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## WARTIME INVESTMENT POLICIES

The evolution of member banks' investment policies during six years of war is characterized by three rather clearly defined phases. The first phase covers the interval prior to this country's entry into war. The second interval extends from Pearl Harbor to the middle of 1943—an eighteen-month period in which a wide variety of new Treasury obligations became available to commercial banks in connection with the financial requirements of war. The third phase covers the period from mid-1943 to date, during which the distinguishing feature was the imposition of sharp limitations upon the extent to which commercial banks could subscribe on their own behalf for new Government securities.

During the first period the inflow of foreign funds, which had been quite pronounced for several years, reached unprecedented proportions. The influx of funds in the form of additions to the nation's monetary gold stocks generated an equivalent volume of deposits and reserves of member banks. New York City banks, generally, were among the first to feel the effects of this international movement of capital. But in the course of time, as such funds were invested or disbursed in payment for American products such as munitions and food, a considerable portion of those deposits gravitated to the interior. In the fourth district, member bank deposits increased approximately 34 percent during the thirty months prior to Pearl Harbor. Small banks as a group gained deposits—and reserves—as rapidly as large banks.

This expansion of reserves was especially significant in that it was superimposed on an already unprecedented level of deposits, caused by previous gold imports and by bank credit expansion in the wake of deficit financing. As a result of this climactic increment, excess reserves of all member banks stood between \$6 billion and \$7 billion during much of 1940 and early 1941. Excess reserves of fourth district member banks rose above \$500 million in November 1940, and remained in that area until after mid-1941.

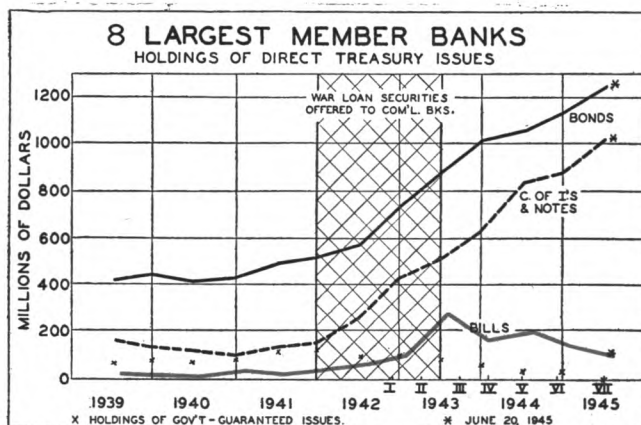
As an accompaniment of growing industrial and commercial activity, there was some expansion in the

volume of outstanding loans, particularly among the large metropolitan banks. Total loans of reserve city banks in the fourth district rose by about one-third, and of country banks by one-fourth. However in terms of dollars this increase of \$325 million in loans fell far short of the \$1,225 million concurrent expansion of deposits.

Under the circumstances of rather rapidly rising deposits, accompanied by only a moderate expansion in loans, the problem of idle funds and their disposition assumed increased significance. The accompanying charts provide a comparison of investment policies of three groups of fourth district member banks, classified chiefly on the basis of size.

Of the eight largest banks, two are located in Cincinnati, three in Cleveland, two in Pittsburgh, and one in Toledo. In total resources, these eight range from around \$225 million to approximately \$1 billion, representing 40 percent of the total resources of all fourth district member banks.

The second group consists of the 33 remaining weekly reporting member banks, most of which belong to the \$50-\$150 million size class. The resources of this group constitute about 25 percent of the district total.



The third section is composed of all other member banks, not reporting on a weekly basis. The vast majority of these banks fall within the \$1-\$10 million range. These 670-odd banks averaged just under \$5 million each in total assets at the end of 1944. In the aggregate resources, this group represents the remaining 35 percent of the district.

**First Phase** It is notable that, notwithstanding the huge surplus of available funds, member banks made virtually no net additions to their portfolios of U. S. Government securities during the first 18 months of the European War. This reluctance, apparent in all three groups of banks, was perhaps more attributable to a relative paucity of investment outlets than to a deliberate policy of liquidity.

The yield on Treasury bills held consistently near zero and certificates of indebtedness had not yet made their appearance in the Government's financial program. The aggregate volume of new Treasury offerings of marketable securities, chiefly long-term bonds, did not rise to new high levels until 1941 when a record peacetime borrowing program developed in connection with the rearmament effort. However, over 70 percent of those new Treasury issues offered during 1940-41 were of the long-term type, with maturities in excess of ten years.

There were only two Treasury offerings for cash during 1940—one of 14-16 year 2½'s in July of which only \$630 million were issued and \$530 million five-year ¾ percent notes in December. During 1941 there was only one note offering—a small one in January. In February, weekly bill offerings were utilized to raise \$300 million of new money. During the remainder of the year, some \$4 billion of long-term 2's and 2½'s were issued for cash as rearmament expenditures mounted.

