expenditures in current dollars on furniture, household appliances, clothing, and shoes—the major items sold by department stores—were a smaller percentage of consumer expenditures on goods in 1953 than in 1947. As in the case of most nondurable goods, consumer expenditures on clothing and shoes are in general not particularly sensitive to changes in disposable income. This has been much the case over the postwar years. From 1947 to 1953, dollar expenditures on clothing and shoes increased by only 7 percent compared with a 46 percent rise in disposable income. In addition, consumers appear to have been no more sensitive to relative price movements than to changing incomes in their apparel goods purchases. Clothing prices over the postwar years rose less than the combined Consumer Price Index and buyers showed little or no inclination to purchase proportionately more of this relatively cheaper commodity. Even though apparel prices rose less than consumer prices generally, the higher dollar outlays on clothing and shoes since 1947 have been primarily a reflection of the increase in prices rather than an increase in physical volume. Thus, the apparel sales picture has been weak in physical as well as in dollar terms.

[1] Independent department stores are that reporting group which does not include retail outlets of the large national department store chains.

CHART 1

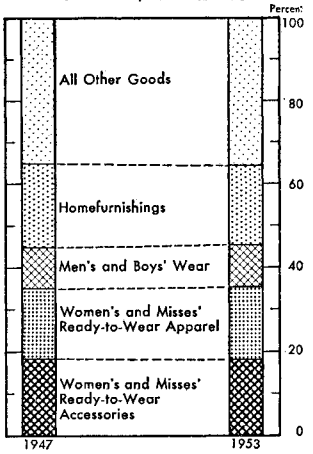
PERCENTAGE DISTRIBUTION OF CONSUMER GOODS EXPENDITURES, UNITED STATES 1947 and 1953



Source: United States Department of Commerce, Office of Business Economics, *Survey of Current Business.*

CHART 2

PERCENTAGE DISTRIBUTION OF INDEPENDENT DEPARTMENT STORE SALES BY MAJOR DEPARTMENTS, UNITED STATES, 1947 and 1953



Source: Board of Governors of the Federal Reserve System, *Department Store Sales and Stocks by Major Departments.*

Similarly, the seven-year rise in consumer expenditures for household furniture and appliances has not kept pace with the increased outlay on all consumer goods. Though buying of home furniture and appliances, like other durable goods, is generally sensitive to changes in income, consumer outlays on these commodities in 1953 were only 15 percent larger than in 1947 compared with a 46 percent rise in disposable income. However, sales of these commodities were unusually high in 1947 and relatively low in 1953. This is largely explained by the fact that household furniture and appliances sales have been marked by "wave" buying over the postwar years. The first wave occurred in the period 1947-49 when consumers were still meeting pent-up wartime demands and another in the late 1950 and early 1951 Korean "scare" buying.

In place of apparel and home furnishings, consumers have allocated a large part of their increased incomes in the postwar period to automobiles and food—commodities generally not handled by department stores. Expenditures for food, generally not very sensitive to changing incomes, have shown striking gains over the postwar years. Owing partly to a more equal distribution of incomes and to a small rise in food prices relative to that for other consumer goods, food consumption from 1947 to 1953 in current dollars rose by about 40 percent, just 6 percent less than the rise in disposable income.

The postwar climb in automobile sales is particularly striking. The rate of increase in consumer expenditures on automobiles—the most income-sensitive commodity in the durable goods category—was more than double the rise in disposable income from 1947 to 1953. Physically, the total number of passenger cars in use in the nation by mid-1954 is expected to reach 44 million units compared to 27.5 million in 1947, a rise of 60 percent.

While home furnishings and apparel sales have declined as a proportion of total consumer goods expenditures over the postwar years, they have remained a fairly constant and large percentage of independent department store sales. As shown in Chart 2, these major departments combined accounted for approximately 65 percent of total independent department store sales in 1953, just about the same as in 1947. Thus, it appears that the kind of commodities handled by the nation's independent department stores is an important factor in explaining their declining importance in the country's retail markets.

Suburbanization gives rise to stronger competitive forces

The movement of the nation's families into suburbs has been directly associated with the rise in the use of automobiles. Between the population census years 1940 and 1950, suburbs showed larger increases than either central cities or countryside communities, accounting for nearly half the total increase—a trend which appears to be continuing.

The independents located in downtown areas have been especially vulnerable to the increased suburbanization. Downtown congestion, scarcity of parking facilities, and near-home shopping conveniences, among other factors, have caused a larger proportion of metropolitan area shoppers to concentrate their buying in suburban shopping centers. Though many downtown independents have extended their operations into suburban branches, the accelerated growth of their strongest competitors—chain department stores—has largely been an outgrowth of this suburban trend.

Downtown independents claim a declining proportion of District retail market

Downtown independent department stores located in the major metropolitan areas of the Twelfth District have apparently experienced the same downward trend in their sales position as those in the country as a whole. Though series are not available on either consumption expenditures or total retail sales for the District, taxable retail sales data for California and Washington serve to reveal some of the basic trends.[1] Except for differences in pattern, downtown independents in the city of Seattle and in the Los Angeles and San Francisco-Oakland metropolitan areas reporting to this bank have experienced the same general decline in their sales relative to total taxable retail sales over the postwar period.

Of the three areas, independent department stores in downtown and Westside Los Angeles[2] have experienced the biggest decline in sales relative to taxable sales from

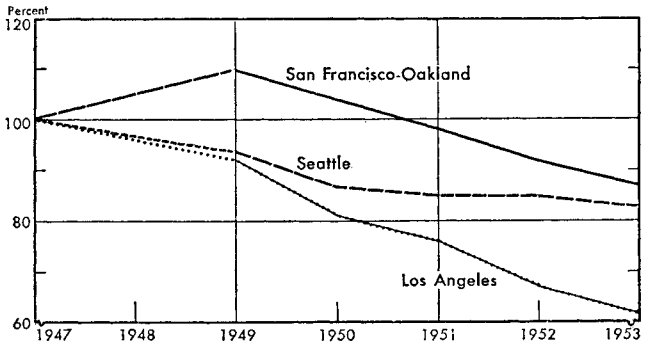
[1] Due to differences in coverage in state sales tax laws and problems inherent in the general method of reporting taxable sales, it is precarious to interpret individual magnitudes. This article only attempts to analyze trends.

[2] During the postwar years, the behavior of Westside independent department stores has been similar to those in the downtown district. Therefore, although not geographically located in the downtown area, sales by independents on the Westside have been combined with sales by independents in the downtown district in order to analyze the trends of these centrally located stores in the Los Angeles retail market.

CHART 3

INDEX OF RATIO OF TOTAL DOWNTOWN INDEPENDENT DEPARTMENT STORE SALES TO TAXABLE SALES FROM ALL RETAIL OUTLETS,[1] SEATTLE CITY, LOS ANGELES AND SAN FRANCISCO-OAKLAND METROPOLITAN AREAS,[2] 1947 to 1953

(1947=100)



[1] The California Board of Equalization first employed the Standard Industrial Classification for retail outlets in 1949. Adjustments were made to the 1947 taxable sales data in order to make them comparable to the actual data for 1949 to 1953. No estimates were made for 1948 for any of the three areas.

[2] The Los Angeles metropolitan area comprises Orange and Los Angeles counties. The San Francisco-Oakland metropolitan area includes San Francisco, Alameda, Contra Costa, Marin, San Mateo, and Solano counties.

Note: Since the actual ratios underlying these indexes are small figures, a change of one point in the ratio results in a relatively large change in the index. For example, if the ratio in the base year is 8 percent, a decline of that ratio to 7 percent represents a drop of 12.5 points in the index number.

Sources: California State Board of Equalization, *Trade Outlets and Taxable Retail Sales in California* and Tax Commission of the State of Washington, *Bimonthly Statistical Report of the Revenue From Excise Taxes.*

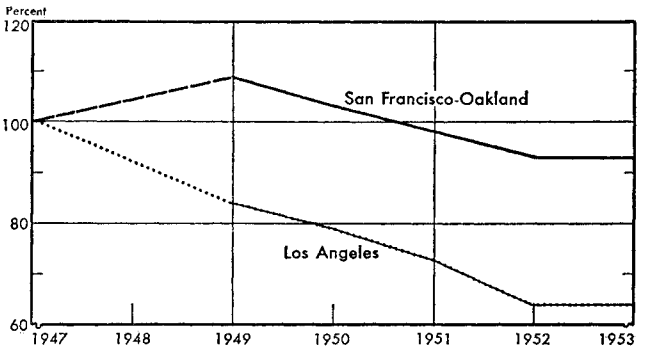
all retail outlets. In fact, it has been more than a relative decline. Independents in these two sections rang up an annual sales figure in 1953 which was some $30 million below 1947. The fall in dollar sales over the seven-year period followed much the same pattern as the trend shown in Chart 3. Independents in both the Westside and downtown sections shared in the decline, with downtown stores accounting for approximately three-fourths of the drop. On the whole, the picture from 1947 to 1953 has been one of decreasing total sales by these centrally located independent department stores and increasing taxable sales from all other retail outlets in the metropolitan area.

