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## *Quantitative Measures*

THE QUANTITATIVE IMPORTANCE of equipment financing is indicated in this chapter by means of separate estimates of the instalment receivables held by the principal agencies active in this field, namely, commercial finance companies, commercial banks, insurance companies and vendors carrying their own receivables. In making these estimates, two special difficulties have been encountered. First, there is very little information on some agencies of equipment financing, particularly on the local and smaller regional finance companies and on those selling companies that act as distributors of equipment. Second, the similarity between equipment financing and other types of lending and sales financing arrangements is so close that allocations of reported outstanding receivables by some agencies have to be made on a quite arbitrary basis. This is particularly true of commercial finance companies and of the receivables reported by manufacturers and distributors.

Where it has been necessary to make allocations of reported receivables, as between those that fall within our definition as equipment financing contracts and those that do not, we have proceeded on a conservative basis. Also, in making our estimates of receivables carried by concerns on which information is sketchy at best we have attempted to stay on the conservative side. It is likely, therefore, that our final results underestimate the amount of instalment equipment financing conducted.

At this point it might be well to point out that the importance of instalment equipment financing is by no means adequately represented by its quantitative proportions. More important than its present size is its rapid growth as a relatively new type of financing procedure; the fact that it provides a means whereby new equipment is obtained by small and medium-sized concerns that might

otherwise be unable to make such purchases raises its importance to the enterprise system.

### *Commercial Finance Companies*

The commercial finance companies most active in equipment financing are also the leading companies in the field of consumer instalment financing. Thus, the bulk of equipment financing by commercial finance companies is done by General Motors Acceptance Corporation, Commercial Investment Trust Corporation, Commercial Credit Company, Bankers Commercial Corporation, Walter E. Heller & Company, Credit Utility Company, Inc., American Business Credit Corporation and the Finance Company of America at Baltimore. With the single exception of Credit Utility Company, Inc., which *specializes* in equipment financing, all of these listed are diversified finance companies. General Motors Acceptance Corporation divides its activities between automobile and industrial equipment financing; at the time of our estimates the other companies were engaged, either directly or through affiliated companies, in a variety of activities including factoring, non-notification financing of open accounts receivable, rediscounting of consumer instalment paper for other finance companies, purchasing of retail consumer instalment paper, and the financing of inventories for dealers.

It is possible, for most of the companies mentioned above, to determine the amount of their automobile financing, but in almost all cases the public reports of these companies do not distinguish between holdings of instalment paper arising out of sales of commercial and industrial equipment and receivables which represent sales of household appliances. However, there are supplementary data that make it possible to estimate roughly the amount of commercial and industrial equipment financing which they conduct.

At the end of 1940 and 1941, 7 of the 8 companies listed above reported certain types of paper as follows:<sup>1</sup>

|  | 1940          | 1941          |
|--|---------------|---------------|
| <i>Commercial Investment Trust Corporation</i>                   |               |               |
| Industrial instalment obligations secured by liens or guarantees | \$122,480,028 | \$137,069,526 |
| <i>Commercial Credit Company</i>                                 |               |               |
| Industrial lien, retail time sales notes                         | 63,783,596    | 79,679,979    |

<sup>1</sup> Data from reports to stockholders.

|   | 1940                   | 1941                   |
|---|------------------------|------------------------|
| <i>Bankers Commercial Corporation</i>                               |                        |                        |
| Industrial instalment lien notes and contracts                      | \$14,193,000           | \$12,247,079           |
| <i>American Business Credit Corporation</i>                         |                        |                        |
| Industrial lien instalment notes and instalment accounts receivable | 7,114,239 <sup>a</sup> | 9,858,207 <sup>b</sup> |
| <i>Credit Utility Company, Inc.</i>                                 |                        |                        |
| Notes and accounts receivable                                       | 4,998,984              | 6,736,666              |
| <i>Walter E. Heller &amp; Company</i>                               |                        |                        |
| Commercial instalment notes other than auto                         | 6,286,079              | 5,404,981              |
| <i>Finance Company of America at Baltimore</i>                      |                        |                        |
| Industrial liens  | 1,862,587              | 1,825,913              |

<sup>a</sup> As of June 30, 1941.

<sup>b</sup> As of June 30, 1942.

The principal difficulty in estimating the amount of income-producing equipment contracts held by commercial finance companies is, of course, to determine what part of their industrial lien contracts represents paper arising out of the sale of income-producing equipment. It was necessary to make this estimate on a different basis for practically every company. Since the procedure followed varied considerably from company to company, it is not given here in detail.<sup>2</sup> The final estimates were that, for all 8 leading companies, commercial and industrial equipment financing outstandings at the end of 1940 were about \$150 million and, at the end of 1941, about \$180 million. Outstandings decreased during 1942 but scanty year-end data make it impossible to estimate the change with confidence. At the time of writing it appears that instalment equipment outstandings may have fallen to \$140 million by December 31, 1942 for the companies included in our group.

