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THE GREAT LAKES-ST. LAWRENCE SEAWAY AND POWER PROJECT

The Great Lakes area, of which the Fourth District is a part, is a unique economic region in that it contains the world's only major industrial development not easily accessible to tidewater. As a result of this interior position, most intercontinental foreign trade originating here has to be handled more than once.

Salient Features The Great Lakes-St. Lawrence Seaway and Power Project is designed to enable ocean-going ships to travel from the Atlantic Ocean all the way to Duluth, Minnesota, at the western end of the lakes, a distance of 2,350 miles.

The navigation features include the improvement and deepening of interconnecting rivers, channels, canals, and locks in the Great Lakes system, as well as the building of a new canal and locks at Sault Ste. Marie and around portions of the International Rapids section of the St. Lawrence River. The minimum control depth in the resulting shipping lane would be 27 feet. The Project also contemplates the construction of a hydroelectric power plant with a capacity of 2.2 million horsepower near Massena, New York.

The cost of the combined Project was estimated in May 1947 by the United States Army Engineers to be \$839 million. Of this, \$161 million has already been spent, largely by Canada. Of the \$648 million balance, the United States share would be \$492 million of which about \$161 million would be paid by the State of New York for the power development.

Legislative Status On March 19, 1941, a formal agreement between Canada and the United States was signed for the construction of the Seaway and power facilities, subject to approval by the legislative bodies of both countries. On July 18 of this year, shortly before Congressional adjournment, the Foreign Relations Committee of the Senate

reported favorably on a Senate resolution to confirm and implement the 1941 agreement. The House Public Works Committee has not completed its hearings on the measure. Unlike a treaty, resolutions and the executive agreement need only majority Congressional approval to become effective.

Sources of Support and Opposition The Project receives support largely from these five economic, geographic, and political groups: (1) Lake port areas because of potential expansion in trade; (2) Midwestern agricultural areas interested in lower shipping costs; (3) advocates of cheaper power for both rural areas and industries; (4) conservation groups interested in the preservation of the nation's mineral resources; and (5) those who regard the waterway and its power facility as vital components of our national defense system.

On the other hand, the Project has met opposition from (1) both railroad and lake shipping enterprises; (2) the coal mining industry; (3) North Atlantic and Gulf Coast ports; and (4) the iron ore and steel industry whose long-range plans for iron ore utilization are vitally affected by such a major undertaking.

Anticipated Benefits Proponents of the Project anticipate that its consummation would result in: (1) expansion of industrial activity in the Great Lakes area because of cheaper transportation, more favorable outlets for foreign trade, and greater accessibility to needed raw materials; (2) larger income for mid-Western farmers because of lowered transportation costs; (3) widespread, low-cost rural electrification for much of New England and New York; (4) more abundant electric power for industries and communities in Northeastern states; (5) conservation of essential raw materials such as the Mesabi iron ore deposits; and (6) more flexibility for national defense.

Alleged Drawbacks

Opposition to the Seaway and Power Project is based largely upon the theses that: (1) foreign buyers and exporters would be the chief beneficiaries of lower transportation costs; (2) the estimated cost of construction and maintenance of the Seaway would far exceed both direct and indirect benefits; (3) the Seaway would be used only during the summer months; (4) its potential role in national defense has been exaggerated; (5) the proposal in its present form is unconstitutional—an abrogation of the Senate's treaty-making powers; and (6) substantial use of the Seaway would disrupt established continental railway systems.

Potential Volume of Traffic

Estimates regarding the potential volume of traffic of the proposed Seaway range from 20 to 40* million tons annually, composed largely of United States freight, amounting to 10-15 percent of our estimated 1950 water-borne foreign trade.

Even the smaller 20 million ton estimate, however, has been subjected to some criticism. The calculations were made on the basis of potential tonnage with the assumption that rate savings would be the controlling factor; therefore, some items were included which would not necessarily move on the Seaway because of perishability, special handling facilities available on other channels, the general advantage of less time in transit by rail or combination routes, and other reasons. Examples of commodities so affected are bananas, citrus fruits, and coffee. Exportable products such as machinery, iron and steel products, and spare parts, might require such prompt delivery

* 40 million tons is the highest responsible estimate for traffic on the waterway. This prediction, by Secretary of Commerce Harriman, is based on the assumption that large amounts of iron ore will have to be imported.

as to preclude their use of the Seaway.

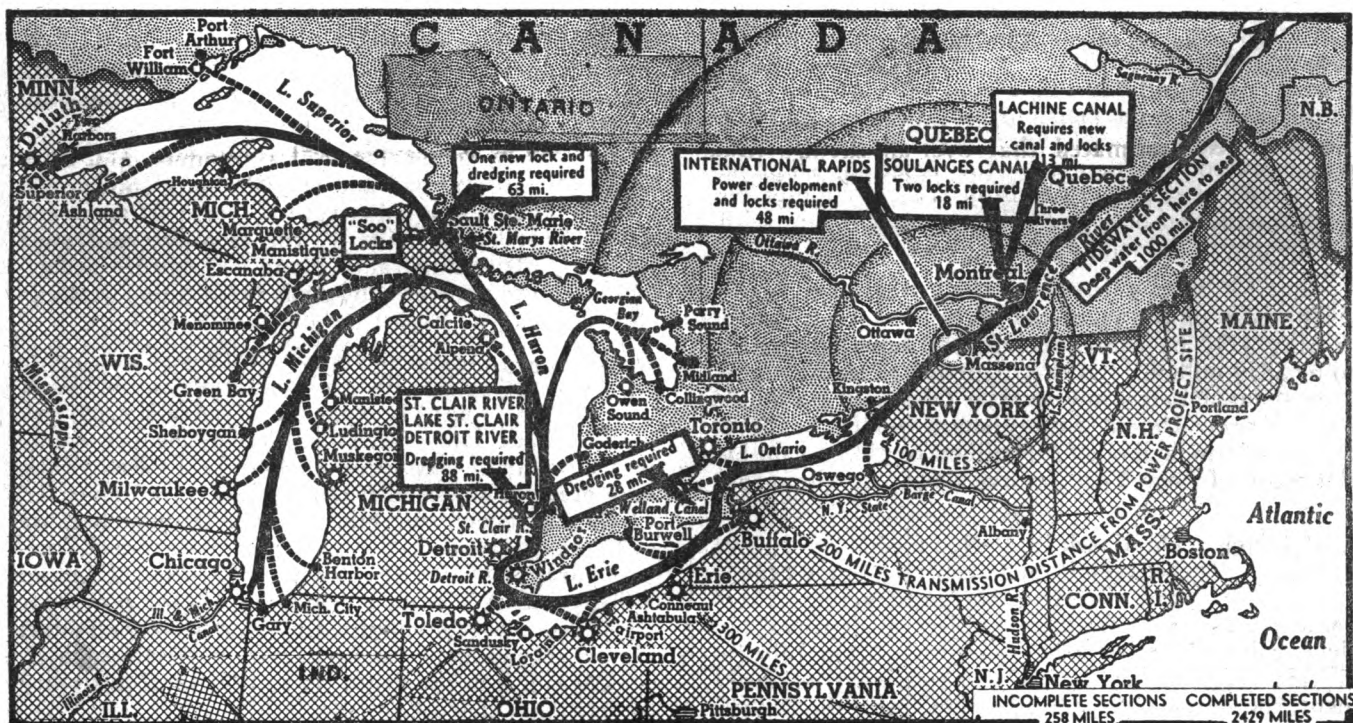
Claims for as much as 40 million tons of traffic are assailed on the grounds that the projected 27-foot depth would be too shallow for most modern ships. The U. S. Maritime Commission is confident, however, that there would be sufficient American ships of suitable draft to handle a substantial share of the anticipated traffic. If ships that proceed on less than full draft are considered, (most ships transiting the Panama Canal are loaded only to about 70 percent of capacity) a large proportion of both the American and world fleets become possible users of the Seaway. Victory ships, for example, could traverse the waterway loaded to 79 percent of dead-weight capacity, and Liberty ships at 85 percent of capacity. Available ships include freighters, tankers, and combination cargo-passenger vessels.

