

Monthly Business Review

Finance, Industry
Agriculture, and Trade

Fourth Federal Reserve District
Federal Reserve Bank of Cleveland

Vol. 29

Cleveland, Ohio, April 1, 1947

No. 4

THE RUBBER SITUATION

Ever since July 1940, when the Rubber Reserve Company was formed to acquire stocks of that strategic commodity, rubber has been vested with a good deal of public interest.

The Rubber Reserve Company and its successor agency, the Office of Rubber Reserve, have been the sole importers of natural rubber since before Pearl Harbor. That authority was originally scheduled to be terminated at the close of last year, but owing to the stringent supply conditions the deadline was extended to March 31.

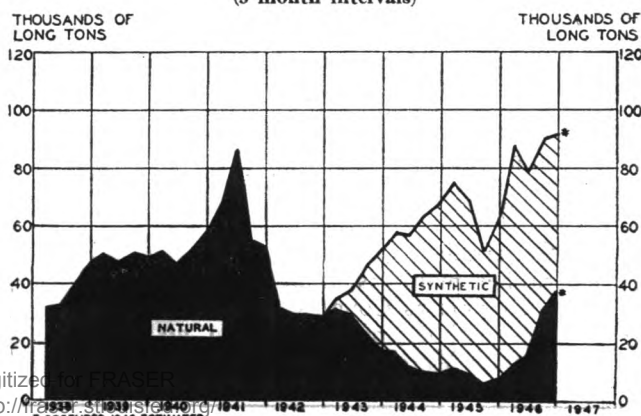
Not only the importation of rubber, but also its allocation among domestic fabricators, has been under strict Federal regulation. First the War Production Board and then the Office of Rubber Reserve of the Reconstruction Finance Corporation have had the power to allocate supplies, to control inventories, and to determine the end-uses of rubber under the provisions of the Second War Powers Act. That authority likewise expired on March 31.

At the time this Review went to press it appeared to be the intent of Congress to permit the lapse of the Government import and purchase monopoly but

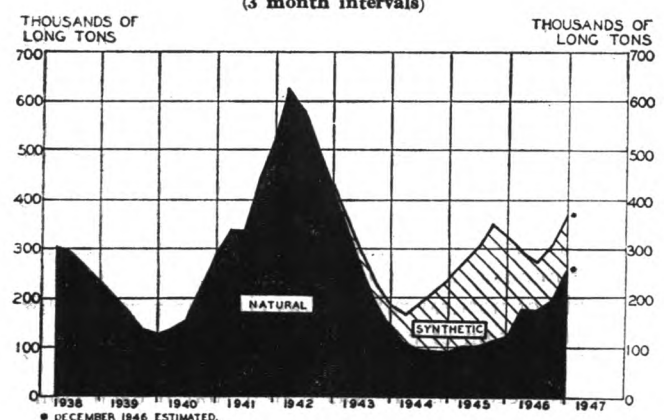
to permit continuance of the authority to allocate natural rubber among manufacturers, and to control inventories and end-product use. Many aspects of the problem remain to be solved, and it is the purpose of this article to review the factors which enter into the consideration of a national rubber policy.

Allocation Control In the course of the public discussion regarding the renewal of both purchase and allocation powers, the rubber industry and Government agencies were in general agreement as to the necessity and desirability of continuing, at this time, control over the use of rubber by manufacturers. Three factors appear to have influenced this agreement. One was the need to maintain a strong synthetic rubber producing industry for national security reasons. Another was the insufficiency of natural rubber supplies in relation to the continuing high rate of production in the rubber industry. A third, and longer term factor, was the possibility that the domestic industry might have to cope with wide fluctuations in crude rubber prices such as occurred in Far Eastern markets on occasions during the past two decades.

Total Rubber Consumption
Natural and Synthetic
(3 month intervals)



Total Rubber Stocks
Natural and Synthetic
(3 month intervals)



It is apparent from the accompanying charts that the supply of natural rubber is not yet adequate to meet the combined demand for natural and synthetic rubber. Despite some increase in imports during 1946, by the end of the year it was still required that in the aggregate only one ton of natural rubber could be used for each 1½ tons of synthetic. Deviations from that ratio were permitted among different products.

The proportion of natural rubber contained in tires has been steadily increased. On an over-all basis for all tires (passenger, truck, bus, and off-the-road) the percentage was increased from 18 percent at the beginning of 1946 to 38 percent by the end of the year. However, the amount permitted in different kinds of tires varies widely. Passenger car tires up through the 6:50 size may use up to 23 percent natural rubber, larger passenger sizes up to 67 percent, large truck tires up to 94 percent, while tires of 11:00 inch cross section and larger may use any amount. The use of natural rubber in such items as soles, heels, belts, mats, hose, etc., has also been strictly controlled.

Stocks of Natural Rubber

Natural stocks reached their low point of 90,000 tons in October 1944 and then were built up to more than twice that amount by the end of 1946 as imports increased and consumption was restricted in order to re-establish a safe working reserve. Total stocks at the beginning of 1947 were about equal to the amounts in hand in early 1941. If imports are received as expected (310,000 tons) during the first six months of this year and no important changes are made in the rate of consumption, stocks of natural rubber should approximate the 1938 level of 300,000 tons by mid-year. A reserve of this size should be adequate to meet short-term fluctuations in supply.

These were some of the major considerations which were responsible for the nearly unanimous agreement among manufacturers on the desirability of extending Federal control over the use of natural rubber. Without official control it was believed that competitive forces, for example in the tire field, would result in an immediate attempt to return to the pre-war product since the consuming public seems to show some preference for the natural hevea. In the struggle for supply, some manufacturers would be unable to obtain their proportionate share.

Continuation of Government Purchases

While substantial agreement existed regarding the desirability of continuing Government allocation of supplies and control of end-uses, such agreement did not exist with respect to continuation of public purchase. The shortness of supply of natural rubber was cited as a reason for the continuation of public purchase of foreign rubber for at least six more months by perhaps a majority of tire manufacturers. It was feared that if each com-

pany should try to maximize its purchases in Far Eastern markets, prices would sky-rocket without causing any immediate improvement in over-all supply. Further, it was argued that Government control of rubber use is incompatible with private purchase since such control would require the more successful buyers to give up part of their supply to competitors. Finally, it was pointed out that individual buying would require a whole new control system to balance individual imports with amounts allocated for product use.

The demand for a further extension of public purchase of rubber, however, was by no means unanimous. Several tire manufacturers wanted it discontinued and expressed a desire to return immediately to competitive practices. Rubber importers and buyers, largely inactive since 1942, offered the opinion that Government buying was not effective in securing for the United States its fair share of world supply and that only inferior grades of rubber had been obtained. It was reported that recent Government buying had not been too successful. Whereas purchase goals had been set at 50,000 tons a month for the first quarter of 1947, unofficial estimates indicated that January and February acquisitions had amounted to only 26,000 and 16,000 long tons respectively.

