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FINANCE • INDUSTRY • AGRICULTURE • TRADE
FOURTH FEDERAL RESERVE DISTRICT

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Federal Reserve Bank of Cleveland

Cleveland 1, Ohio

What's Happening in Dairy Farming

FARMERS in the United States own about two percent fewer milk cows than a year ago, but they are getting three percent more milk. The increase in yield per cow, as well as falling feed prices, has reduced the cost of producing milk, but not enough to offset the decline in the selling price of milk. The annual cash receipts from dairy farming, however, are still estimated at nearly \$4,000 million or double the prewar level. This figure represents a seventh of the income from farm marketings and is second only to receipts from meat animals, which, incidentally, include large numbers of discarded dairy cattle.

Developments such as these have great importance for at least one of every two farm operators in the Fourth District where the movement of milk from farms to cities is much greater than average. Dairy products are the leading source of income in over half of the Ohio counties and in most of the Pennsylvania counties.

In this region and others which supply much milk for fluid consumption, the recent increase in production has been sharper than the over-all average would suggest. Dwindling incomes have led farmers to milk a larger proportion of their cows this year than at any other time in eight years, but that accounts for only a part of the high-level output.

Today's situation is the result of a trend that has been in progress since the war. The number of milk cows on farms has tumbled twelve percent in the postwar period, but production has held relatively stable. Important causes of the higher rate of production per cow are the liberal feeding of rations adapted for maximum production, and an increased percentage of cows with inherited ability for high production.

Better Feeding Many milk cows are underfed. They receive neither a large enough quantity of feed nor a sufficient balance of nutrients for the most profitable production of milk. Underfeeding is most common on farms where dairying is not a major enterprise, but it also occurs on some well established dairy farms. Since there is much room for improvement, it may be expected that any general advance in feeding will raise noticeably the yield of milk per cow. For instance, most of the upturn in the past twelve months is probably due to a record rate of grain feeding following the huge production of feed grains in 1948.

Certain other changes in feeding practices are of a more permanent nature. Grasses were once the only widely used pasture and meadow crops, but today grass is most commonly used in mixtures with legumes, which have two or three times as much digestible protein. Adoption of soil conservation practices is partially responsible for increased production of pasture and hay and also for a higher protein content of the roughages fed to livestock. The growing use of soybean meal as a component of the grain ration has further augmented the protein intake.

Some practices by which dairy farmers improve their production are so simple, inexpensive and obvious that it is surprising they weren't adopted unanimously long ago. One of these is the provision of drinking cups or other means of insuring an ample supply of fresh, clean water for the cows.

For other practices the advantages are not always so obvious. This is especially true of measures tending to smooth seasonally the production of milk, avoiding a high peak in May and June and a slump in November and December. A study by the Ohio

Experiment Station indicates that herds with relatively heavy fall production produce more milk annually at a lower cost per hundredweight than those with heavy spring production. To this advantage is added that of selling more milk in the autumn when prices are usually highest. A few farmers are taking a step in that direction by breeding for fall freshening. They are also learning that it pays to feed some silage and an abundance of high-protein hay. Summer pasture seasons are being lengthened by such crops as alfalfa and ladino clover which thrive in hot weather when bluegrass pastures are practically dormant. The Trumbull County experiment farm in Ohio has had remarkable success in achieving an even supply of milk at low feed costs. The farm's meadows of alfalfa, timothy and ladino clover furnish the three tons of hay per cow needed for winter and supplement permanent pastures with all the green feed the herd will eat. This requires about two acres for each cow.

Better Cows In recent years the principle of the dairy herd improvement associations has been greatly extended by cooperatives employing owner-sampler testing. A farmer can now have the tests without the expense of having them conducted on his farm. He keeps individual records of milk and butterfat production, which enable him to weed out unprofitable cows, as well as to improve feeding and breeding practices.

Artificial breeding cooperatives have come into existence only recently, but this year 15 percent of all dairy cows in Ohio are enrolled for artificial insemination. The practice ultimately raises milk yields because the cooperatives usually own higher quality bulls than can be afforded by most individual dairymen. Its popularity, however, stems mostly from a more immediate profit aspect: for all except very large herds artificial breeding lowers breeding costs. Dispensing with the herd bull releases feed, labor and buildings for additional cows or other enterprises.

Milk production is also affected by a gradual shift which is occurring in the breeds of dairy cattle on farms. In earlier days much milk was made into farm butter or sold as cream for production of butter by creameries. The consequent high premium on butterfat led to extensive adoption of the high butterfat-producing breeds, Guernseys and Jerseys. Now most milk is consumed in liquid form and the demand for butterfat has shrunk. The rich cream-producing cows are still numerous, but in major dairy areas they are slowly being replaced by Holsteins, which produce more milk.

High Yields for Best Profits Changes in milk output reflect the decisions of thousands of farmers on the basis of their individual profit and loss experiences. Most have learned that

the higher the production per cow, the lower is the cost per hundred pounds of milk produced. Recent investigations in Ohio and Pennsylvania indicate that the one-third of the commercial milk producers who have yields per cow of less than 6,000 pounds per year are generally the highest-cost third. There are probably few in this group who would not be found to be operating "in the red" if all costs were counted. The low-cost third, on the other hand, generally average over 7,000 pounds per cow, and those who are most secure in profits from dairying approach or pass the 8,000-pound mark. There are, of course, several factors which enter into the determination of profits, especially efficiency in the use of labor and capital, but milk production per cow is one of the most important.

High Prices Until Recently The most prominent economic condition which has influenced the decisions of dairy farmers in the postwar era has been a rise in the general price level. Farmers' incomes from sales of dairy products rose 45 percent from the end of the war up to last year. Since milk gallonage has changed relatively little it is apparent that the rise in money income is due almost entirely to price rises. Now that prices have turned down, cash receipts have dropped despite heavier marketings. Nationally, the cash receipts of farmers from dairying will probably be down ten to fifteen percent this year. The downtrend in prices received by farmers for milk began in the late summer of last year and completely eliminated the annual peak which has usually occurred in November or December. This year a more normal pattern will probably appear.

The average price received by farmers for milk has not yet fallen to the Government's support level, which is 90 percent of parity through 1949. Prices of butterfat and milk for manufacturing use, however, have been at levels equivalent to their part of the average "floor". To support those prices the Commodity Credit Corporation has been buying actively in the wholesale markets for several months. Up to mid-June this year, 5.8 million pounds of butter and 206 million pounds of dry skim milk had been purchased both for price support and foreign assistance programs. In addition E. C. A. funds have been appropriated for about 125 million pounds of cheese for Britain in 1949 and over half the amount has been spent. Cheese was declared a surplus commodity in June, automatically limiting E. C. A. cheese purchases to U. S. production. The recent curtailment of British purchases in this country, however, makes future shipments uncertain.