Although assertions have been made that partial loading of United States ships would accentuate their competitive disadvantage with smaller foreign vessels by making the voyages less economical, there is little doubt that if cargoes were available, ships would be provided to transport them. It appears likely, however, that draft limitations would work to the advantage of foreign shippers.

Effect Upon Railway Operations

Although considerable doubt has been cast upon the validity of estimates of potential Seaway traffic, it is frequently contended that the Seaway would disrupt present railway operations by the diversion of revenue freight from rail to water carriers.

This might come about not only from direct competition, but from the fact that during the Seaway's seven months of operation, considerable rolling stock would have to be maintained solely to meet the demands during the other five months when the



Seaway would be closed. That argument is mitigated somewhat by the fact that rail traffic is usually heavier during April-October than during the mid-winter months, suggesting the possibility that the functioning of the Seaway might allow a more constant utilization of cars and locomotives than is now the case.

In any event, if the Seaway should result in greater economic activity in the central industrial region, the trunk line railroads might conceivably experience a gain in traffic particularly in the more lucrative form of fabricated products rather than bulk goods.

Impact Upon Coal Mining Industry

Another equally-emphasized objection is that the Seaway would have an adverse effect upon the domestic coal industry. The logic runs as follows: since railroads consume 22 percent of bituminous output (1945), a reduction in rail activity would result in a lessened demand for coal. The Seaway would also make possible the direct importation of coal from abroad. The United Mine Workers union has estimated that a total of 100 million tons, or 18 percent, of United States coal production might be displaced by this means alone. The chronic over-capacity problem of the coal industry would thus be severely aggravated both by the amount of coal imports and by the lower price which imports would carry. The waterpower phase represents a third threat since it conceivably might eliminate many coal-using steam power plants.

Large-scale competition of foreign coal is discounted by the fact that there has never been any sizable influx of foreign coal through American and Canadian ports now open to ocean shipping, so it seems unlikely that any would occur because of the Seaway. Moreover, public power developments have usually increased the use of coal for the generation of power in the region concerned. According to the Federal Power Commission, the use of coal for power purposes in TVA areas increased 250 percent from 1934 to 1940.

Potential Economies

The Department of Commerce has estimated that over-all savings from Seaway transportation would amount to about \$3.50 per ton of freight in transit, or several times the annual per-ton cost of maintenance and amortization.

This estimate is based on the general assumption that the freight charges to be applied to a voyage from overseas to Duluth would be substantially the same as the rate from overseas to an Atlantic port, plus a possible toll charge which pending legislation provides. In other words the 1,500 miles of inland water travel would not add much to the present trans-ocean transportation cost.

If so, it seems probable that through the use of the Seaway the cost of imports to states in the Great Lakes area would be reduced. Wood pulp, wines and liquors, cod liver oil, ball clay and china clay are a few types which would be affected in addition to numerous items of general cargo. Farmers, for example, presumably would save on coffee, sugar (unless price is artificially maintained), lumber,

fertilizer, sisal products, and burlap, New England consumers would probably get coal and steel at less cost from the lake states via the Seaway.

With regard to the benefits which might accrue to Midwestern agricultural and industrial enterprises, it is difficult to determine the precise distribution among producers, middlemen, and consumers, of the benefits of reduced transportation costs for their products. The same difficulties prevail in any attempt to allocate these potential savings between domestic consumers and foreign suppliers. The state of competition among buyers and among sellers at any given time is an important determinant in the final distribution of such advantages.

Depending upon the extent to which transportation costs would be actually lowered, a sort of economic parity between Midwest producers and manufacturers in coastal areas would be established. New markets for surplus production might be developed, but it must be remembered that freight charges are usually only a small percentage of the value of most commodities, and the savings in freight costs might be offset, in varying degrees, by the slowness of Seaway transportation. In addition to greater speed, another example of a prominent advantage of present channels of transportation in the case of grains is the "in transit milling privilege" whereby a through rate is applied although the grain is processed at a way-point.

The Power Project

The site of the proposed hydroelectric developments is in the International Rapids section of the St. Lawrence River, near Massena, New York. A large power dam would cross the river at that point. The total capacity originally would be 2.2 million horsepower, with a potential annual output of 13 billion kwh. The State of New York would have control of the United States' half of the power, at an original cost to that state of about \$161 million.

According to the Federal Power Commission, the New York investment per installed horsepower would be \$89 (1941 estimate) compared to \$104 at TVA, \$99 at Bonneville, \$90 at Boulder, and up to \$169 at various private power dams. Energy costs are estimated by the Federal Power Commission to be about one mill per kwh (1941). Delivered to New York City (at 80 percent load factor) the cost would be 2.5 mills, or to Schenectady at 1.9 mills. The first figure compares with a *cost of production* of 5.15 mills per kwh for the most economical plant in New York City (1945). The cost within 300 miles of Massena should not exceed 3.1 mills per kwh, while rates in this same area now range up to 13.3 mills per kwh.

Opponents claim on the other hand that there is still unused power at Niagara, which could be utilized at considerably less cost than the St. Lawrence Power Project, and further, that all needs will be met upon completion of the unprecedented expansion programs already undertaken by private power companies servicing the area. It is argued, moreover, that the Power Project is poorly located to dispose of the huge block of energy, and that it should not be handled exclusively by the State of New York.

Role in National Defense With respect to national defense, the Seaway conceivably would provide interior shipbuilding and repair facilities for ocean-going warships and cargo vessels. The additional main line of communication supplied in the form of the Seaway would ease the overburden on rail systems and ocean ports during a war period. The power phase would serve to support war industries, yet would not use coal or other scarce combustibles. Cheap power available in large amounts is fundamental for experimentation in, and production of, atomic energy.

Yet the ardor of the War Department for the Seaway has cooled off considerably, and while the Project is still considered "helpful," it no longer bears the label of "essential" or "vital." Its limitations of speed hinder its use because in national emergencies the element of time is a most vital consideration. The Seaway, with its many locks and canals would be difficult to defend, even with large numbers of men and much equipment, to the detriment of our regular forces. The Power Project, the large dam and powerhouse, like all other major installations now in existence, would make an easy target, and one atomic bomb could block the Seaway, trapping whatever ocean ships were in the lakes.

Iron Ore Utilization Of all the questions raised in the St. Lawrence Seaway controversy, one of the most vital to the Fourth Federal Reserve District is that regarding iron ore. The prospective exhaustion of higher-grade Mesabi ores almost inevitably means costlier steel in the near future. One solution to the ore depletion problem is the construction of the Seaway, which would enable purer ores to be brought in to the Midwest producers from abroad without prohibitive cost. Ore is now being received at seaboard mills from mines in Chile and Venezuela. Additional deposits exist in Labrador, Mexico, and Brazil. In the latter country, the United States-Brazil jointly owned Itabira mines represent a vast potential source of iron ore, capable of supplying United States' needs for 150 years, but political and topographical considerations are important deterrents to an early large-scale exploitation. If the Labrador deposits are of sufficient extent (most recent estimate is one billion dollar value), a 300-mile railway may eventually be built from the mines to the Gulf of the St. Lawrence, from which the ore could be shipped to lower lake docks in lake freighters.

There exists, however, an important alternative to imports of iron ore and that is the use of low-grade ores contained in present domestic deposits, a source preferred by most steel producers in this area. This would provide large tonnages of ore for an almost unlimited time. Low-grade taconite and jasper ores would be concentrated before shipping; the capital required to provide concentration plants is estimated at over \$750 million for an annual taconite output of 50 million tons. This will have the obvious effect of raising ore costs, rendering them more vulnerable than ever to competition with coastal users of foreign ores, or from imports of foreign ores which would become accessible via the Seaway.