In contrast to Los Angeles, independent department stores in Seattle and in the San Francisco-Oakland metropolitan area have experienced a rise in their dollar sales from 1947 to 1953. They have, however, declined in relative importance. Chart 3 illustrates their loss of position resulting from the greater growth in taxable retail sales. Though the decline of Seattle downtown independent department store sales as a ratio of total taxable retail sales has been little more than 1 percent from 1947 to 1953, year-to-year movements have continued downward. The increase from 1947 to 1949 in the ratio of independents' sales to taxable sales from all retail outlets shown in Chart 3 for the San Francisco-Oakland area is due to a low sales figure for independents in 1947. This low sales figure was largely the result of a department store strike during that year in Oakland. Nevertheless, the trend has been down since 1949.

CHART 4

INDEX OF RATIO OF DOWNTOWN INDEPENDENT DEPARTMENT STORE SALES TO TAXABLE SALES OF ALL DEPARTMENT AND DRY GOODS GROUP STORES,[1] LOS ANGELES AND SAN FRANCISCO-OAKLAND METROPOLITAN AREAS, 1947 to 1953

(1947=100)



[1] The California Board of Equalization first employed the Standard Industrial Classification for retail outlets in 1949. Adjustments were made to the 1947 taxable sales data in order to make them comparable to the actual data for 1949 to 1953. No estimates were made for 1948.

Source: California State Board of Equalization, *Trade Outlets and Taxable Retail Sales in California.*

Los Angeles downtown and Westside independents most affected by suburbanization

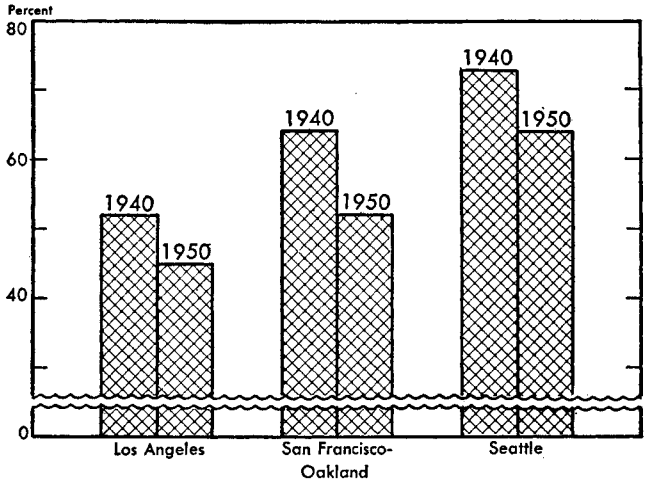
Probably the principal factor explaining the downward trend in District downtown independent department store sales appears to be the increased competition from chain and suburban department stores (including suburban branches of downtown independents) and specialty shops. The declining position of downtown independent department stores relative to chain and suburban located department stores in the major California metropolitan areas is shown in Chart 4. Comparable data for Seattle are lacking. However, reports to this bank indicate a somewhat similar, if less marked, downward trend in the proportion of downtown independents' sales to sales by all department stores has also occurred in that city since 1947. These sources of competition over the postwar years have largely been the result of the trend toward suburbanization in the major metropolitan areas of the District. Because of their central or near-central city locations, downtown (and Westside) Los Angeles independent department stores have been especially vulnerable to population movements into suburban areas.

Independents in the Los Angeles metropolitan area have been especially affected by competition resulting from this trend. The effect of suburbanization between the census years 1940 and 1950 on central city concentration is shown in Chart 5. A more detailed study by "major economic areas" of Los Angeles County[1] emphasizes the potential effect of suburbanization upon independents reporting to this bank. From 1940 to 1954, the proportion of total county population residing in the centrally located major economic areas of Los Angeles showed a marked decline.

[1] Security-First National Bank of Los Angeles, Monthly Summary "Business Conditions in Southern California," February 1954.

CHART 5

PERCENTAGE OF METROPOLITAN AREA POPULATION LIVING IN CENTRAL CITIES
1940 and 1950



Source: United States Department of Commerce, Bureau of the Census, *Census of Population, 1950,* Vol. I.

As shown in Chart 5, this movement has been just as pronounced in the other two metropolitan areas discussed in this article. Over the decade, less than 30 percent of the population increase in the San Francisco-Oakland metropolitan area occurred in the cities of San Francisco and Oakland combined. Seattle city claimed a larger percentage of the population increase in its metropolitan area from 1940 to 1950 than San Francisco and Oakland, but these figures are somewhat deceptive in that they are not adjusted to take account of annexations by Seattle. The drop in the proportion of central city to metropolitan area populations in all three major metropolitan areas in the District points to increased concentration of shoppers into suburban and countryside communities and thereby to a larger percentage of the consumers' incomes probably being spent in suburban shopping centers.

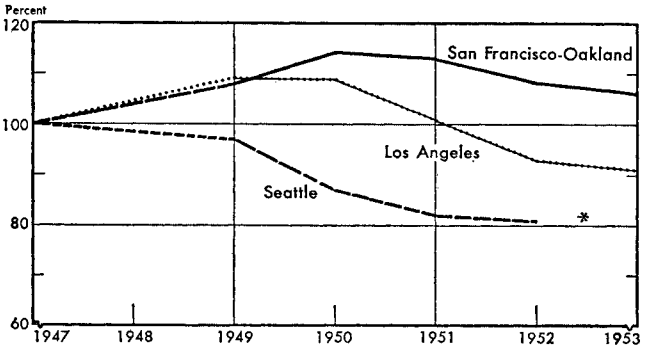
Specialty shops claim a larger fraction of apparel and home furnishing sales in Seattle

Specialty shops located in suburban shopping centers have also been a major competitive force growing out of suburbanization. Though not the most important source of competition, they have nonetheless been a contributing factor to the declining importance of downtown independent department stores in some areas. To analyze the effect of these specialized stores, sales by major departments of the independents have been compared with sales by specialty shops selling similar commodities.

The competitive inroads of these specialty shops have been most apparent in Seattle. As illustrated in Charts 6 and 7, sales by major departments of Seattle independents relative to sales by specialty group stores, with which they directly compete, indicate a markedly downward movement since 1947 for the department stores. The greatest drop occurred in the apparel-accessories departments. A downward year-to-year movement is evident with the largest decline occurring from 1949 to 1951. The homefurnishing departments have also continued to lose ground to furniture and appliance stores since 1947.

CHART 6

INDEX OF RATIO OF APPAREL-ACCESSORIES DEPARTMENTAL SALES BY DOWNTOWN INDEPENDENT DEPARTMENT STORES TO TAXABLE SALES OF APPAREL GROUP STORES[1]
SEATTLE CITY, LOS ANGELES AND SAN FRANCISCO-OAKLAND METROPOLITAN AREAS, 1947 to 1953
(1947=100)



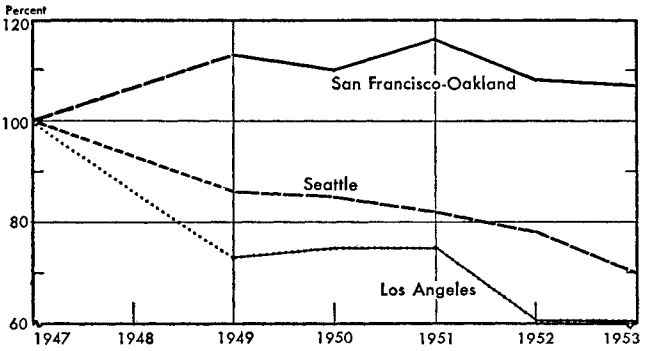
[1] The California Board of Equalization first employed the Standard Industrial Classification for retail outlets in 1949. Adjustments were made to the 1947 taxable sales data in order to make them comparable to the actual data for 1949 to 1953. No estimates were made for 1948 for any of the three areas.
*Due to discrepancies between available series, 1953 data for Seattle have been omitted.

Sources: California State Board of Equalization, *Trade Outlets and Taxable Retail Sales in California* and Tax Commission of the State of Washington, *Bimonthly Statistical Report of the Revenue From Excise Taxes.*

Specialty stores in the Los Angeles metropolitan area have also made inroads on the downtown independents. As shown in Chart 6, apparel-accessories sales relative to apparel specialty shop sales began to decline after 1949, and homefurnishing department sales of the Los

CHART 7

INDEX OF RATIO OF HOMEFURNISHINGS DEPARTMENTAL SALES BY DOWNTOWN INDEPENDENT DEPARTMENT STORES TO TAXABLE SALES OF HOUSEHOLD FURNITURE PLUS HOUSEHOLD APPLIANCE GROUPS STORES[1]
SEATTLE CITY, LOS ANGELES AND SAN FRANCISCO-OAKLAND METROPOLITAN AREAS, 1947 to 1953
(1947=100)



[1] The California Board of Equalization first employed the Standard Industrial Classification for retail outlets in 1949. Adjustments were made to the 1947 taxable sales data in order to make them comparable to the actual data for 1949 to 1953. No estimates were made for 1948 for any of the three areas.
Note: Since the actual ratios underlying these indexes are small figures, a change of one point in the ratio results in a relatively large change in the index. For example, if the ratio in the base year is 8 percent, a decline of that ratio to 7 percent represents a drop of 12.5 points in the index number.