Holdings of Treasury obligations by each of the three groups of banks did not exceed the 1936-37 peak until near the middle of 1941. Outside the eight largest banks, which added to their note portfolios, the increase during 1941 was confined almost entirely to bonds, of which some were long-term offerings acquired directly from the Treasury, and some were bonds with shorter maturities purchased from other investors. It is quite apparent that during this early wartime period, bank investment policies were conditioned by the scant supply of new offerings con-

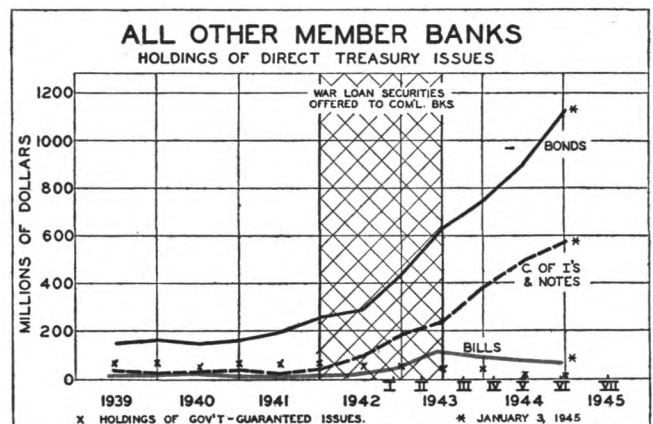
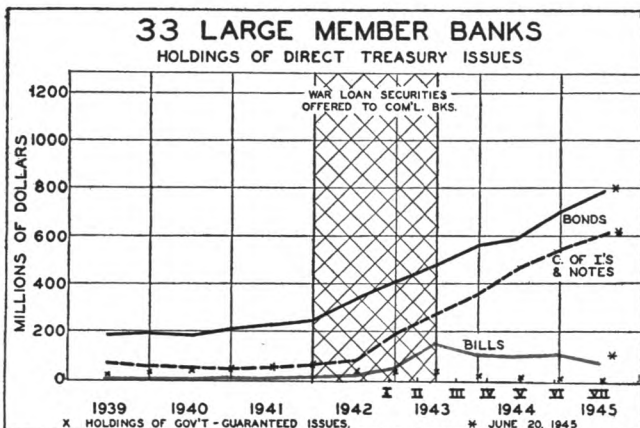
sidered suitable and attractive for commercial bank investment. At the time of Pearl Harbor, bond holdings represented from 75 to 85 percent of all direct Treasury obligations held by fourth district member banks. Bill holdings were of a nominal amount—only three of the eight large banks held bills. Treasury notes also occupied a relatively unimportant position in investment lists.

**Second Phase** The second phase of wartime investment policies was ushered in by this country's entry into active participation in the conflict and is indicated by the crosshatched portion of each chart. As a consequence of greatly increased financial requirements, Treasury offerings for cash during 1942 and the first half of 1943 amounted to a record-breaking \$57 billion of marketable issues, and consisted of a wide assortment of bills, certificates, notes, and bonds.

Some of those securities were tailored primarily for commercial bank investment, and with the exception of the two long-term 2½ percent "Tap" issues, all were eligible for ownership by member banks without restriction. Notwithstanding the fact that reserve requirements had just been increased (November 1, 1941) by about one-seventh, member banks of this district embarked upon an aggressive investment program. This positive attitude developed in response to a combination of considerations.

Short-term rates were moving toward higher levels (and lower prices) and on April 30, 1942, it was announced that the reserve banks had established a ¾ percent buying rate on Treasury bills. Thenceforth bills could be acquired at that rate without risk of loss. In August a further incentive was provided by the adoption of the repurchase option technique which in conjunction with the ¾ percent buying rate virtually endowed Treasury bills with the quality of reserve funds. Thereafter banks could go into and out of bills with absolute impunity, and could use bills as a means of adjusting their reserve position daily, or at less frequent intervals.

Later, in October 1942, the Treasury made it known that the yield on marketable offerings during the war would be stabilized in accordance with a "pattern of rates" beginning with ¾ percent for 91-day bills and extending to 2½ percent on long-term bonds. This action gradually evoked a considerable degree of



confidence on the part of institutions of deposit that the facilities of the reserve banks would be ample to provide a high degree of stability in the rate structure.

In the same month, the Federal Reserve Bank of Cleveland, along with all other reserve banks, instituted a preferential rediscount rate of  $\frac{1}{2}$  percent on all advances secured by marketable Government obligations callable or maturing within one year. Moreover, in April 1943, just prior to the Second War Loan, war loan deposits were statutorily exempted from reserves requirements and also from Federal Deposit Insurance Corporation premium payments. Furthermore, on May 12, the Treasury initiated a plan under which any bank could tender a bid of  $\frac{3}{8}$  percent for bills up to \$100,000 with the assurance that the subscription would be allotted in full. As a consequence of this series of both real and psychological inducements, all three groups of banks acquired substantial quantities of every type of Treasury obligation.

During the 18-month period, there were five major offerings of less-than-ten-year bonds, ten sizable offerings of notes and certificates of indebtedness, and an increase of nearly \$10 billion in Treasury bills. Thus, although longer-term and higher-yielding securities were available in virtually unlimited quantities (with regard to each respective bank), the amount of low-yielding bills acquired was greater in proportion to previous holdings than the acquisition of longer obligations. By mid-1943, these short securities comprised no less than 10 percent of the direct-Government portfolio of the 670 smaller banks, and 15 percent in the case of the largest banks.

At the close of this second phase, the eight largest and 33 other weekly reporting banks had purchased a volume of securities sufficiently large to reduce their ratio of cash assets to total assets to around 24-27 percent, or the lowest since the beginning of the war, and in contrast to nearly 40 percent at the end of 1940. On the other hand, country member banks were still more liquid than in 1939, and held a greater percentage of assets in the form of cash than did the reserve city banks. The small banks whose need for liquidity historically has been less pronounced were, by mid-1943, the furthest removed from a condition of full investment.

**Third Phase** The third phase in wartime investment policy covers the period from the middle of 1943 to the present time. Two major characteristics differentiate this most recent interval from the two preceding stages. One is the unabated growth of holdings of bonds, notes, and certificates, despite the virtual exclusion of commercial banks from direct participation in war loan offerings, beginning with the Third War Loan. The other feature is the shift of emphasis from short to longer-term obligations.