The War Department went on record to the effect that national security would be served adequately by private trade. The State Department opposed public purchase of rubber on the grounds that it was contrary to the announced policy of the United States that foreign trade should be conducted by private enterprise. It would leave this country open to charges that it was using war powers unnecessarily to influence a world rubber market. Retaliation by other nations would be invited thus fostering an undesirable form of economic warfare. The State Department also expressed the belief that the British and Dutch Governments, acting either in concert or separately, had not set up a cartel to control natural rubber sales.

NEW RUBBER CONTROL BILL

On March 29, the President signed a new Rubber Control Act. Principal provisions of this new legislation are:

1. The purchase of natural crude rubber is returned to private enterprise.
2. Government control of crude rubber consumption, inventories, and end-uses of natural rubber is extended to March 31, 1948.
3. Government operation of synthetic rubber plants is to be continued until such time as Congress adopts a permanent rubber policy, but in no event beyond March 31, 1948.

In summary, the case for continued Government purchase actually hinged upon two assumptions: first, that competition would push prices upward to unreasonable levels and second, that such higher prices would not bring out a substantially larger supply under present chaotic conditions in the Far East. The validity of these assumptions can be tested only in the market place. Higher prices with no increase in supply would be extremely costly to the American rubber consumer. On the other hand, continuation of public purchases and maintenance of a low price for natural rubber might forestall a return to higher grade merchandise if the rubber were available and private buying would bring it out.

The Long-term Problem The problem of acquisition and allocation of natural rubber, however, is unimportant in relation to

the longer-term matter of maintaining an adequate synthetic rubber producing industry in competition with natural rubber. That question should be met before the supply of imported rubber becomes great enough to meet total demand.

The Inter-Agency Policy Committee on Rubber was created in September 1945 to consider all aspects of the rubber situation as it affected the national interest, and to make recommendations which would serve as a guide in the formulation of a national rubber policy. The agencies which were represented on that Committee were the Departments of State, Justice, Commerce, Agriculture, War, and Navy; the Surplus Property Board, the Reconstruction Finance Corporation, the Civilian Production Administration, and the Tariff Commission.

Mr. William A. Batt, vice chairman of the WPB was designated as chairman of the Rubber Committee.

The long-term recommendations of that Committee, published in July 1946, may be summarized as follows:

1. For purposes of national security, the Government should ensure that a minimum amount of general purpose synthetic rubber is produced in the United States. The minimum should be one-third of total rubber consumption or not less than 250,000 long tons a year. Plants kept in production should be the most efficient and lowest cost of existing facilities. Consequently, plants using alcohol as a raw material should not be included.
2. Controls should be available to assure the domestic use of the synthetic rubber produced.
3. The synthetic rubber industry should be privately owned and operated to assure competition in research, development, and use. The amount of productive capacity in private hands should be greater than the guaranteed market so as to stimulate this competition.

4. Efficient general purpose synthetic rubber facilities not purchased by private owners should be maintained by the Government in a stand-by condition, and not operated except in national emergencies. In order to avoid complete reliance upon petroleum as a raw material, at least one plant using alcohol feedstocks should be included in the stand-by reserve. The total capacity of the industry kept operating or in stand-by condition should approximate 600,000 long tons, or about 60 percent of present existing capacity.
5. Private industry and Government should continue to sponsor broad rubber research programs to explore new end-products, the field of new polymers, processing techniques, and development of new sources of natural rubber.
6. The United States should establish a revolving stock-pile of natural rubber wholly apart from stocks in commercial channels.
7. With the certain prospects of a changing rubber situation, some agency should be created to review continuously the rubber program.

On the whole, the recommendations of the Committee were well received, particularly its admonition that it is highly desirable that a coordinated program should be carefully worked out while there is still a shortage of natural rubber. The synthetic industry as it now stands is completely integrated and centrally administered. The Office of Rubber Reserve of the Reconstruction Finance Corporation distributes the output of Government owned butadiene and styrene plants (source of the raw material) to Government owned copolymer plants that produce GR-S or general purpose synthetic rubber. The Government also indirectly controls the distribution of the synthetic rubber to private manufacturers by specifying the proportion of natural rubber that may be used in end-products.

If a synthetic rubber industry is to be maintained for purposes of national security and is to go into private hands, steps must be taken to provide a reasonable assurance of raw materials and of a market for the finished product. The attitude of the Committee with regard to devices for maintaining a market for synthetic rubber when the natural product again is freely available may be summarized as follows:

1. **Tariff on imports** of natural rubber. While this is a familiar American method of protecting domestic industries, it would conflict with existing trade agreements which guarantee rubber imports free of duty. Costs to the consumer would be pyramided and there would be no way of ensuring diversity of use of synthetic rubber. Flexible rates would be needed to meet changes in price for which rubber is notorious.

2. **Import quotas** to limit supply of natural rubber for forced consumption of synthetic rubber. This method, too, would cut across present trade pacts. Quotas would keep out natural rubber, but certain manufacturers might obtain enough for all purposes while competitors would have to use domestically produced rubber. The quota system is inflexible and rubber needs vary widely from year to year as well as seasonally. The apportionment of import quotas would be extremely complex.
3. **Excise tax** on products in proportion to natural rubber content. This creates the problem of determining the amount of natural rubber in various commodities and puts the cost of a national security program solely on rubber consumers.
4. **Government monopoly** in purchase and sale of natural rubber. This contravenes national policy of freedom of trade and promotion of private enterprise.
5. **Certificate plan** permitting manufacturers to import natural rubber in some proportion to the amount of synthetic rubber purchased. This would create a need for secondary markets for both synthetic rubber and certificates as individual manufacturers traded certificates or sold rubber to meet their individual needs. It would be complex as well as contrary to present trade agreements.
6. **Industry code** set up by the rubber industry itself. The basic objection is that a national

security problem should be settled by public action and not by private determination. It would also require public policing and enforcement of private agreements.

7. **Government subsidy** to either producers or users, or both. This would transfer to the Government the financial burdens of the competitive disadvantages of domestically produced rubber. Subsidies would probably vitiate private incentive for research, product development, and operating efficiency, but would not ensure that the necessary minimum of synthetic rubber would be produced and consumed. The cost of maintaining a synthetic industry, however, would be clearly visible to the public.
8. **Minimum quantity** of synthetic rubber to be included in any given product. This would be similar to the present plan of control and has the virtue of controlling the total amount to be used and of channeling it to a variety of products.

The Committee as a whole was inclined to favor some sort of combination of the last two propositions. This, in effect, would continue the present program of specifying maximum quantities of natural rubber that could be used. The present program has had an element of subsidy in it, inasmuch as GR-S made from alcohol cost a great deal more than the petroleum product but was sold at the same price. This plan has the further advantage of continuing a control system which is already operating and with which producers are familiar.