Sources: California State Board of Equalization, *Trade Outlets and Taxable Retail Sales in California* and Tax Commission of the State of Washington, *Bimonthly Statistical Report of the Revenue From Excise Taxes.*

Angeles downtown and Westside independents have declined relative to competing specialty shop sales since 1947.

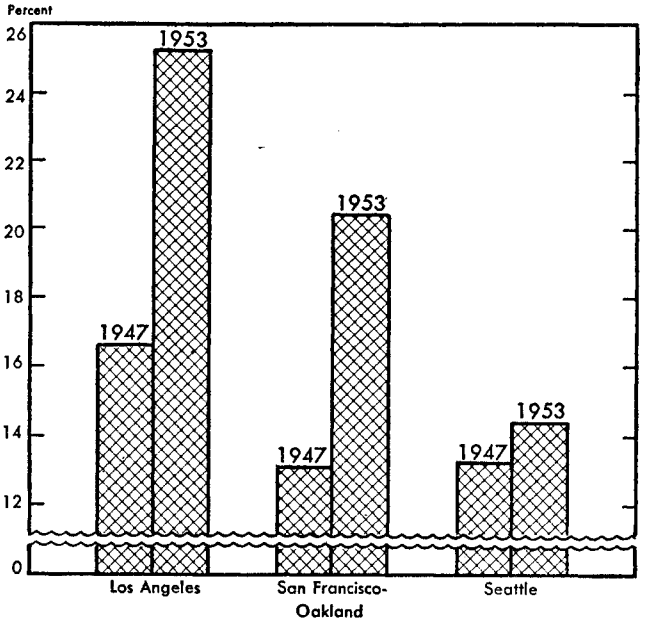
In contrast to Seattle and Los Angeles, apparel and accessory departmental sales of San Francisco and Oakland downtown independents tended to rise during most of the postwar period relative to sales by apparel stores. Though Chart 6 indicates a decline since 1951, prior to that year the postwar trend had been upward implying a stronger competitive position by independent department stores relative to apparel stores in that metropolitan area. Homefurnishing departmental sales showed neither a significant upward nor downward trend but rather remained constant relative to furniture and appliance stores' taxable sales. Until 1951, independent department stores in the San Francisco-Oakland area showed postwar gains over such specialty shops but have since shown a decline.

Postwar changes in consumer expenditures have an adverse effect on District independents' sales position

The postwar change in consumer demands in the District appeared to parallel the country as a whole. As shown in Chart 8, automotive group store sales in the three largest metropolitan areas of the District accounted for a greater proportion of total taxable retail sales in 1953 than 1947. Taxable food sales in Seattle were also a larger percentage of total taxable retail sales, increasing approximately 4 percentage points from 1947 to 1953. Because foods are not subject to tax in California, there exists no comparable figure to indicate their changed importance in the Los Angeles and San Francisco-Oakland areas. However, in view of the size and growth of these regional markets and the rise in Seattle food sales, it seems probable that these two major metropolitan areas experienced an increase in the proportion of food to total consumer expenditures similar to that in the country as a whole.

CHART 8

PERCENTAGE OF TAXABLE SALES OF AUTOMOTIVE GROUP STORES TO TAXABLE SALES FROM ALL RETAIL OUTLETS[1] SEATTLE CITY, LOS ANGELES AND SAN FRANCISCO-OAKLAND METROPOLITAN AREAS, 1947 and 1953



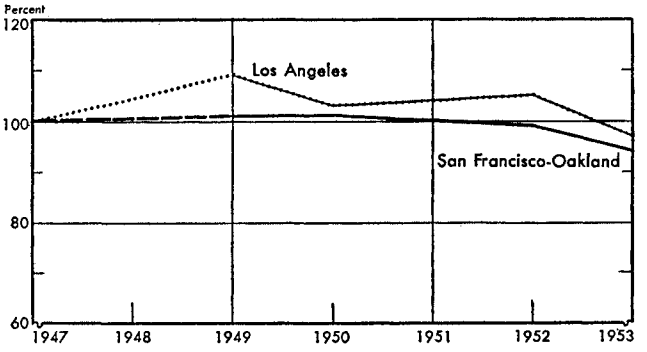
[1] The California Board of Equalization first employed the Standard Industrial Classification for retail outlets in 1949. Adjustments were made to the 1947 taxable sales data in order to make them comparable to the actual data for 1953.

Sources: California State Board of Equalization, *Trade Outlets and Taxable Retail Sales in California* and Tax Commission of the State of Washington, *Bimonthly Statistical Report of the Revenue From Excise Taxes.*

CHART 9

INDEX OF RATIO OF TAXABLE SALES OF DEPARTMENT AND DRY GOODS GROUP STORES TO TAXABLE SALES FROM ALL RETAIL OUTLETS,[1] LOS ANGELES AND SAN FRANCISCO-OAKLAND METROPOLITAN AREAS, 1947 to 1953

(1947=100)



[1] The California Board of Equalization first employed the Standard Industrial Classification for retail outlets in 1949. Adjustments were made to the 1947 taxable sales data in order to make them comparable to the actual data for 1949 to 1953. No estimates were made for 1948.

Source: California State Board of Equalization, *Trade Outlets and Taxable Retail Sales in California.*

Further evidence of the shift in consumer spending in the two California metropolitan areas is apparent from Chart 9. The decline in sales of all department and dry goods stores relative to taxable sales from all retail outlets shown in that chart suggests that the shift in consumer spending has contributed to a decline in importance of all department stores in the Los Angeles and San Francisco-Oakland areas. Competition from apparel, appliance, and furniture specialty stores could account for part of the downward movement pictured in Chart 9. However, this competition has been mild in the Los Angeles area and almost negligible during most of the postwar years in the San Francisco-Oakland area. Therefore, most of the decline in the ratio of all department and dry goods store taxable sales to total taxable sales reflects the shift in spending. The effect of this change in spending on independents has probably been more marked than on chains. The chains carry a higher proportion of durable goods which for the entire period 1947-1953 have been less adversely affected by shifts in consumer buying than have the apparel lines. Thus, downtown independents in the major California metropolitan areas have apparently suffered from the shift in spending as well as from suburbanization and chain department store competition.

Summary and outlook

Of the factors considered in this article, it appears that the competitive inroad made by chain and suburban-located department stores has perhaps been the most important force contributing to the declining sales position of downtown independents in Seattle, San Francisco-Oakland, and Los Angeles. Other factors showed varied effects in these three areas. Specialty shops seem to have made inroads on downtown independents in Seattle and Los Angeles but not in San Francisco-Oakland. The shift in consumer expenditures among different goods and as between goods and services has apparently also contributed to the declining trend in independent department store sales relative to taxable sales from all retail outlets in the major metropolitan areas of the District.

The outlook, as always, is much less clear than the picture of the recent past. The handling of a large proportion of commodities whose sales are not particularly sensitive to income changes also has something of a brighter side. Just as increased consumer expenditures on apparel did not keep pace with rising incomes, their sales can generally be expected not to decrease as rapidly as incomes decline. Because of this factor, independent department stores may, on the whole, experience a comparative degree of stability in their sales during periods of fluctuating business activity.

Downtown independents have and are moving to meet the increased competition arising from suburbanization. The above analysis has been directed at centrally located independents and therefore does not take account of any increased sales arising from their opening suburban branches during the postwar period. In fact, part of the competitive inroads on downtown (and Westside) Los Angeles independents shown in Chart 4 comes from these independent suburban department stores. The continued opening of suburban stores by downtown independents suggests that they are "recapturing" a large segment of the metropolitan retail market.

THE CHANGING PER ACRE VALUE OF FARM REAL ESTATE

DECLINING prices on a wide range of farm products and a dearth of buyer interest, at current asking prices, in the nation's farm land are being reflected in falling farm land values. In the year ending March 1, 1954 average per acre values of farm land fell 6 percent. In the Twelfth District, farm real estate prices on March 1, 1954 were down 7.1 percent from a year earlier and 4.1 percent from July 1, 1953. In addition, the volume of voluntary farm land transfers in the United States during the summer and fall of 1953 was about 10 percent under that for 1952 and at the lowest level in eleven years. In some District states the decline in rate of sales was as much as 12 percent. The degree of decline in market prices of farm land is not so significant as the fact that they have turned down after a long upward climb and that according to present indications a downward readjustment in land values is continuing.

Farm land values started to fall toward the end of 1952 and the rate of decline was fairly sharp until November 1953, but since then the rate has slowed perceptibly. The greatest reductions in land values during the year ending last November appear to have occurred in the Pacific Coast region of the United States and in the Mountain states, where values dropped about 8 and 10 percent, respectively. Utah and Colorado were particularly affected, with reductions approximating 12 percent. However, between July and November, 1953 Arizona suffered the most severe decline in farm land prices of any state in the nation. The drop in that state was about 7 percent compared with declines of 5 to 6 percent in the area from Kentucky and Tennessee westward to Utah. It is in this general region that farm incomes and crop prospects have been most affected by lower cattle and cotton prices or unfavorable weather.

