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Summary of Findings

THE GROWTH OF INSTALMENT equipment financing has been one of the most striking and most immediate effects on financial institutions of the increasing mechanization of industry. By this type of financing operation we mean extensions of credit where (1) the specific purpose of the financing is to make possible the acquisition of income-producing machinery or equipment; (2) the financing agency has title to, or a lien on, the equipment as a means of securing the credit extended; and (3) the debt is amortized in prescheduled, regular instalment payments. Since the focus of our attention has been on financing techniques of relatively recent development this definition has been qualified to exclude certain conventional types of financing, such as that conducted under equipment trust certificates.

In many respects the development of instalment equipment financing, or equipment financing as it is referred to in this study for sake of brevity, follows that of other new types of financing. Its earliest development was promoted by non-bank agencies sufficiently specialized to cope with its unique credit problems, and more ready and able, by virtue of their lack of deposit functions, to pioneer in new credit areas. These agencies were commercial finance companies and manufacturers and distributors who, offering instalment payment terms to their customers, carry their own receivables either along with other assets or through some special financing subsidiary. Subsequently, the field was entered by commercial banks, as they came under pressure to find profitable uses for their lending capacities and as they grew better acquainted with the techniques of equipment financing. At the present time the market consists of operations by all these agencies and to a lesser extent by insurance companies, industrial banking companies and public lending agencies. There are several types of financing arrangements: (1) instalment sales of equipment by manufacturers and distributors without the involvement of any separate financing agency, (2) the discounting by commercial finance companies and commercial banks of instalment receivables arising out of equipment sales, and (3) the extension, primarily by commercial banks, of cash loans secured by the equipment acquired with the proceeds of the loan.

Equipment financing along the lines indicated has been promoted primarily by the steadily increasing mechanization of manufacturing, mining and construction industries and by the pressure that competitive conditions have placed upon concerns to modernize their production processes. Of more recent development has been the wider use of mechanical equipment and fixtures in trade and service establishments. Although the great majority of business units in the latter lines are relatively small in size and have limited capital resources, equipment financing has certain features that have made it adaptable to the financing needs of such concerns. First, the instalment payment procedure makes it possible for the machinery or equipment to be paid for out of income, while the machine is in use, with a relatively small capital outlay. Second, the title retention, down payment and other features of an equipment financing contract minimize the risks assumed by the financing agency.

Equipment financing by financial institutions is possible only because many manufacturers and distributors do not desire to carry their own instalment receivables. A decision of this kind is influenced by a number of factors. In the case of most distributors a strong factor is the lack of adequate owned capital and an inability to borrow on a straight note basis. For manufacturers a primary reason may be the desire to stay out of financing operations. If the practical alternative to discounting receivables is to carry them and not only to assume financing functions but also to borrow funds in order to replenish working capital, the manufacturer or distributor may prefer to discount the contracts. This procedure makes it possible for the vendor to gear his use of outside funds directly to the amount of receivables outstanding and, what is often very important, to do this automatically. It is also important that the manufacturer receives certain ancillary services in equipment financing which would not be obtained on a conventional borrowing basis and which he might not be able to supply as economically through his own organization. There are, of course, certain other factors that have tended to act oppositely, that is, to cause sellers to carry their own receivables. Among these are the advantages of earning the full finance charge and the desire to avoid the intervention of any outside agency between manufacturer or distributor and ultimate purchaser.

Because of the close similarity of equipment financing to other types of business financing, it is extremely difficult to estimate its quantitative importance. On the basis of our definition it has been estimated that at the end of 1940 equipment financing agencies held receivables of about $400 million: commercial banks $200 million, commercial finance companies $175 million, and life insurance companies $25 million. This total is estimated to have increased to $470 million by the end of 1941. In addition, at the end of 1940 manufacturers carried $125 to $200 million of instalment receivables originating in their own sales. It has been further estimated that the total amount of equipment financing conducted during the year 1940 was about equal to the amount outstanding at the end of the year.

A special questionnaire survey conducted by the National Bureau in June 1941 provided additional information concerning the types of banks participating in equipment financing and the extent of their participation. It was found that only 2 percent of the total loans and investments of the banks participating in equipment financing originate in this type of business. Of this 2 percent, about one-third were discounted instalment equipment paper or contracts and about two-thirds were cash instalment loans secured by equipment. Equipment credits were 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 located in larger places; the bulk of the financing, however, is done by the larger banks. In general, the discounting of instalment paper seems to be more important in smaller banks than the making of direct equipment loans while just the opposite seems to be true of the larger banks.