NEW MEMBER BANK

The Citizens Banking Company of Celina, Ohio, became a member of the Federal Reserve System on April 1. The new member bank is located in an area devoted largely to dairy farming, hog raising and general farming. A furniture factory and a stearic acid plant provide industrial employment.

Grand Lake, which is nearby, is a fishing and vacation resort. The population of Celina, which is the county seat of Mercer County, is approximately 5,000.

The Citizens Banking Company was incorporated in January 1897. At present, deposits are approximately \$2,500,000. Combined capital and surplus amount to \$142,500.

Officers of the bank are as follows:

Mr. August J. Spieler, chairman of board and president
Mr. Lee Heckler, first vice president
Mr. Sam Dixon, second vice president
Mr. N. F. Otey, cashier
Mr. Ben H. Cartwright, assistant cashier and secretary
Miss Victoria Lennartz, assistant cashier

INTEREST RATES AND REPAYMENT METHODS ON COMMERCIAL AND INDUSTRIAL LOANS

In November, 1946, this bank conducted a survey of commercial and industrial loans outstanding at member banks in the Fourth District. Detailed information on a carefully selected sample of loans was provided by 165 member banks holding about 80 percent of the loans of all 724 member banks. The first report based on the survey appeared in the March issue of the *Monthly Business Review* and dealt chiefly with the characteristics of the lending institutions and borrowers. The present article discusses the survey findings regarding the rates of interest charged on the loans and the methods of repayment.

Summary

Most of the commercial and industrial loans outstanding last November 20 were made at rates of 5 or 6 percent. However, the larger loans were made at much lower rates, with the consequence that almost half the dollar volume of loans outstanding bore an interest rate of 2 percent.

The most important factor in rate determination was found to be the size of the loan. Interest rates were somewhat lower at the larger banks and in larger cities for a given size of loan.

The tendency of the smaller loans to bear higher rates of interest reflects the fact that costs of drawing up and servicing small loans are undoubtedly greater per dollar loaned than is the case with large loans.

The method of repayment and the length of term of a loan apparently have little effect on the stated rate of return. With the exception of commercial and industrial loans secured by stocks and bonds, the nature of the security pledged likewise seems to have little bearing upon the rate of interest.

About one-half of the loan volume was in single payment form. Repayment by regular instalments was called for most frequently in loans with the longer maturities.

Interest Rates

The rate of interest charged on most of the 52,000 business loans outstanding last November was 5 or 6 percent. The average rate charged per loan was 5.0 percent. However, large loans in general were made at much lower rates of interest, with the result that the average rate of return on the aggregate dollar volume of loans outstanding was only 3.1 percent.

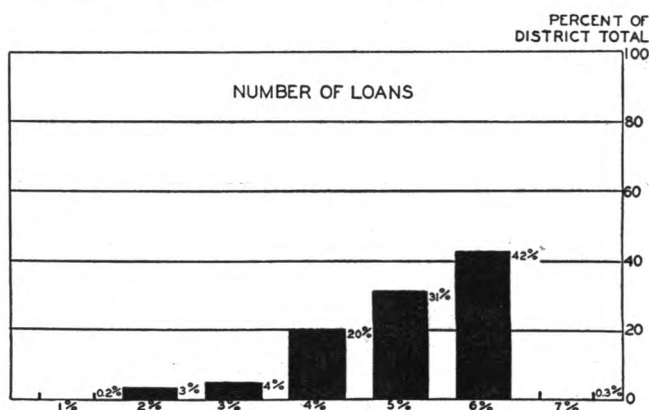
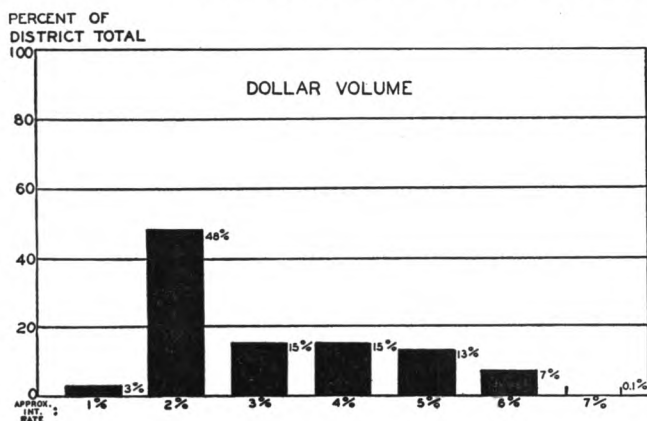
An accompanying chart shows the dollar volume of loans made at various interest rates and also the number of loans made at those rates. Almost half of the dollars loaned were earning about 2 percent on November 20, with most of the remainder of the loan volume about equally divided among interest rates of 3, 4, and 5 percent. Only seven percent of the dollar volume of loans was bearing an interest rate of 6 percent, with virtually no funds out at any higher rate.

A completely different picture is presented by data based on the number of loans at the various rates. Only three percent of the total number of loans were earning about a 2 percent interest rate on November 20 and only six percent of the total were earning 3 percent. In round numbers, twenty percent of the total number of loans specified a 4 percent rate, thirty percent called for 5 percent payments and forty percent were made at a 6 percent figure.

Interest Rates and Size of Loans The chart presenting the dollar volume of loans and the number of loans at the various interest rates emphasizes the wide range of rates charged by Fourth District banks.

Although many factors may contribute to this flexibility of the rate structure, the data submitted in the loan survey indicate that the variations in interest charges are more closely correlated with the size of loans than with any other factor. An accompanying

Percentage Distribution of Commercial and Industrial Loans by Interest Rate Charged



Average Interest Rate by Size of Loan and Size of Bank

Size of Loan	All Banks	Banks with Deposits of—			
		Over \$100 Million	\$10 to \$100 Million	\$2 to \$10 Million	Under \$2 Million
All Loans.....	3.1%	2.5%	4.3%	5.0%	5.3%
Under \$500.....	5.6%	5.7%	5.7%	5.7%	5.5%
\$500 to \$999.....	5.5	5.5	5.4	5.5	5.7
\$1,000 to \$4,999....	5.1	4.8	5.0	5.3	5.4
\$5,000 to \$9,999....	4.9	4.4	4.9	5.0	5.1
\$10,000 to \$24,999..	4.6	4.2	4.6	4.9	5.4
\$25,000 to \$49,999..	4.2	3.8	4.4	4.3	....
\$50,000 to \$99,999..	3.6	3.3	3.9	*	....
\$100,000 to \$499,999	2.8	2.6	3.5	....	....
\$500,000 to \$999,999	2.1	2.1	3.3	....	....
\$1,000,000 and over.	2.1	2.1	....	....	....

*Sample too small to justify an average figure.