One reason for the relative stability of fluid milk prices during the recent general price decline is the highly successful (from the farmers' point of view) operation of marketing orders issued by the Secretary

of Agriculture. Orders promulgated in the past four years cover three large cities of the Fourth District and numerous smaller places.

Fewer Cows but Larger Herds

After the war, meat animal prices rose more rapidly than dairy product prices. In consequence many dairy cows were sold for beef. For some farmers it was advantageous to liquidate the entire herd and shift to some other enterprise. On the other hand, many farmers having resources best adapted for dairying have intensified their operations in order to overcome rising costs. The result is that there are fewer dairy herds but these are larger in size. This is but a continuation of a trend revealed by each census over a long period.

A recent sampling of Ohio herds with six or more cows producing milk for fluid bottling plants revealed an average size of between 14 and 15 cows. The high-cost herds were usually smaller than average and the low-cost herds were most often larger. About the average number is necessary to justify investment in milking machines and otherwise to use labor and capital most efficiently. Above-average sized herds, however, do not appear to have any special cost advantage.

The net effect of changes on individual farms has been a steady drop in the total number of milk cows. From the record peak reached during the war the number has dropped to the lowest point in 18 years. Recent estimates of calves and young heifers on farms seem to indicate that the limit of contraction has about been reached and that, nationally, dairy cow numbers will stabilize late this fall, but that in the Fourth District the stabilization will be delayed another year.

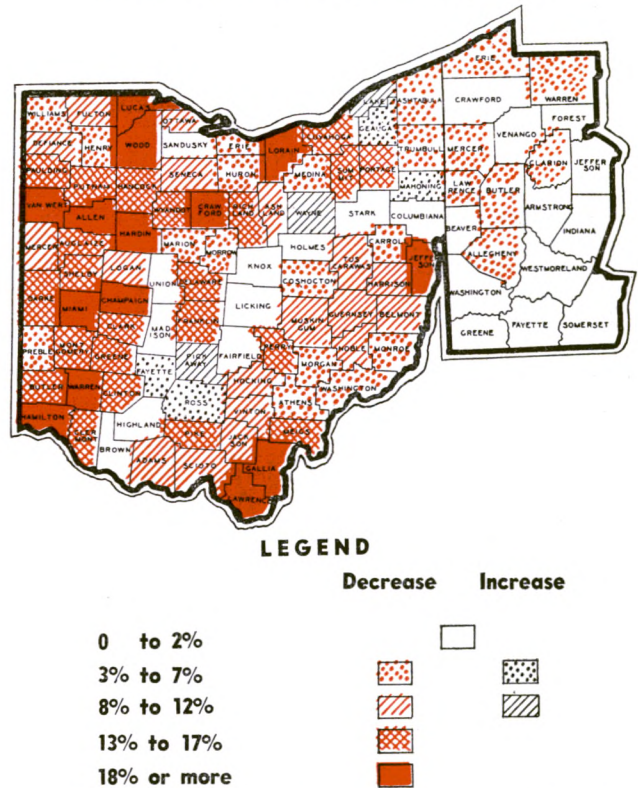
Fourth District Above Average

In this District the decline in the number of cows has been less rapid than the national average.

Dairymen in the state of Pennsylvania have countered the general trend by maintaining their wartime total of milk cows. The number in Kentucky has dropped only four percent. The map shows the post-war percentage changes in the District counties for which data are available—those in Ohio and Pennsylvania.

The smallest decrease occurred in western Pennsylvania and parts of northeastern and central Ohio—an area in which dairying has a great relative advantage over alternative agricultural pursuits. Here soils unsuited for the most part to intensive cropping without heavy application of animal and green manures, a rolling terrain and a moist climate have best utilization in production of forage crops. These in turn can be marketed to best advantage by being converted into milk. The reason is that this region has large and easily accessible markets for

PERCENTAGE CHANGES IN MILK COW NUMBERS
January 1, 1945 to January 1, 1949
Ohio and Fourth District Pennsylvania



... milk cow numbers decreased most in the Ohio Corn Belt and least in the milksheds of large cities.

Source: Computed from estimates of Federal-State Crop Reporting Services.

fluid milk. City people are the major consumers of milk, which, due to its bulkiness and perishability and the necessity for inspecting its source, must be produced fairly near the cities. In western Ohio, on the other hand, grain and hogs are relatively the most advantageous enterprises. In that section milk cattle numbers have been sharply reduced.

Relatively large losses of milk cows indicated for most metropolitan counties reflect a high level of industrial employment in these communities. High urban wage rates and short hours make it difficult for a farm operator to obtain necessary labor. Demand for residential or industrial sites often provides a more profitable use for suburban farm land and a prosperous community sometimes provides the farm operator himself with opportunities for more profitable employment. Although nearby cities are necessary for extensive dairy farming, they must not be too near.

Changed Uses for Milk

During the war Ohio farmers increased their sales of milk by nearly 15 percent, and most of this gain has been retained. The form in which milk was

sold, however, continued to change after the war in accordance with long-term trends. As indicated by the accompanying table farmers employed the cream separator less than formerly and sold more whole milk.

Percentage Distribution of Ohio Milk Sales
(Selected Years)

	1941	1945	1948
Sold to plants and dealers			
Whole milk	71.7%	83.0%	86.1%
Cream	20.1	11.3	9.5
Milk and cream retailed by farmers.....	7.1	5.1	3.9
Farm butter sold	1.1	.6	.5
Total sales	100.0%	100.0%	100.0%
Total sales—million pounds ..	4083	4676	4647

Source: U. S. Department of Agriculture.

These changes occurred largely in response to changes in consumer demand. A part of the increase in demand for whole milk and whole milk products is due to the normal growth of population. A larger part of it is due to a high level of consumer incomes. Consumption of fluid milk and ice cream is far above the prewar level although it has slipped from the peak of three or four years ago. Consumers are buying greater quantities of cheese, evaporated and condensed milk, and dried whole milk, but they are buying less butter per capita than at the war's end and much less than before the war. A part of the drop in butter sales resulted from the shift of many consumers to margarine while prices were high. Since prices have dropped within the past year, some families have shifted back to butter. The long-run rise in demand for fluid milk has also been assisted by the ever-increasing number of municipal Grade A ordinances, which assure a high-quality product and make milk more attractive to the consumer.

A related attitude—the general insistence on pasteurized milk—explains part of a steady decrease in the amount of milk that farmers sell direct to consumers. Health regulations, moreover, have become so exacting that many farmers have discontinued retail sales of raw milk.