While at least two companies are planning to establish beneficiation plants in Minnesota on an experimental basis, large scale developments of this type will be held in abeyance pending the outcome of the Seaway Project.

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Most of these references are available in the bank Library. Subscribers may make requests either in person or in writing for material on this subject.

NON-REAL ESTATE LOANS TO FARMERS

Postwar Trend in Farm Loans Fourth District member banks have experienced a rapid expansion in loans to farmers during the post-war period. The increases have applied to both real estate loans and non-real estate loans, as indicated on an accompanying chart.

In the past two years the volume of real estate loans outstanding to farmers has increased from about \$35 million to almost \$58 million, for a percentage gain of 66 percent. Non-real estate loans to farmers have advanced even more rapidly, the total doubling in amount from \$19 million to \$38 million.

A discussion of farm real estate loans appeared in the preceding issue of the *Review*. In this issue the non-real estate loans to farmers (other than Commodity Credit Corporation loans) are analyzed on the basis of a survey of such loans at a sample of Fourth District member banks on June 20 of this year.

CHARACTERISTICS OF NON-REAL ESTATE LOANS TO FARMERS

Prevailing Interest Rates The prevailing interest rate on non-real estate loans to farmers in the Fourth District is 6 percent. Eighty percent of the 1,220 loans analyzed by the 59 banks which cooperated in the survey carried that rate. Sixteen percent of the loans involved an interest rate of $5\frac{1}{2}$ or 5 percent. Comparatively few loans were made at an effective annual rate above 6 percent.

The survey revealed a definite tendency for rates to be lower on the larger loans, and as a result the proportion of *dollars* loaned at rates under 6 percent was greater than the proportion of *loans* bearing less than that rate. The chart on page six indicates that almost 40 percent of the *dollars* were earning under 6 percent on June 20.

SURVEY OF NON-REAL ESTATE LOANS TO FARMERS

The adjoining article presents Fourth District results of a survey of non-real estate loans to farmers. The survey was conducted nationally as of June 20 by the Federal Reserve System and the Federal Deposit Insurance Corporation.

Fifty-nine Fourth District country member banks, located in 46 counties of the District, are represented in the accompanying analysis. Most of the participating banks ranged between \$2 million and \$10 million in total deposits.

The 59 banks hold about nine percent of total non-real estate loans to farmers at all member banks in this District. The reporting banks provided comprehensive data on every fifth loan out of their 5,600 non-real estate loans to farmers outstanding on June 20.

Most of the cooperating banks reported that 6 percent was the "usual" rate charged in 1930, 1940 and 1947. There has been a marked shift, however, in the distribution of banks usually charging more or less than 6 percent. In 1930, 18 of the 59 banks usually charged more than 6 percent. For the year 1947, on the other hand, none of the banks reported a prevailing rate above 6 percent, whereas 24 banks listed a current charge of under 6 percent.

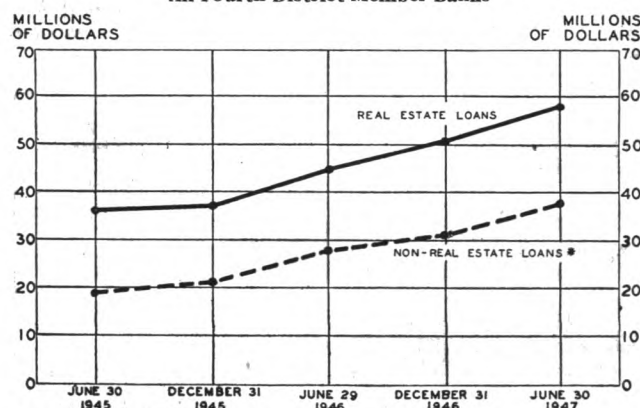
Interest Rates by Size of Loan The interest rate charged on small loans was generally somewhat higher than the rate charged on the larger loans. For example, the average rate charged on loans of less than \$250 was 6.2 percent, whereas an accompanying chart indicates an average rate of 5.2 percent on loans of \$2,500 and over. The average rates on the six loan sizes presented in the chart declined steadily as the loan sizes increased.

Furthermore, the average rates listed for the small size loans may be underestimated. The survey dealt only in terms of the amount of the loan still outstanding on June 20. Undoubtedly many of the loans, which on June 20 were of small size and yet carried a comparatively low interest rate, were large loans at the time they were initially made.

This tendency for large loans to enjoy the lower rates is probably due chiefly to the influence of operating costs. It probably costs nearly as much in dollars to make and service a small loan as a large loan. The rate of interest charged, therefore, must be higher on the smaller loans if they are to pay their own way.

Other Factors Affecting Interest Rates The survey data suggest that some factors, other than the size of the loan, may exert a consistent influence on interest charges. The following relationships were found to exist with loans in each of two size ranges, under \$1,000 and \$1,000-\$4,999:

Postwar Trend of Loans to Farmers
All Fourth District Member Banks



*Other than Commodity Credit Corporation loans.

1. Loans with maturities up to six months bore higher interest rates than demand loans, and loans running for more than six months carried still higher interest rates.
2. Loans to borrowers with a net worth of less than \$10,000 involved slightly higher rates than did loans to those with a net worth of \$10,000 and over.
3. Loans to be repaid in equal instalments carried higher interest rates than single payment loans.
4. Loans where the charge was computed on the discount method involved a comparatively high effective annual interest rate.

FACTORS AFFECTING INTEREST RATE OTHER THAN SIZE OF LOAN

Term of Loan	Average Interest Rate	
	Loans Under \$1,000	Loans of \$1,000-\$4,999
Demand.....	5.8%	5.4%
up to 6 mos.....	6.0	5.5
over 6 mos.....	7.0	6.2
Net Worth of Borrower		
\$10,000 and above.....	6.0%	5.5%
Under \$10,000.....	6.2	5.8
Method of Repayment		
Single Payment.....	5.9%	5.4%
Unequal Instalment.....	6.1	5.3
Equal Instalment.....	7.3	6.8
Type of Charge		
Interest.....	5.9%	5.4%
Discount.....	6.8	6.5

The tendency for higher rates with the longer term loans and with loans to borrowers with a comparatively small net worth may be attributed in part to the element of the anticipated safety of the loan. The apparent net worth relationship, however, may be questioned on the basis that many loans at low rates to borrowers of large net worth may have been large loans when first made, but were small enough by June 20 to fall into lower size ranges. The higher rates involved in instalment loans may be partly a matter of bookkeeping expense and partly a reflection of the quality of the loans.

Effect of Discounting on Interest Charges

Loans where the charges are computed on the discount method frequently carried relatively high average *effective annual* rates. On instalment loans the *nominal* discount rate is applied to the original amount of the loan, whereas the average size of the loan from the time it is made until the last instalment is paid is commonly little more than half the original amount of the loan. Thus the effective rate on such loans is generally almost double the nominal rate. The survey included 243 loans (23 percent of the total number of loans) on a discount basis, and on 45 of these the data regarding the dollar amount of the charge indicated that the effective annual interest rate was probably about double the nominal discount rate.

It is difficult to measure the relative importance of the various factors discussed above from the standpoint of their effect on interest rates, since the same set of factors was so often found together on loans with comparatively high rates. For example, a third of the equal instalment loans were on a discount basis, compared with only one-fifth of the single payment loans. Almost three-fifths of the equal instalment loans ran for more than six months, whereas only about one-tenth of the single payment loans were for that long a term. A larger proportion of loans with a term of over six months was found on a discount basis than was the case with loans of six months or less.