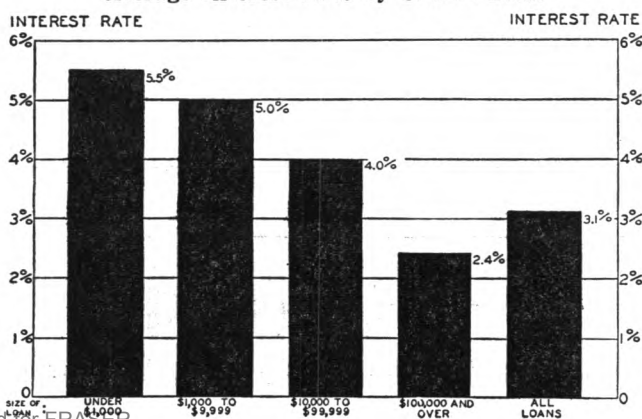
table lists an average rate of 5.6 percent on loans of less than \$500, as against a rate of 2.1 percent on loans of over \$1,000,000.* Average charges on the ten loan sizes listed in the table declined steadily as the loan sizes increased.

Furthermore, average rates on small loans actually may have been somewhat higher than the accompanying data would indicate. The survey did not call for the amount of a loan as of the date it was originally made, but rather as of November 20. Undoubtedly there were many loans bearing a low interest rate which were classified as small loans on November 20 only because a substantial proportion of the original amounts of the loans had been paid off by the date of the survey.

Moreover, the effective rate, as distinct from the nominal rate, is usually higher on small discounted instalment loans than on single payment loans. The 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 will be approximately half as large as the original amount. Thus the actual rate is about double the nominal discount rate, unless some provision is made to return to the lender a part of the initial charge.

* Average interest rates reported in this and succeeding tables and charts are average charges per dollar loaned, rather than the average rate per loan.

Average Interest Rate by Size of Loan



Size of Borrower Since large companies usually borrow larger sums than do smaller companies, it follows that large companies pay a lower interest rate than do the smaller firms. An accompanying table discloses that the average rate paid last November 20 by borrowers with assets under \$50,000 was 4.9 percent, whereas borrowers with assets over \$5,000,000 obtained their credit at an average figure of 2.1 percent. The other borrower groups listed borrowed at intervening rates of 4.4, 3.8, and 2.9 percent respectively.

Average Interest Rate
By Size of Borrower and by Size of Bank

Assets of Borrower	All Banks	Banks with Deposits of—			
		Over \$100 Million	\$10 to \$100 Million	\$2 to \$10 Million	Under \$2 Million
All Borrowers.....	3.1%	2.5%	4.3%	5.0%	5.3%
Under \$50,000.....	4.9%	4.5%	4.9%	5.2%	5.3%
\$50,000-\$250,000....	4.4	4.1	4.5	4.8	5.1
\$250,000-\$750,000....	3.8	3.3	4.3	4.4	....
\$750,000-\$5,000,000...	2.9	2.8	3.6	4.6	....
Over \$5,000,000.....	2.1	2.0	2.2	4.0	....

The tendency of the smaller loans to bear the higher rates of interest reflects in part the influence of operating costs on interest rates. It is probable that the total cost in dollars of making a small loan is nearly as much as the cost of a large loan. In most cases investigation and accounting costs tend to be approximately the same for each loan. It is necessary for the lender to receive interest payments sufficient to pay those costs. As a consequence, rates are generally higher when the amount loaned is small than when the amount is large.

Size of Bank and Size of City The survey disclosed that interest rates on loans of comparable size tend to be somewhat lower in large cities and at large institutions than in smaller cities and at smaller banks, although the correlation is not nearly so pronounced as that evidenced by the size of the loan and the rate of interest. This variation in rates by size of city and size of bank, which is described by accompanying tables, appears greater in the case of large loans than small loans.

Average Interest Rate by Size of Loan and Size of City

Size of Loan	Population of City—			
	Under 5,000	5,000-25,000	25,000-100,000	100,000 and over
Under \$10,000.....	5.3%	5.1%	4.9%	4.8%
\$10,000-\$100,000....	5.0	4.3	4.3	4.0
\$100,000 and over.....	....	3.0	2.9	2.3

The lower rates afforded borrowers at the larger banks and in the larger population centers in part reflects a tendency among small banks to charge a flat rate regardless of the size of the loan. It will be noted from the accompanying data that the decline in rates that accompanies the increased size of loans is much more evident at the large banks than at the small.

This greater flexibility of rates at the large banks may be partly induced by their experience with a comparatively wide range of loan sizes. The relatively narrow variation in the size of loans at the smaller banks probably tends to encourage a policy of charging a flat rate regardless of the size of the loan. Another possibility is that the lack of flexibility in rates may be counter-balanced in many cases by concessions other than reduced interest charges.

Method of Repayment, Security, and Maturity The loan survey presented no conclusive evidence of correlation between the rate charged on loans in a given size range and the security, maturity, or method of repayment on the loans.

For example, the method of repayment apparently had very little bearing on the rates charged on loans in the \$5,000 to \$9,999 size range. The average rate on single-payment loans in that size range was 4.9 percent. The same rate was charged for loans to be repaid by equal instalments, whereas the charge when repayment was scheduled in unequal instalments was only slightly higher at 5.1 percent.

The security pledged against the loan likewise appeared to be of comparatively slight significance in determining the interest rate. Again using loans ranging from \$5,000 to \$9,999 in size as a typical example, the average rate on unsecured loans was 5.0 percent and that same rate applied to loans secured by a co-signer or endorser. Business loans secured by real estate averaged 4.9 percent and those secured by chattel mortgages, warehouse receipts, etc., averaged 5.1 percent. The only significant departure from this pattern was that business loans secured by stocks and bonds featured an average rate of only 4.0 percent.

With regard to the relationship of loan maturity to the interest rate, it was found that loans of less than \$10,000 in size carried an average interest rate of 5.0 percent with a maturity of a year or less, 5.0 percent with a maturity of one to five years, and 4.7 percent with the maturity longer than five years. The corresponding percentages for loans of \$10,000-\$99,999 were 4.0, 4.3, and 4.4 percent, and for loans of \$100,000 and over the rates for the three maturities were 2.4, 2.5, and 2.2 percent. Thus no clear relationship between the loan maturity and the interest rate could be discerned.

Industry of Borrower With the possible exception of sales finance companies, no evidence appeared that any one type of industry consistently pays a lower rate than other types. The accompanying table, which lists the average rates paid by the various industry groups on loans in each

Average Interest Rate by Industry and Size of Loan

Industry	Size of Loan			
	All Loans	Under \$10,000	\$10,000-\$100,000	\$100,000 and Over
Retail.....	4.3%	5.1%	4.4%	2.5%
Wholesale.....	3.3	4.9	4.2	2.5
Mfg. and Mining.....	2.8	5.1	4.1	2.3
Public Utilities.....	2.4	5.2	4.4	2.1
Sales Finance.....	2.3	3.8	2.9	2.2

of three loan size ranges, merely reaffirms the point expressed earlier—that the size of the loan and of the borrower appear to be the dominant considerations in determining the interest rate.