Larger Investments

Over a long period of time the average amount of capital invested in dairy farms has risen steadily. The trend in size of herds has been mentioned. In addition the average value of individual cows has risen due to the improvement in quality resulting from better breeding practices. The era of high prices brought good profits, available for purchase of additional equipment; it also brought high wage rates as an added incentive to the purchase of labor-saving machinery. Tractors, manure spreaders and mowers were bought in mounting numbers through last year at least. It appears, however, on the basis of manu-

facturers' shipments, that hay loaders, ensilage cutters and forage blowers became sufficiently available to satisfy the backlog of demand as much as two years ago. Purchases of specialized dairy equipment, moreover, appear to have reached the crest near the end of the war.

With greater sales of whole milk it is necessary for more producers to conform to the sanitary regulations of communities where whole milk is consumed. A farmer equipped only for production of sour cream would have to spend a minimum of \$700 to \$1,000 on additional buildings and equipment before he could ship to a fluid market. The capital outlay would need to be even larger if he desired to equip for more than a very small production or if he were in the southern part of the District where mechanical refrigeration is necessary. Whole milk for manufacturing use does not require quite so much investment, however. In the autumn of 1946 Ohio State University questioned a number of farmers in northwestern Ohio about the size of their investments in milking machines and in equipment to cool milk and wash utensils. Among those producing milk for bottling the average was \$61 per cow; among those producing for condenseries it was \$35 per cow.

Recent upward revisions of the ordinances in many cities require water heaters and tanks and two-compartment wash vats in milk houses. For some farmers this has also meant larger milk houses, and for many it points up a need for a careful analysis of the farm's capital. It is difficult to make efficient use of capital when the portion represented by land and buildings is much over 60 percent. A Pennsylvania study disclosed that the most profitable one-tenth of dairy farms had an average of about 55 percent of their capital tied up in real estate. In addition, the operators of those farms practiced many efficiency-promoting measures. Less than two years were required for their gross receipts to equal total assets. On the least efficient third of the farms about 70 percent of the investment was in real estate and the turnover of assets required over three and a half years.

Dealers also are conscious of milk quality. In the flush spring season when more milk is produced than the fluid market will take, they must cut down on the amount they buy or drop some of it to manufacturing use. Unless they are tied to a producers' cooperative which prohibits their doing so, they drop the producers who are lowest on quality. Competition to hold markets the year around induces some farmers to set their own standards above the legal minimums. That is responsible for much of the great increase in mechanical refrigeration in milk houses. Quality often gives the producer a choice of markets and the equipment to achieve it reduces dairy chores. Not many farmers would go back to the old ways.

(References on following page)

Seasonal Swings in Department Store Trade

SUFFICIENT data have now been accumulated since the end of the war to show that the present seasonal pattern of department store trade is somewhat different from that experienced during the war years. It appears that December and May are more important months for department store sales than they were during the war, while the first four months of the year, including Easter, are relatively less important than they were in the previous pattern of seasonal swings.

These conclusions are based on an analysis of department store sales in the Fourth Federal Reserve District covering the period from January 1938 through May 1949. The seasonal pattern previously used in this district was based on experience from 1938 through the spring of 1946. Thus the revision takes the form of adding to a previous foundation the materials drawn from recent experience, rather than an attempt to construct entirely separate patterns for prewar, war, or postwar periods. The results, at least in broad outline, are similar to those obtained by other Federal Reserve Banks which have recently revised the seasonal outlines for their respective districts.⁽¹⁾

Changes in Seasonal Pattern of Sales The first of the accompanying charts shows the typical seasonal pattern of Fourth District department store sales, before and after the

latest revision. The solid line shows the latest pattern, based on experience from 1938 through May 1949, with sales for each month of the year expressed as a percentage of the monthly average for the year. The broken line shows the pattern before revision, based on the experience from 1938 through part of 1946. Thus, the month of December now counts for 164 percent of the monthly average of any given year, while previously it had counted as 155 percent of the monthly average.

One of the reasons for the greater importance of December is probably the recent reversion to prewar habits of last-minute Christmas buying. During the war years, which counted heavily in the seasonal pattern before revision, Christmas shopping was relatively earlier on account of overseas mailing, and the entire Christmas bulge in trade appears to have been less than in peacetime. The seasonal timing of consumer buying during the war was affected considerably by the scarcities in certain types of consumer goods.

The revision also resulted in raising the typical May figure from 95 percent to 99 percent of the monthly average. Conversely January, February, and April were lowered by 2 or 3 percentage points each, while March was lowered 5 points. October was also lowered 1 point. The remaining five months were unaffected by the change. The special adjustment to take account of the shifting date of Easter was left unchanged.

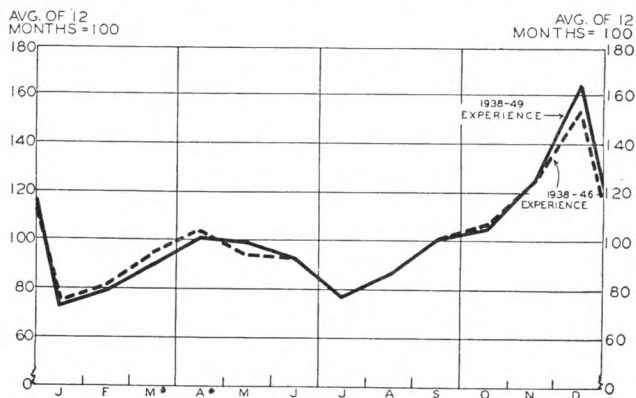
⁽¹⁾ The method used in revising Fourth District seasonal patterns is essentially the same as that employed in constructing the original pattern and in earlier revisions. For a detailed description of the method see H. C. Barton, Jr., "Adjustment for Seasonal Variation", *Federal Reserve Bulletin*, June 1941, p. 518-528.

For sales indexes reflecting recent revisions of seasonal factors for other districts and for the United States, see *Federal Reserve Bulletin*, June 1949, p. 719.

TYPICAL PATTERN OF SEASONAL SWINGS

Fourth District Department Store Sales

Based on 1938-46 Experience and 1938-49 Experience



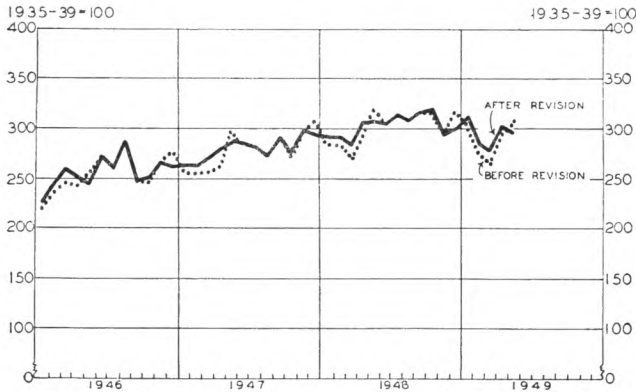
* March and April in terms of 1949 Easter date.