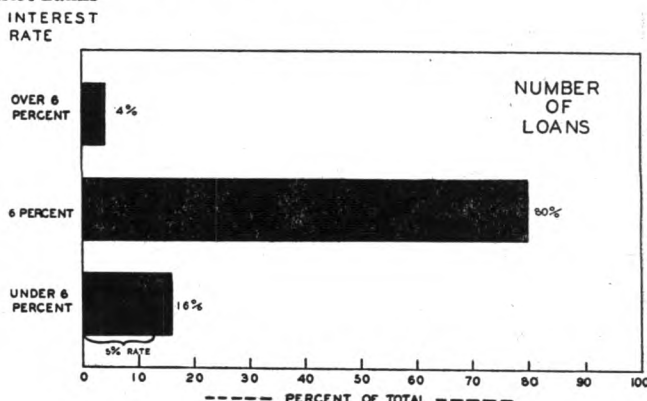
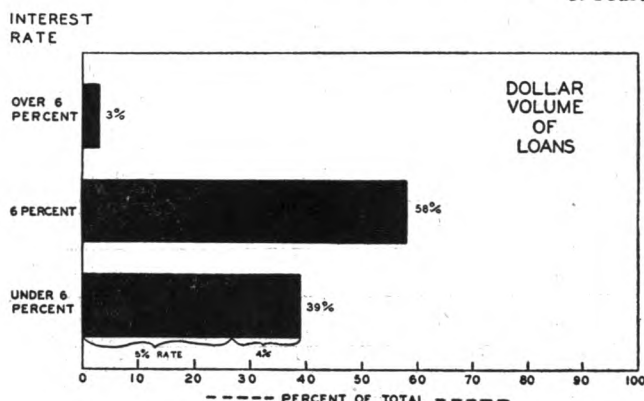
Supplementary Fees and Minimum Charges

The 59 cooperating banks were asked to list charges, other than interest or notary fees, that a farmer-borrower may be asked to pay in the course of obtaining a non-real estate loan. Thirty of the 59 banks reported that they make no extra charge. The 29 that did report supplementary fees appeared to charge about \$1.50 per loan on the average, usually to pay for chattel mortgage costs, inspection costs, etc.

The banks were also asked to state their policy with regard to minimum charges on non-real estate loans to farmers. All but nine of the banks reported that they utilize a minimum charge. Nineteen of the 50 banks with a minimum designated \$.50 and 21 specified \$1.00.

Percentage Distribution of Non-Real Estate Farm Loans by Interest Rate Charged

59 Fourth District Banks



Size of Loans On June 20, the average amount outstanding on 1,120 loans in the survey was about \$720. Slightly more than a third of the loans involved an unpaid balance of less than \$250. Almost four out of five loans outstanding were smaller than \$1,000.

The distribution of total dollar volume of loans outstanding, of course, presents a sharply different picture. Only six percent of the dollars were represented by loans of less than \$250 and only 35 percent by loans under \$1,000. Almost 30 percent of the dollars were covered by loans of \$2,500 and above, but only five percent of the total number of loans exceeded the \$2,500 mark.

SIZE OF LOANS OUTSTANDING
on June 20, 1947

Size Range	No. of Loans	Dollar Volume of Loans
Under \$250.....	35%	6%
\$250-\$499.....	21	10
\$500-\$999.....	21	19
\$1,000-\$1,499.....	10	16
\$1,500-\$2,499.....	8	21
\$2,500-\$4,999.....	4	19
\$5,000 and over.....	1	9
	100%	100%

Method of Repayment Roughly three-fourths of the loans and of the dollars loaned called for repayment through a single payment. The remaining loans and dollars were fairly evenly divided between the equal instalment and unequal instalment methods of repayment.

There seemed to be very little relationship between the method of repayment and the size of the loan. Instead, the decisions regarding the repayment method seem to have been determined chiefly by the length of the loan and secondarily by the element of loan safety. Slightly over half of the loans with a term of over six months prescribed repayment in regular instalments, whereas only one loan in 25 with a term of six months or less required regular instalments.

METHOD OF REPAYMENT BY TERM OF LOAN

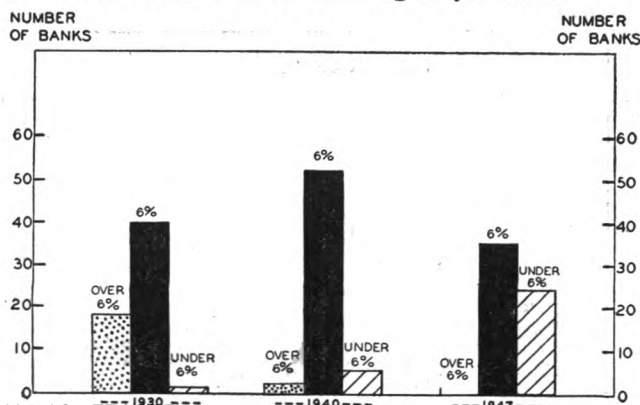
Method of Repayment	Demand	0 to 6 mos.	Over 6 mos. to 1 year	Over 1 year
Single Payment.....	48%	88%	58%	8%
Irregular Inst.....	33	8	6	0
Regular Inst.....	18	4	36	92
Total.....	100%	100%	100%	100%

With regard to the element of safety, 16 percent of the loans to borrowers with a net worth under \$10,000 involved regular instalment payments, compared with 7 percent for loans to those with \$10,000 or more in net worth. Similarly, 14 percent of the loans to tenant farmers involved regular instalments, as against 9 percent of the loans to those who own unmortgaged farms. In loans where some sort of collateral was pledged, a fourth of the loans called for regular instalments, while on loans where the bank did not require any pledged security only 4 percent involved regular instalment payments.

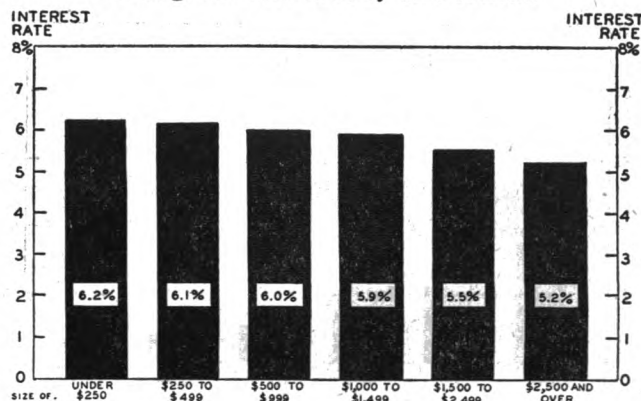
Terms of Loans Non-real estate loans to farmers are predominantly short-term loans. The accompanying chart shows that of the 1,120 loans surveyed, 70 percent were written for a term of six months or less, with another 13 percent of the total in the form of demand loans. Only 17 percent of all the loans were for more than six months and only 7 percent had a maturity of greater than one year. There was little relationship between the size of the loans and the term of the loans, hence the distribution of the total dollar volume of loans by their term did not vary greatly from the numerical distribution.

An analysis of the relationship of the term of the loan to the purpose of the borrower in making the loan disclosed that over two-thirds of the loans running for more than a year were negotiated to pay for machinery or livestock. When shorter term loans were analyzed the proportion of loans made for that purpose grew smaller, while an increasing share of the loans were designed to meet living or production costs. Loans with a term of 6 months or less paid for machinery or livestock in 29 percent of the cases while 34 percent of such loans were to help the borrowers meet production or living costs.

Usual Rate of Interest Charged by 59 Banks



Average Interest Rate by Size of Loan



There also appeared to be some correlation between the term of the loan and the security. About 85 percent of the loans with a term of over a year were secured, compared with a figure of 65 percent for loans running from over 6 months to a year, and a much lower figure of 37 percent for loans maturing in 6 months or less.

Loan Security Fifty-six percent of the 1,120 non-real estate loans to farmers were unsecured. Fourteen percent of the loans were endorsed, while the remaining 30 percent of the loans were secured by some type of collateral such as machinery, livestock, or growing crops.