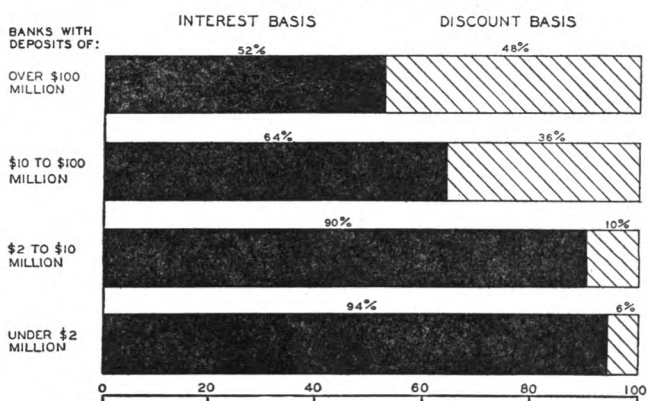
Interest Versus Discount Basis On most of the loans outstanding last November 20, charges were computed on an interest, rather than a discount, basis. About 78 percent of the dollar volume was on an interest basis, while 71 percent of the total number of loans was on that arrangement. The variation of these two percentages may be accounted for by the fact that the size of the average loan on an interest basis was \$17,500, whereas the comparable figure for the discount method of payment was \$12,800.

The larger banks utilized the discount method in more instances than did the smaller banks. For example, a fourth of the dollar volume and almost half the total number of loans at the largest banks were on a discount basis. By comparison, at the smallest banks only about one loan in twenty called for the discount method of computing charges.

Dollar Volume of Loans on an Interest and Discount Basis by Size of Bank

	Banks with Deposits of—				
	All Banks	Over \$100 Million	\$10 to \$100 Million	\$2 to \$10 Million	Under \$2 Million
Interest Basis....	78%	75%	75%	94%	96%
Discount Basis...	23	25	25	6	4
Total.....	100%	100%	100%	100%	100%

Number of Loans on an Interest Versus a Discount Basis, by Size of Bank



Method of Loan Repayment

About 48 percent or almost half of the dollar volume of loans outstanding on November 20 provided that the loans were to be repaid in one payment. Repayment by equal instalments was called for in 23 percent of the total dollar volume of loans, while the remaining 29 percent of the volume was about equally divided between serial note repayment and repayment through unequal instalments.

Size of Bank An analysis of repayment methods by size of bank discloses that the single payment method is the procedure most relied upon by banks of all size groups. The smallest banks specified the single payment method on 59 percent of the dollar volume of their loans, which is the highest percentage reported for any bank size group. The equal instalment method was relied upon more by banks in the \$2 to \$10 million size group than by banks in other size groups, while serial notes as a method of repayment were used chiefly by the largest institutions.

Method of Loan Repayment by Size of Bank

Method of Repayment	Banks with Deposits of—				
	All Banks	Over \$100 Million	\$10 to \$100 Million	\$2 to \$10 Million	Under \$2 Million
One Payment....	48%	49%	49%	43%	59%
Equal Instal.....	23	21	27	34	28
Serial Notes.....	15	20	2	1	3
Unequal Instal....	14	10	22	22	10
Total.....	100%	100%	100%	100%	100%

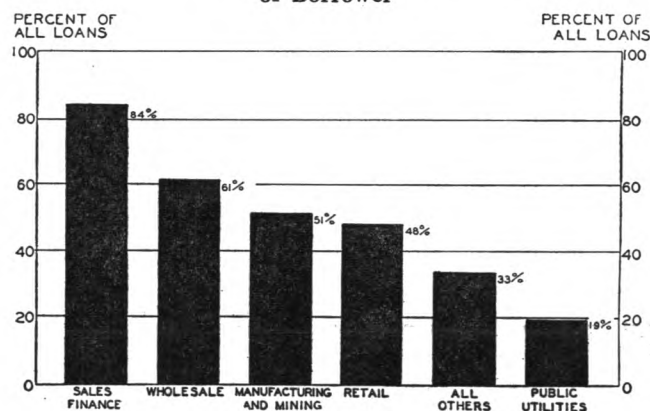
Size and Maturity of Loans The mere size of loans apparently has little effect upon the choice of a method of repayment. For example, in three major loan size ranges of 0—\$9,999, \$10,000—\$99,999, and \$100,000 and over, single payments were called for in loans consisting of 47, 44 and 50 percent of the dollar volume in the three respective size classifications.

However, the length of time to maturity does influence the method of repayment. In general there is a greater insistence on repayment in instalments in the case of loans of long maturity than in loans of short maturity.

About 84 percent of the dollar volume of single payment loans matured in a year or less, 13 percent matured in one to five years and only 4 percent matured in over five years. In sharp contrast, only 27 percent of the equal instalment loans matured in a year or less, 30 percent matured in one to five years, and 43 percent matured in over five years. On the longer maturities the banks usually required repayment throughout the life of the loan rather than just one payment on the termination date.

Industry of Borrower Analysis of repayment methods by the industry of the borrower in general confirms the above finding regarding the relationship of loan maturity to the method of repayment. In a given industry, the proportion of loans to be repaid in a single payment tends to be large when the proportion of loans maturing within a year is large, and vice versa. In last month's *Review*, it was pointed out that the sales finance industry had the largest proportion of loans maturing within a one-year period, i. e. 90 percent, while public utilities had the smallest proportion, 16 percent. The accompanying chart indicates that 84 percent of the loans to sales finance companies were scheduled to be paid off in one payment, while the corresponding percentage for the public utilities was only 19 percent.

Ratio of the Dollar Volume of Single Payment Loans to All Loans, by Industry of Borrower



INDUSTRIAL SUMMARY

Iron and Steel Production of ingots and steel for casting continued at a very high rate in February with an output of 6.4 million tons, or about 92 percent of industry capacity. The decrease of one percent from the preceding month was due to fuel and scrap shortages in certain areas. The trend was reversed in March, however, with weekly output rising to new highs since 1945 when the nation was engaged in a two-front war.

District production rates at the end of March according to *Steel* were 101½ percent in Pittsburgh, 94 percent in Cleveland, 91 percent in Youngstown, 87 percent in Cincinnati, and 93½ percent in Wheeling.

The dominant factor in the industry continued to be the unprecedented buoyancy of the scrap market. With the exception of a few instances in World War I, when isolated sales above \$50 a ton were recorded, the market was at an all-time high in mid-March. *Steel's* composite price on steelmaking scrap was \$36.58 a ton as compared to \$19.17 a year ago. In Pittsburgh, the price for heavy melting grades of scrap rose to \$38.00 a ton with some sales reported above this figure. The principal cause of these prices appears to be the disruption in the normal flow of scrap from dealers to mills. Many metal fabricators and others outside the scrap industry have been competing for scrap on the open market in order to deliver tonnages to their finished steel suppliers. Excessive cross-hauling and purchases outside of normal areas have resulted in costs far in excess of reported prices.