A \$2.7 billion note offering in July 1943, open to all investors including commercial banks, elicited subscriptions of nearly \$20 billion. And in October, shortly after the Third Loan, a special offering of \$3.2 billion of certificates and eight to ten year two percent bonds was made to commercial banks. These two offerings in addition to the issuance of some \$5.2

billion of additional Treasury bills during the past two years, and the very limited subscriptions permitted under a time deposit formula, were the only avenues whereby commercial banks have had direct access to new Treasury issues since the middle of 1943.

It is significant that the one type of security which was most readily available, namely, Treasury bills (especially after the fixed-price tender feature was instituted in May 1943), proved to be the least attractive Government security among fourth district member banks, particularly the largest institutions. A partial explanation of the actual divestment of bills is to be found in the continued, although irregular, rise in reserve requirements which many banks met by selling Treasury bills to the reserve banks with the repurchase option privilege. However, as funds subsequently became available, some of the excess reserves were diverted to the acquisition of longer securities, while some optioned bills were permitted to run off. Possibly another factor of some minor consequence is to be found in the slowing down in the rate of deposit growth in the largest banks; but that development seemingly did not impede the acquisition of other Treasury issues by the same institutions.

The continued steep rise in bonds, notes, and certificates during the past two years slightly overstates the actual holdings of public debt, for it was during this interval that most of the remaining guaranteed issues were refunded into direct Treasury obligations. However, the magnitudes involved were too small to make an appreciable change in the overall position. Even after adjustment for this factor, acquisitions of certificates of indebtedness and notes by the eight largest banks had continued at a virtually unchanged rate since the time of Pearl Harbor. In the case of the two groups of lesser size, the rate of acquisition has actually been accelerated, most noticeably with respect to the smallest, or non-weekly-reporting banks, whose deposit growth broke all previous records in the past two years.

On the basis of latest available data, bond holdings of the three groups of fourth district member banks are now three, four, and six times, respectively, their 1939 portfolio. Unquestionably these very purchases created an equivalent volume of deposits somewhere in the banking system and thus accentuated the difficulty of all banks in the aggregate in achieving a full investment policy. However, the knowledge that the deposit expansion since 1941 was largely self-generated was, and still is, an irrelevant abstraction to any one bank confronted with a practical and persistent investment problem in the form of idle funds.

**Summary** During the first interval under review, idle funds were the largest on record, while the supply of new Treasury issues was comparatively small. Banks looked askance at the outstanding issues because of the "low" yields at which such securities were available. As a result, there was very little increase in the portfolios of Treasury obligations of fourth district member banks during the early years of the war.

During the second phase, there was an abundance and variety of market issues. Fourth district member

banks displayed a noticeable preference for the short end of the market although toward the end of the period confidence in the stability of the rate structure became increasingly evident.

The third phase—not necessarily the last—in a sense was a repetition of the first in that the supply of suitable and attractive issues was again sharply restricted. However, there the similarity ends. The limitation of supply in the current phase has been deliberate, pursuant to what was believed to be a sound anti-inflationary policy. In this new period of artificial scarcity, fourth district member banks turned to outstanding issues and to nonbank investors for a continual supply of intermediate and longer-term securities, at prices which betokened an exceptional degree of confidence in the future trend of interest rates and bond prices.

Perhaps most significant is the fact that many of the Treasury obligations purchased by fourth district member banks in the past year or two involved the payment of premiums of varying and sometimes substantial amounts, whereas Government securities obtained during the first and second phases were purchased, presumably for the most part, at the issue price of par.

### SEVENTH WAR LOAN

On June 20, or ten days before the end of the Drive, purchases of Seventh War Loan securities reached and exceeded the goal of \$1,037 million established for the fourth district. Preliminary reports indicate that subsequent subscriptions pushed the final figure to more than \$1,700 million, as against the previous record of \$1,560 million attained in the Fifth Drive. There was also considerable variation from earlier campaigns with respect to investor response to the eight respective issues offered in the Seventh Loan.

On the basis of still incomplete data, the only issues to show no noticeable deviations from precedent are the Series F and G Savings Bonds, whose subscriptions usually have represented only a small part of the total, and Series C Savings (Tax) Notes which appear to have been equally as popular as heretofore. It is estimated that, as in the past, approximately 20 percent of the funds raised during the Drive in this district was represented by these tax anticipation notes.

The difference in the status of Series E War Bonds during the Seventh Drive has been almost wholly the result of an arbitrary decision. In terms of dollars, sales to date have not lagged behind previous efforts. At the end of June, sales had exceeded the record \$267 million obtained in the Fourth Loan, and it appears that Series E sales will constitute the customary one-sixth of total funds raised. However, in terms of the current quota of \$357 million, final results will be somewhat behind schedule. Absorption of available funds in the hands of individuals, through the increased sale of Series E bonds, has not conformed to the record high objective sought for the campaign.

The  $\frac{7}{8}$  percent certificates of indebtedness appear actually to have receded somewhat in popularity

among investors with the exception of state and local governments whose investment policies are subject to rather inflexible statutory requirements and limitations.

Subscriptions entered for the short ( $5\frac{1}{2}$ -year) bonds which were offered only to individuals, but which are now eligible for commercial bank ownership, comprised only some five percent of total funds obtained in this district, as against a considerably larger proportion represented by  $1\frac{1}{4}$  percent notes in two previous drives.