<sup>2</sup>The general procedure used in obtaining the 1940 estimate may be stated briefly. All of the industrial lien outstandings reported above for American Business Credit, Credit Utility Company and Finance Company of America at Baltimore were considered to represent commercial and industrial equipment financing for reasons derived from a careful study of their annual reports or from supplementary information acquired directly. One-half of the industrial instalment obligations reported by C.I.T. and by Bankers Commercial Corporation were taken to represent contracts arising out of instalment sales of income-producing equipment, and 25 percent of the "industrial lien retail time sales notes" reported by Commercial Credit Company. The estimate of income-producing equipment financing conducted by General Motors Acceptance Corporation was made by deducting from its total retail financing volume the amounts originating in the financing of automobiles and household appliances. The estimates for 1941 and 1942 were made in the same manner except that industrial lien outstandings for General Motors Acceptance Corporation were estimated by applying to its 1940 outstandings the percentage changes from 1940 to 1941 and 1942 of outstandings of the seven companies for which data were available.

To these estimates must be added the outstandings held by other sales finance companies operating on a regional or local basis. During 1939 a census of sales finance company holdings of retail instalment paper, conducted by the United States Bureau of the Census, revealed that there were 1,086 single-city and multi-unit companies in this field, and that these companies operated 2,548 offices. While the commercial and industrial equipment financing done by sales finance companies appears to be dominated by large national concerns, a certain amount is conducted by regional and local companies. There is no direct basis for making an estimate of equipment financing outstandings held by these smaller companies; what information is available relates exclusively to their holdings of retail consumer instalment paper. However, on the basis of inquiries made in the trade it is estimated that the total instalment equipment outstandings of these companies at the end of 1940 was \$25 million and at the end of 1941 was \$30 million, or approximately 15 percent of the amount held by the 8 leading companies. Added to our figure for the principal companies this makes an estimate of total instalment equipment paper held by commercial finance companies at the end of 1940 of \$179 million, and of \$210 million at the end of 1941.

#### *Commercial Banks*

The National Bureau of Economic Research conducted a sample questionnaire survey in the summer of 1941 in order: (a) to determine the frequency with which commercial banks of different sizes, in places of different population size and in different parts of the country, are participating in the financing of instalment purchases of commercial and industrial equipment, and (b) to make an estimate of the present quantitative importance of this type of financing as a commercial bank activity. The sample of commercial banks surveyed was selected from the list of 13,492 institutions with deposits insured by the Federal Deposit Insurance Corporation as of August 1, 1941. The procedures followed in selecting the sample and the coverage of the sample are discussed in Appendix A, which also reproduces the questionnaire distributed to the surveyed banks.

The frequency with which banks of different deposit size are engaged in equipment financing, whether by discounting paper

Table 1—COMMERCIAL BANKS PARTICIPATING IN EQUIPMENT FINANCING, 1941<sup>a</sup>

|   | Total<br>Banks<br>Reporting | Number<br>Not<br>Participating | Number<br>Participating | Banks Engaged in Equipment Financing     |                              |                         | Quantitative<br>Measures |
|---|-----------------------------|--------------------------------|-------------------------|--|------------------------------|-------------------------|--------------------------|
|   |                             |                                |                         | Discounting<br>Paper and<br>Making Loans | Discounting<br>Paper<br>Only | Making<br>Loans<br>Only |                          |
| <i>Deposit Size of Bank<sup>b</sup></i>         |                             |                                |                         |  |                              |                         |                          |
| \$1,000 or less                                 | 63                          | 49                             | 14                      | 5  | 5                            | 4                       |                          |
| 1,000-5,000                                     | 102                         | 77                             | 25                      | 6  | 11                           | 8                       |                          |
| 5,000-10,000                                    | 32                          | 24                             | 8                       | 2  | 3                            | 3                       |                          |
| 10,000-50,000                                   | 47                          | 23                             | 24                      | 10                                       | 7                            | 7                       |                          |
| Over 50,000                                     | 30                          | 10                             | 20                      | 11                                       | 2                            | 7                       |                          |
| <i>Size of Center of Population<sup>c</sup></i> |                             |                                |                         |  |                              |                         |                          |
| Under 10,000                                    | 76                          | 55                             | 21                      | 6  | 8                            | 7                       |                          |
| 10,000-50,000                                   | 47                          | 39                             | 8                       | 3  | 5                            | ..                      |                          |
| 50,000-100,000                                  | 42                          | 29                             | 13                      | 3  | 5                            | 5                       |                          |
| 100,000-500,000                                 | 64                          | 35                             | 29                      | 14                                       | 8                            | 7                       |                          |
| 500,000 and over                                | 45                          | 25                             | 20                      | 8  | 2                            | 10                      |                          |
| <i>Region</i>                                   |                             |                                |                         |  |                              |                         |                          |
| New England                                     | 19                          | 15                             | 4                       | 1  | 1                            | 2                       |                          |
| Middle Atlantic                                 | 67                          | 45                             | 22                      | 10                                       | 8                            | 4                       |                          |
| East North Central                              | 62                          | 42                             | 20                      | 6  | 5                            | 9                       |                          |
| West North Central                              | 46                          | 30                             | 16                      | 6  | 4                            | 6                       |                          |
| South Atlantic                                  | 27                          | 17                             | 10                      | 2  | 4                            | 4                       |                          |
| East South Central                              | 14                          | 10                             | 4                       | 1  | 2                            | 1                       |                          |
| West South Central                              | 11                          | 8                              | 3                       | 2  | 1                            | ..                      |                          |
| Mountain  | 11                          | 7                              | 4                       | 2  | 2                            | ..                      |                          |
| Pacific   | 17                          | 9                              | 8                       | 4  | 1                            | 3                       |                          |
| ALL REPORTING BANKS                             | 274                         | 183                            | 91                      | 34                                       | 28                           | 29                      |                          |