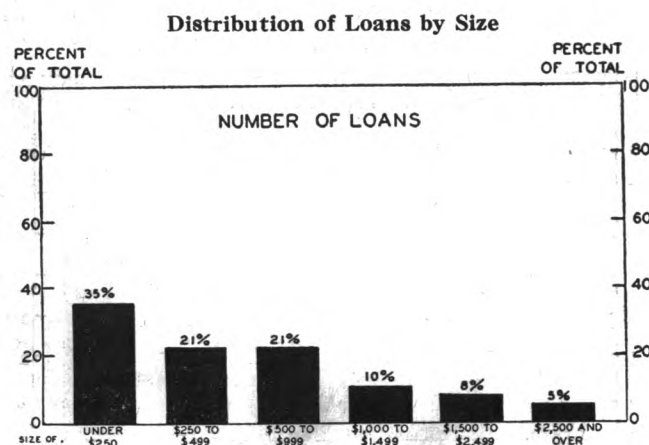
SECURITY OF NON-REAL ESTATE LOANS TO FARMERS

Type of Security	Proportion of Loans
Unsecured.....	56%
Endorsed.....	14
Machinery.....	10
Multi-type Collateral*.....	7
Livestock.....	6
Growing Crops.....	2
Other.....	5
	<u>100%</u>

*Combination of crops, livestock or machinery.

There was little correlation between the security of the loans and their size. A strong relationship apparently existed, however, between the security status of the loan and the net worth as well as tenure of the borrowers. Only about one-fourth of the loans to borrowers with a net worth of under \$2,000 were unsecured, whereas about three-fourths of the loans to borrowers with a net worth of at least \$25,000 were in that category.

With regard to the tenure of the borrowers, those who owned their own farms and had no mortgage borrowed without putting up security in two-thirds of the loans surveyed, whereas tenants or croppers were able to borrow without security in only about one-third of their loans.



LOAN SECURITY BY NET WORTH AND TENURE OF BORROWER		
Net Worth of Borrower	Percent of Loans Secured	Percent of Loans Unsecured
Under \$2,000.....	76%	24%
\$2,000-\$9,999.....	47	53
\$10,000-\$24,999.....	32	68
\$25,000 and over.....	21	79
Borrower Tenure	Secured	Unsecured
Owner, no mortgage.....	33%	67%
Owner, mortgage.....	41	59
Tenant or cropper.....	64	36

CHARACTERISTICS OF BORROWERS

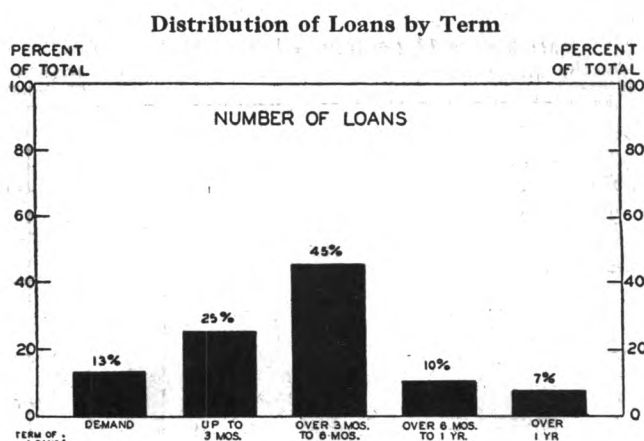
Net Worth and Tenure of Borrower Half of the loans surveyed were made to borrowers with net worth ranging from \$2,000 to \$9,999. The accompanying chart shows that 12 percent of the loans were to borrowers with less than \$2,000 with the remaining 38 percent to those with a net worth of \$10,000 or more. When the dollar volume of loans was considered, however, it was found that 70 percent of the dollars were loaned to those with a net worth of at least \$10,000.

A tabulation of the relationship of net worth to the purpose of the borrower disclosed that the dominant purpose of the loans in the case of borrowers with low net worth was to meet living or production costs. On the other hand, the most important purpose of the borrower with a relatively high net worth was to buy machinery or livestock. The survey data also indicated that the average size of the loans increased rapidly in direct relation to the net worth of borrowers.

SIZE OF LOAN COMPARED WITH NET WORTH OF BORROWERS

Net Worth of Borrower	Average Size of Loan
Under \$2,000.....	\$ 340
\$2,000-\$9,999.....	480
\$10,000-\$24,999.....	890
\$25,000-\$99,999.....	1,820
\$100,000 and over.....	3,100

Almost three-fourths of the farmer-borrowers involved in the loan survey own their own farms. Furthermore, about 43 percent of the borrowers own farms with no mortgage.



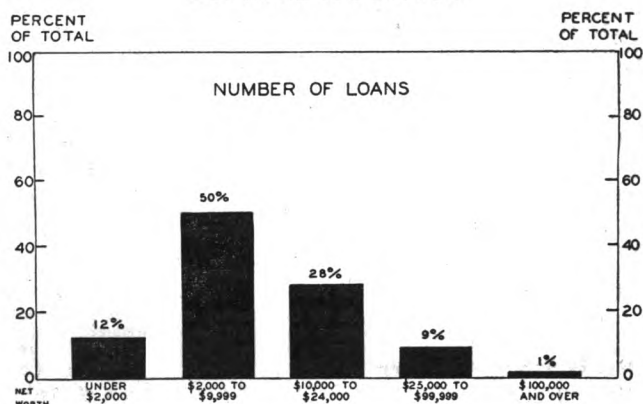
Purpose of Loans Almost half the total number of loans were made to finance the purchase of machinery or livestock. The next most important reason for borrowing was to pay production or living costs and 29 percent of the loans were found in this category. Ten percent of the loans were to enable the borrowers to buy or improve land and buildings, and a few loans were used as a means of repaying debts. The purpose the borrower had in mind was not stated in 14 percent of the loans.

PURPOSE OF LOANS

	No. of Loans	No. of Dollars
To Buy Machinery or Livestock.....	43%	53%
To Pay Production or Living Costs.....	29	17
To Buy or Improve Land-Buildings.....	10	17
To Repay Debts.....	4	3
Purpose Unknown.....	14	10
	100%	100%

The larger loans tended to go for the purchase of machinery or livestock, and to buy or improve land and buildings. The survey also disclosed that there is little variation in the purposes of borrowing by tenant-croppers compared with the purposes of farm

Net Worth of Borrowers



Industrial Summary

(Continued from Page 12)

As a result of the ten-day coal miners' vacation, the July report of the Ore and Coal Exchange shows the very low figure of 4,600,000 tons of coal dumped into vessels at lower lake docks bound for upper lakes delivery. This is the lowest tonnage for July in over ten years and is 41 percent below last year. The total for the shipping season, however, is 20 percent above last year, when output and shipping were adversely affected by the coal strike.

According to the Bureau of the Census, the value of coal exports reported at \$62.5 million in May and \$61.6 million in June led all other exported commodities. June exports of 8,300,000 tons of coal were close to the record of 8,400,000 tons set the previous month and may be compared to a monthly average of 3,975,000 last year and 1,200,000 tons in 1939.

Construction Construction contracts awarded in July increased over June for both residential and non-residential projects in the com-

AVERAGE SIZE OF TYPES OF FARMS

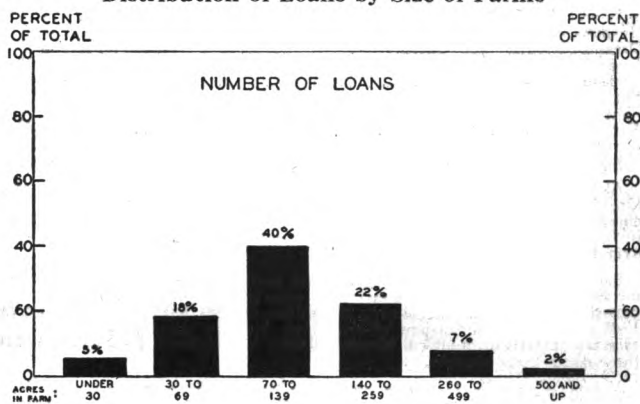
Type of Farm	Average Acreage
Livestock.....	152
General.....	138
Dairy.....	132
Tobacco.....	106
Fruit.....	91
All Farms.....	132

owners, except that very few loans to tenant croppers were to finance the purchase or improvement of land and buildings.