It is not possible to predict the extent or duration of the current readjustment in prices of District farm land. Much depends upon the future course of commodity prices and incomes. However, some strengthening in prices of farm commodities since last fall helped to slow the rate of decline in land values that was underway from July to November, 1953. But with the farm real estate market remaining inactive and continued downward adjustments during the past year in farm commodity prices and in farmer incomes, some additional easing down of District land values appears in prospect.

Even though recent developments regarding farm commodity prices have tended to slow the rate of decline of farm real estate prices, they are not likely to reverse the downward trend in land values which began in late 1952. Under the pressure of the large 1954 output currently indicated and record carry-overs of several major farm commodities, prices of farm commodities are likely to weaken in late summer and fall.

Farm production costs are lower this year but it is not expected that they can be reduced enough to fully offset an expected decline in gross farm income.[1] Consequently, realized incomes of farmers in 1954 may drop as much as 5 percent from 1953. Under these conditions, farm land values could be expected to show a further small decline by next fall.

In view of the apparent weakness in the farm real estate situation and the uncertainty with which buyers and sellers are faced, a more detailed analysis appears in order. The remainder of this article will be devoted to (1) a historical review of District real estate developments, (2) a closer examination of the forces which influence farm land values, and (3) an investigation of changes in District farm real estate prices as they have been related to changes in prices of farm commodities,

[1] United States Department of Agriculture, Agricultural Marketing Service, *The Farm Income Situation*, April 23, 1954.

cash receipts from farm marketings, net farm incomes, and other factors.

The Historical Pattern of Changes in Farm Real Estate Values

District farm land values, as may be observed in Chart 1, appear to have been more stable over time than average farm land values of the United States as a whole. In periods of rising land prices such as 1912 to 1920, 1940 to 1948, and 1950 to 1952, District land values have risen proportionately less than corresponding values for the United States. The period 1940 to 1946 was a marked exception to this rule when District land values rose about 98 percent compared to 70 percent for the nation. However, between 1946 and 1948 District land prices changed very little whereas average prices of farm land in the United States continued to rise very rapidly. By 1952 average farm land prices had risen 156 percent above the 1940 level in the nation compared with 94 percent in the Twelfth District. On the other hand, during periods of generally falling farm land values, the reductions nationally have greatly exceeded corresponding reductions in the District.

The broad outlines of change in farm real estate prices, however, have been roughly similar not only for the United States and the District but also for each of the District states.[1] The principal reason for these similarities is the dominant influence of inflation and deflation or changes in the level of general business activity. Therefore, in any study of land values the effects of inflation and deflation must be accorded a primary role.

[1] Per acre land value data published by the United States Department of Agriculture on a state basis are subject to certain limitations. They are not highly reliable guides to conditions in local areas within states—particularly in the western areas of the United States where climate, types of farming areas, topography, and size and types of farms vary greatly. The state averages usually are good indicators of changes in directional movement of farm land values. They also tend to give fairly reliable indications of the magnitude of change on a state or regional basis. Recently considerable interest has been expressed by various individuals and organizations in District states in developing better and more detailed farm land value data.

Although the outstanding feature of change among District states in regard to market prices of land has been similarity, significant variations may be observed. Among Pacific Coast states, real estate values in Oregon and Washington fluctuated in close sympathy with one another throughout the period 1912 to 1952 (Chart 2). California farm land values, however, have risen since the early part of the century relative to market prices of farm land in the Pacific Northwest. In 1952, California farm real estate prices were about 25 percent higher than in the period 1919-20 whereas Washington and Oregon farm land prices were about the same in the two periods.

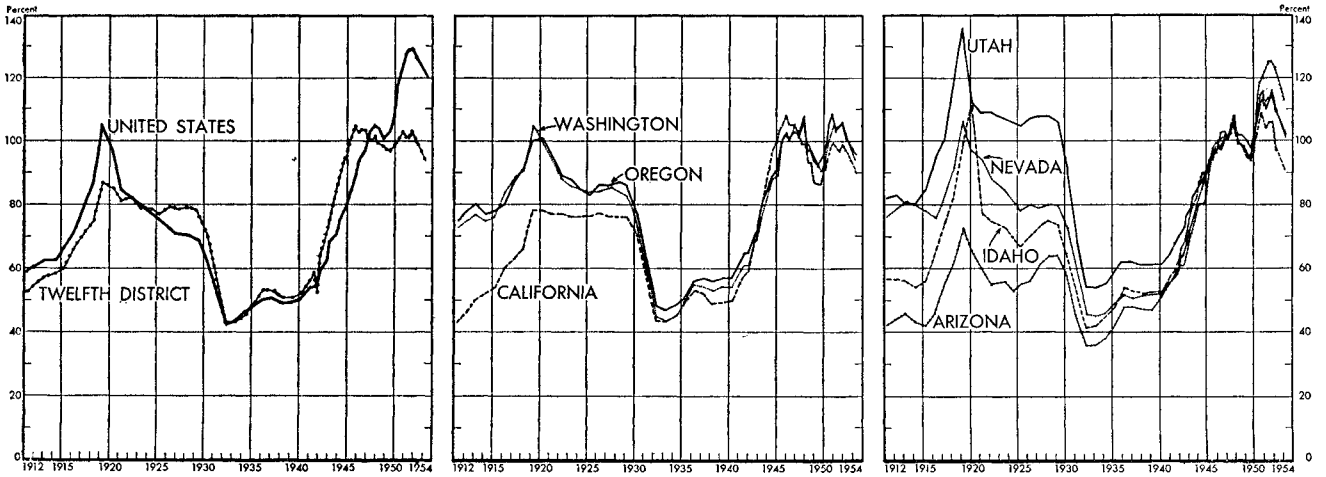
Farm land values of California exhibit the widest range of any state in the nation. Apparent reasons for this lie in the extreme variations in soil, climate, and intensity of land use in California. Still another important factor is the strong upward pressure on prices of farm land exerted by expanding industrial and residential areas. For example, in southern California, dealers have reported numerous sales of producing orange groves for subdivision purposes at from $2,500 to $3,500 per acre.[1]

In Chart 3 it may be observed that in the period 1915 to 1929, farm real estate prices in Utah were at very high levels. Principal reasons for this may have been the relatively early and rapid development of some areas in Utah agriculturally and industrially. Irrigation on a large scale was first introduced in Utah, and the population per cultivated acre of land in the early part of the century was greater there than in most other western states. However, between 1929 and 1933 farm land prices fell more than 50 percent in Utah compared with 45 percent for the District as a whole. In the period 1940 to 1948 the farm land values in Utah rose much less than in each of the other District states. The result is that whereas

[1] United States Department of Agriculture, Agricultural Marketing Service, *Current Developments in the Farm Real Estate Situation*, March 1954, p. 8.

CHARTS 1, 2, AND 3

INDEXES OF FARM REAL ESTATE VALUES PER ACRE, 1912-1954
(1947-49=100)



Sources: United States Department of Agriculture, Agricultural Research Service, *Current Development in Farm Real Estate Market* and the Board of Governors of the Federal Reserve System.

District values of farm real estate in 1952 were about 15 percent above those of 1920, farm land prices in Utah were about 15 percent lower in the more recent period.

Arizona has experienced the greatest relative increase in land values of any District state. Several factors have contributed to this: cotton was introduced into Arizona on a large scale fairly late in the period under consideration; the amount of Arizona land in farms in 1950 was about six times greater than in 1920 compared to a doubling for the District as a whole; and a very high proportion of Arizona's harvested crop land has been placed under irrigation. In 1952 Arizona's per acre farm land values were about 71 percent greater than in 1920.

A new series of index numbers of average value per acre of irrigated, dry farming, and grazing lands in the eleven western states provide a measure of relative changes in market prices of these three major types of land. A substantially greater increase has occurred since before World War II, according to the new series, in the value of dry farming and grazing lands than for irrigated land. Compared with the 1935-1939 averages, 1952 values of grazing land and of dry farming land in the Mountain region had increased 198 percent and 203 percent, respectively. However, irrigated land was up only 129 percent. In the Pacific Coast states, peaks for irrigated and dry farming land were reached in 1947 and 1948. By 1948 irrigated lands in these states had increased only 98 percent in value from the 1935-39 average compared with 124 percent for dry farming land and 122 percent for grazing lands. From 1948 through March 1952 per acre values of all three types of land continued to increase in the Mountain states. In the Pacific Coast region values of grazing land also increased during this four-year period but prices of crop land, both dry and irrigated, fell slightly.

Since 1952 reductions have occurred in all classes of farm land in the West. Under the pressure of falling cattle prices, values of grazing land have dropped 15 percent in the last two years. Reductions in the same period for the other classes of land are 9 percent for dry farm and only 2 percent for irrigated. However, values of grazing lands have not declined sufficiently that the relationships which existed between values of grass and crop land which existed in the period 1947-49 have been re-established.