The two remaining types of issues, namely, the long-term  $2\frac{1}{4}$  percent and the  $2\frac{1}{2}$  percent bonds, appear to have been decidedly in the ascendancy in the fourth district. Subscriptions to the 14-17 year  $2\frac{1}{4}$ 's probably will be almost equal to sales of the shorter 2's (eight to ten years) offered in the previous drive, and which were immediately eligible for purchase by commercial banks upon conclusion of the Sixth War Loan. A considerable proportion of these new  $2\frac{1}{4}$ 's was taken by building and loan, and savings and loan associations.

The "Tap"  $2\frac{1}{2}$ 's which have been a regular feature in each of the seven war loans set a new high mark for total subscriptions by a considerable margin. The final figure for subscriptions by individuals will be at least twice the volume attained in any of the three preceding drives. In the Fifth and Sixth campaigns, sales of these long-term bonds accounted for only around 10 percent of total funds raised. In the current campaign, the proportion will be close to 20 percent, notwithstanding the fact that these new  $2\frac{1}{2}$ 's can not be sold to (owned by) commercial banks during the next 17 years, as against a limitation of only 10 years in previous "Tap"  $2\frac{1}{2}$ 's.

This growing preference for longer-term ineligible securities, when coupled with the unchanged or slightly lessened demand for fully negotiable short-term securities, seems to suggest that investors feel more assured than ever that the long-term rate will not rise in the next several years. In increasing numbers, both individual and corporate investors appear to prefer the higher rate available on long-term securities, on the premise that, should the need arise in the next few years, such securities could be liquidated without fear of loss, as against the alternative of receiving a lower income from notes and certificates, or the low income which would be realizable in comparable circumstances on discount securities such as the Series E, F, and G Savings Bonds. This growing assumption regarding the permanence of present long-term rates which featured commercial banks' investment policies in recent months evidently has also become a factor in the nature of subscriptions entered by noncommercial banking investors during the Seventh War Loan.

### New Member Banks

The Farmers & Citizens Savings Bank Company  
Germantown, Ohio

The Grafton Savings and Banking Company  
Grafton, Ohio

# The Farm Mechanization Trend In Wartime

War-stimulated demand for agricultural machinery has left a widespread impression that farm equipment production and sales have lagged during the war years. Throughout this period, the farm machinery situation has been described as "acute" or "stringent," and calumny frequently has been heaped on the heads of those responsible for farm machinery output and rationing. The war period now has lasted long enough, however, to permit examination of what actually has taken place in this important field with somewhat greater perspective. In part, this may aid in a better understanding of the miraculous food production record during the war; in part, it may give some idea of farm machinery consumption possibilities in postwar years.

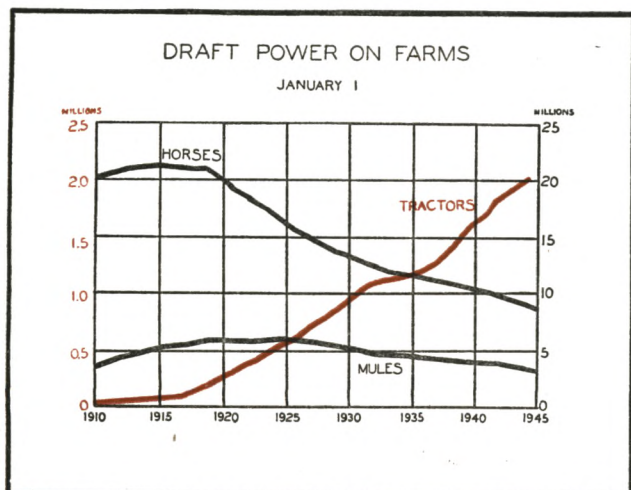
**Quotas** Since its issuance on June 15, 1943, production quotas on farm machinery have been established under Limitation Order L-257. This was the fourth order governing wartime farm equipment production and, in general, it bases quotas on an average of 80 percent of the steel tonnage used in the production of each item classification during 1940 or 1941, whichever was larger. This order has been amended so that it is continuous for the duration of the war or the useful life of the order. It was under the authority of this order that quota restrictions were removed from agricultural machinery production beginning on July 1, 1945. It was also under this order that an easing of quota restrictions was granted for the month of June whereby any producer who had no quota for an item or had completed his quota could make or ship additional quantities of that item before July 1 without regard to his quota. Producers could use material in inventories or material procured without the use of allotments or priorities assistance. Thus, by "open ending" the Controlled Materials Plan, additional steel tonnage may be available to the industry beyond that already allotted for each of the third and fourth quarters of 1945. It is on this basis, in conjunction with earlier upgradings to an AA-1 priority rating for malleable iron castings, as well as a hoped-for improvement in labor and component

shortages, that some sources predict record production and sales of farm machinery and equipment for 1945.

**Mechanization Trend** It seems to be a characteristic of wartime that many years of agricultural tradition are abandoned because of war pressure. During World War I, labor-saving machinery, especially mechanical power, expanded in practically all regions of the country, and the mechanization trend continued throughout most of the 1920's. As evidence of this tendency toward "powering the farm," the Bureau of the Census estimates the value of machinery equipment on farms in 1910 at \$1,300,000,000 and in 1940 at \$2,633,000,000. Confirmation of the trend toward mechanical power also is indicated in the chart entitled "Draft Power on Farms."

Though the depression of the early 1930's interrupted the farm mechanization trend, the current war period has provided renewed acceleration. Actually, a considerable increase in farm machinery production preceded this country's entrance into war. Production in 1940 and 1941 was high and there was extensive inventory carryover into 1942. It is possible to see now how fortunate it was for this Nation to go into the war with farms fairly well supplied with equipment. Unquestionably, the progressive change from animal to mechanical power has led to faster and more timely operations which have been particularly helpful in view of the farm labor shortage and the difficult planting seasons of the past two years.