Size and Type of Farm Almost half of the farms represented in the survey ranged between 70 and 139 acres in size. The accompanying chart indicates that 31 percent of the farms totaled 140 or more acres, whereas 23 percent were under 70 acres.

There was a substantial difference in the average size of the various types of farms. Livestock and general farms exceeded the over all average of 132 acres, while dairy farms were about equal to the average in size. Fruit and tobacco farms, on the other hand, were much smaller than the average.

Distribution of Loans by Size of Farms



bined Pittsburgh-Cleveland-Cincinnati territories according to the F. W. Dodge Corporation. This gain amounts to 38 percent for residential construction and 23 percent in the non-residential type, exclusive of public works and utilities.

During the first seven months of 1947, the total value of contracts awarded for residential construction was 6 percent over last year in the three metropolitan areas of this District, as compared with an aggregate decrease of 11 percent in all 37 states. In non-residential building, however, a Fourth District decline of 25 percent compares with a 21 percent drop in the 37 states.

Weekly building permits in Cleveland continue to display a sharp increase over corresponding periods last year. In August the average weekly increase over the same month of 1946 amounted to 60 percent, following a similar year-to-year gain of 55 percent in July. In the first six months of 1947 an average gain of 8 percent was registered.

DEPARTMENT STORE TRADE STATISTICS

Sales by Departments—July, 1947

As Compared with a Year Ago

(Compiled August 27, and released for publication August 29)

Major Household Appliances	+77%
Domestic Floor Coverings	+29
Sportgoods (including Cameras)	+20
Art Needlework and Art Goods	+16
Men's and Boys' Shoes	+14
Notions	+13
Luggage	+12
Coats and Suits (Women's and Misses')	+10
Infants' Wear	+9
Furniture and Beds	+9
Cotton Wash Goods	+7
Men's Clothing	+6
Corsets and Brassieres	+6
Restaurants	+6
Silverware and Jewelry	+5
Lamps and Shades	+5
Shoes (Women's and Children's)	+5
MAIN STORE TOTAL	+4
Millinery	+4
China and Glassware	+3
Beauty Salon	+3
Women's Underwear	+1
Neckwear and Scarfs	-0-
Toilet Articles and Drug Sundries	-0-
Gloves	-1
Books and Stationery	-1
Domestics and Blankets	-1
Blouses, Skirts and Knit Goods	-2
Laces and Trimmings	-2
Draperies and Curtains	-3
Boys' Clothing and Furnishings	-3
Handkerchiefs	-3
Men's Furnishings (Hats and Caps)	-5
Silks and Velvets (Woolen Dress Goods)	-5
Housewares	-6
Dresses (Women's and Misses')	-7
Juniors' and Girls' Wear	-7
Leather Goods (Small)	-8
Furs	-8
Photographic Studio	-9
Toys and Games	-18
Aprons and Housedresses	-18
Hosiery (Women's and Children's)	-18

Although July department store sales in the Fourth District were the largest on record for the month, the margin over a year ago was small, and chiefly ascribable to sustained volume in the house furnishing division. Gains in basement store trade also contributed substantially to the over-all gain over July 1946.

Sales of **major household appliances** were the second highest on record for any month, and 77% greater than a year ago. Trade in **domestic floor coverings** was lower than during the spring months but ran 29% ahead of 1946 and established a new all-time high for the month. At the other extreme, sales of **domestics, blankets, etc.**, have fallen behind last year for three consecutive months.

Volume of sales in the **sports goods** and **luggage** departments was up 20% and 12% respectively, from a year ago, whereas sales of **toys and games** throughout 1947 to date have compared unfavorably with year ago figures. In the masculine apparel lines, the most noticeable gain occurred in **Men's and boys' shoes** where sales were 14% above the 1946 level, and the highest on record for the month.

The 10% increase over last year in **women's and misses' coats and suits** represents the most favorable comparison in that department since last December. On the other hand, sales of **women's hosiery** were 18% less than a year ago. This relatively adverse trend has been in effect since early this year, but has become more pronounced since about the first of June. Other items of women's wear in which sales in July were noticeably below a year ago were **women's and misses' dresses**, off 7%, **juniors' and girls' wear**, off 7%, **furs**, off 8%, and **aprons, housedresses, etc.**, off 18%. In the last-names department sales were the smallest for the month in three years.

Indexes of Department Store Sales and Stocks

Daily Average for 1935-1939=100

	Adjusted for Seasonal Variation			Without Seasonal Adjustment		
	July 1947	June 1947	July 1946	July 1947	June 1947	July 1946
SALES:						
Akron (6)	302	305	274r	251	281	227r
Canton (5)	338	344	326	273	330	264
Cincinnati (8)	326	314	298	238	283	218
Cleveland (10)	278	271	252	209	249	189
Columbus (5)	327	327	321	255	304	250
Erie (3)	301	303	278	229	269	211
Pittsburgh (8)	289	254	281	188	251	183
Springfield (3)	305	289	289	229	287	217
Toledo (6)	296	272	272	210	253	193
Wheeling (6)	256	248	249	189	221	184
Youngstown (3)	314	307	294	235	288	221
District (96)	281	284	260	220	267	203
STOCKS:						
District	216	231	213	216	222	213

r—Revised.

Inventories by Departments—July 31, 1947

As Compared with a Year Ago

(Compiled September 2, and released for publication September 3)

Major Household Appliances	+226%
Men's Clothing	+110
Domestic Floor Coverings	+82
Men's and Boys' Shoes	+78
Shoes (Women's and Children's)	+58
Sports Goods (Including Cameras)	+44
Cotton Wash Goods	+40
Hosiery (Women's and Children's)	+23
Silks and Velvets	+22
China and Glassware	+18
Furniture, Beds, Mattresses and Springs	+16
Men's Furnishings (Including Hats and Caps)	+15
Domestics, Blankets and Towels	+8
Luggage	+4
Corsets and Brassieres	+2
MAIN STORE TOTAL	+1
Silverware and Jewelry	+1
Aprons, Housedresses and Uniforms	-1
Draperies and Curtains	-5
Women's Underwear	-5
Housewares	-6
Dresses (Women's and Misses')	-10
Boys' Clothing and Furnishings	-12
Books and Stationery	-14
Notions	-15
Laces and Trimmings	-15
Toilet Articles and Drug Sundries	-16
Art Needlework and Art Goods	-20
Infants' Wear	-23
Coats and Suits (Women's and Misses')	-27
Millinery	-29
Lamps and Shades	-30
Handkerchiefs	-31
Toys and Games	-32
Leather Goods (Small)	-32
Gloves	-33
Furs	-35
Neckwear and Scarfs	-36
Juniors' and Girls' Wear	-42
Blouses, Skirts and Knitgoods	-47

Department store inventories in the Fourth District declined during July for the fourth successive month to a point approximately even with a year ago.

This downward trend, however, was not universal throughout all departments. Inventories of **major household appliances** increased further during July and at month-end were the highest on record, up 226% in a year, and about 87% since January 1.

Stocks of **men's clothing** likewise moved upward during July to an unprecedented level for this time of year.

Other departments in which July 31 inventories, while somewhat below the preceding month, were the highest on record for midsummer included: **domestic floor coverings** up 82% over a year ago, **men's and boys' shoes**, up 78%, **women's and children's shoes**, up 58%, **sport goods**, up 44%.

In contrast to these changes, stocks of **small leather goods** on July 31 were the lowest for the month in five years or longer. **Glove inventories** were the lowest for any July 31 since 1943, and a similar condition existed in **toys and games**.

There were seasonal increases in a number of feminine apparel and ready-to-wear accessories departments, but in many instances July 31 inventories were the smallest in three years. Typical among these were **infants' wear**, 23% below a year ago; **women's and misses' coats and suits**, off 27%; **millinery**, off 29%; **furs**, off 35%; and **juniors and girls' wear**, 42% below a year ago.

