

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Accounts Receivable Financing

Volume Author/Editor: Raymond J. Saulnier and Neil H. Jacoby

Volume Publisher: NBER

Volume ISBN: 0-870-14131-7

Volume URL: <http://www.nber.org/books/saul43-1>

Publication Date: 1943

Chapter Title: Client Charges, Operating Expenses and Profits

Chapter Author: Raymond J. Saulnier, Neil H. Jacoby

Chapter URL: <http://www.nber.org/chapters/c4593>

Chapter pages in book: (p. 128 - 144)

7

Client Charges, Operating Expenses and Profits

TWO CONSIDERATIONS ARE IMPORTANT to the analysis of levels of charges in accounts receivable financing. First, in some instances the client receives a number of services in addition to the advance of funds. Consequently, not all the charges paid by clients are to be interpreted exclusively as costs of funds. Second, there is a substantial area in receivables financing in which the risks undertaken are greater, on the average, and the costs of selecting or limiting risks are higher, than in many other types of financing relationships. Risk conditions are reflected in both gross income and gross expenses of receivables financing. These conditions act, in some cases, virtually to invalidate comparisons of the charges levied under different financing arrangements; in the subsequent sections, therefore, the practices of the principal types of receivables financing agencies are examined separately.

Client Charges

Factors

Factoring companies customarily quote charges to clients in two parts, as a commission on the net amount of receivables purchased and as a per annum rate of interest at which receivables are to be discounted. Data on the relative importance of these two charges, as sources of income for the factoring company, are available on only one company in recent years. It is believed, however, that this company is fairly representative. Results of a study of its income statements are given in Table 16. This table shows that, of the two charges, the commission is the major source of income, comprising 59 to 70 percent of gross income earned. The remainder is earned as

Table 16—GROSS INCOME AND PERCENTAGE DISTRIBUTION BY SOURCE OF INCOME FOR TWO COMMERCIAL FINANCE COMPANIES AND ONE FACTORING COMPANY, 1933-40^a

Year	TWO COMMERCIAL FINANCE COMPANIES				ONE FACTORING COMPANY			
	Gross Income	Percentage Distribution by Source of Income			Gross Income	Percentage Distribution by Source of Income		
		Service Charges ^b	Interest and Commissions	Other Revenue		Interest	Commissions	Other Revenue
1940	\$2,267,734	94.4%	4.7%	.9%	\$1,468,257	35.2%	64.8%	^c
1939	1,944,745	94.3	5.0	.7	1,882,775	29.7	69.8	.5%
1938	1,893,985	94.5	4.5	1.0	2,004,575	33.3	66.7	^c
1937	1,882,111	95.0	3.9	1.2	2,078,044	41.2	58.7	.1
1936	1,500,473	94.7	3.5	1.8	1,707,774	39.6	60.3	.1
1935	1,286,070	91.4	5.2	3.4	1,354,602	34.4	64.8	.8
1934	964,001	88.3	6.8	4.9	1,118,896	31.7	68.0	.3
1933	809,434	88.7	7.3	4.0	1,036,628	29.9	68.3	1.8

^aData taken from reports to the Securities and Exchange Commission.

^bThis distribution of income by source reflects present methods of quoting charges as a "service charge" of some fraction of 1 percent per diem. Other finance companies quote a per annum "interest rate" on average daily balances plus a service charge on volume; for such companies the item "service charges" would be less important than in this table.

^cLess than .05 percent.

interest on cash supplied under purchases of receivables and on loans secured by clients' merchandise inventories. A very small amount (less than 1 percent of gross income in every year except 1933) came from other sources, such as investments.

As to the level of factoring charges, receivables are discounted by factoring companies at the present time at a per annum rate of 6 percent, although in some cases the rate may be 5 percent. In this respect factoring charges have remained unchanged for a considerable period of time. On the other hand, it is maintained that, in recent years, competition has tended to reduce the factor's commission rate. There is, however, very little factual evidence available on this point. Only one factoring company has reported a breakdown of income that makes it possible to compute ratios of commissions earned to the gross amount of receivables purchased by years; the range of variation over the period 1933-40 is from a low of 1.2 to a high of 1.6. It is generally understood that, at the present time, commissions vary for different customers from .75 to 2 percent of sales cashed. While the data in Table 16 are obviously inadequate to reveal any trend that may have developed in the level of factoring commission rates, other evidence tends to support the statement that commission rates are not likely to exceed 2 percent of sales cashed and may be as low as .75 percent for some accounts. The rate charged any particular client is governed mainly by competition, the volume of sales to be handled and the quality and average size of the receivables to be purchased.

Finally, it should be noted that the two charges levied in connection with factoring are related to two different factoring functions. First, the factor's commission is charged for the service of selecting and collecting credits and assuming the credit risk on the receivables purchased. This is generally, although not necessarily, accompanied by a requisition on the part of the client for a supply of funds prior to the maturity of the receivables. Where cash is thus supplied, this is paid for by a charge calculated by computing the average

due date plus 10 days for the receivables purchased and discounting the receivables, as indicated above, at a rate of 6 percent per annum. Clients are credited at the same rate for credit balances left with the factor although if these balances are very large, reflecting little need on the part of the client for the factor's funds, the interest paid may be adjusted downward.