<sup>a</sup> Based on results of a questionnaire survey. See Appendix A for coverage of survey and questionnaire used.

<sup>b</sup> Total deposits in thousands of dollars. Each size class is exclusive of the lower limit and inclusive of the upper.

<sup>c</sup> Each size class is inclusive of the lower limit and exclusive of the upper.

originated by manufacturers and distributors or by making installment cash loans direct to the purchasers of the equipment and secured by the equipment acquired, is summarized in Table 1. As an over-all figure it may be said that about one out of every three banks was engaged in equipment financing in some one of the forms indicated. However, banks of larger size entered this field more frequently than banks of smaller deposit size. Thus, of the reporting banks that had deposits of \$1 million or less, about one out of every five banks was engaged in equipment financing, while every other bank of those having deposits of over \$10 million reported equipment financing.

Table 1 also compares the number of reporting banks engaged in equipment financing with the number of reporting banks not engaged in this type of financing, according to the size of the center of population in which the institution is located. It shows that, in general, a larger proportion of banks in the larger centers of population are engaged in equipment financing than of banks in the smaller centers of population. Thus, of the banks in places of under 10,000 population, only every fourth bank reported activity in this field, while of the banks in places of 100,000 population or over, every other bank reported doing some equipment financing.

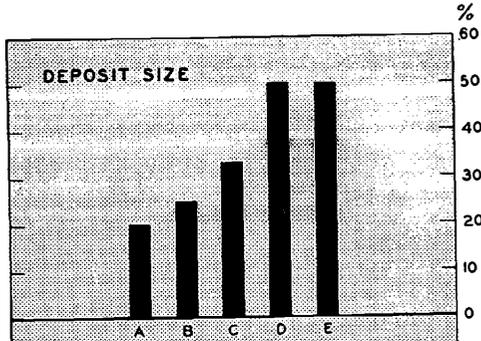
Finally, an analysis was made of the extent of bank activity in equipment financing in different regions. This showed very little difference between regions in the percentage of banks doing equipment financing. It is interesting to note that the frequency of bank activity, as revealed by this sample, is lowest in New England and next lowest in the West South Central states. The West South Central result may be explained by reference to the economic character of the region but not that for the New England states. It is probable that here the results merely reflect a slower development of equipment financing than in other regions of comparable business activity. (See also Chart 1.)

The foregoing has dealt exclusively with the frequency with which commercial banks of different sizes and locations are engaged in equipment financing, either through discounting installment paper or making installment equipment loans. Tables 2 and 3, on the other hand, show the relative importance of equipment financing for banks of different types and sizes. Several conclusions

# APPROXIMATE PERCENTAGE OF BANKS ENGAGED IN EQUIPMENT FINANCING, BY CLASS OF BANK<sup>Ⓢ</sup>

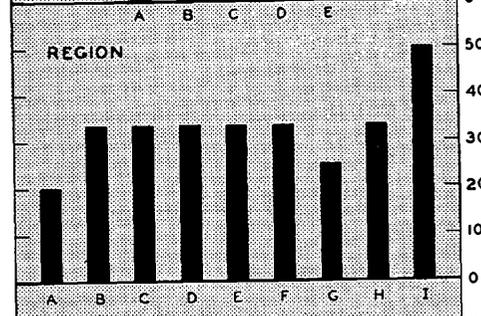
## DEPOSIT SIZE OF BANK (IN THOUSANDS)