Factors Which Influence Land Values

That farm land, like other more standardized commodities, is an economic good with its price level determined by forces of supply and demand is a fact that is sometimes not adequately recognized. However, as in the case of any commodity or service which commands a price, the value of farm land is a function of its supply relative to the demand for it—a demand which arises because land is a necessary factor to the satisfaction of human food and fiber wants. At any particular time, therefore, the price of farm land reflects a certain degree of scarcity, that is, a particular set of interactions between supply and demand. In principle, farm land will become relatively less scarce and its price will decline whenever (1) increases occur in the supply of farm land in the absence of similar increases in demand for it, or when (2) reductions in the demand for farm land occur without corresponding reductions in supply of such land. The reverse of these condtions would tend to result in an increase in the value and scarcity of farm land. In short, a study of supply-demand characteristics of land, it appears, should lead to an understanding of land price behavior. However, agricultural land in its function as an agent in the process of food and fiber production has a number of characteristics which render it unique. These characteristics, necessarily, tend to shift the emphasis in any study of land prices from over-all supply and demand considerations to a few key factors which influence farm land prices. Brief consideration of the conditions of supply and demand for land will at once point up the reasons for this shift.

The supply of land

In the short period the physical supply of land is, of course, fixed. Even in the long run, supplies of particular classes of land are subject to some definite limitations. The quantitative supply of farm land is limited by: the ultimate physical limits of temperature which will permit growth of plant and animal life; adequate moisture to foster growth, accessible location, and topography which will permit cultivation; the availability of soils containing required minerals necessary for sustenance and maturing of plant life; and access to markets. Substitution of one tract of land for another either for the same or different uses is not entirely possible because land is immobile and generally lacks homogeneity.

Modern science and the application of capital and labor, however, have removed many of these limitations or made them less restrictive. The result is that the economic supply of farm land in the United States has increased much more than has the physical supply of such land. The physical supply of farm land has increased through reclamation and through extending the margin of cultivation. The economic supply, on the other hand, has been increased by a variety of means including improving quality and texture of soils, greater use of fertilizer, and introduction of higher yielding plant varieties. Farm land, in effect, has been "produced" by various means but, in the process, costs of production have been incurred.

The demand for land

The demand for farm land other than for speculative purposes is a "derived demand" in that it arises from consumer demand for food and fiber. In the long run, then, the size of the population and its rate of growth, the standard of living together with levels of total per capita consumption of food and fiber, and the level and changes in the import-export balance of farm products

indirectly determine the demand for farm land. The physical aspects of land, in addition to the state of technology, and the form of capital invested largely determine and limit, at any time, the range of choice as to what commodities will be produced. Still, it is the consumers' pattern of choice among farm products as expressed in farm prices of commodities grown on the land and in net returns to farmers that ultimately determine specific uses of farm land. The demand for farm land depends, therefore, upon buyers' anticipations of how all these factors will affect the income from land.

Supply, demand, and valuation

With some of the peculiar characteristics of demand and supply for farm land thus set forth, two generalizations appear. It seems clear that increases in (1) the population, (2) per capita consumption of food and fiber, and (3) demand from abroad for farm products will tend to increase the relative scarcity and value of farm land. On the other hand, (1) improvements in technology leading to better yields, (2) improvements in the basic quality or productivity of farm land, (3) increases in the physical supply of arable land, and (4) imports of food and fiber tend to reduce the relative scarcity and value of farm land. In either the short or long run, these factors all find their expression in the structure of prices for farm products, in gross and net income from farming, and, ultimately, in the price of land. Thus, it is the ability of land to produce income that is of major concern to owners as well as to buyers of farms. It is, however, anticipated future prices and incomes which are of primary concern to both parties rather than current or past prices and incomes. This is true even though present or recent past conditions often play a major role in determining anticipations of future price and income conditions. Thus, individual judgment plays a very large part in valuing land because the future is always uncertain, because it is impossible to standardize different units of land, and because the real estate market in many areas is disorganized and local.

With uncertainty emerging as a permanent and highly important element in the land market, prediction of land values and of associated factors such as farm commodity prices, gross incomes, and net incomes becomes extremely difficult. This is particularly true when alternate periods of inflation and deflation in the general economy occur. Nevertheless, in most of the practical valuation procedures used in appraising farm land, attempts are made to provide proximate values of future prices and net incomes. In these procedures it is net farm income which is of critical importance for it is the net return to land in perpetuity that is actually transferred in the sale of land. Nevertheless, neither gross nor net farm income is entirely satisfactory for analyzing changes in farm land values as both gross and net farm income include returns to operating capital and to management in addition to returns to land alone. Net rents paid for the use of rented lands more nearly approximate what is needed to understand trends in land values. However, to date there is a dearth of data with respect to rentals, income data is relatively scarce, and statistics of land values are neither highly accurate nor sufficiently detailed. The result is that, working with the data available, land economists have had to confine their analyses to such measurable variables as gross income, net income, farm prices, and availability of capital.

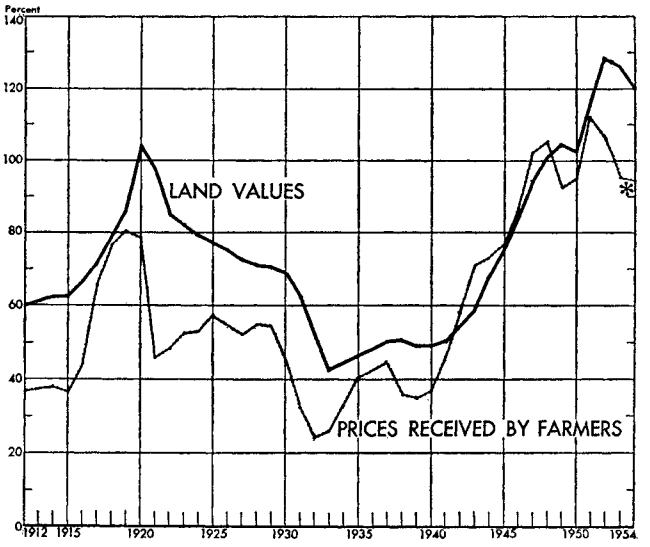
Relationships Between Changes in Per Acre Land Values and Changes in Farm Commodity Prices and Incomes

Three outstanding features appear in comparing per acre farm land value changes in the past four decades with changes in other related factors such as farm commodity prices and farm incomes. These are (1) the remarkable comparative stability of farm land prices, (2) the tendency for market prices of land to lag behind changes in farm commodity prices and income, and (3) the markedly changed structural relationship between per acre farm land values, on the one hand, and farm commodity prices or farm incomes on the other. These features all may be related to one another. Also, they are not particularly surprising since farm land values tend to reflect, rather than cause, price and income changes in agriculture and the general economy and since expected values of prices and incomes for the relatively distant future play an important role in determining land values. However, in order to illustrate these tendencies adequately a more detailed discussion of the period 1919 to date is necessary. This is, perhaps, accomplished most effectively by breaking the period into segments.

CHART 4

ANNUAL INDEX OF PRICES RECEIVED BY FARMERS AND INDEX OF LAND VALUES ON MARCH 1— UNITED STATES, 1912-1954

(1947-49=100)



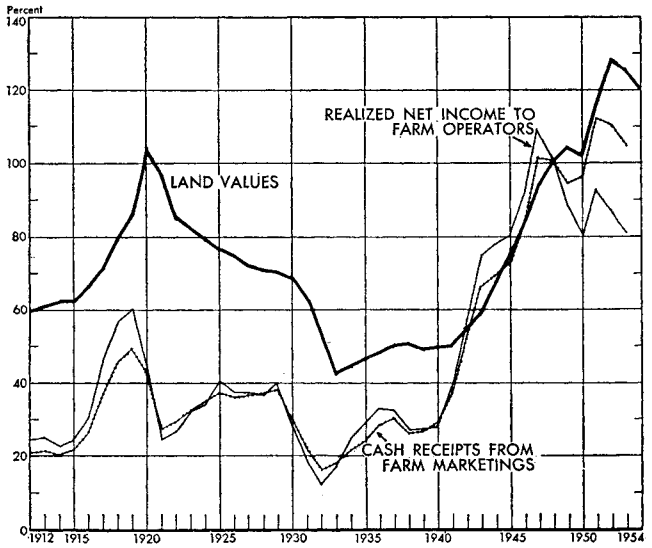
*1954 price index for March.

Sources: United States Department of Agriculture, Agricultural Marketing Service, *Agricultural Prices* and Agricultural Research Service, *Current Development in Farm Real Estate Market.*

CHART 5

INDEXES OF LAND VALUES, CASH RECEIPTS FROM FARM MARKETINGS, AND REALIZED NET INCOME FROM FARM OPERATORS—UNITED STATES, 1912-1954

(1947-49=100)



Sources: United States Department of Agriculture, *Agricultural Statistics*, 1952-53 and Agricultural Research Service, *Current Development in Farm Real Estate Market*.

1919-1933

In 1919 prices of farm products as well as of gross and net incomes from farming were at a postwar peak and farm land values were at very high levels. Farm commodity prices and farm incomes, however, began to fall sharply in 1920, whereas farm land prices continued to rise very rapidly. The following year prices of farm products and net farm income fell even more rapidly because production expenses of farmers remained at high levels or dropped only slightly. At the same time, the combined effects of deflation and unfavorable price and income conditions of agriculture caused farm land values to begin dropping, but they fell at a slower rate than either farm commodity prices or farm incomes. As a result per acre farm land values during the period 1920-21 were at higher levels compared to net and gross incomes or prices than in any period since that time.