The monthly consumption of purchased scrap in the first quarter has been estimated at about two million tons, or nearly equal to the all-time high established in March 1945. Strenuous efforts are being made to increase the flow of scrap. Ship-breaking activities are estimated to be yielding about 50,000 tons a month. The War Assets Administration hopes to locate and dispose of at least 300,000 tons of scrap within the next 60 days. The Army is also planning to expedite the return of scrap from European war theatres and 150,000 tons may be available from this source. An early return of mild weather could materially increase country scrap collection.

High scrap prices have caused steel mills to use larger proportions of pig iron in their furnaces and further reduced the supply of iron available to foundries. Pig iron prices advanced from \$2.50 to \$4.00 per ton at most basing points due to the tight supply condition.

Evidence of the intense demand for steel can be found, not only in steel mill backlogs, but in trade reports of a widening "gray" market operated by brokers. Small metalworking shops in need of steel

to finish work in process are said to be paying fantastic prices.

The freight car building program was expanded from the original 7,000 cars a month goal to 10,000 cars. Current production is about 3,000 cars a month, and it is estimated that the enlarged schedule cannot be attained before the third quarter of the year. Steel producers have agreed to provide the needed tonnage as it is required.

Effective March 31, Government allocation of pig iron was discontinued for all items except cast iron soil pipe and fittings. These items still constitute a major bottleneck for the building industry. This action is expected to increase the supply of iron for non-housing industries.

Consumption of Lake Superior Iron Ore amounted to 6¼ million tons in February according to the Lake Superior Iron Ore Association. Stocks of iron ore at docks and furnaces declined to 24.3 million gross tons by March 1 as compared to 33.6 million gross tons on the corresponding date last year.

Iron Foundries Shortages of high grade coke, pig iron, and steel scrap have operated to hold down production in ferrous foundries. Merchant iron deficiencies are due directly to the scrap shortage as steel producers divert an increasing quantity of hot metal to the open hearths. Low quality coke has also reduced output. Order backlogs are reported to be increasing and now amount to three months production. Improved labor supply and reduced turnover are the bright spots in the industry.

The foundry equipment and repair order index which is compiled by the Foundry Equipment Manufacturers Association advanced to 513 in January, a rise of 30 percent over January 1946. The base period of this index is the 1937-39 monthly average. The increase of 400 percent may be taken as a measure of foundry efforts to modernize and increase production.

Coal Present indications point to uninterrupted coal production, at least until June 30, when bituminous mines are scheduled to be returned to private ownership. On March 6, the United States Supreme Court ordered the head of the United Mine Workers to withdraw the official notice to local unions which set March 31 as the expiration date of the present contract. Compliance was made on March 19.

United States bituminous coal production for the first two months of this year totaled 109.5 million tons. Daily average production is four and a half percent above last year and would be even greater if the car shortage could be overcome. Industrial stocks of coal rose slightly in January to approximately 46 million tons and were equivalent to a 33-day supply.

February production of bituminous coal in the District amounted to 19.3 million tons to bring the year's total to 41.8 million tons. Production for the first two months was six percent greater than last year. Car shortages in the northern areas are more severe than in the south, and as much as a day and a half's production a week is being lost because of this factor.

The lack of gas continued to hamper industrial production early in March in the Cleveland, Wheeling, and Pittsburgh areas. Several large fuel users, as a consequence, have converted to fuel oil. Further conversion to gas burning equipment has been halted in both Cleveland and Cincinnati for at least another year which has improved the prospects for the sale of stokers and solid fuels.

Production of Pennsylvania anthracite coal in the first two months of 1947 fell six percent below last year. Car shortages and minor labor disputes were the principal causes.

Beehive coke production in the United States totaled one million tons through March 1, up 36 percent from the previous year.

Cement District cement manufacturers anticipate a substantial rise in output over 1946 and the greatest volume since 1929. Several mills are proceeding with extensive modernization and expansion programs. Production plans are contingent upon an adequate supply of fuel and railroad cars in which to move the finished material in the heavy shipping months from May through October. The price outlook is stable, although charges for paper and cloth containers may vary with the cost of these items.

Shoes Shoe factories have begun to feel consumer price resistance at the retail level. Dollar shoe sales in Ohio, as reflected by sales tax collections, are slightly below 1946 for the first ten weeks of this year. With due consideration for price increases, this would indicate a decline of at least 15 percent in unit sales.

Factories report that raw material prices are still rising. As a result, commitments have been reduced and inventories are being held to a practical minimum

working basis. Tanners also have become cautious and in some instances have withdrawn altogether from the hide market. Labor has become more quiet and this condition is believed to reflect the closing of some eastern shoe factories and part-time operations in other shops.

Ceramics District dinnerware production continues at maximum rates. Potteries were not seriously affected by the gas shortages in February and March since most kilns are equipped with oil stand-by facilities. Order backlogs remain at very high levels and cancellations are about normal. Imports of foreign ware have not been large enough to affect domestic operations.

Soap Soap production has attained a level substantially above a year ago. The industry is chiefly concerned over the advance in raw material costs. One large producer reported that February prices advanced sharply; crude cottonseed oil 21 percent, soybean oil 30 percent, coconut oil 16 percent, and inedible tallow 17 percent. Principal soap producers advanced most selling prices five percent in mid-March. Distributors' stocks of soap are low but increasing steadily.

Rubber Automotive pneumatic casing production in January continued at a very high level according to the Rubber Manufacturers Association. Tire plants turned out about 6.9 million passenger casings and 1.6 million truck and bus tires. Factory inventories of these classifications rose 40 percent and 24 percent, respectively, during the month.

Dealer stocks of passenger casings are rapidly returning to normal and distributors have resumed the prewar practice of offering trade-in allowances for old tires and free mounting service for customers.

Shortly before the present labor contract expired at midnight March 23, the United Rubber Workers Union signed a new contract with the four largest rubber manufacturers. The agreement, retroactive to February 2, provided for a 11½ cent hourly wage increase and will raise average hourly earnings to about \$1.45. These terms will undoubtedly set the pattern for the entire rubber industry. Tire manufacturers indicated that present selling prices will not be increased.

Indexes of Department Store Sales and Stocks

Daily Average for 1935-1939 = 100

	Adjusted for Seasonal Variation			Without Seasonal Adjustment		
	Feb. 1947	Jan. 1947	Feb. 1946	Feb. 1947	Jan. 1947	Feb. 1946
SALES:						
Akron (6).....	260	275	249	232	209	222
Canton (5).....	315	310	279	239	238	212
Cincinnati (9).....	300	260	285	225	213	214
Cleveland (10).....	250	224	233	195	186	182
Columbus (5).....	318	277	301	239	225	226
Erie (3).....	250	253	225	212	197	191
Pittsburgh (8).....	227	247	200	204	186	180
Springfield (3).....	275	265	281	215	193	219
Toledo (6).....	267	236	244	211	175	192
Wheeling (6).....	224	214	229	181	150	185
Youngstown (3).....	302	279	252	244	215	204
District (96).....	256	256	236	210	194	194
STOCKS:						
District.....	261	257	163	242	225	151

Bank Debits—February, 1947

(29 Fourth District Cities)

Bank debits during February at 29 Fourth District cities exceeded the February 1946 total by 26 percent. This was the largest percentage gain reported over year-ago figures since September 1946, when the identical percentage increase was recorded. The average comparable percentage for the past four months was 20 percent.