... revision of the typical seasonal sales pattern results in higher May and December figures, offset by somewhat lower levels for the first four months of the year.

DAIRY FARMING REFERENCES

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- Ohio Agricultural Extension Service, *Ways to Increase Your Milk Check*, Bulletin 284, August 1947.
- Pennsylvania Agricultural Experiment Station, *Agricultural Development in the Pittsburgh District* (16 western Pennsylvania counties), April 1949; *Costs in Keeping a Bull Compared with Artificial Breeding*, Bulletin 499, May 1948; *Organizing Dairy Farms for Efficient Production*, Bulletin 478, April 1946.
- U. S. Bureau of the Census, *Farm Machines and Equipment*, Facts for Industry, Series M35A, annually.
- U. S. Department of Agriculture, Bureau of Agricultural Economics, *The Dairy Situation*, monthly; *Farm Production, Disposition and Income From Milk*, annually.

SEASONALLY ADJUSTED INDEX OF SALES Fourth District Department Stores, 1946-49



. . . the new seasonally adjusted index of department store sales reflects altered seasonal expectations by reduction in May and December showings, and a relative strengthening of the index during the early months of the year.

Revision of District Sales Index

Because of the changes in the seasonal pattern, the seasonally adjusted index of department store sales has been correspondingly revised. Wherever the seasonal expectation has been raised, as in the case of December, the seasonally adjusted index of actual department store sales correspondingly falls, since the seasonal percentages are used as divisors or "adjustment factors" applied to the ordinary unadjusted index of department store sales. The effect on the seasonally adjusted sales index for the Fourth District is shown in the second chart, covering the period from 1946 through May 1949. Thus the adjusted sales index for any given December or May is lowered, while the indexes for January through April, as well as October, for any given year are raised.

Valleys and Peaks

Some slight reinterpretation of what has been going on in department store trade during the past three or four years emerges from the revision described above. Business comments have given much emphasis to a dip in trade in the first quarter of each of the three years, 1947, 1948 and 1949. The revised seasonally adjusted index for the Fourth District shows this occurrence to have been less marked than had previously been thought. In other words, part, although not all, of the first quarter weakness during the years in question appears to be seasonal in character, and consequently the picture for those months becomes somewhat more favorable when a more accurate allowance for seasonal factors is made.

By the same token, the high points in May and December sales become reduced or eliminated when better allowance is made for seasonal expectations.

The all-time high in seasonally adjusted dollar sales by Fourth District department stores under the old index occurred in May 1948, with December of last year running a very close second. After the revision of the seasonal factors, it now appears that the peak was in October 1948, with September 1948 running a close second, as is shown in the second chart.

Postwar Sales Trends

Any seasonally adjusted index of department store sales, when charted over a period of time as in the second chart, appears to run a somewhat choppy course, due to the nature of trade itself as well as the unavoidable imperfections of the seasonal adjustment factors. In order to see the short-term trends more clearly, a moderate smoothing of the curve may be effected by the use of a three-months' moving average as is done in the third chart. Thus, the seasonally adjusted sales index for Fourth District department stores, when smoothed by the moving-average device, shows a slight hesitation in the early parts 1947 and 1948 followed in each case by new high levels especially in the middle part of the year 1948. The peak in the early fall of last year was followed by a decline which lasted through the latter part of the year and well into this year. Some leveling or slight improvement on a seasonally adjusted basis occurred in the second quarter of this year, although the significance of this recent development is obscured by the current uncertainties of the general business situation.

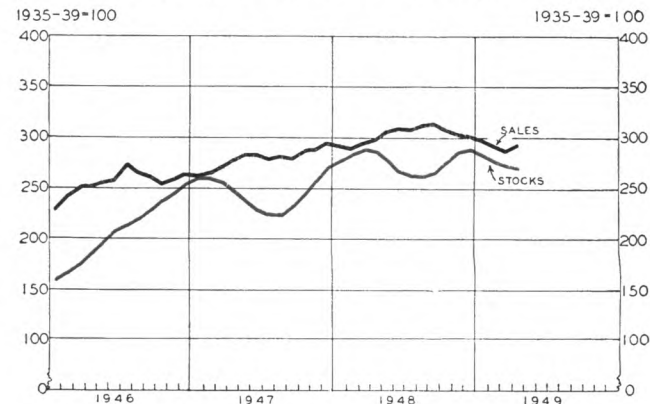
Revision of Stocks Index

The seasonal pattern of end-of-month inventories held by Fourth District department stores has also been recalculated in the light of available postwar data. The revision assigns a slightly higher value of stocks to

(Continued on Page 11)

SEASONALLY ADJUSTED INDEX OF SALES AND STOCKS (REVISED)

Fourth District Department Stores, 1946-49 (Smoothed by Three-Months' Moving Average)



. . . postwar department store sales rose steadily until the fall of 1948, while the inventory trend included two periods of marked contraction.

Revised Seasonally Adjusted Indexes of Department Store Sales

1935-39 = 100

FOURTH DISTRICT

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1946.....	226	242	260	251	245	272	260	286	249	250	266	262
1947.....	263	263	270	280	286	284	281	273	290	273	296	292
1948.....	291	291	284	305	307	306	313	308	316	319	293	300
1949.....	311	284	279	301	295							

AKRON

1946.....	265	252	285	256	278	301	270	304	283	268	276	283
1947.....	282	263	266	309	299	299	299	298	293	284	313	308
1948.....	306	299	293	295	328	314	330	318	334	326	295	327
1949.....	310	296	296	308	307							

CANTON

1946.....	253	290	313	282	299	314	314	345	317	315	314	317
1947.....	322	328	328	344	350	344	325	329	336	334	361	348
1948.....	342	346	357	379	390	366	405	380	415	396	368	376
1949.....	361	342	374	376	366							

CINCINNATI

1946.....	229	270	280	269	261	291	283	309	288	281	279	278
1947.....	273	285	291	302	309	304	309	292	308	288	323	308
1948.....	304	309	313	315	326	321	341	337	336	331	309	316
1949.....	310	297	292	305	314							

CLEVELAND

1946.....	210	227	244	231	234	243	233	265	249	241	250	250
1947.....	241	243	248	254	266	262	258	247	266	248	284	277
1948.....	276	269	263	275	284	279	282	279	287	291	275	284
1949.....	292	260	256	271	281							

COLUMBUS

1946.....	257	277	300	277	290	300	302	344	314	287	306	315
1947.....	287	290	304	311	322	307	308	312	326	304	338	330
1948.....	321	326	317	347	360	334	368	372	378	366	332	349
1949.....	360	324	318	346	353							

ERIE

1946.....	238	239	277	240	251	278	270	297	261	254	262	271
1947.....	256	265	277	292	309	296	294	301	305	289	304	319
1948.....	295	298	305	335	333	336	347	338	335	353	335	336
1949.....	336	317	320	352	334							