Since the security of the creditor rests in large part on the practicability of repossession, equipment sold on an instalment payment basis generally does not become affixed to the purchaser's real estate; exceptions occur where affixed installations can be made unusable by the removal of certain strategic parts. Within the broad limits set by this condition there are obviously many types of equipment that become the subjects of instalment financing. In terms of cost, units may vary from a $30 typewriter to a Diesel engine installation costing $500,000. Equipment so financed is of continuing use and value, although the value may be subject to considerable reduction where the unit has a very specific use and limited resale possibilities, or is subject to a high rate of depreciation. Substantial amounts of business are involved in sales of hotel, restaurant, bar, and store fixtures, equipment for barber and beauty shops and medical and dental offices, commercial refrigeration and air conditioning units, construction, road building, farm and transportation equipment, equipment for such service businesses as cleaners, laundries, bowling and billiard establishments, garages, etc.

A special study based on credit reports prepared by Dun & Bradstreet, Inc. reveals that equipment credit was most frequently extended to concerns in the service industries. Retail trade was next in importance by this measure, with manufacturing third. Further, the proportion of concerns with a low credit rating that have received equipment financing credit proved to be higher than the proportion of concerns having a high credit rating. Finally, small firms are, in general, more likely to obtain income-producing equipment on this basis than are large concerns.

Very little information is available on the manufacturers and distributors that discount the instalment receivables arising out of their sales with equipment financing agencies. These concerns vary in size from small dealers and manufacturers of limited credit standing to the prime credit risks among the very largest manufacturing companies. Their industrial characteristics can be inferred from the types of equipment financed on this basis.

The terms of equipment financing credits are determined mainly by the type of equipment financed and the credit standing of the purchaser. Where contracts are discounted and liability for them assumed by the vendor of equipment, the terms of credits may be affected also by the financial responsibility of the vendor and the type of recourse arrangement which is entered into. Reports were received from 169 different manufacturers and distributors with regard to the face amounts of the contracts which they originate. Of these, 141 indicated that the majority of their contracts amounted to $5,000 or less: 47 reported contract amounts concentrated between $100 and $500, 39 between $500 and $1,000, and 55 between $1,000 and $5,000. No company reported purchasing the bulk of its contracts at face amounts of less than $100.

Information assembled during 1941 suggested a tendency for down payment percentages to group around 33⅓ percent. Some installations were reported as carrying down payments of 50 percent, some 10 or 20 percent. Down payments on heavy machinery were frequently lower than those on more easily repossessible machinery of low unit value, indicating that the buyer's credit standing is a primary consideration in determining contract terms. The repayment period is clearly related to the cost and expected service life of the equipment and thus varies widely among different types. Equipment and fixtures sold to service industry concerns most often required repayment in 24 or 36 months; longer terms of 48 or 60 months were frequently reported on sales to manufacturers of heavy equipment of large unit value.

Equipment financing contracts are usually repayable in regular monthly instalments but exceptions are found in sales of farm equipment and in equipment sales to entertainment and service businesses of a seasonal nature. In such cases the repayment schedule conforms to the buyer's flow of income. As another variation from equal monthly payments, repayment schedules may be framed with particular regard to the added income or savings resulting from the use of the equipment. Thus, one year's repayment may be set at either a fraction, say one-third, of the annual savings accruing from the use of the equipment or a certain specified amount, whichever is greater. Automatic coin-dispensing equipment may be sold on a plan whereby the contract holder takes all or a certain stipulated percentage of the machine's receipts.

The above discussion relates to what may be termed indirect financing, where the financing agency acquires a contract not directly from the ultimate equipment purchaser, but indirectly from a manufacturer or distributor. Additional information was received from a number of commercial banks on direct equipment financing, that is, instalment cash loans that were made to finance equipment purchases and that were secured by a chattel mortgage on the equipment acquired; such loans vary in average amount from $2,000 in the smallest banks to nearly $175,000 in the largest banks. On the other hand, bank loans that are made on the basis of assignments of groups of individual instalment receivables reach much larger amounts in some cases; these are usually revolving credits with their balance determined by the rate at which new contracts are discounted and old contracts paid off.

It would be inadequate to describe equipment financing credits merely in terms of the size and maturity of individual credits. This type of financing is properly understood only when account is taken also of services provided by the financing agency other than the extension of credit itself. The most important of these ancillary services are credit appraisal and collection, legal advice and assistance in the preparation of documents, engineering counsel, and general management advice.

Credit analysis in equipment financing has three principal elements: (1) the equipment, in which the vendor retains title, or which serves as collateral security; (2) the general credit standing and financial responsibility of the purchaser; (3) the financial responsibility of the seller. With regard to the equipment, the financing agency estimates its repossession value, its expected service life, its usefulness and acceptability to the purchaser and the validity of the available title or lien. The vendor of the equipment is important, first, because he must accept responsibility for the satisfactory installation and performance of the equipment; second, because he may accept a contingent liability on the contract. Finally, the credit appraisal must evaluate the credit strength of the purchaser of the equipment. This is especially important and, indeed, crucial if the recourse arrangement with the manufacturer or dealer is limited, if the equipment is wholly or partly non-repossessible or if the equipment is likely to be repossessible only at substantial cost.