Aggregate bank debits of \$5,270,000 for February were considerably below the \$5,950,000 figure for January, chiefly because February is a short month. However, the February decline amounted to only 11 percent this year, compared with 17 percent in 1946 and 13 percent in 1945.

TEN LARGEST CITIES

For the seventh successive month, the largest percentage gain over year-ago figures occurred in **Toledo**. The Toledo percentage of 42 percent was far above the average of 26 percent for all the large cities. Other cities with increases above the average were **Canton**, **Dayton**, **Pittsburgh** and **Cincinnati** with percentages of 31, 30, 29 and 27 percent respectively.

NINETEEN SMALLER CITIES

Warren led the smaller centers in percentage gains over the figures of last year with a mark of 47 percent. **Sharon** and **Lexington** likewise exceeded year-ago figures by a wide margin, with percentage gains of 45 percent. **Lexington** debits exceeded \$300,000,000 for the first time in any three-month period. Other cities exceeding the District average of 26 percent for smaller centers were **Lorain** and **Mansfield** with 36 percent and **Portsmouth** with 33 percent.

The accompanying table shows the volume of debits to all deposit accounts (except interbank balances) in 29 cities of the Fourth District. Most of the debits represent transfers of funds by check although debits to (withdrawals from) savings deposits and U. S. Treasury deposits at reporting banks are also included.

(In thousands of dollars)

	February 1947	% Change from year ago	3 Months Ended Feb., 1947	% Change from year ago
ALL 29 CENTERS.....	\$5,270,236	+25.9%	\$17,848,425	+18.7%
10 LARGEST CENTERS:				
Akron.....Ohio	199,741	+15.2%	682,700	+22.9%
Canton.....Ohio	85,425	+30.7	283,946	+25.9
Cincinnati.....Ohio	733,811	+26.9	2,404,432	+18.6
Cleveland.....Ohio	1,339,573	+25.0	4,593,922	+12.0
Columbus.....Ohio	355,023	+9.5	1,215,490	+6.9
Dayton.....Ohio	186,812	+29.8	598,807	+26.9
Toledo.....Ohio	318,682	+43.6	1,065,982	+42.0
Youngstown.....Ohio	96,466	+24.1	331,598	+23.6
Erie.....Penna.	64,359	+15.1	224,237	+15.8
Pittsburgh.....Penna.	1,393,134	+29.2	4,768,953	+21.4
Total.....	\$4,773,026	+25.9%	\$16,170,067	+18.4%
19 OTHER CENTERS:				
Covington-Newport Ky.	30,706	+12.9%	104,047	+14.0%
Lexington.....Ky.	93,150	+44.7	307,502H	+21.5
Hamilton.....Ohio	26,479	+21.8	86,098	+23.1
Lima.....Ohio	33,260	+27.6	112,487	+29.0
Lorain.....Ohio	13,195	+36.2	43,718	+28.1
Mansfield.....Ohio	30,399	+35.8	99,455	+34.3
Middletown.....Ohio	24,612	+14.9	83,527	+22.7
Portsmouth.....Ohio	15,904	+33.2	53,458	+28.9
Springfield.....Ohio	37,220	+23.8	120,069	+21.2
Steubenville.....Ohio	16,700	+10.9	57,973	+16.0
Warren.....Ohio	28,391	+47.2	94,543	+36.7
Zanesville.....Ohio	19,508	+15.4	64,498	+23.2
Butler.....Penna.	22,508	+22.7	79,074	+33.2
Franklin.....Penna.	5,355	-10.6	18,341	-4.3
Greensburg.....Penna.	14,259	+16.6	51,092	+23.0
Homestead.....Penna.	5,940	+16.7	19,965	+24.3
Oil City.....Penna.	16,407	+14.2	56,876	+24.1
Sharon.....Penna.	19,632	+44.8	63,425	+30.3
Wheeling.....W. Va.	43,585	+10.4	162,210	+5.8
Total.....	\$ 497,210	+25.8%	\$ 1,678,358	+22.2%

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

Digitized by FRASER

http://fraser.stlouisfed.org/

Federal Reserve Bank of St. Louis

Fourth District Business Statistics

(000 omitted)

	February 1947	% change from 1946	January 1947
Fourth District Unless Otherwise Specified			
Retail Sales:			
Department Stores—96 firms.....	\$ 47,571	+ 9	47,622
Wearing Apparel—14 firms.....	\$ 1,666	- 8	1,692
Furniture—59 firms.....	\$ 2,457	+ 7	2,623
Building Contracts—Total.....	\$ 59,307	+19	48,256
—Residential.....	\$ 31,499	+174	25,915
Commercial Failures—Liabilities.....	1,190	+1,600	150
—Actual Number.....	16	+129	9
Production:			
Pig Iron—U. S.....Net tons	4,550	+296	5,071
Steel Ingot—U. S.....Net tons	6,431	+361	7,213
Birmingham Coal.....			
O. W. Pa., E. Ky.....Net tons	19,313	+ 1	22,482
Cement—O. W. Pa., W. Va.....Bbls.	1,158a	+81	1,217b
a—January.			
b—December.			

Time Deposits*—12 Fourth District Cities

(59 Banks)

City and Number of Banks	Time Deposits Feb. 26, 1947	Fourth Quarter 1946	5 Weeks Ended Jan. 29, 1947	4 Weeks Ended Feb. 26, 1947
Cleveland (4).....	\$ 855,390,000	+\$1,126,000	+\$2,274,000	+\$ 551,000
Pittsburgh (13).....	329,585,000	+ 513,000	+ 655,000	+ 177,000
Cincinnati (8).....	181,021,000	+ 83,000	+ 229,000	+ 225,000
Akron (3).....	99,768,000	+ 122,000	+ 204,000	+ 191,000
Toledo (3).....	90,223,000	+ 120,000	+ 281,000	+ 143,000
Columbus (3).....	71,034,000	+ 158,000	+ 116,000	+ 150,000
Youngstown (3).....	53,059,000	+ 32,000	+ 54,000	+ 18,000
Dayton (3).....	49,497,000	+ 22,000	+ 31,000	+ 39,000
Canton (4).....	39,540,000	+ 10,000	+ 8,000	+ 16,000
Erie (4).....	36,642,000	+ 11,000	+ 98,000	+ 47,000
Wheeling (6).....	28,579,000	+ 26,000	+ 56,000	+ 49,000
Lexington (5).....	10,503,000	+ 4,000	+ 50,000	+ 33,000
Total—12 Cities.....	\$1,844,841,000	+\$2,101,000	+\$3,808,000	+\$1,639,000

*of Individuals, Partnerships, and Corporations.