- A = \$1000 OR LESS
- B = 1000 - 3000
- C = 3000 - 10,000
- D = 10,000 - 30,000
- E = OVER 30,000



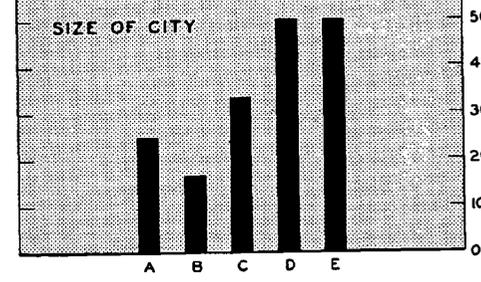
## REGION

- A = NEW ENGLAND
- B = MIDDLE ATLANTIC
- C = EAST NORTH CENTRAL
- D = WEST NORTH CENTRAL
- E = SOUTH ATLANTIC
- F = EAST SOUTH CENTRAL
- G = WEST SOUTH CENTRAL
- H = MOUNTAIN
- I = PACIFIC



## SIZE OF CITY

- A = UNDER 10,000
- B = 10,000 - 50,000
- C = 50,000 - 100,000
- D = 100,000 - 500,000
- E = 500,000 AND OVER



<sup>Ⓢ</sup> BASED ON A SAMPLE STUDY. SEE TABLE I.

Table 2—INSTALMENT EQUIPMENT PAPER IN AMOUNT, AND AS A PERCENT OF TOTAL LOANS, AS OF MID-1941, BY DEPOSIT SIZE OF BANK, SIZE OF POPULATION CENTER AND REGION IN WHICH BANK IS LOCATED<sup>a</sup>

|   | Number<br>of<br>Banks | Total<br>Loans<br>(000) | Instalment Equipment<br>Paper Outstanding |                                |
|---|-----------------------|-------------------------|---|--------------------------------|
|   |                       |                         | Amount<br>(000)                           | As a Percent<br>of Total Loans |
| <i>Deposit Size of Bank<sup>b</sup></i>         |                       |                         |   |                                |
| \$1,000 or less                                 | 10                    | \$3,256                 | \$244                                     | 7.5%                           |
| 1,000-5,000                                     | 17                    | 21,837                  | 461                                       | 2.1                            |
| 5,000-10,000                                    | 5                     | 10,689                  | 310                                       | 2.9                            |
| 10,000-50,000                                   | 16                    | 150,900                 | 1,830                                     | 1.2                            |
| Over 50,000                                     | 13                    | 1,323,520               | 8,259                                     | .6                             |
| <i>Size of Center of Population<sup>c</sup></i> |                       |                         |   |                                |
| Under 10,000                                    | 14                    | 8,195                   | 369                                       | 4.5                            |
| 10,000-50,000                                   | 8                     | 18,633                  | 194                                       | 1.0                            |
| 50,000-100,000                                  | 7                     | 20,332                  | 223                                       | 1.1                            |
| 100,000-500,000                                 | 22                    | 307,782                 | 2,933                                     | 1.0                            |
| 500,000 and over                                | 10                    | 1,155,260               | 7,384                                     | .6                             |
| <i>Region</i>                                   |                       |                         |   |                                |
| New England                                     | 2                     | 5,519                   | 35  | .6                             |
| Middle Atlantic                                 | 18                    | 420,535                 | 4,363                                     | 1.0                            |
| East North Central                              | 10                    | 80,411                  | 2,861                                     | 3.6                            |
| West North Central                              | 10                    | 87,717                  | 551                                       | .6                             |
| South Atlantic                                  | 6                     | 37,981                  | 535                                       | 1.4                            |
| East South Central                              | 3                     | 12,884                  | 192                                       | 1.5                            |
| West South Central                              | 3                     | 21,159                  | 284                                       | 1.3                            |
| Mountain  | 4                     | 8,497                   | 87  | 1.0                            |
| Pacific   | 5                     | 835,499                 | 2,196                                     | .3                             |
| ALL REPORTING BANKS                             | 61                    | \$1,510,202             | \$11,104                                  | .7%                            |

<sup>a</sup> Based on a questionnaire survey. See Appendix A for coverage of survey and questionnaire used.

<sup>b</sup> Total deposits in thousands of dollars. Each size class is exclusive of the lower limit and inclusive of the upper.

<sup>c</sup> Each size class is inclusive of the lower limit and exclusive of the upper.

regarding equipment financing by banks can be drawn from these tables.

First, equipment financing is relatively unimportant as a component of the total loans and discounts of commercial banks. For all reporting banks combined, only .7 percent of total loans and discounts was made up of discounted instalment equipment paper, and 1.3 percent of instalment loans secured by equipment;