With gradually improving conditions in agriculture between 1921 and 1929, farm land values of the United States were affected, but they continued to fall. In 1922 the precipitous fall in market prices of land was arrested. Thereafter, they fell at a more gentle rate until 1930 when they again assumed a rapid rate of fall in response to the downward plunge in farm commodity prices and incomes which had begun the year before.

In the periods 1920-1922 and 1929-1933 the declines in market prices of farm land were proportionately less than the corresponding reduction in prices of farm products, gross farm incomes, or net farm incomes. However, since per acre farm land values continued to fall in the middle twenties while farm prices and farm incomes were rising, United States land values in 1933

TABLE 1

CHANGES IN PER ACRE FARM LAND VALUES, FARM COMMODITY PRICES, AND FARM INCOMES FOR SELECTED PERIODS TWELFTH DISTRICT AND UNITED STATES

	Percent change		Change in indexes (1947-49=100)	
1919 and 1920 to 1921 and 1922	Twelfth District	United States	Twelfth District	United States
Land values (1920-1922)[1]	— 5.8	—18.7	— 5.0	—19.6
Farm commodity prices (1919-1921)[2]	....	—43.1	....	—34.8
Cash farm receipts (1919-1921)[3]	....	—44.4	....	—22.1
Net realized farm income (1919-1921)[4]	....	—60.1	....	—36.6
1928 and 1929 to 1932 and 1933				
Land values (1929-1933)	—44.7	—39.7	—35.4	—38.1
Farm commodity prices (1928-1932)	....	—56.4	....	—32.1
Cash farm receipts (1928-1932)	—51.3	—56.8	—18.2	—21.3
Net realized income (1928-1932)	....	—66.6	....	—24.8
1919 and 1920 to 1932 and 1933				
Land values (1920-1933)	—49.5	—59.3	—42.9	—62.2
Farm commodity prices (1919-1932)	....	—70.2	....	—56.7
Cash farm receipts (1919-1932)	....	—67.5	....	—33.6
Net realized income (1919-1932)	....	—79.6	....	—48.6

[1] Land values used are for March 1 of each year.
[2] Weighted average of prices received by farmers.
[3] Total cash receipts from farm marketings.
[4] Net realized income to farm operators as estimated by the United States Department of Agriculture.

Sources: United States Department of Agriculture, Agricultural Marketing Service, *Agricultural Prices;* Agricultural Research Service, *Current Developments in Farm Real Estate Market;* and *Agricultural Statistics*, 1952-53.

were down 62 index points from 1920 while for the period 1919-1932 United States farm prices were down 57 points.[1] At the same time, United States cash farm receipts were down 34 points and average net realized incomes of farm operators were off 49 index points from the high levels of 1919 (Charts 4 and 5 and Table 1).

During the period 1929 to 1933 District farm land values fell 45 percent compared to a 40 percent drop in farm land prices for the nation as a whole. However, since District farm land prices, in contrast to national average values of farm land, leveled off about 1925 and increased to 1929, the decline in market prices of land for the entire period 1920-1933 was much less for the District than for the United States. During the middle twenties District per acre farm land values, apparently, were more sensitive to changes in farm prices and incomes than were average land values of the nation as a whole.

1933-1940

The low point of farm prices, cash receipts to farm operators, and net realized farm incomes occurred in 1932, whereas the low point for per acre land values, on both a District and a national basis, occurred in 1933. In the succeeding period to 1940 all of the indices, including farm land values, commodity prices, and farm incomes rose, but the rates of increase among the indices differed considerably (Table 2).

During the early part of this period farmers became forcibly impressed with the extreme instability of farm commodity prices and incomes, particularly net farm incomes. Many had learned that current prices of farm commodities may not be good indicators of the long time earning ability of land. They had learned also that since changes in production expenses lag behind farm com-

[1] Indexes of per acre farm land values, farm commodity prices, and farm incomes referred to in this article all are based on the period 1947-1949=100.

TABLE 2
CHANGES IN FARM LAND VALUES, FARM COMMODITY PRICES, AND FARM INCOMES FOR THE PERIODS 1932 OR 1933 TO 1939 OR 1940
TWELFTH DISTRICT AND UNITED STATES

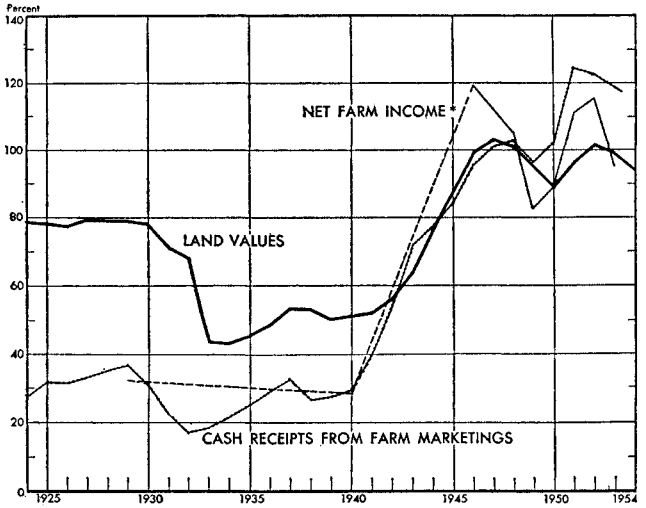
	Percent change		Change in indexes (1947-49=100)	
	Twelfth District	United States	Twelfth District	United States
Land values (1933-1940)[1]	+16.9	+ 16.9	+ 7.4	+ 7.2
Farm commodity prices (1932-1939)[2]	....	+ 46.1	....	+11.1
Cash farm receipts (1932-1939)[3]	+60.7	+ 64.8	+10.5	+10.5
Net realized income (1932-1939)[4]	....	+124.2	....	+15.4

[1] Land values used are for March 1 of years indicated.
[2] Weighted average of prices received by farmers.
[3] Total cash receipts from farm marketings.
[4] Net realized income to farm operators as estimated by the United States Department of Agriculture.
Sources: See Table 1.

modity prices and cash returns their net incomes fluctuated widely as the economy passed from prosperity to depression and back to prosperity again. Therefore, current net realized incomes of farm operators were particularly deceiving when used as a guide in buying or selling farm land. Consequently, the depression experiences of farmers appear to have had a marked influence upon buyers and sellers of farm real estate in the period 1933-1940 and during World War II. Farm land values increased very little until 1941 when it became clear that the demands upon agriculture resulting from all-out war would be very great.

The two depression periods 1920-1921 and 1929-1933 illustrated the tendency of farm commodity prices and farm incomes, under conditions of general deflation, to begin falling sooner and to fall further than per acre values of farm land. The period 1933-1940 illustrates the tendency of farm land values to lag behind farm commodity prices and incomes when all of these are rising (Charts 4, 5, and 6).

CHART 6
INDEXES OF LAND VALUES, CASH RECEIPTS FROM FARM MARKETINGS, AND NET FARM INCOME—TWELFTH DISTRICT, 1924-1954
(1947-49=100)



*Broken line indicates data estimated from statistics supplied by the United States Department of Commerce.
Sources: United States Department of Agriculture, *Agricultural Statistics*, 1952-53 and Agricultural Research Service, *Current Development in Farm Real Estate Market* and United States Department of Commerce.

1940 to 1946—the World War II period

In 1940 prices of farm products and gross incomes from farming began to rise very rapidly and net realized incomes of farm operators began to shoot upward at the phenomenal rate of nearly 40 percent per year. A rapid sympathetic rise in per acre farm land values was inevitable, but in the first years of the period commodity prices and farm incomes rose so much faster than per acre land values that pre-World War II or World War I relationships between farm land values and the other factors have never been re-established. One reason why the World War I relationship between commodity prices and land values was not repeated during World War II was that highly speculative activity, with many purchasers in the market for the specific purpose of profit by resale, was largely lacking in World War II. During the first World War, the total farm mortgage debt increased; during the second it decreased. Total farm mortgage debt and interest carrying charges were lower in 1946 than in 1920. Furthermore, the smaller total debt in 1946 rested on a greater number of farms—which means that the debt load per farm was lower.

A publication of the North Central Regional Land Tenure Committee indicates that several phenomena stand out as activating the land market in the World War II period. Likewise, several restraints are obvious, without which the per acre land value changes of World War II may have been immensely greater. The more important of these are listed as follows:

A. Forces Stimulating the Land Market

(1) The increase in agricultural commodity prices, relatively greater than the increase in production costs, resulting in significantly higher net agricultural incomes;
(2) A series of extremely favorable years of weather, resulting in larger than average crop yields;
(3) An increasing fund of accumulated capital in the hands of farmers and nonfarmers, available for investment in land;
(4) The prospect of greater return from investments in land and in farming than from nonagricultural investments;
(5) The Federal agricultural programs, including price support, encouraging increased agricultural production and income;
(6) Credit facilities, private and public, sufficient to finance purchase of land;
(7) The presence in the market of nonfarmer purchasers and unwilling owners.

B. Forces Restraining the Land Market

(1) The memory of "last time" and the repercussions following the boom of World War I, abetted by the educational activities of the United States Department of Agriculture, the Extension Services and Experiment Stations of the Colleges of Agriculture;
(2) Shortages of labor and of farm equipment to handle expanded acreages;
(3) Profitableness of land ownership and operation, with returns from farming exceeding the profit realizable from sale of farms;
(4) Postponed retirement of farm owners;
(5) Credit policy: lending agencies in general encouraged loans for land purchase on sound financing terms.