**Steel Consumption** One measure of wartime farm machinery output, of especial interest to the steel-producing fourth district, lies in steel tonnage consumption for farm equipment production. An accurate appraisal of the industry's net steel consumption is difficult because of component production by suppliers who are classified in other industrial fields. Therefore, one is limited to direct shipments from mills to known farm machinery and equipment manufacturers. On this basis, steel tonnage consumption during recent years for the industry is shown in Table I.



## Steel Product Shipments to Farm Equipment Manufacturers

TABLE I  
(Net Tons)

1939	630,147
1940	919,502
1941	1,153,626
1942	570,046
1943	712,851
1944	1,095,635

SOURCE: Figures for 1939 compiled by *Steel*; for 1940-44 by *American Iron and Steel Institute*.

During 1944, the agricultural implement and machinery manufacturers received an estimated 1,095,000 tons of steel mill products. This compares favorably with the 713,000 and 570,000 net tons shipped them

during 1943 and 1942, respectively. With the exception of 1941, the steel shipped to farm equipment companies during 1944 was the largest tonnage recorded since 1937. Peak in steel shipments to this group occurred in 1929 when they totaled 2,100,000 tons. However, the dollar sales, at wholesale value, of farm equipment for that year amounted to only \$517,015,064, which reflects the heavier type of farm equipment of the period, as well as a large carryover into stocks. The great proportion of current agricultural steel tonnage takes the form of bars, sheets and strips.

The continuance of L-257 during the third and fourth quarters of 1945 assures the agricultural machinery industry of a considerable steel tonnage, nearly 80 percent of which will be given through AA-2 rated orders. Third quarter steel allocations to the agricultural machinery industry amounted to 348,598 tons against industry requests for the quarter totaling 468,000 tons. For the fourth quarter, the allocations of rated steel to the industry will probably remain the same as during the third quarter, whereas the industry requested 521,871 tons. If the open ending of L-257 results in the industry being able to obtain additional unrated steel, total steel consumption during 1945 for agricultural machinery production may approximate 1,300,000 tons. However, there is some question as to whether additional steel can offset the present shortage of labor and certain scarce components.

Over-all, the volume of unrated steel orders is expanding rapidly, and in the fourth district it is estimated that fully 50 percent of incoming business is of this character with sheets representing, by far, the larger portion. Generally speaking, no definite delivery promises can be made on this unvalidated tonnage because of priority of rated orders. Apparently, the order rush is influenced by desire of consumers to secure the best possible position when mills can place such orders on schedule. On their part, steel companies will do all in their power to fill these unrated requirements, especially for the larger consumers, because of the hope that purchasing agents may not soon forget steel producers who supply them in this uncertain period. Because of its strategic importance, it is believed that the agricultural machinery industry may be more than normally successful in obtaining its share of available unrated steel tonnage. However, if the tendency to give supply preference to large consumers actually evolves during reconversion, pressure from smaller companies may require continuation of materials allocations for a longer period than the War Production Board now contemplates.

**Sales and Production** A second measure of farm equipment production is contained in the record of sales. In fact, during the war period production and sales have been so closely correlated that the data are very similar. The Bureau of the Census has compiled sales data on farm machines and equipment, attachments, and parts from 1929 through 1944—excluding 1934, 1933 and 1932, for which years the annual survey was suspended.

## Sales of Farm Machines and Equipment, Attachments, and Parts: 1929-1944

TABLE II

	Total	Farm Machines and Equipment	Attachments and Parts
1944--	1,067,840,007	730,968,019	336,871,988
1943--	636,989,307	375,869,408	261,119,899
1942--	659,028,241	447,186,782	211,841,459
1941--	671,398,247	538,963,006	132,435,241
1940--	497,822,660	396,370,509	101,452,151
1939--	420,796,883	330,894,316	89,902,567
1938--	435,806,448	346,133,693	89,672,755
1937--	517,474,802	436,678,175	80,796,627
1936--	402,874,783	327,940,485	74,934,298
1935--	294,545,665	234,958,385	59,587,280
1931--	223,426,837	171,730,475	51,696,362
1930--	439,811,535	361,217,468	78,594,067
1929--	517,015,064	434,754,424	82,260,640

The influence of the track-laying (crawler) type tractor on the total figures for farm machines and equipment must be noted in any analysis of sales during the war years. For many years, track-laying tractors have been used largely for industrial purposes, and during the war military consumption has been added to industrial uses. By number, approximately 10 percent of track-laying tractor sales have been for domestic farm use during 1943 and 1944. In terms of dollars, however, only 7 of \$261 million in 1944 and 3 of \$142 million in 1943 represented sales for domestic farm use. A similar problem occurs in wheel type and garden tractors where military, commercial export, lend-lease, and UNRRA requirements take almost one-fourth of the total production. However, this problem is not serious for agricultural machinery in the aggregate since only some ten percent of farm machinery production, aside from track-laying tractors, has gone to other than domestic farm users.

The War Production Board has endeavored to segregate non-farm agricultural machinery from the industry totals for the years 1939-1944 in order to obtain net farm-use production. Its conclusions, by machinery groups and in total, are summarized in Table III, entitled "Value of Farm Machinery and Equipment Production 1939-1944."

Based upon Bureau of the Census and War Production Board compilations, adjusted to omit non-farm agricultural machinery production during the war years, total agricultural machinery sales for the years 1929-1944 are shown in the chart entitled, "Sales of Agricultural Machinery and Equipment." According to War Production Board data—and an evidence of the relative price stability of the industry—an adjustment of production values for the 1939-1944 period to 1943 prices would introduce comparatively small changes in the farm equipment production record for these years.