Table 3—INSTALMENT EQUIPMENT LOANS IN AMOUNT, AND AS A PERCENT OF TOTAL LOANS, AS OF MID-1941, BY DEPOSIT SIZE OF BANK, SIZE OF POPULATION CENTER AND REGION IN WHICH BANK IS LOCATED<sup>a</sup>

|   | Number<br>of<br>Banks | Total<br>Loans<br>(000) | Instalment Equipment<br>Loans Outstanding |                                |
|---|-----------------------|-------------------------|---|--------------------------------|
|   |                       |                         | Amount<br>(000)                           | As a Percent<br>of Total Loans |
| <i>Deposit Size of Bank<sup>b</sup></i>         |                       |                         |   |                                |
| \$1,000 or less                                 | 9                     | \$2,844                 | \$46                                      | 1.6%                           |
| 1,000-5,000                                     | 14                    | 13,514                  | 476                                       | 3.5                            |
| 5,000-10,000                                    | 5                     | 15,772                  | 445                                       | 2.8                            |
| 10,000-50,000                                   | 17                    | 150,333                 | 2,702                                     | 1.8                            |
| Over 50,000                                     | 17                    | 882,965                 | 10,618                                    | 1.2                            |
| <i>Size of Center of Population<sup>c</sup></i> |                       |                         |   |                                |
| Under 10,000                                    | 13                    | 8,104                   | 550                                       | 6.8                            |
| 10,000-50,000                                   | 3                     | 11,845                  | 233                                       | 2.0                            |
| 50,000-100,000                                  | 8                     | 18,957                  | 232                                       | 1.2                            |
| 100,000-500,000                                 | 21                    | 350,166                 | 1,969                                     | .6                             |
| 500,000 and over                                | 17                    | 676,356                 | 11,302                                    | 1.7                            |
| <i>Region</i>                                   |                       |                         |   |                                |
| New England                                     | 3                     | 12,975                  | 120                                       | .9                             |
| Middle Atlantic                                 | 14                    | 426,516                 | 5,908                                     | 1.4                            |
| East North Central                              | 15                    | 334,281                 | 3,741                                     | 1.1                            |
| West North Central                              | 12                    | 167,121                 | 2,876                                     | 1.7                            |
| South Atlantic                                  | 6                     | 45,201                  | 464                                       | 1.0                            |
| East South Central                              | 2                     | 29,201                  | 549                                       | 1.9                            |
| West South Central                              | 2                     | 6,794                   | 9   | .1                             |
| Mountain  | 2                     | 479                     | 22  | 4.6                            |
| Pacific   | 6                     | 42,860                  | 596                                       | 1.4                            |
| ALL REPORTING BANKS                             | 62                    | \$1,065,428             | \$14,286                                  | 1.3%                           |

<sup>a</sup> Based on results of a questionnaire survey. See Appendix A for coverage of survey and questionnaire used.

<sup>b</sup> Total deposits in thousands of dollars. Each size class is exclusive of the lower limit and inclusive of the upper.

<sup>c</sup> Each size class is inclusive of the lower limit and exclusive of the upper.

thus, only 2 percent of the total loans and discounts of participating banks were in these two categories.<sup>3</sup>

Second, equipment credit generally comprises a larger part of the total loans and discounts of banks of smaller size and of those located in smaller places than of the larger banks and those in larger places.

<sup>3</sup> It should be noted, moreover, that this statement refers only to the banks actually engaged in equipment financing.

Third, among the reporting banks actively engaged in equipment financing, there were no very substantial differences between the relative quantitative importance of instalment equipment loans and instalment equipment paper as bank assets. Perhaps the one exception to this is that equipment paper is relatively more important in the smallest banks and equipment loans in the largest banks.

An estimate of the total amount of assets originating in instalment equipment financing that was held by all commercial banks at the end of 1940 was made on the basis of these questionnaire returns. Table 4 shows approximately \$200 million of equipment financing paper and loans as outstanding in all operating insured commercial banks at the end of 1940.<sup>4</sup>

Since total loans and discounts of commercial banks were about 15 percent higher at the end of 1941 than at the end of 1940, it can be further estimated that equipment loans and paper held by banks at the end of 1941 were around \$230 million.

#### *Life Insurance Companies*

The activity of life insurance companies in the equipment financing market is largely restricted to holdings of equipment trust certificates, although there is some tendency for insurance companies to undertake equipment financing transactions in which their security interest is established by means of a chattel mortgage or, to a lesser extent, by a conditional sales contract without the use of the equipment trust certificate. Equipment trust certificate financing has not been described in the present study because it represents a relatively conventional procedure. Nonetheless, its importance for insurance companies is such that it must be taken account of in any description of their equipment financing activities.

Unfortunately, the information available on assets held by life insurance companies is not sufficiently detailed to support definite quantitative estimates of the amounts of equipment financing conducted on the trust certificate and straight conditional sales or chattel mortgage bases. It is possible, however, to indicate the

<sup>4</sup> This estimate was made by first computing the ratios of instalment equipment loans and of discounted instalment equipment paper to the total loans and discounts of all reporting banks, in different size classes. These ratios are given in Table 4. The ratios were then applied to the total loans and discounts of all operating insured banks as of December 31, 1940, and separate estimates made for each group of banks.