PITTSBURGH

1946.....	207	217	253	229	228	261	254	281	200	218	255	250
1947.....	247	246	257	255	269	259	261	262	284	267	255	278
1948.....	259	269	263	282	292	290	284	303	299	308	272	279
1949.....	293	264	260	284	275							

SPRINGFIELD

1946.....	250	271	299	255	254	272	268	301	266	271	268	264
1947.....	269	265	271	288	294	295	282	295	302	292	305	299
1948.....	291	286	279	295	302	295	307	303	309	324	284	298
1949.....	284	276	266	259	283							

TOLEDO

1946.....	214	238	252	231	236	260	250	294	251	256	251	254
1947.....	246	260	266	258	272	272	273	278	282	261	285	285
1948.....	286	280	271	292	294	280	311	305	323	316	285	302
1949.....	296	263	268	297	286							

WHEELING

1946.....	211	238	261	225	230	257	242	270	237	233	234	229
1947.....	224	232	225	239	253	240	249	246	259	226	250	252
1948.....	242	245	253	243	276	266	270	266	283	265	234	253
1949.....	273	245	238	261	253							

YOUNGSTOWN

1946.....	241	246	297	261	274	298	291	320	288	280	282	280
1947.....	286	294	281	313	325	307	310	311	325	305	330	318
1948.....	318	320	302	358	350	338	349	343	376	358	333	349
1949.....	348	325	349	346	336							

Revised Seasonally Adjusted Index of Department Store Stocks—Fourth District

1946.....	157	163	170	180	192	202	214	213	225	236	244	256
1947.....	256	260	257	249	238	226	217	224	225	241	262	270
1948.....	277	285	290	290	277	267	258	261	266	269	296	293
1949.....	274	275	285	260	267							

DEPARTMENT STORE TRADE STATISTICS

Sales by Departments—June 1949

Percentage Changes from a Year Ago
(Fourth District Reporting Stores)

(Compiled July 25, and released for publication July 26)

Fine Jewelry and Watches.....	+16
Toys and Games.....	+4
Aprons, Housedresses and Uniforms.....	+1
Neckwear and Scarfs.....	+1
Men's Furnishings and Hats.....	-0
Toilet Articles and Drug Sundries.....	-2
Blouses, Skirts and Sportswear.....	-2
Gift Shop.....	-2
Girls' Wear.....	-3
Corsets and Brassieres.....	-3
Books and Stationery.....	-3
Handbags and Small Leather Goods.....	-3
Inexpensive Dresses (Women's and Misses').....	-4
Gloves (Women's and Children's).....	-5
Notions.....	-5
Draperies, Curtains, etc.....	-6
Juniors' Coats, Suits and Dresses.....	-6
Shoes (Women's and Children's).....	-7
Costume Jewelry.....	-7
Better Dresses (Women's and Misses').....	-8
Shoes (Men's and Boys').....	-8
Underwear, Slips and Negligees.....	-8
Housewares.....	-9
Millinery.....	-9
Luggage.....	-9
Sporting Goods and Cameras.....	-9
Hosiery.....	-10
Infants' Wear.....	-11
Art Needlework.....	-11
Silverware and Clocks.....	-11
China and Glassware.....	-11
Men's Clothing.....	-11
Records, Sheet Music and Pianos.....	-11
Boys' Wear.....	-12
Lamps and Shades.....	-12
Linens and Towels.....	-14
Handkerchiefs.....	-14
Furniture and Bedding.....	-15
Blankets and Comforters.....	-15
Candy.....	-15
Domestics, Muslins and Sheetings.....	-17
Cotton Wash Goods.....	-19
Radios, Phonographs and Television.....	-23
Furs.....	-23
Silks, Velvets and Synthetics.....	-23
Domestic Floor Coverings.....	-25
Laces and Trimmings.....	-30
Major Household Appliances.....	-32
Coats and Suits (Women's and Misses').....	-34
Woolen Dress Goods.....	-49

GROUP TOTALS

BASEMENT STORE TOTAL.....	-3
Small Wares.....	-5
Men's and Boys' Wear.....	-6
Women's Apparel and Accessories.....	-7
GRAND TOTAL (reporting stores).....	-9
Miscellaneous Merchandise Dept's.....	-9
MAIN STORE TOTAL.....	-10
Housefurnishings.....	-17
Piece Goods and Household Textiles.....	-17

Sales by Fourth District department stores during June failed to match year-ago volume in all but five departments. The decline from May, however, was moderate for most departments, and a number showed gains from May levels. Total sales in June, seasonally adjusted, were 5% below May.

Sales of the men's and boys' wear group of departments were relatively favorable. Although 6% below a year ago, sales of this group totaled higher than in May, and the gain was approximately in line with seasonal expectations. Sales of men's furnishings, for example, showed the usual strong pick-up from May, and were unchanged from year-ago levels. Sales of men's clothing, down 11% from a year-ago, also increased seasonally from May.

In the women's wear group, where June sales in most departments are normally lower than in May, the showing was uneven. Sales of the group as a whole were 7% below a year ago, and substantially down from May. Certain departments, however, held up well. Sales of aprons, housedresses and uniforms, for example, were at a new high for the month, 1% above a year ago. Sales of neckwear and scarfs were also 1% above a year ago. Most departments in the group showed moderate sales declines, less than 10%, from year-ago levels. Sales of women's and misses' coats and suits, however, were more than seasonally down from May, and were 34% below a year ago, representing a five-year low for the month.

Sales in the housefurnishings group of departments averaged 17% below a year ago, and 6% below two years ago. More than seasonal declines from May were shown in sales of domestic floor coverings and of furniture and bedding, where the year-to-year declines were 25% and 15% respectively. Sales of major household appliances, down 32% from a year ago, were off slightly from May on a seasonally adjusted basis, but nevertheless were better than in several of the earlier months this year. Sales by the radio, phonographs and television department were 23% below a year ago, and were off from the previous month for the third successive report.

Among other departments, sales of jewelry and fine watches topped last year by 16%, with a high dollar volume reflecting the traditional June season as well as special sales promotions. Sales of piece goods and household textiles, however, were 17% below a year ago.

All comparisons refer to dollar volume without adjustment for price changes.