TABLE 3
CHANGES IN PER ACRE FARM LAND VALUES, FARM COMMODITY PRICES, AND FARM INCOMES FOR THE PERIOD 1940-1946
TWELFTH DISTRICT AND UNITED STATES

	Percent change		Change in indexes (1947-49=100)	
	Twelfth District	United States	Twelfth District	United States
Land values[1]	+ 94.7	+ 69.9	+48.5	+34.9
Farm commodity prices[2]	....	+134.0	....	+49.7
Cash farm receipts[3]	+227.2	+194.8	+66.6	+55.7
Net realized income[4]	....	+230.7	....	+64.0
Net income[5]	+324.0	+219.9	+91.1	+65.3

[1] Land values used are for March 1 of years indicated.
[2] Weighted average of prices received by farmers.
[3] Total cash receipts from farm marketings.
[4] Net realized income to farm operators as estimated by the United States Department of Agriculture.
[5] Estimated.
Sources: See Table 1.

Farm land values of the Twelfth District, during the period 1940 to 1946, rose much faster than those of the United States as a whole. The principal reason for this difference appears to be the relatively greater and more rapid rise in District cash farm receipts and net income from farming (Table 3). Net income of District farmers rose 324 percent between 1940 and 1946 compared to a 220 percent rise for farmers of the United States. Increases during the period in gross farm incomes from livestock and livestock products were greater for the District than for the United States, and District cash farm receipts from sale of crops increased 280 percent during the period compared to an increase in cash receipts from this source of 215 percent for the nation as a whole.

The periods 1946-1948 and 1948-1950

In the post World War II period some divergences and apparent inconsistencies in District and United States farm land values developed. Market prices of District farm land increased only about 2 percent in the period 1946-1948 compared to a national increase of nearly 20 percent. In the subsequent period, 1948-1950, District farm land values dropped 13 percent while on a national level they increased 1 percent despite a 10 percent drop in United States farm commodity prices and a fall, for the United States, of more than 20 percent in net realized farm income.

The relatively smaller rise in District farm land values in the period 1946-1948 appears to be explained by the relatively smaller rise, on a District basis, in cash farm receipts and net farm income (Table 4). During this period the World War II relationship in the District between cash receipts from crops and cash receipts from livestock was reversed. Cash receipts to District farm operators from sale of crops decreased 5 percent between 1946 and 1948 while District cash receipts from sale of livestock and livestock products, following the upward trend of cattle prices, increased 35 percent. However, since about 60 percent of the total District value of farm products stems from crops, total District cash farm receipts increased only 8 percent compared to a national increase in such total receipts of 23 percent.

Reasons for the dissimilarity of movement in District and United States per acre land values in the subsequent period 1948-1950 are more difficult to determine (Table 4). The downward movement of District farm land values appears to be explained by the reductions in farm commodity prices which accompanied a rise in costs of production thus causing general reductions in net farm incomes. On the other hand, United States farm land values actually increased slightly.

The stability of national average farm land prices during the period 1948-50 is partly a result of the time pattern of change of such prices within the period and of the brevity of the 1948-49 business recession, as well as of the factors mentioned above. On a national basis farm land prices maintained their upward trend well into 1949, or for about a year after the initiation of the decline in farm product prices and incomes. Between March 1, 1948 and March 1, 1949, United States farm land prices increased about 3.5 percent while prices received by farmers declined about 8 percent. Such a divergence in land and commodity prices appears to be characteristic of the beginning year of a business recession and is consistent with the movements of these factors in earlier periods of recession. In the following year the pressure of falling farm product prices and incomes began to have an effect. The national farm land value index dropped to slightly above the 1948 level before it began to reflect the impact of the Korean conflict on agriculture and the general economy.

In 1950 marketing quotas on cotton were declared and production of cotton in that year was effectively restricted. In the same year the United States became involved in the Korean conflict and cotton prices increased nearly 32 percent. At the same time, prices of corn increased 18 percent. These two crops are produced on very large acreages of the nation's farm land but a relatively small proportion of District farm land is devoted to them, and

TABLE 4
CHANGES IN PER ACRE FARM LAND VALUES, FARM COMMODITY PRICES, AND FARM INCOMES FOR THE PERIODS 1946-1948 AND 1948-1950
TWELFTH DISTRICT AND UNITED STATES

	Percent change		Change in indexes (1947-49=100)	
	Twelfth District	United States	Twelfth District	United States
1946-1948				
Land values[1]	+ 1.9	+19.4	+ 1.9	+16.4
Farm commodity prices[2]	....	+21.8	....	+18.9
Cash farm receipts[3]	+ 8.4	+23.0	+ 6.9	+17.1
Net realized income[4]	....	+ 9.9	....	+ 9.2
Net income[5]	—11.8	+21.4	—14.1	+20.3
1948-1950				
Land values	—12.5	+ 1.0	—12.7	+ 1.0
Farm commodity prices	....	—10.2	....	—10.8
Cash farm receipts	+ 1.0	— 6.2	+ 0.8	— 4.4
Net realized income	....	—20.8	....	—21.2
Net income	—14.5	—25.6	—15.3	—29.5

[1] Land values used are for March 1 of the years indicated.
[2] Weighted average of prices received by farmers.
[3] Total cash receipts from farm marketings.
[4] Net realized income to farm operators as estimated by the United States Department of Agriculture.
[5] Estimated.
Sources: See Table 1.

their prices increased relative to prices of most major District agricultural commodities.

1950-1952

In the year beginning March 1, 1950, the downtrend in District and United States farm land values was reversed, but the increases were much smaller for the Twelfth District than for some other areas of the United States. The relative increase for the United States as a whole appears to be at least partly explained by prices of two of the nation's most important crops—cotton and corn. Per acre farm land values moved up much more rapidly in the Corn Belt, in the West South Central states[1], and in the states of Arizona and New Mexico than in other areas of the nation.

Continued high cotton prices, rapidly increasing prices of beef cattle, general increases in other farm commodity prices as well as gross and net farm incomes, and additional inflation stemming from war and defense activity are largely responsible for the increase in market prices of land during the period 1950 to 1952. On a national level, however, this is one of the few periods in history when farm land values increased proportionately more than farm commodity prices or farm incomes. United States farm land values increased about 26 percent compared to an increase in United States cash farm receipts of only 17 percent (Table 5). Similarly, increases in farm land values in Arizona during 1950-1952 were much greater than the average for the District, indicating that during this period also cotton prices, which remained high throughout 1952, were having an important effect on the land market at least in high-yielding cotton growing areas. Characteristically, the current decline in farm land values began late in 1952 or the early part of 1953—about a year after the initial dip in prices of farm commodities.

A comparison of farm land values, farm commodity prices and farm incomes in 1940 with those prevailing in 1952 for both the District and the United States is highly revealing (Table 5). In this twelve-year period, the operators of District farms enjoyed increases in gross as well as in net farm income which greatly exceeded the national average increases. At the same time, District land values rose much less than the average of such land values for the United States. With farm commodity prices and incomes continuing to recede from the high levels of 1951, the more restrained price activity of the District land market may be highly significant. If farm land values continue to fall, the District may well be much less affected than other sections of the nation.

Concluding remarks

Early estimates indicate that net farm income in 1954 may be as much as 4 or 5 percent below 1953, a decline about the same as that from 1952 to 1953. As in the past, the influence of farm income prospects on the decision of buyers and sellers in the land market probably will be the most powerful influence affecting land values. Changes in farm land values occur later and adjust in response to changes in prices of farm commodities and farm incomes. Therefore, declines in prices of farm products in recent months and some continuing uncertainty with respect to future levels of farm income probably will largely shape the farm real estate market in 1954. However, sight should not be lost of the fact that, particularly in Twelfth District states other than Arizona, only a portion of the increase in net farm income since 1939 has been capitalized into land values. Farmers have learned to discount extremely high as well as extremely low farm commodity prices and incomes. This is evident from the greater relative stability of farm land values in recent years and the fact that land values are more stable than farm commodity prices or net farm incomes.

Indications point to a continued decline in prices of farm land in 1954, but a sharp break in land prices is not probable. Prospective buyers may tend to become more cautious and selective in their buying and may be less willing to meet present asking prices since their expectations of net income from land have been revised downward in recent months. At the same time, a large proportion of the present owners are in business to stay and they are relatively well financed. The net effect may be the maintenance of present land values for good farms at or near recent levels. However, on marginal land and relatively poor farms, sellers may find it necessary to reduce their asking prices if they wish to make sales.

[1] Arkansas, Louisiana, Oklahoma, and Texas.