Table 4—INSTALMENT EQUIPMENT FINANCING BY REPORTING COMMERCIAL BANKS AND ESTIMATES FOR ALL COMMERCIAL BANKS, AT END OF 1940

| Deposit Size<br>of Bank <sup>a</sup> | BANKS REPORTING ON EQUIPMENT FINANCING <sup>b</sup> |                     |              |                     | Total Loans<br>and Discounts<br>of All In-<br>sured banks <sup>c</sup><br>(000) | Estimated Instalment Equipment<br>Financing Outstanding |               |               | Total Loans of<br>Reporting<br>Banks as a %<br>of Loans of All<br>Insured Banks |
|--------------------------------------|---|---------------------|--------------|---------------------|---|---|---------------|---------------|---|
|                                      | Paper   |                     | Loans        |                     |   | Paper   | Loans         | Total         |   |
|                                      | Amount  | % of Total<br>Loans | Amount       | % of Total<br>Loans |   |   |               |               |   |
| \$1,000 or less                      | \$244,023   | 1.37%               | \$46,341     | .26%                | \$1,820,596   | \$24,942,165  | \$4,733,550   | \$29,675,715  | 1.0%  |
| 1,000-5,000                          | 460,724   | .45                 | 475,544      | .46                 | 3,007,123   | 13,532,054  | 13,832,766    | 27,364,820    | 3.4   |
| 5,000-10,000                         | 310,250   | .39                 | 444,803      | .56                 | 1,266,521   | 4,939,432   | 7,092,518     | 12,031,950    | 6.3   |
| 10,000-50,000                        | 1,829,929   | .49                 | 2,704,547    | .71                 | 2,661,226   | 13,040,007  | 18,894,705    | 31,934,712    | 14.3  |
| Over 50,000                          | 8,258,742   | .40                 | 10,617,564   | .81                 | 8,281,876   | 33,127,504  | 67,083,196    | 100,210,700   | 25.2  |
| TOTAL                                | \$11,103,668  |                     | \$14,288,799 |                     | \$17,037,342  | \$89,581,162  | \$111,636,735 | \$201,217,897 | 15.7%   |

<sup>a</sup> Total deposits in thousands of dollars. Each size class is exclusive of the lower limit and inclusive of the upper.

<sup>b</sup> Reporting banks include both those engaged in equipment financing and those not so engaged. Percentages to total loans are different, therefore, from those shown in Tables 2 and 3 which refer only to participating banks.

<sup>c</sup> Federal Deposit Insurance Corporation, *Annual Report, 1940*, p. 171.

importance of liens on equipment as a security device used by life insurance companies in their medium-term private placements without specifying the particular types of liens concerned. The five largest life insurance companies reported to the National Bureau the amount of privately purchased securities, with terms at time of issuance of 15 years or less, that they held at the end of 1940. In all, 217 issues with an outstanding value of \$824 million were listed. Of these issues, 23 (11 percent of the number) amounting to \$80 million (almost 10 percent of the total amount of reported issues) were specifically indicated as being secured by liens on equipment. The liens included were equipment trust certificates, first mortgages and first liens on equipment. An additional 1.4 percent of the number and 3.5 percent of the amount of issues were secured otherwise—for example, by combinations of security, preferred ship mortgages, and collateral trust notes.<sup>5</sup>

Most of the equipment financing holdings of the five life insurance companies were in the form of equipment trust certificates. In three instances, however, the issue in question was described simply as secured by a first lien on equipment (in contrast to a mortgage or an equipment trust certificate), which is understood to refer to the lien established by a conditional sales contract. In two cases the issue was described as secured by a combination of first mortgage and first lien on equipment. Concerns obtaining credit from life insurance companies on the basis of a first lien on equipment include railroads, a company leasing tank cars, a department store and a natural gas producer.

The use of the conditional sales contract rather than the equipment trust certificate in the financing of heavy equipment sales seems to be associated with a change in marketing conditions during the thirties. Pressure on manufacturers to increase sales led to the use of the instalment sales device and thus to the conditional sales contract or chattel mortgage as a means of retaining title to, or lien on, the goods sold. The existence of a "buyers' market" tended to place the responsibility for establishing credit facilities

<sup>5</sup> The wide coverage of this sample is indicated by the fact that in 1938 the bonds and notes purchased privately by the five companies included in the National Bureau sample constituted 87 percent of all bonds purchased privately by the 26 largest life insurance companies. For a further discussion of the life insurance company sample see National Bureau of Economic Research (Financial Research Program), *Term Lending to Business*, by Neil H. Jacoby and R. J. Saulnier (1942) Appendix B.

on the seller rather than on the buyer. While the equipment trust certificate establishes a relation between buyer and lender, conditional sales financing involves a relationship between seller and lender. Chattel mortgages and conditional sales have an additional advantage: if the seller does not wish to finance the sale himself over his whole business, the quality of the payment he sells or assigns to a financial institution is greatly improved by carrying his endorsement along with the right to repossess the equipment. This was an important advantage during the depression when the financial conditions of so many customers had deteriorated to the point where it might have been difficult for them to acquire credit without the supplementary endorsement of the equipment manufacturer.