Department Store Inventories—June 30, 1949

Percentage Changes from a Year Ago
(Fourth District Reporting Stores)

(Compiled July 27, and released for publication July 28)

China and Glassware.....	+11
Woolen Dress Goods.....	+6
Better Dresses (Women's and Misses').....	+6
Inexpensive Dresses (Women's and Misses').....	+6
Juniors' Coats, Suits and Dresses.....	+6
Radios, Phonographs and Television.....	+5
Gift Shop.....	+3
Coats and Suits (Women's and Misses').....	+3
Laces and Trimmings.....	+2
Blouses, Skirts and Sportswear.....	+1
Shoes (Women's and Children's).....	-0
Handbags and Small Leather Goods.....	-0
Silverware and Clocks.....	-0
Toys and Games.....	-2
Shoes (Men's and Boys').....	-2
Books and Stationery.....	-2
Costume Jewelry.....	-3
Sporting Goods and Cameras.....	-4
Notions.....	-4
Art Needlework.....	-5
Corsets and Brassieres.....	-5
Luggage.....	-6
Toilet Articles and Drug Sundries.....	-7
Men's Clothing.....	-7
Lamps and Shades.....	-7
Underwear, Slips and Negligees.....	-7
Boys' Wear.....	-8
Fine Jewelry and Watches.....	-8
Domestic Floor Coverings.....	-8
Housewares.....	-9
Draperies, Curtains, etc.....	-10
Girls' Wear.....	-10
Furs.....	-11
Men's Furnishings and Hats.....	-11
Gloves (Women's and Children's).....	-11
Silks, Velvets and Synthetics.....	-11
Furniture and Bedding.....	-12
Blankets and Comforters.....	-12
Neckwear and Scarfs.....	-13
Handkerchiefs.....	-13
Millinery.....	-13
Cotton Wash Goods.....	-14
Major Household Appliances.....	-15
Aprons, Housedresses and Uniforms.....	-15
Linens and Towels.....	-15
Infants' Wear.....	-15
Records, Sheet Music and Pianos.....	-16
Candy.....	-17
Domestics, Muslins, Sheetings.....	-23
Hosiery.....	-29

GROUP TOTALS

Small Wares.....	-4
Women's Apparel and Accessories.....	-6
GRAND TOTAL (reporting stores).....	-7
BASEMENT STORE TOTAL.....	-7
Men's and Boys' Wear.....	-8
MAIN STORE TOTAL.....	-8
Housefurnishings.....	-8
Miscellaneous Merchandise Dept's.....	-9
Piece Goods and Household Textiles.....	-14

Inventories of Fourth District department stores resumed a downward trend during June. Reduction during the month amounted to 7% on a seasonally adjusted basis, and at month end stocks were below year-ago levels, also by 7%.

Stocks of piece goods and household textiles as a group were down 14% from a year ago, with the trimming of inventory accompanying lagging sales. Stocks of domestics, muslins and sheetings, for example were off 23% from a year ago, and stocks of linens, and towels were down 15%. However, inventories of woolen dress goods, where sales have been very slow, were up 6%.

In the housefurnishings group of departments, stocks at the end of June averaged 8% below a year ago. Here, too, sales for the most part have been at reduced levels. Stocks of records, sheet music and pianos were down 16%, and stocks of major household appliances were off 15%. The only housefurnishings lines which showed evidence of recent inventory accumulation were china and glassware, where stocks on June 30 were 11% above a year ago, and radios, phonographs and television, where stocks were up 5% from a year ago.

The men's and boys' wear group of departments, where June sales reports were favorable, closed the month with stocks somewhat reduced from May and 8% below a year ago. Stocks of men's furnishings and hats, for example, were 11% below a year ago, and at a three-year low for the month.

Wide variation among departments occurred in the women's wear group, where the total inventory at month end was 6% below a year ago. Nine departments in the women's wear group registered year-to-year declines in stocks amounting to 10% or more. Stocks of hosiery, for example, were down 29%, and stocks of neckwear and scarfs, down 13%, were at a six-year low for the month.

At the other extreme stocks of women's and misses' dresses and of juniors' coats, suits and dresses were up 6% from a year ago in each case, and stocks of women's and misses' coats and suits were up 3%.

The decline from a year ago in stocks of small wares, amounting to only 4%, was the smallest registered by any departmental group. Small wares as a group also showed the smallest June sales decline from a year ago.

All comparisons refer to dollar value of inventory at retail, without adjustment for price changes.

FINANCIAL AND OTHER BUSINESS STATISTICS

Time Deposits—12 Fourth District Cities

(Compiled July 7, and released for publication July 8)

City and Number of Banks	Time Deposits June 29, 1949	Average Weekly Change During:		
		June 1949	May 1949	June 1948
Cleveland (4)	\$ 897,349,000	-\$127,000	-\$ 688,000	+\$1,325,000
Pittsburgh (11)	459,006,000	— 94,000	— 107,000	— 231,000
Cincinnati (8)	183,499,000	+ 128,000	— 163,000	— 110,000
Akron (3)	103,152,000	— 73,000	— 40,000	— 4,000
Toledo (4)	103,252,000H	+ 12,000	+ 96,000	+ 100,000
Columbus (3)	83,506,000	— 19,000	+ 34,000	+ 252,000
Youngstown (3)	64,597,000	— 32,000	— 91,000	— 30,000
Dayton (3)	46,536,000	— 27,000	— 63,000	— 73,000
Canton (5)	43,208,000	— 40,000	— 57,000	+ 112,000
Erie (4)	40,038,000	— 10,000	— 7,000	— 97,000
Wheeling (5)	28,058,000	— 31,000	— 2,000	+ 86,000
Lexington (5)	10,720,000	+ 18,000	+ 8,000	— 1,000
TOTAL—12 Cities..	\$2,063,521,000	-\$295,000	-\$1,080,000	+\$1,329,000

H—Denotes new all-time high.

For the second month in succession, the trend of time deposits has been adverse in relation to the same interval in 1948.

During the five weeks ended June 29, time deposits at 58 reporting banks in 12 Fourth District cities declined at the rate of \$295,000 per week in contrast to a gain of \$1,329,000 per week in June 1948. Twenty-six banks reported gains during last month, while 32 experienced small decreases.

Individual Cities

In Canton, Cleveland, Columbus, and Wheeling the trend during June was downward in contrast to one of expansion in the same month last year.

In both Akron and Youngstown, the contraction this June was somewhat more noticeable than a year ago.

Time deposits in Toledo reached a new all-time high during June, but the rise was nominal in relation to the increase in June 1948.

On the other hand, in Dayton, Erie, and Pittsburgh, the shrinkage in time deposits in June, was less pronounced than it was last year. And in Cincinnati and Lexington, time deposits actually expanded during June in contrast to a reduction in the same month of 1948.