In both aggregate values and numbers, the production and sales of farm equipment during 1944 approximately doubled 1943. Tractors; planting, seeding and fertilizing machinery; harvesting machinery; haying equipment; harrows, rollers, stalk cutters and pulverizers; plows and listers; dairy and poultry equipment—all these were up from one-third to more

**TABLE III**  
**VALUE OF FARM MACHINERY AND EQUIPMENT PRODUCTION**  
**1939-1944**

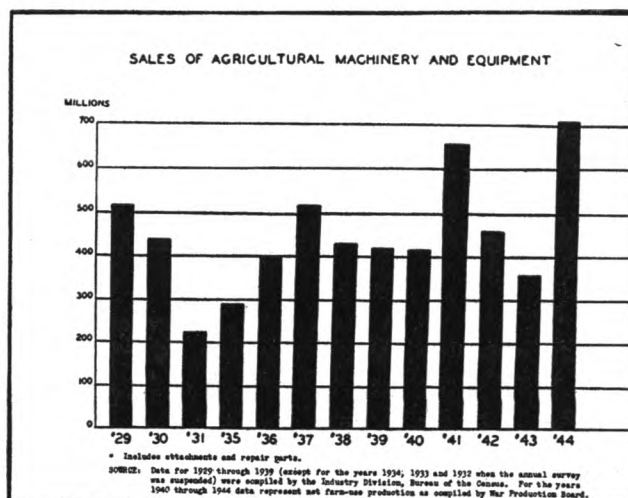
Group Code No.	Group Descriptions	Census Reports					1944 Census Yr. Estimate
		1939	1940	1941	1942	1943	
450 1	Planting, Seeding and Fertilizing Machinery	\$12,618,659	\$17,092,384	\$23,325,835	\$10,085,579	\$ 8,648,819	\$23,400,000
450 2	Farm Plows and Listers	12,511,422	18,875,905	22,284,453	16,272,774	8,369,527	18,800,000
450 3	Harrows, Rollers, Pulverizers & Stalk Cutters	9,127,129	11,671,068	16,711,187	11,953,358	6,701,778	15,200,000
450 4	Cultivators and Weeders	9,972,400	13,111,006	17,428,343	15,117,482	9,211,412	20,700,000
450 5	Farm Sprayers, Dusters & Orchard Heaters	3,719,400	3,412,615	7,174,888	5,933,923	5,767,201	9,600,000
451 6	Harvesting Machinery	37,120,643	31,584,483	44,295,161	35,286,226	27,869,636	48,800,000
451 7	Haying Machinery	10,105,151	14,653,336	25,316,421	20,556,427	11,915,040	28,300,000
451 8	Machines for Preparing Crops for Market or Use	14,664,832	16,389,665	18,357,091	14,738,185	9,638,022	14,200,000
451 9	Farm Elevators and Blowers	1,668,544	1,865,118	2,448,464	1,809,446	2,601,210	3,400,000
471 10a	Garden Tractors	1,415,543	1,272,746	1,993,761	1,875,590	1,287,728	1,700,000
471 10	Wheel Tractors	110,856,746	136,762,330	182,895,701	102,557,627	63,784,198	173,900,000
452 12	Farm Wagons, Gears and Trucks (Not Motor)	3,435,164	4,877,476	6,505,328	3,525,820	3,766,245	5,800,000
452 13	Domestic Water Systems (Farm Type)	11,755,457	17,193,468	20,079,979	14,992,542	9,985,488	22,300,000
452 14	Farm Pumps and Windmills	5,455,457	5,859,893	6,310,826	5,436,500	5,500,637	5,500,000
452 15	Irrigation Equipment	5,500,000	6,165,000	5,705,000	4,548,661	4,450,000	9,200,000
453 16	Dairy Farm Machines and Equipment	8,219,451	11,656,010	18,205,607	17,758,749	15,850,857	21,600,000
453 17	Barn and Barnyard Equipment	6,677,294	7,105,715	10,210,784	7,933,026	7,804,025	15,600,000
453 18	Farm Poultry Equipment	9,798,320	7,441,019	11,395,995	10,106,244	16,920,208	16,700,000
453 19	Miscellaneous Farm Equipment	9,662,288	12,708,073	14,763,000	17,941,673	12,425,610	15,800,000
313	Attachments	20,800,000	23,400,000	31,400,000	25,432,223	16,073,918	35,900,000
813	Repair Parts	49,843,297	59,443,836	76,032,159	114,887,763	115,241,663	199,800,000
Total New Units, Attachments & Repair Parts		354,927,197	422,541,147	562,840,023	467,748,818	363,813,222	705,600,000
Total New Units and Attachments Only		305,083,900	363,097,311	486,807,864	352,861,055	248,571,559	505,800,000
Total New Units Only		284,283,900	339,697,311	455,407,864	327,428,832	232,497,641	469,900,000

than double 1943 production. Labor-saving machinery, such as small combines, corn pickers, windrow pickup bailers and tractor planters and cultivators have shown phenomenal gains in farm usage. Tractors, which have been in tremendous demand during the war years, have increased more rapidly than machinery for soil preparation and sowing. That this trend toward farm mechanization is still advancing is evidenced by the fact that in the ten month period, July 1, 1944, to April 30, 1945, total agricultural machinery production amounted to \$533 million. This compares with a similar period beginning July 1, 1943, in which the total production value for all groups of agricultural machinery amounted to \$465 million. Although the 1944-1945 ten month production period ran behind quotas by 14 percent, this lag should be made up, perhaps exceeded, before the end of the calendar year 1945.