In addition to the greater protection that the conditional sales contract or assigned chattel mortgage financing may give the holder, by means of special recourse provisions, they also provide the same conveniences as the equipment trust certificate with regard to maturity, security interest, repayment provisions, and possession and use of the equipment financed. Considerations of this kind are doubtless responsible for the increasing use of the conditional sales contract and chattel mortgage. No information is available on the relative importance of the use of these documents in the marketing of different types of equipment but it is known that they have been used widely in financing acquisitions of busses, singly and in fleets, and of commercial aircraft.

It has been estimated<sup>6</sup> that the total amount of medium-term bonds and notes and business mortgage loans acquired privately by life insurance companies and outstanding at the end of 1940 was \$900 million. Since 10 percent of the amount reported on was secured by liens on equipment, it is estimated that life insurance companies held approximately \$90 million in equipment financing at the end of 1940 and that probably not more than \$25 million of this was originated on some other than the conventional equipment trust receipt basis. On the assumption of an increase comparable to that shown by commercial finance companies, the 1941 year-end holding of instalment equipment receivables by insurance companies may be estimated at \$30 million. Again it should be

<sup>6</sup> See Neil H. Jacoby and R. J. Saulnier, *op. cit.*, p. 30.

emphasized that this is exclusive of equipment trust receipt holdings.

### *Manufacturers and Distributors*

In order to obtain some indication of the activities of manufacturers of commercial and industrial equipment in the instalment financing field, a special questionnaire was distributed by the National Bureau in the summer of 1941 to 365 manufacturing concerns. These concerns were engaged in manufacturing income-producing machinery and equipment and were selected to secure the widest possible coverage of products in this field. Of the companies receiving questionnaires 153 replied; of these, 54 or about 35 percent stated that their product was sold on an instalment payment basis. Table 5 presents the results of this questionnaire, classifying the replies according to the principal product of the respondent. The data refer to sales made by the manufacturer. Since these sales are frequently to distributors the fact that a manufacturer reports no instalment sales does not mean that the product is not sold by a distributor on an instalment basis.

Of the groups of manufacturers containing a reasonably large representation of companies and having a majority *not* selling on an instalment plan, the following are the most outstanding: air conditioning equipment, automotive equipment and accessories, building materials and equipment, electrical equipment, machine tools, oil well equipment, and steel mill equipment. As stated immediately above, it must not be inferred from these results that products of these companies are not available to ultimate purchasers on an instalment payment basis because the questionnaire applied only to financing by the manufacturer and in many cases it is known that the products are sold to distributors who merchandise them, in part at least, on a time-sales basis. This is certainly true of agricultural equipment, automotive equipment and accessories, much electrical equipment (particularly smaller appliances) and oil well equipment. In some cases, manufacturers have reported that the instalment sales method was seldom used, and have attributed this mainly to the highly specialized character of the equipment and to the fact that buyers have ample cash or other sources of readily available credit.

Table 5—NUMBER OF MANUFACTURING COMPANIES REPORTING  
 INSTALMENT SALES AND NON-INSTALMENT SALES, BY TYPE OF  
 PRODUCT

| Product  | Number of Concerns |                |       |
|--|--------------------|----------------|-------|
|  | Instalment         | Non-Instalment | Total |
| Agricultural equipment                         | 2                  | 2              | 4     |
| Air conditioning equipment                     | 2                  | 7              | 9     |
| Amusement equipment                            | 2                  | 2              | 4     |
| Automotive equipment and accessories           | ..                 | 7              | 7     |
| Aviation equipment and accessories             | ..                 | 1              | 1     |
| Barber and beauty parlor equipment             | 1                  | ..             | 1     |
| Bottling machinery                             | 1                  | ..             | 1     |
| Building materials and equipment               | 1                  | 12             | 13    |
| Diesel engines                                 | 1                  | 1              | 2     |
| Electrical equipment                           | 1                  | 12             | 13    |
| Excavating machinery                           | 2                  | 1              | 3     |
| Food, tobacco, dairy and bakery equipment      | 3                  | 2              | 5     |
| Gasoline dispensing pumps and garage equipment | 4                  | 1              | 5     |
| Hardware                                       | ..                 | 3              | 3     |
| Heavy construction machinery and equipment     | 2                  | 1              | 3     |
| Laundry machinery                              | 3                  | ..             | 3     |
| Machine tools                                  | 1                  | 12             | 13    |
| Machinery (heavy)                              | 3                  | 2              | 5     |
| Machinery (mining)                             | 1                  | 3              | 4     |
| Machinery (miscellaneous)                      | 5                  | 9              | 14    |
| Medical, dental and hospital equipment         | 1                  | 3              | 4     |
| Office equipment and machinery                 | 4                  | 3              | 7     |
| Oil well equipment                             | 2                  | 5              | 7     |
| Power plant equipment                          | ..                 | 2              | 2     |
| Printing machinery                             | 3                  | ..             | 3     |
| Road building machinery                        | 1                  | ..             | 1     |
| Shoemaking and shoe repairing machinery        | 1                  | ..             | 1     |
| Steel mill equipment                           | ..                 | 3              | 3     |
| Store fixtures and equipment                   | 4                  | 2              | 6     |
| Textile machinery                              | 2                  | 2              | 4     |
| Tractors                                       | 2                  | ..             | 2     |
| TOTAL  | 55                 | 98             | 153   |