Changes in Consumer Instalment Credit June 1949

25 Fourth District Member Banks

(Compiled July 20, and released for publication July 21)

New Loans Made Compared With Mo. Ago	Yr. Ago	Type of Credit	Outstanding at End of Mo. Compared With	
			Mo. Ago	Yr. Ago
- 1.9%	+21.1%	Total consumer instalment credit	+3.0%	+19.7%
+ 6.2	- 0.3	Personal instalment cash loans	+2.4	- 2.1
+18.9	+29.9	Repair and modernization loans	+4.3	+22.5
		Direct retail instalment loans		
		(a) Automobile	+5.0	+37.3
+ 6.0	+52.1	(b) Other	-2.0	- 7.3
- 4.4	-27.1	Retail instalment paper purchased		
		(a) Automobile	+2.0	+80.3
- 1.2	+55.1	(b) Other	+1.9	+17.8
-31.9	+15.0			

The volume of consumer credit extended during June by the 25 reporting member banks of this District was only slightly less than the record volume of last month, and was in excess of the year-ago level for the fourth successive month.

A new peak was reached in the dollar amount of new direct automobile instalment loans which was about 52 percent larger than in June 1948. The volume of repair and modernization loans made was also considerably greater than at any time in the postwar period, and ran almost 30 percent above the June total last year. On the other hand, total activity in the form of new instalment loans on non-automotive products, including both direct loans and purchased paper, and new personal instalment cash loans, was virtually unchanged from a year ago.

Paced by the expansion in automobile loans, and in repair and modernization credits, the aggregate of consumer instalment credit outstanding at the end of June reached a new postwar high, and was about 20 percent above the comparable month of 1948.

Existing loans (exclusive of purchased paper) were being paid off at a rate of slightly more than 1½ percent of the amount outstanding at the beginning of the month. This rate of repayment has been fairly constant for the past three months, and is virtually the same as in June of last year.

Bank Debits*—June 1949

(In thousands of dollars (Compiled June 14, and released for publication July 15))

No. of Reporting Banks	June 1949	% Change from Year Ago	3 Months Ended June, 1949	% Change from Year Ago
10 LARGEST CENTERS:				
5 Akron	Ohio \$ 224,643	- 7.9%	\$ 673,491	- 3.6%
5 Canton	Ohio 101,852	-10.9	321,646	- 4.6
16 Cincinnati	Ohio 864,277	- 9.6	2,466,284	- 6.4
10 Cleveland	Ohio 1,821,128	- 6.4	5,274,102	- 1.6
7 Columbus	Ohio 555,254	+ 3.3	1,673,415	+ 5.1
4 Dayton	Ohio 214,304	- 6.6	643,118	- 5.3
6 Toledo	Ohio 332,520	- 5.7	963,291	- 7.4
4 Youngstown	Ohio 150,086	- 8.3	445,383	- 2.5
6 Erie	Penna. 83,105	- 9.2	248,806	- 6.5
51 Pittsburgh	Penna. 2,240,589	+14.7	6,108,339	+11.3
113 TOTAL	\$6,587,758	- 0-	\$18,817,875	+ 1.4%
21 Other Centers:				
9 Covington-Newport	Ky. \$ 42,061	- 4.0%	\$ 116,901	- 2.8%
6 Lexington	Ky. 56,714	- 5.5	166,362	- 2.4
3 Elyria	Ohio 17,801	- 9.5	52,957	-10.5
3 Hamilton	Ohio 38,786	- 5.2	109,107	- 6.7
2 Lima	Ohio 40,274	-10.0	120,173	- 6.7
5 Lorain	Ohio 18,195	- 6.5	52,939	- 6.4
4 Mansfield	Ohio 38,664	-11.1	118,489	- 7.4
2 Middletown	Ohio 30,548	-10.2	94,086	- 6.1
3 Portsmouth	Ohio 19,983	-12.8	60,617	- 3.4
3 Springfield	Ohio 46,293	+ 1.7	135,066	- 0.8
4 Steubenville	Ohio 21,955	-13.6	64,316	-10.5
2 Warren	Ohio 36,307	- 4.1	110,080	- 0-
3 Zanesville	Ohio 25,275	-12.1	77,929	- 4.5
3 Butler	Penna. 28,683	-11.7	88,242	- 7.0
1 Franklin	Penna. 6,518	-13.0	20,067	- 7.6
2 Greensburg	Penna. 22,352	- 1.3	63,636	+ 0.5
4 Kittanning	Penna. 11,239	- 3.0	29,955	+ 1.6
3 Meadville	Penna. 13,045	-10.5	34,485	-15.5
4 Oil City	Penna. 19,322	- 6.8	54,595	-11.8
5 Sharon	Penna. 26,963	- 1.9	81,632	+ 4.3
6 Wheeling	W. Va. 61,579	+ 1.9	179,597	+ 5.3
78 TOTAL	\$ 622,557	- 6.2%	\$ 1,831,740	- 3.8%

*Debits to all deposit accounts except interbank balances.

Debits to deposit accounts (other than interbank accounts) in 31 Fourth District cities rose more than seasonally during June to nearly \$7,211,000,000, but were nominally below the year-ago level for the first time in the postwar period. This was due to the fact that while the shrinkage in debits at the 21 smaller centers continued for the third successive month, debits at the 10 larger centers failed for the first time to register a year-to-year improvement.

The volume of deposits was somewhat in excess of June last year, with the result that the rate of turnover of deposits was slower than in the comparable month of 1948.

TEN LARGEST CENTERS

Declines from year-ago levels were reported by eight of the largest centers. These ranged from 11% in Canton to 7% in Cleveland and 6% in Toledo, which indicates that the falling off in the volume of money transfers was both general and fairly uniform in extent. However, a sharp rise of 15% in Pittsburgh, together with a small upswing in Columbus, was sufficient to offset the general downward trend, and maintain the debit volume for all ten centers on a par with last year.

TWENTY-ONE SMALLER CENTERS

In June, the year-to-year decline in debit volume, which has become increasingly general in recent months, was apparent at all the smaller centers except Wheeling and Springfield, which recorded slightly higher levels than in the corresponding month of 1948. Portsmouth and Steubenville showed the most outstanding declines from the all-time highs registered by them a year ago. For the past three months combined, only four centers have exceeded year-ago levels and in none of them has the gain been appreciable.

Indexes of Department Store Sales and Stocks

Daily Average for 1935-1939=100

SALES:	Adjusted for Seasonal Variation			Without Seasonal Adjustment		
	June 1949	May 1949	June 1948	June 1949	May 1949	June 1948
	Akron (6)	283	307	314	266	298
Canton (5)	328	366	366	315	363	351
Cincinnati (8)	290	314	321	270	314	299
Cleveland (10)	263	281	279	250	272	265
Columbus (5)	312	353r	334	300	336r	321
Erie (3)	312	334	336	284	317	306
Pittsburgh (8)	266	275	290	258	275	281
Springfield (3)	267	283	295	259	283	287
Toledo (6)	270	286	280	251	277	260
Wheeling (6)	228	253	266	210	248	244
Youngstown (3)	305	336	338	287	326	317
District (96)	281	295	313	265	292	288
STOCKS:						
District	249	267	267r	244	269	262

r—Revised. Back figures: Revised index series for period from January 1946 through May 1949 are shown on p. 7 of this issue.