TABLE 5
CHANGES IN PER ACRE FARM LAND VALUES, FARM COMMODITY PRICES, AND FARM INCOMES FOR SELECTED PERIODS
TWELFTH DISTRICT AND UNITED STATES

	Percent change		Change in indexes (1947-49=100)	
	Twelfth District	United States	Twelfth District	United States
1950-1952				
Land values[1]	+ 13.8	+ 25.5	+12.3	+25.9
Farm commodity prices[2]	....	+ 12.5	....	+11.9
Cash farm receipts[3]	+ 18.1	+ 16.9	+18.9	+13.7
Net realized income[4]	....	+ 9.1	....	+ 7.3
Net income[5]	+ 28.2	+ 10.7	+25.4	+ 9.2
1940-1952				
Land values	+ 93.8	+156.7	+50.0	+78.2
Farm commodity prices	....	+188.0	....	+69.7
Cash farm receipts	+320.3	+288.5	+93.2	+81.9
Net realized income	....	+213.9	....	+59.9
Net income	+309.8	+219.9	+87.1	+65.3
1952-1953				
Land values	— 1.9	— 1.5	— 2.0	— 1.9
Farm commodity prices	....	— 8.4	....	—11.1
Cash farm receipts	— 3.8	— 4.3	— 4.7	— 4.7
Net realized income	....	— 5.2	....	— 4.6
1953-1954				
Land values	....	— 5.0	....	— 6.0
Farm commodity prices[6]	....	— 1.0	....	— 0.8

[1] Land values used are for March 1 of the years indicated.
[2] Weighted average of prices received by farmers converted to 1947-49=100.
[3] Total cash receipts from farm marketings.
[4] Net realized income to farm operators as estimated by the United States Department of Agriculture.
[5] Estimated.
[6] Price change from average index value for 1953 to average value for March 15, 1954.
Sources: See Table 1.

BUSINESS INDEXES—TWELFTH DISTRICT[1]
(1947-49 average=100)

Year and month	Industrial production (physical volume)[2]								Total nonagricultural employment	Total mf'g employment[4]	Carloadings (number)[2]	Dep't store sales (value)[2]	Retail food prices[3, 5]	Waterborne foreign trade[3, 6]	
	Lumber	Petroleum[3] Crude	Petroleum[3] Refined	Cement	Lead[3]	Copper[3]	Wheat flour[3]	Electric power						Exports	Imports
1929	97	87	78	54	165	105	90	29	....	....	102	30	64	190	124
1931	51	57	55	36	100	49	86	29	....	....	68	25	50	138	80
1933	41	52	50	27	72	17	75	26	....	....	52	18	42	110	72
1935	54	62	56	33	86	37	87	30	....	47	66	24	48	135	109
1937	74	71	65	56	114	88	84	38	....	60	81	30	50	170	119
1938	58	75	64	45	92	58	81	36	....	51	72	28	48	164	87
1939	72	67	63	56	93	80	91	40	....	55	77	31	47	163	95
1940	79	67	63	61	108	94	87	43	....	63	82	33	47	132	101
1941	93	69	68	81	109	107	87	49	....	83	95	40	52	....	....
1942	93	74	71	96	114	123	88	60	....	121	102	49	63	....	....
1943	90	85	83	79	100	125	98	76	100	164	99	59	69	....	....
1944	90	93	93	63	90	112	101	82	101	158	105	65	68	....	....
1945	72	97	98	65	78	90	112	78	96	122	100	72	70	....	....
1946	85	94	91	81	70	71	108	78	95	97	101	91	80	89	57
1947	97	100	98	96	94	106	113	90	99	100	106	99	96	129	81
1948	104	101	100	104	105	101	98	101	102	102	100	104	103	86	98
1949	99	99	103	100	101	93	88	108	99	97	94	98	100	85	121
1950	112	98	103	112	109	115	86	119	103	105	97	105	100	91	137
1951	114	106	112	128	89	115	95	136	111	122	100	109	113	186	157
1952	107	107	116	124	86	112	96	144	118	132	101	114	115	171	200
1953	111	109	123	130	74	111	96	161	122	139	100	116	113	140*p*	311*p*
1953															
March	121	109	123	126	85	116	96	142	122	139	103	120	113	179	336
April	119	108	122	132	82	114	96	165	121	139	102	116	113	164	336
May	112	109	127	142	75	115	91	167	122	140	102	124	113	118	384
June	110	110	121	134	77	105	99	179	122	141	103	121	113	114	372
July	112	110	125	140	64	106	96	172	121	142	98	117	113	123	356
August	108	109	124	134	69	110	92	168	122	139	99	114	113	127	337
September	100	109	126	133	73	111	101	166	124	140	98	110	114	129	368
October	106	109	125	137	69	112	99	163	123	141	95	111	114	133	316
November	105	110	121	128	69	112	98	157	121	137	97	112	113	139	287
December	108	109	125	120	67	104	96	158	121	138	102	109	113	141	256
1954															
January	116	109	121	114	60	107	99	163	121	138	93	108	114	108	210
February	116	109	120	117	79*r*	102*r*	97	160	121	137	90	107	114	....	271
March	117	108	118	116	74*p*	98*p*	98	171	120	136	93	111	113	....	....

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

Year and month	Condition items of all member banks[7] Loans and discounts	U.S. Gov't securities	Demand deposits adjusted[8]	Total time deposits	Bank rates on short-term business loans[9]	Member bank reserves and related items[10] Reserve bank credit[11]	Commercial operations[12]	Treasury operations[12]	Coin and currency in circulation[11]	Reserves	Bank debits Index 31 cities[3, 13] (1947-49=100)[2]
1929	2,239	495	1,234	1,790	.....	− 34	0	+ 23	− 6	175	42
1931	1,898	547	984	1,727	.....	+ 21	− 154	+ 154	+ 48	147	28
1933	1,486	720	951	1,609	.....	− 2	− 110	+ 150	− 18	185	18
1935	1,537	1,275	1,389	2,064	.....	+ 2	− 163	+ 219	+ 14	287	25
1937	1,871	1,270	1,740	2,187	.....	− 1	− 90	+ 157	− 3	549	32
1938	1,869	1,323	1,781	2,221	.....	− 3	− 240	+ 276	+ 20	565	29
1939	1,967	1,450	1,983	2,267	.....	+ 2	− 192	+ 245	+ 31	584	30
1940	2,130	1,482	2,390	2,360	.....	+ 2	− 148	+ 420	+ 96	754	32
1941	2,451	1,738	2,893	2,425	.....	+ 4	− 596	+1,000	+ 227	930	39
1942	2,170	3,630	4,356	2,609	.....	+ 107	−1,980	+2,826	+ 643	1,232	48
1943	2,106	6,235	5,998	3,226	.....	+ 214	−3,751	+4,486	+ 708	1,462	60
1944	2,254	8,263	6,950	4,144	.....	+ 98	−3,534	+4,483	+ 789	1,706	66
1945	2,663	10,450	8,203	5,211	.....	− 76	−3,743	+4,682	+ 545	2,033	72
1946	4,068	8,426	8,821	5,797	.....	+ 9	−1,607	+1,329	− 326	2,094	86
1947	5,358	7,247	8,922	6,006	.....	− 302	− 510	+ 698	− 206	2,202	95
1948	6,032	6,366	8,655	6,087	.....	+ 17	+ 472	− 482	− 209	2,420	103
1949	5,925	7,016	8,536	6,255	3.20	+ 13	− 930	+ 378	− 65	1,924	102
1950	7,093	6,415	9,254	6,302	3.35	+ 39	−1,141	+1,198	− 14	2,026	115
1951	7,866	6,463	9,937	6,777	3.66	− 21	−1,582	+1,983	+ 189	2,269	132
1952	8,839	6,619	10,520	7,502	3.95	+ 7	−1,912	+2,265	+ 132	2,514	140
1953	9,220	6,639	10,515	7,997	4.14	− 14	−3,073	+3,158	+ 39	2,551	150
1953											
April	9,054	6,173	10,011	7,597	.....	+ 16	− 277	+ 239	+ 11	2,378	153
May	9,092	6,020	9,843	7,627	.....	− 12	− 174	+ 293	+ 22	2,463	150
June	9,151	6,013	9,830	7,753	4.18	− 39	− 531	+ 435	+ 39	2,274	155
July	9,167	6,675	10,005	7,729	.....	+ 75	− 184	+ 275	+ 3	2,452	148
August	9,229	6,589	9,950	7,749	.....	− 100	− 98	+ 176	+ 36	2,397	142
September	9,241	6,481	10,018	7,794	4.17	+ 113	− 308	+ 217	− 4	2,425	149
October	9,255	6,556	10,248	7,854	.....	+ 19	− 391	+ 394	+ 7	2,449	142
November	9,248	6,693	10,255	7,815	.....	− 137	− 149	+ 330	+ 23	2,476	149
December	9,220	6,639	10,515	7,997	4.19	+ 50	− 432	+ 438	− 26	2,551	158
1954											
January	9,198	6,844	10,540	7,995	.....	+ 1	− 308	+ 125	− 86	2,468	146
February	9,176	6,667	10,138	8,071	.....	+ 98	− 245	+ 80	− 2	2,398	153
March	9,106	6,500	9,922	8,175	4.12	− 125	− 213	+ 315	− 29	2,413	158
April	9,045	6,903	10,190	8,234	.....	+ 5	− 324	+ 381	+ 7	2,477	150

[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. [5] Los Angeles, San Francisco, and Seattle indexes combined. [6] 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 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] 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 deposits except interbank prior to 1942. Debits to demand deposits except Federal Government and interbank deposits from 1942. *p*—Preliminary. *r*—Revised.