Inventories of **blouses, skirts, etc.**, declined somewhat seasonally during July to the lowest for the month in three years.

These figures are not adjusted for price changes during the various intervals.

July Department Store Sales by Cities*

(Compiled August 26, and released for publication August 28)

CITY	% Change From		Sales During July (July 1941=100)				
	June '47	July '46	1941	1943	1945	1946	1947
Akron	-11	+10	100	131	151	175	194
Wheeling	-14	+ 3	100	99	148	184	189
Erie	-15	+ 9	100	124	139	176	191
Cincinnati	-16	+ 7	100	116	160	206	221
Columbus	-16	+ 2	100	135	186	233	238
Cleveland	-16	+11	100	113	139	169	187
Toledo	-17	+ 9	100	134	170	205	223
Canton	-17	+ 4	100	134	155	194	200
Fourth District	-17	+ 8	100	117	151	190	206
Youngstown	-18	+ 7	100	120	158	194	207
Springfield	-20	+ 6	100	164	178	201	212
Pittsburgh	-25	+ 3	100	112	154	205	211

* Based on daily average sales.

Department store sales usually reach the low point of the summer during July. This year, however, the decline from June was somewhat more noticeable than usual.

(Continued on Page 11)

FINANCIAL AND OTHER BUSINESS STATISTICS

Bank Debits*—July, 1947

(In thousands of dollars)

(Compiled August 8, and released for publication August 11)				
	July 1947	% Change from year ago	3 Months Ended July 1947	% Change from year ago
ALL 29 CENTERS.....	\$6,091,049	+8.4%	\$18,219,780	+14.4%
10 LARGEST CENTERS:				
Akron.....Ohio	216,554	- 3.5	659,865	+ 0.5
Canton.....Ohio	99,186	+16.4	299,186	+18.0
Cincinnati.....Ohio	782,094	+ 1.8	2,369,688	+11.6
Cleveland.....Ohio	1,617,989	+ 9.2	4,807,084H	+13.2
Columbus.....Ohio	453,395	- 4.1	1,338,671	+ 6.6
Dayton.....Ohio	227,403H	+20.5	662,904H	+23.5
Toledo.....Ohio	356,513	+ 6.4	1,054,297	+14.2
Youngstown.....Ohio	143,868H	+27.1	427,480H	+39.0
Erie.....Penna.	80,216	+15.1	237,765	+14.5
Pittsburgh.....Penna.	1,584,162	+13.6	4,764,596	+18.6
Total.....	\$5,561,380	+8.3%	\$16,621,536	+14.4%

19 OTHER CENTERS:

Covington-Newport...Ky.	\$ 36,167	- 9.1%	106,647	- 1.2%
Lexington.....Ky.	47,715	- 1.3	148,223	+ 6.5
Hamilton.....Ohio	31,341	+19.3	100,541H	+27.6
Lima.....Ohio	36,798	+ 9.8	113,296	+16.7
Lorain.....Ohio	16,788H	+27.2	49,534H	+30.5
Mansfield.....Ohio	35,680	+21.3	108,371H	+27.4
Middletown.....Ohio	27,903	+ 8.9	84,637	+12.7
Portsmouth.....Ohio	18,340	+15.4	57,034	+20.3
Springfield.....Ohio	41,232	+ 7.0	123,137	+11.1
Steubenville.....Ohio	21,653H	+ 5.6	63,066H	+ 9.1
Warren.....Ohio	31,832	+11.2	101,203	+20.6
Zanesville.....Ohio	22,680	+10.5	72,036H	+21.5
Butler.....Penna.	30,800H	+26.2	86,199H	+22.3
Franklin.....Penna.	6,371	- 2.5	20,027	- 4.5
Greensburg.....Penna.	18,534	+ 6.3	53,721	+12.7
Homestead.....Penna.	7,913H	+ 5.2	22,540H	+ 7.7
Oil City.....Penna.	18,760	+14.8	58,001	+11.0
Sharon.....Penna.	24,688H	+25.0	71,443H	+24.7
Wheeling.....W. Va.	54,474	+ 6.5	158,588	+ 5.9
Total.....	\$529,669	+ 9.6%	\$1,598,244	+14.2%

H denotes new all-time high for one month or quarter-year.

* debits to all deposits accounts except interbank balances.

Bank debits in 29 Fourth District cities during July totaled \$6,091,000,000, the largest figure reported in the postwar period to date with the exception of the all-time high of \$6,629,000,000 set last December. Total debits in June amounted to \$6,068,000,000 while the May aggregate was \$6,060,000,000.

July bank debits were approximately 8% above the total reported for the corresponding month a year ago. However, this was the smallest percentage gain reported over year-ago figures since June 1946. The year-to-year gain in June was 16% while the May figure was 20%.

TEN LARGEST CITIES

Debits for the three-month period of May-June-July were at an all-time high in Cleveland, Dayton, and Youngstown. The July totals at the latter two cities likewise constituted record highs.

Youngstown, with an increase of 27.1% over a year ago, led the large cities in this respect for the fifth successive month. Other outstanding year-to-year gains were reported by Dayton (20.5%), Canton (16.4%), Erie (15.1%), and Pittsburgh (13.6%). Cleveland and Toledo were close to the 8.3% average for all ten large cities. The increase in Cincinnati was 1.8%.

July debits in Akron and Columbus were under the totals for a year ago. It was the first time since June 1946 that any of the large cities dropped below their respective year-ago totals.

NINETEEN SMALLER CENTERS

Debit totals for July were at an all-time high in five of the nineteen smaller centers. The cities were Lorain, Steubenville, Butler, Homestead, and Sharon. In these five cities and in Hamilton, Mansfield, and Zanesville, aggregate debits for the three-month period of May-June-July were likewise at record high levels. Butler debits exceeded the \$30,000,000 mark for the first time.

July Department Store Sales by Cities

(Continued from Page 10)

For the Fourth District as a whole, July sales fell 17% short of the June total. Sales were larger than a year ago by 8%, and thus were the highest on record for the month.

Dollar volume continues to run at levels approximately twice as large as in the comparable months of prewar 1941.

INDIVIDUAL CITIES

The June-July shrinkage in sales in Akron amounted to only 11% as against the 25% drop in the other cities. Sales in the other cities were 11% below the Federal Reserve Bank of St. Louis

Times Deposits—12 Fourth District Cities

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

City and Number of Banks	Time Deposits July 30, 1947	Average Weekly Change During:			
		First Half 1947	4 Weeks Ended June 25, 1947	5 Weeks Ended July 30, 1947	
Cleveland (4).....	\$860,463,000	+ \$ 631,000	+ \$395,000	+ \$448,000	
Pittsburgh (13).....	339,131,000	+ 337,000	+ 340,000	+ 3,000	
Cincinnati (8).....	183,319,000	+ 176,000	+ 66,000	+ 46,000	
Akron (3).....	102,584,000	+ 167,000	+ 59,000	+ 49,000	
Toledo (3).....	90,315,000	+ 77,000	+ 53,000	+ 14,000	
Columbus (3).....	71,996,000	+ 29,000	+ 78,000	+ 43,000	
Youngstown (3).....	53,232,000	+ 25,000	+ 48,000	+ 29,000	
Dayton (3).....	49,677,000	+ 34,000	+ 33,000	+ 77,000	
Canton (4).....	39,592,000	+ 16,000	+ 10,000	+ 65,000	
Erie (4).....	38,179,000	+ 64,000	+ 19,000	+ 113,000	
Wheeling (6).....	29,059,000	+ 28,000	+ 11,000	+ 45,000	
Lexington (5).....	10,587,000	+ 16,000	+ 22,000	+ 8,000	
TOTAL—12 Cities	\$1,868,134,000	+ \$1,600,000	+ \$788,000	+ \$500,000	

Time deposits at 59 banks in the largest cities of the Fourth District advanced to a new all-time high during the month of July. The average weekly gain amounted to \$500,000, compared with \$788,000 in June and \$700,000 in May. The July rate of increase was the lowest experienced in the postwar period to date.