SUMMARY OF NATIONAL BUSINESS CONDITIONS

By the Board of Governors of the Federal Reserve System

(Released for publication July 27, 1949)

Industrial output declined further in June. Department store sales declined somewhat more than usual in this period, while sales of automobiles were maintained in record volume. Construction contract awards increased further. Prices of basic commodities showed some recovery from mid-June to mid-July; the average level of all wholesale commodity prices showed little change.

Industrial production

The Board's seasonally adjusted index of industrial production in June was 169 per cent of the 1935-39 average—3 per cent lower than in May and 13 per cent below the postwar peak level reached in October and November 1948. The decline in June reflected mainly further curtailment of output in most durable goods industries and a marked decline in activity in the coal mining industry. Production of nondurable goods as a group was maintained at the reduced levels prevailing in April and May.

Iron and steel production decreased sharply in June and declined further by mid-July. Output of open hearth steel in June was at 85 per cent of capacity, while electric steel output, following a decline of one-third from the reduced May level, was at 39 per cent of capacity. Activity in most machinery industries was curtailed further in June. Production of lumber and of stone, clay and glass products remained about 11 per cent below last year's level. Output of passenger automobiles, which had been reduced in May by a labor dispute at the plants of a major producer, increased considerably in June and was at a new high rate in mid-July.

Activity in the textile industries increased somewhat in June from the very low levels reached in May. Output of apparel wool textiles showed a further recovery from the April low point. Production of manufactured foods rose slightly in June. Newsprint consumption, however, decreased from the record May rate, and activity at petroleum refineries and chemical plants also declined somewhat.

Minerals production decreased in June reflecting largely a marked reduction in coal output as a result of a work stoppage and the beginning of the annual vacation period. Coal output remained at a low level in July with most mines operating three days a week. Production of crude petroleum was curtailed slightly in June and somewhat more in early July.

Construction

Value of construction contracts awarded in June, according to the F. W. Dodge Corporation, increased further to 946 million dollars as compared with 880 million in May and 935 million in June 1948. The increase reflected chiefly a further rise in awards for private residential work and an expansion in awards for public utility construction. The number of new housing units started in June totaled 100,000, accord-

ing to the Bureau of Labor Statistics. This was 5,000 more than in May and equal to the postwar high reached in May 1948.

Distribution

Value of department store sales showed somewhat more than the usual seasonal decline in June and the Board's adjusted index was estimated to be 284 per cent of the 1935-39 average, as compared with 292 in May and 307 in June of last year. Sales in the first half of July remained near the June level, after allowing for the usual seasonal changes.

Railroad revenue freight shipments decreased further from May to mid-July. In addition to marked reductions in the volume of coal loadings, shipments of various other industrial goods were in smaller volume than in earlier months.

Commodity prices

Prices of nonferrous metals and some other industrial materials advanced from mid-June to mid-July, following sharp declines in recent months. Steel scrap prices, however, decreased further by 5 per cent. Prices of hogs and pork showed marked seasonal increases in this period, while prices of worsted fabrics, paints, and some other finished products were reduced.

The average level of consumers' prices increased slightly in June as small advances in prices of foods were partly offset by further declines in clothing and housefurnishings.

Bank credit

Required reserves of all member banks were reduced by about 800 million dollars on June 30 with the expiration of the temporary reserve requirement authority granted to the Board of Governors by Congress in August 1948. Subsequently, during the first three weeks of July, Government security holdings at the Reserve Banks declined by about one billion dollars, reflecting sales of bills and certificates made in response to a strong market demand for these securities.

Business loans at banks in leading cities were reduced further during June and the first half of July, but the declines were somewhat smaller than in other recent months. Holdings of Government securities increased by over one billion dollars in the first half of July.

Security markets

Shortly before the reduction in reserve requirements, the System announced a change in open market policy. These developments were reflected in sharp declines in yields on Government securities early in July. System sales of bills and certificates checked this decline, but the resulting yields were still substantially below previous levels.

Prices of other securities—bonds and common stocks—advanced steadily in the first three weeks of July.

Seasonal Swings in Department Store Trade

(Continued from Page 6)

the typical month-end inventory for March, June, and November, and a slightly lower value of end-of-month stocks to April, August, September, and October. The changes, however, are not as large as in the sales pattern.

Incorporating the revised seasonal pattern of inventories into the seasonally adjusted index of department store stocks for the Fourth District yields the results shown by the red line of the third chart. The trend of department store inventories over the past three years may be seen from this revised stocks index (smoothed by the moving-average device) and may be compared with the sales trend depicted by the same chart. Thus as sales rose in 1946, stocks showed a steady and sharp rise from the previously reduced levels of wartime. Marked reductions in stocks, on a seasonally adjusted basis, occurred during the second quarter of 1947, reflecting in part a fear of impending recession which, as matters turned out, failed to materialize. A less marked interruption in the upward trend of stocks occurred in the spring of 1948, as the adjusted sales index continued to rise. In response to the declining sales trend which actually began in the latter part of 1948, an orderly reduction in stocks occurred, although apparently at a less steep rate than in the earlier periods of reduction.

It is interesting to observe that at no time in the postwar period has the index of stocks, in relation to the prewar base period of 1935-39, risen as high as the index of sales in relation to base-period sales. For two brief periods, in the very early parts of 1947 and 1948, the stocks index almost reached prewar parity with the sales index, only to back away in response

to a cautious inventory policy on the part of store management. (In this comparison, both stocks and sales are being related to their respective prewar levels. At the end of any given month, however, the typical dollar value of department store stocks is two to three times as large as the monthly volume of dollar sales.)

Sales by Cities A final phase of the general overhauling of seasonal patterns is concerned with the department store sales indexes for each of eleven cities within the Fourth Federal Reserve District. Here, too, the seasonal patterns previously in use needed revision in order to give maximum effect to postwar changes in the character of seasonal swings. In the case of some of the medium-size or smaller cities within the District, such as Springfield, Ohio; Erie, Pennsylvania; and Wheeling, West Virginia, the sales assigned as typical to the month of December were raised to levels as high as 170 percent to 180 percent of the monthly average, with corresponding reductions spread over certain other months of the year. In each of the three largest cities of the District, namely Cleveland, Pittsburgh, and Cincinnati, the typical December factor emerged slightly lower than the District average of 164 for December, although even in these cities the effect of the revision was to raise the December seasonal factor from its previous level, and to lower the factors for some of the early months of the year.

The tables which appear on page 7 show the revised seasonally adjusted department store sales and stock indexes for the Fourth District, as well as sales for each of the eleven reporting cities of the District. In each case the period covered is January 1946 through May 1949.