Wholesale and Retail Trade

Percentage Changes
from Preceding Year
SALES SALES STOCKS

	Feb. 1947	first 2 mos. 1947	Feb. 1947
DEPARTMENT STORES (96)			
Akron.....	+ 6	+ 7	+64
Canton.....	+13	+20	a
Cincinnati.....	+ 5	+12	+69
Cleveland.....	+ 7	+11	+56
Columbus.....	+ 6	+ 9	+53
Erie.....	+11	+ 9	+42
Pittsburgh.....	+14	+16	+57
Springfield.....	- 2	+ 2	a
Toledo.....	+ 9	+12	+48
Wheeling.....	- 2	+ 2	+47
Youngstown.....	+20	+19	a
Other Cities.....	+ 8	+16	+50
District.....	+ 9	+13	+57
WEARING APPAREL (14)			
Cincinnati.....	- 8	+ 1	+56
Cleveland.....	- 4	+ 4	+88
Pittsburgh.....	- 6	- 2	+37
Other Cities.....	-13	- 5	+33
District.....	- 8	- 4	+55
FURNITURE (59)			
Canton.....	- 3	+12	+75
Cincinnati.....	-11	- 4	+66
Cleveland.....	+15	+13	+65
Columbus.....	+ 8	+10	+28
Dayton.....	+ 1	+10	a
Pittsburgh.....	a	a	a
Allegheny County.....	+23	+31	a
Toledo.....	+ 7	+33	a
Other Cities.....	+ 7	+11	+64
District.....	+ 7	+12	+57
WHOLESALE TRADE**			
Automotive Supplies (5).....	+18	+22	+30
Beer (5).....	-31	-22	+100
Clothing and Furnishings (3).....	-31	-22	a
Confectionery (3).....	+ 9	+15	a
Drugs and Drug Sundries (3).....	-17	- 3	a
Dry Goods (4).....	+ 3	a	+94
Electrical Goods (3).....	+43	a	a
Fresh Fruits and Vegetables (12).....	-0-	+ 5	+17
Grocery Group (34).....	+10	+ 9	+44
Total Hardware Group (19).....	+53	+53	a
General Hardware (7).....	+45	+53	+69
Industrial Supplies (7).....	+38	+33	a
Plumbing and Heating Supplies (5).....	+102	+76	a
Jewelry (7).....	-28	-32	a
Machinery, Equip. & Sup. (exc. Elect.) (3).....	+60	+57	a
Meats and Meat Products (3).....	+57	+46	+40
Paints and Varnishes (3).....	+85	+56	a
Paper and Its Products (5).....	+35	+41	a
Tobacco and Its Products (14).....	+13	+17	+29
Miscellaneous (15).....	+35	+29	+40
District—All Wholesale Trade (147).....	+17	+23	+52

** Wholesale data compiled by U. S. Department of Commerce, Bureau of the Census.

a Not available.

Figures in parentheses indicate number of firms reporting sales.

SUMMARY OF NATIONAL BUSINESS CONDITIONS

By the Board of Governors of the Federal Reserve System

Industrial output and employment were maintained in February and the early part of March at the record peacetime levels reached in January. Value of department store sales has continued at a seasonally adjusted rate close to the level prevailing since early last summer. Wholesale commodity prices have advanced further.

Industrial Production

Industrial production, as measured by the Board's seasonally adjusted index, was maintained in February at the January rate of 188 percent of the 1935-39 average.

Output of durable manufacturers was slightly above the January rate, owing mainly to increased activity in the automobile industry and to a somewhat greater than seasonal gain in production of lumber and other building materials. The number of automobiles and trucks assembled reached a new postwar peak which was about the same as the 1941 average.

The Board's index of steel production showed a slight gain in February as a 9 percent increase in output at electric furnaces more than offset a 2 percent decline in production at open hearth furnaces. In March scheduled operations continued to advance, reaching a new postwar high of 97 percent of capacity in the last week of the month.

Output of manufactured food products declined somewhat in February, after allowance for the usual seasonal changes, owing largely to a reduction in the processing of fruits and vegetables. Activity showed little change at textile mills, and also in industries producing chemicals, rubber products, and most other nondurable manufacturers.

Minerals production was maintained at the January rate, as a 6 percent decline in coal output was offset in the total by increased production of crude petroleum and metals.

Construction

Value of construction contracts awarded in February was about the same as in December, according to the F. W. Dodge Corporation. Awards in January had been about one-fourth higher, owing mainly to several large public and private projects. Value of awards for private nonresidential construction continued to show little change from the reduced levels reached in November. The maximum amount of this general type of activity permitted under Federal orders was raised substantially on January 10th.

Distribution

Department store sales in February and the first

half of March showed about the usual seasonal advance, and the Board's adjusted index of sales during the first quarter of the year is likely to be at about the same average level as during the fourth quarter of last year, when the index was close to 270 percent of the 1935-39 average. Value of department store stocks showed a greater than seasonal increase in February and the preliminary adjusted stocks index reached a level of 280 percent of the 1935-39 average.

Shipments of coal and most other classes of revenue freight declined somewhat in February, owing in part to severe weather conditions, and then advanced during the first two weeks of March. Loadings of forest products, however, were considerably above the January rate throughout this period.

Commodity Prices

Wholesale commodity prices continued to rise during February and the first half of March. The Bureau of Labor Statistics' index of wholesale prices at 149 (1926=100) was one-third above the level of last June. There were sharp increases to a new high level of 184 in the index for farm products and the average of prices of commodities other than farm products continued to rise.

Bank Credit

Deposits of businesses and individuals at commercial banks declined sharply and Treasury deposits at Federal Reserve Banks increased in February as a result of large tax payments. This shift of funds to Treasury accounts at the Reserve Banks put a drain on member bank reserves, which was offset in part by a decline in required reserves and in part by an increase in Reserve Bank holdings of Government securities. In the first half of March, however, when Treasury deposits at the Reserve Banks were drawn down in connection with cash retirement of about 3 billion dollars of maturing securities, member bank reserve positions were eased considerably and Reserve Bank holdings of Government securities declined sharply. Completion of the United States payment to the International Monetary Fund in February resulted in a decline in the total monetary gold stock of the Treasury and in offsetting changes in other Treasury and Federal Reserve accounts without affecting member bank reserve balances.

Commercial and industrial loans increased further at banks in leading cities. Real estate loans rose moderately. Holdings of Government securities were reduced further in February through sales to maintain reserve position and were increased somewhat early in March as purchases of Treasury bills and certificates were larger than the amount of retired issues held by these banks.