During the first half of 1947 the average weekly increase in time deposits amounted to \$1,600,000. The average gain in January was at a seasonal high of \$3,800,000, while the average for the succeeding five months was about \$1,100,000. It is estimated that the average weekly gain in the first half of 1946 came to \$3,500,000, while the second half figure was \$1,850,000.

In July, time deposits increased in seven of the twelve cities from which reports are received. Outstanding gains occurred in Cleveland and Wheeling, where the average weekly advances were the largest reported since February. Large gains also occurred in Erie and Columbus, where the July figures were substantially higher than the averages for the first half of the year.

Time deposits also advanced in Akron, Toledo and Lexington. Akron is now the only city where time deposits have advanced every month since this series was first compiled in July 1946.

Total time deposits declined slightly during July in Pittsburgh, Cincinnati, Youngstown, Dayton, and Canton. This was the third successive drop for Cincinnati and Canton, while the decrease in Dayton was the second consecutive reduction. The nominal decrease in Pittsburgh was the first reported for that city since this series was begun a year ago. In all cities where reductions occurred, total time deposits are less than one percent below the respective all-time highs.

Retail Trade

	Percentage Changes From Preceding Year		
	SALES July 1947	SALES First 7 Months	STOCKS July 1947
DEPARTMENT STORES (96)			
Akron.....	+10	+ 6	+ 3
Canton.....	+ 4	+14	a
Cincinnati.....	+ 7	+ 9	- 8
Cleveland.....	+11	+ 9	+ 6
Columbus.....	+ 2	+ 7	- 4
Erie.....	+ 9	+11	+20
Pittsburgh.....	+ 3	+ 9	- 4
Springfield.....	+ 6	+ 6	a
Toledo.....	+ 9	+10	-11
Wheeling.....	+ 3	-	- 7
Youngstown.....	+ 7	+11	a
Other Cities.....	+29	+26	+ 3
District.....	+ 8	+10	- 2
WEARING APPAREL (14)			
Cincinnati.....	+ 6	- 2	+30
Cleveland.....	- 7	- 4	+28
Pittsburgh.....	-12	- 9	-14
Other Cities.....	+ 4	+ 1	-19
District.....	- 3	- 3	+ 3
FURNITURE (60)			
Canton.....	- 6	+ 6	+15
Cincinnati.....	+ 5	+ 4	+19
Cleveland.....	+10	+ 9	+34
Columbus.....	+ 8	+ 8	-11
Dayton.....	+ 4	+ 4	a
Pittsburgh.....	a	a	a
Allegheny County.....	+19	+23	a
Toledo.....	+ 9	+17	a
Other Cities.....	+ 8	+19	+32
District.....	+ 8	+12	+23

a Not available.

Figures in parentheses indicate number of firms reporting sales.

the District average of 17%. The 10% gain over a year ago in Akron likewise was one of the largest year-to-year increases.

The seasonal decline was much more pronounced in Springfield and Pittsburgh where sales declined 20% and 25% respectively, from the June level.

Sales in the Cleveland area ran 11% ahead of a year ago for the widest margin among the eleven major cities. In Canton, Columbus, Pittsburgh and Wheeling, gains over last year were in the 2%-4% range. Columbus stores, however, continue to report the largest increase over the prewar period. July sales were 238% of the July 1941 total.

INDUSTRIAL SUMMARY

Iron and Steel In July, according to the American Iron and Steel Institute, production of steel ingots and steel for castings totaled 6,570,000 tons, the smallest output, on a daily average basis, of any month this year, reflecting the adverse effect of the coal miners' vacation. Operations were at 85 percent of capacity, the first month in 1947 during which the rate fell below 90 percent. August rates have been high, however, and for the week ended August 30, mills in Pittsburgh produced at 97½ percent of capacity, Cleveland 94½ percent, Youngstown 92 percent, and Wheeling 89 percent, with the national average at 93 percent.

Net shipments of finished steel products in June were just under 5.3 million tons. Sheets accounted for 23 percent of the total, bars 16 percent, plates 11 percent, pipe and tubes, 10 percent, shapes 7 percent, strip 5 percent. July pig iron production from 23 blast furnaces in the Pittsburgh-Youngstown-Cleveland-Detroit region amounted to 2.2 million tons, just about half the national total. The seven-months' total for the nation was 33.7 million tons, a 51 percent increase over the same period in 1946.

Prospects are that high demand for practically all major steel products will continue for some months to come. At present, according to *Steel*, severest shortages exist in flat-rolled items, pipe, plates, shapes and bars.

The price of steelmaking scrap has backed away from the long-time high established a few weeks ago. *Steel's* composite market average for scrap dropped from \$41.75 to \$37.83. Other prices in the ferrous metals market remain virtually unchanged with the exception of a leading Fourth District producer's decision to raise his pig iron price to the level of scrap. This change was the outgrowth of a situation faced by those iron and steel producers who normally use scrap and their own pig iron in making steel, while selling part of their pig iron output to other steel makers or to foundries. When scrap prices climbed beyond pig iron prices, any pig iron which was sold had to be supplanted by higher cost scrap.

The recent drop in the scrap prices is not necessarily indicative of a prolonged downward trend in view of the fact that steel production remains at a consistently high level, resulting in a continuing real need for scrap. Moreover, scrap stocks have increased only slightly during recent months.

Brick and Tile Total shipments of unglazed brick in May and June reached 400 million bricks per month for the first time since last November. Shipments in June were 15 percent above those of a year ago and production totaling 414 million bricks, was 11 percent above. Stocks have been accumulating for a number of months.

Structural tile shipments in June for the nation and the District were down 7 to 8 percent from the previous month. A spot check of Fourth District producers shows July shipments were up about 40 percent, while July production was double that of June.

Cement At the current rate of activity reported by the Bureau of Mines, Fourth District cement manufacturing is running at record levels. District production of 1½ million barrels of portland cement in June brought the total for the first half of the year to just under 8 million barrels. This is the highest rate of production for the period since 1930 when slightly more than 8 million barrels were produced during the first half.

The District rise of 10 percent in portland cement output in June 1947 over June 1946 was matched by producers in the nation as a whole. Shipments from District mills, however, were up 40 percent as compared with a national increase of 25 percent.

District clinker production registered a 13 percent increase in June over the same month a year ago and was almost twice as great as the comparable nationwide increase of 7 percent.

District stocks of both portland cement and clinker at the end of June were up 82 percent and 87 percent respectively in the District. These increases in inventories over last year are likewise higher than for the nation as a whole for which increases of 44 percent in portland cement and 17 percent in clinker were reported.

Machine Tools July shipments of machine tools were estimated at \$18.7 million by the National Machine Tool Builders' Association. This figure represents a 23 percent drop from June and extends the decline into the fourth consecutive month. Partially as a result of the decrease in shipments, preliminary reports of unfilled orders show a slight month-to-month increase for the first time in a year. The industry expects that its business will turn upward seasonally in the fall, abetted by the impetus given by the Machine Tool Show in Chicago this month.

Coal National coal production of 47,800,000 tons in June and 39,690,000 tons in July measured a reduction of 6 percent and 23 percent, respectively, from the corresponding months of 1946. Daily average output through August 16 was 1,964,000 tons.

An attempt to determine the effects of the recent coal wage pact on production may be somewhat inconclusive at this time. During the four weeks ended August 16, (which excludes the 10-day vacation early in July) weekly production has averaged 11,800,000 tons as compared to an average of 12,400,000 tons last year in the same period. Partly responsible for this drop in production is the shortage in the number of freight cars available at the mines for the loading of coal, a situation which caused the shutdown of several large mines in the District for a number of days. Although some "wildcat" strikes have occurred, most of these have been of short duration.

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