The conclusion seems to be inescapable—farm machinery and equipment have been supplied to farmers during the war years in very large amounts. The record production of attachments and repair parts have also played an important part in supplying the Nation with food and feed for both the home and the war fronts. While it is true that food and feed production during the war period has been hindered by a shortage of farm machinery and equipment, the lack has not been absolute, in terms of prewar standards, but is relative to the pressure for wartime production and the scarcity of farm labor. These latter forces, occurring simultaneously with record farm incomes, have culminated in a pyramided demand for farm machinery that a war economy could not hope to satisfy and, at the same time, maintain its primary

responsibility to supply the armed services with superior war power.

**Postwar Farm Mechanization** Farm mechanization has made gains all over the country during the war. This is true even in the heavily mechanized middle western and western areas, but it especially is true of the southeastern part of the country where the rapid expansion in the use of power machinery practically is creating an agricultural production revolution. The pressure for production during the war period has brought a new realization of the value of farm mechanization and farmers see it as the means of producing agricultural products on a cost comparison with the mass-produced goods of



industry. Perhaps the lesson of mechanization had been learned before the war, but the experience of the war has emphasized its value in view of advancing manpower and materials costs, plus actual manpower shortage. It may be well to remember, however, that as manpower becomes more plentiful once again, the marginal-cost conflict between mechanical and labor power may assert itself anew.

However, the over-all farm mechanization trend is likely to receive even greater impetus in the next few years. The greatest demand will be for basic machinery of a labor-saving character—tractors, combines, trucks, and all kinds of tractor-operated farm equipment and tools. It is estimated that the demand for tractors alone may call for 200,000 to 300,000 units each year. This figure is arrived at by the replacement rate for the 2,000,000 tractors now on farms—estimated to require about 100,000 units annually—plus another 100,000-200,000 to replace the draft animal decline and to take care of the expanded use of tractors among old and new farm users. There also will be increased use of specialized machinery, including sugar beet harvesters, hay choppers, basin-listers, fertilizer placement machinery, cotton pickers, etc. The soil conservation program, too, will require its quota of special equipment for digging ditches and making terraces in addition to increased use of standard equipment such as plows, harrows, drags and slip scrapers. New and improved designs for many types of agricultural equipment will appear in the next few years, and this will soon offset the wartime congealing of equipment design that has tended to curtail normal progressive machinery improvement.

In predicting postwar requirements for farm machinery, much is made of low dealer stocks and the unsatisfied demand as evidenced in requests placed by farmers with the War Food Administration. Other surveys indicate similar demands and the current financial position of farmers, in addition to unused credit possibilities, would seem to give them the purchasing power to expand farm mechanization. "Intention to buy" surveys, however, must be interpreted with caution, especially if they refer to the postwar period. Likewise, potential demand cannot be measured by formal farm machinery and equipment requests received by the War Food Administration, partly because of the pyramiding of requests by individual farmers with different dealers. Deferred demand alone could not be sufficient to maintain farm machinery sales for any extended length of time. Current income and prospects of profitable operation, considered in relation to alternative operating costs, are the primary long-term barometers of machinery purchase. Since reconversion problems are nearly

non-existent for agricultural machinery producers, future production will depend on many factors, including the level of industrial employment, the expansion of export markets and the extent to which products of the farm will be utilized as raw materials in industrial processes.

### DISTRICT SUMMARY

The Fourth Federal Reserve District sometimes is called the sub-contracting district. In consequence, primary contract cancelations have, thus far, filtered down somewhat slowly to the diversified industry of the area. In fact, up to July 1 cutbacks were spotty throughout the fourth district and had been reflected only slightly in the level of industrial operations and employment. In practically all areas where employment had decreased, examination indicated that the lower employment followed the trend of available manpower. The larger part of the drop during the past year was due to the armed services' requirements, the return of students to schools and colleges, and a persistent reduction of marginal employees, including many women. From early July on, however, retrenchments in the war production program may be expected to be a more dominant factor in the employment picture. The consensus seems to be that most of the district still faces a tight labor market, and that the difficult job adjustment period still lies in the future. This is confirmed by the number of priority job openings, total calls on job order books and the relatively small number of claims for unemployment compensation. However, the fourth district, like the rest of the Nation, is on a touch-and-go basis during reconversion.

**Steel** Steel remains the bellwether of district industrial operations, and as long as it continues to operate at near-90 percent capacity levels, employment in the district is not in serious jeopardy. Present order books are so heavy that cutbacks have not been reflected in operating schedules—the operating rate decline during June being due to manpower, maintenance and fuel difficulties. Pressure of non-rated orders from the automobile industry, as well as from other important civilian goods fields, has been heavy and it is believed that deliveries will be forthcoming by the time the steel is needed. It has been reported that some companies are using priority ratings to stock materials which they may later use in civilian production, the simplest device being non-cancelation of steel orders when contracts, under which the steel was allocated, were cut back.

**Other District Industries** Bituminous coal production during May in the fourth district amounted to 19,379,000 tons. This brought the January 1-June 1, 1945, total to 90,805,000 tons,



compared with a national total of 250,150,000 tons from January 1 through the week ending June 2, 1945. National tonnage for the comparable 1944 period was 272,357,000 tons, which indicates that 1945 production is running behind 1944 by almost 10 percent. Demand for all sizes of coal continues strong and reflects normal seasonal demands for lake tonnage coupled with unusually heavy domestic and war requirements. The 1945 production record of the industry may require the tightening of distribution controls unless curtailed industrial activity results in decreased demand.