The classes showing a majority of manufacturers selling on the instalment plan are food, tobacco, dairy and bakery equipment, laundry and printing machinery, gasoline dispensing pumps, garage equipment, and store fixtures and equipment. Representation in other classes is either too small to permit of even tentative conclusions on the prevalence of instalment selling, or else there are nearly equal divisions between companies selling on the instalment plan and companies not using that sales device.

Manufacturers reporting instalment sales were asked whether

they (a) carried their own receivables, (b) pledged them with some financial institution as security for a loan, or (c) utilized the services of some separate financial agency. Information on this point was received from 47 manufacturing concerns; of these, 32 reported that they carried their own receivables, utilizing their own capital funds to this end or borrowing on an unsecured basis from commercial banks to meet the capital requirements involved. Five companies reported that their receivables were pledged with banks in order to obtain working funds; 3 reported that the receivables were sold to an independent finance company; 7 companies reported that they utilized more than one method of financing.

The total 1940 instalment sales of these 47 companies, as reported in the questionnaire returns, amounted to approximately \$96 million. While it may be objected that the size of this sample of companies is too small to permit general conclusions, the economic importance of the reporting companies far transcends their numerical significance; respondents did an aggregate sales volume in 1940 of approximately \$1.3 billion, amounting to about 25 percent of the sales of all commercial and industrial equipment likely to be sold on an instalment payment basis. While this evidence does show that instalment selling is an important merchandising method for many machine and equipment manufacturing companies and that, to a very large extent, the receivables thus originated are carried by the manufacturing companies on their own resources, it is not possible from this evidence alone to reach any definite estimate of the amount of instalment selling financed by manufacturers. As a very rough approximation, based on a study of these questionnaire returns and the position of the respondents in the whole industry, we may place the total 1940 volume of instalment selling of commercial and industrial equipment that was financed by manufacturers themselves at between \$200 and \$300 million, and the instalment receivables held by these companies at the end of 1940 at between \$125 and \$200 million.

There are no data available on machinery and equipment distributors on which to estimate the amount of instalment equipment financing conducted by these companies on their own or borrowed funds. Recent information does show, however, that a very substantial amount of sales of equipment, machinery and fixtures is made through non-manufacturing enterprises. According

to the Census of Business for 1939, wholesale merchants and industrial distributors dealing in machinery, equipment and supplies, trucks and tractors, and office furniture numbered about 10,000 establishments and had gross sales in that year of about \$1.1 billion. Similar outlets dealing in plumbing and heating equipment numbered about 2,200 and had gross sales of \$375 million. No information is available on the proportion of these sales made on an instalment basis. It is probable that this was a substantial amount, perhaps as much as one half, and that it provides the primary source for instalment equipment sales paper discounted by commercial finance companies and banks.

This would, of course, enter into our estimates of instalment equipment receivables held by financial institutions; in order to round out our estimates it would be desirable to know the amount of instalment equipment receivables held by the distributors themselves. Unfortunately there are no direct data on this point and no special survey was made in order to obtain data for an estimate because of the large number and small average size of establishments and because our main interest was in the procedures followed by the financial institutions active in this credit area. It is unlikely, however, that the amount of instalment receivables held by distributors on their own account is as large as the amount held by manufacturers because, first, the sales of distributors in the machinery and equipment lines are much less, about 25 percent of the sales of manufacturers, and second, the capital resources of distributors are, in general, so much less adequate than those of manufacturing companies that we would expect distributors to discount instalment receivables with some financial institution rather than carry them on their own capital.

Summarizing, these estimates indicate that at the end of 1940 financing institutions held about \$400 million in instalment receivables originating in sales of commercial and industrial equipment. Of this amount it has been estimated that \$200 million was held by commercial banks, \$175 million by commercial finance companies and \$25 million (excluding equipment trust certificates) by life insurance companies. At the end of 1941 the total of outstanding for financial institutions has been estimated at \$470 million, of which \$210 million was held by commercial finance companies, \$230 million by commercial banks, \$30 million by insurance com-

panies. In addition, manufacturers held instalment receivables estimated for the end of 1940 at between \$125 and \$200 million; distributors probably held an amount of instalment receivables on their own capital not in excess of the figures for manufacturers and more likely a smaller amount. It should be emphasized, however, that the estimates for manufacturers and distributors are very rough and are based on quite inadequate statistical data; these estimates should be used only as broad indications of the participation of manufacturers and distributors in equipment financing.