A process of continuing credit supervision begins when a financing agency has made an arrangement to purchase or take assignments of instalment contracts. Primary emphasis is placed on a periodic aging of the contracts held, calculation of delinquency and charge-off ratios, observation of trends in types of equipment sold, contract terms and customer quality. Changes are made in the terms of the arrangement between financing agency and vendor and in the terms of customer contracts on the basis of this continuing supervision of the loan account. As part of its recourse arrangement, the financing agency usually advances only 80 or 90 percent of the face amount of contracts required. A customer's reserve is thereby accumulated from which deductions can be made if contracts prove to be excessively delinquent or uncollectible. One company specializing in equipment financing had such customers' reserves of between 17 and 24 percent of outstandings from 1934 to 1940.

The basic interest rate charged on direct instalment equipment loans, as well as the rate at which contracts are discounted, is usually 6 percent per annum on original face amount of contract, is rarely in excess of this and, in some cases of installations of heavy machinery for prime credit risks, has been reported to be as low as 3½ percent per annum. In addition to this basic rate special fees may be charged for legal documentation and recordation and for insurance coverage. On very small installations a minimum finance charge may be levied; one company reported a finance charge of 7 percent per annum or a minimum charge of $7.50. The effective rate on the amount of funds actually in use will usually be higher than the quoted rate, of course, because the debt is paid off in instalments.

Turning to credit experience in instalment equipment financing it will be clear that where arrangements involve complete recourse on the manufacturer or distributor, or both, the financing agency may continue for some time with no losses at all, the incidence of all losses being on the manufacturer. Therefore, in order to measure credit experience in this field it is necessary to examine the net credit losses incurred by the manufacturer. Of 54 large manufacturers reporting collection experience 19 stated they had no credit losses at all during 1940, 9 that their credit losses were ¼ of 1 percent of instalment sales or less, 4 that their losses were between ¼ of 1 percent and 1 percent, 5 reported losses of between 1 and 2 percent, another 5, losses between 2 and 5 percent. Only 2 companies reported losses of over 5 percent. That is, of all companies combined, over one-half sustained net credit losses during 1940 of less than 1 percent of instalment sales volume. Credit experience on equipment that becomes partly affixed to the real estate was not found to be noticeably worse than on equipment of a wholly and readily repossessible variety.

Equipment financing represents only a small portion of the medium-term business credit market, and a very minor segment of the total loans and discounts of commercial banks. Yet it has considerable significance as an example of how the demand for business credit is influenced in character and in amount by underlying economic and technological trends and how these demands in turn elicit adaptations in the functional basis and practices of financial institutions. In this and other respects equipment financing has close parallels in term lending, accounts receivable financing and consumer instalment lending. As in these fields the pioneering was not done by commercial banks; equipment financing methods were developed by commercial finance companies and by the financing subsidiaries of manufacturers. Paralleling consumer financing and term lending, equipment financing incorporates one of the now well-established principles of medium-term credit, namely, repayment of debt on a prescheduled basis out of a flow of income as earned. Also, in modified degree, equipment financing illustrates the mass financing procedures clearly seen in consumer instalment financing and open accounts receivable financing. The importance of this last feature of equipment financing is that credit standards and credit appraisal methods must be made to conform to the necessity of rapid appraisals of individually small credits. Furthermore, this same feature makes it necessary to judge equipment financing ultimately by reference to credit experience on a mass of accounts rather than on specific contracts. The problem of establishing appropriate reserves and maintaining proper supervision over balances is obviously quite different in a mass financing operation of this type than in the extension of individual credits such as characterize conventional short-term lending.

Experience acquired in financing acquisitions of income-producing equipment on an instalment payment basis should prove useful in connection with postwar developments. Industrial concerns of all sizes will be faced with problems of conversion and expansion for civilian production; commercial establishments will also need to modernize or replace equipment. In both cases, these problems suggest a wide use of equipment financing techniques and immediate application of methods developed in the prewar period.

Furthermore, the present study shows that equipment financing is used chiefly by small and medium-sized manufacturing companies and by the service trades, where business units are typically small and frequently undercapitalized. Since many concerns needing credit during the postwar period will be in these groups and will find it difficult to obtain funds on an unsecured basis, it is reasonable to anticipate increased resort to equipment financing as a technique for extending intermediate-term credits to business enterprises after the war.