Many industries of the district continue to reflect military requirements. Heavy duty tire needs still absorb the energies of tire, carbon black and tire cord producers. Expanded capacity, however, may release most of the pressure on the tire needs of some classes of consumers by the end of 1945. Textile manufacturers, both for cotton and worsteds, are still largely occupied with army requirements, with the civilian economy to feel the pinch in the next few quarters. Paper and paperboard continue in short supply, due to enormous requirements for packaging military supplies. The peak, however, may have passed and civilian releases may become more abundant soon. Production in ceramics holds at high levels, limited chiefly by manpower rather than component shortages. Manufacturers of many other civilian goods, including shoes and clothing, report a larger volume of orders than can be filled under present manpower and materials conditions.

**Agricultural Prospects** On a district basis—but under the handicaps of late plantings and replantings of crops—much progress has been made with the prospect that most of the acreage intended for crops has been planted. Weather conditions during earlier months of the year were so favorable to winter grain crops and pastures that prospects throughout the district are from good to excellent despite adverse May weather. In Ohio, winter wheat production for 1945 was estimated at 55 million bushels as of June 1, compared with an average production of 41 million bushels for the years 1934-44. At the same time, oats production was estimated at 48 million bushels as compared with the 1934-44 average of 40 million bushels. The rainy weather that prevailed during June flooded many of the fields in the district, as well as generally throughout the corn belt, and is a rather distinct threat to the corn crop. A period of extremely dry weather could make a very unfavorable season for corn production, which might adversely affect meat supplies in 1946. Largely because of the good pasture conditions, fluid

milk production remains at record levels and is taxing manufacturing facilities to the limit.

**The Meat Situation** Field reports indicate that the Ohio spring pig crop will be only 10 to 12 percent less than last year, and this may provide some relief from the present tight meat situation by the last quarter of the year. In fact, the combined spring and fall pig crop, now estimated at 87 million for 1945, is expected to exceed the 1944 total, although it falls about 8 million head below the Government's goal. However, despite the promising hog situation, and the increased feeding of cattle, it is not likely that total civilian meat consumption per capita for 1945 will be above 130 pounds as compared to 147 in 1944.

There has been some fear that one consequence of the shortage of meat would be depletion of poultry flocks, partly through the black markets, with the result that egg production—now running 7 percent below the first six months of 1944—in the late summer and fall will be endangered. Although there had been a heavy reduction of layers in the first three months of the year, in the period April 1 to June 1 the reduction was less than in the comparable period of 1944. Ohio farmers decreased their flocks for the first six months of 1945 by practically the same number as in 1944, while the number of chicks and young chickens was slightly above 1944 holdings.

**Farm Income and Prices** The value of farm marketings in fourth district States during the first five months of 1945 was slightly lower than for the comparable 1944 period, largely due to the reduced marketing of livestock and livestock products. In terms of the May 1910-1914 average price index of 100, Ohio farm prices were 203 in May 1945. Prices paid by United States' farmers had risen to 173 for May 1945 as compared with the May 1910-14 average of 100. The present high level of demand for farm products is likely to be maintained during the remainder of 1945, and may result in a new record for cash farm income.

## DEPARTMENT STORE SALES

As shown on the accompanying chart, sales at fourth district department stores this month evidenced considerable improvement over both the previous month and June 1944. Based on reports received from fourth district stores for the first two weeks of June, sales were up 18 percent from last year and were the largest on record for that period. This is in sharp contrast to the experience for April and May, when dollar volume was close to the 1944 level. May

was the first month in some time for which stores reported a year-to-year decline in their total dollar sales. This decrease resulted partly from unfavorable weather conditions and also from the announcement of V-E Day, with the attendant uncertainty regarding cutbacks in war production and lay-offs. However, so far, the cutbacks in this district have been relatively small and have had only a slight affect on total employment and payrolls. Any reduction in fourth district retail sales that may have occurred because of the end of the European phase of the war probably resulted more from the fear of possible lay-offs in the future rather than from actual unemployment. There has been little reduction in the purchasing power of consumers, and they are continuing to buy a large volume of department store merchandise, as indicated by the gains for the first part of June.

Weather has been an important factor influencing retail business recently. This month conditions were quite seasonal, and retailers reported considerable activity in their departments featuring summer

merchandise. However, during May there was much cool weather, which reduced somewhat the demand for summer goods, but, at the same time, prompted many women to buy such items as suits and coats. Sales in this category were 47 percent larger this May than last. In contrast, sales of sportswear, blouses, and skirts were up only two percent, and the retail dress business dropped off five percent from 1944. Men's and boys' wear sales were down twelve percent, and housefurnishings departments, in the aggregate, sold three percent less merchandise during May this year than in the same month of 1944. Total piece goods sales were slightly smaller, as a result of the 16 percent decline in sales of cotton yardage. Stores are continuing to experience considerable difficulty in securing cotton wash goods, and there is a rapid turnover of this merchandise. Stocks in this department at the end of last month were down 21 percent from May 31, 1944.

Although total sales last month were slightly smaller than in May a year ago, stores in certain cities of the district—such as Akron, Cincinnati, Columbus, and Youngstown—experienced year-to-year gains. However, these were offset by declines in other localities. Canton merchants reported the sharpest drop in sales—nine percent. During the first five months of this year, total dollar volume at the 97 reporting stores of the fourth district was up 11 percent from the corresponding period of 1944.

Department store inventories continued their upward trend, and, at the end of May, were up 12 percent from a year ago. From January 1 to May 31, stores purchased 33 percent more goods than they sold.