Commercial Finance Companies

The sources of income of commercial finance companies are necessarily less uniform than those of factoring companies because of the greater diversity of their business. This is illustrated in Table 17 which shows the operating income of one commercial finance company, by type of business. It is to be noticed that there is no interest income on open accounts receivable purchased; income on advances is classified as a service charge. Data on the company covered in Table 17 and on another, a large national commercial finance company, were combined to produce the results in Table 16 showing that service charges alone have amounted to from 88 to 95 percent of gross income, with commissions and other non-interest revenues accounting for an undeterminable proportion of the remainder.

These data are a direct reflection of the character of commercial finance company charges. These charges are normally computed as a certain percent per day of the total gross amount of the client's receivables held by the financing agency. This rate varies for different clients, depending on somewhat the same considerations as in the case of the factor's commission charge. One of the chief considerations is the amount of work involved in handling a particular client's receivables. At present, rates vary from $1/50$ of 1 percent to $1/25$ of 1 percent per day with a substantial portion set at $1/40$ of 1 percent. Since the amount of the lender's funds actually in use in the client's enterprise is less than the gross amount of the receivables held by the finance company, by an amount depending on the percentage of receivables retained

Table 17—OPERATING INCOME OF ONE COMMERCIAL FINANCE COMPANY, 1934, BY TYPE OF BUSINESS ^a

Source of Operating Income	Accounts Receivable	Secured and Unsecured			Total	
		Notes Receivable	Industrial Liens	Instalment Liens	Amount	Percent
Service charges	\$263,915	..	\$87,963	\$1,882	\$353,760	82.9%
Bonds ^b	20,383	..	..	..	20,383	4.8
Interest	..	\$20,659	..	..	20,650	4.8
Discount and commissions	..	13,539	..	..	13,539	3.2
Collection fees, etc.	..	..	987	..	987	.2
Recoveries of accounts previously written off	3,572	11,579	..	2,491	17,642	4.1
TOTAL	\$287,870	\$45,768	\$88,950	\$4,373	\$426,961	100.0%

^a Data taken from reports to the Securities and Exchange Commission.

^b Premiums paid by clients for fidelity and fraud bonds.

as a collateral margin, these rates understate the annual effective rate to the client where charges are based on the face amount of collateral held by the finance company.¹ Assuming a 75 percent advance, the range of rates cited above produces effective rates of from 9.7 to 19.5 percent per annum; assuming a 90 percent advance, the range of rates works out to 8.1 to 16.2 percent per annum on funds in use. A rate of 1/40 of 1 percent per day produces an effective rate of 12.2 percent per annum on a 75 percent advance and a rate of 8.1 percent per annum on a 90 percent advance.

Since it is likely that the clients with the smallest percentage advances will also carry the highest financing charge, and that the best clients will get both a large percentage advance and a lower rate, it is likely that the actual range of rates is from approximately 9 percent per annum on money in use for the best clients to 20 percent per annum for those whose accounts present the financing agency with the heaviest operating costs and whose receivables are of a quality to command only a relatively low percentage advance. In point of fact this rate, considered as a cost of acquiring a financing service, may be higher if the client is required to pay the premiums of fidelity and fraud bonds as a condition of receiving the service. Clearly, the cost of providing this protection must necessarily be heaviest for the highest risks. While it is obvious that these charges raise the cost of the financing service for certain clients, there is no factual evidence available as to the extent of this increase.

In addition to the rate form discussed above, the commercial finance company may levy a delinquency charge but this is usually found where a rate, say 6 percent per annum, is levied on cash advanced plus a service charge on receivables acquired. Apparently, however, this is infrequently used as a form of quoting customer charges.²

Since no data are available to show a breakdown of com-

¹ One form of rate competition is to base the per diem interest charge on the amount actually advanced rather than on the face amount of collateral held. It is not known how general this procedure is.

² See *Problems of Small Business*, TNEC Monograph No. 17, pp. 347-53.

mercial finance company income by type of business it is not possible to provide a statistical measurement of charges. The only tests that are possible are computations showing the relations of total operating income of commercial finance companies to total receivables acquired. Changes in this ratio are obviously affected by changes in the distribution of volume acquired from the different types of receivables. Furthermore, since these companies hold substantial amounts of receivables having maturities of 12 months and over, changes in the annual volume of receivables acquired produce very substantial changes in the ratios of income earned to annual volume of receivables purchased. These changes are wholly unreliable as indications of changes in the level of charges on any particular type of receivables acquired.

Commercial Banks

The widely varying practices of commercial banks in quoting charges make it difficult to give a general statement of the cost of acquiring funds from them through the assignment of open accounts receivable. In general, however, commercial banks can be classified into two groups with respect to their methods of quoting charges on such loans. First, many banks charge a per annum interest rate on the outstanding debit balance arising out of loans secured by assigned receivables without any additional service charge. Second, other banks combine a per annum interest rate on average balances with some form of service charge or fee.

In general, the interest rates on average loan balances are 5 or 6 percent per annum, most frequently the latter, but several rates of 4 percent were reported in the course of this study. However, in order to express these rates in terms of effective per annum rates on money in use by the borrower, it is necessary to take account of the procedure followed in applying collections to loan balances. Where credits are made to the borrower's loan balance on the same day that collections are received and where the rate is charged against an average of the daily balances outstanding (that is, on a strict

“money in use” basis), the quoted rate is identical with the effective rate. However, the bank may apply collections to the borrower’s loan balance only at stipulated intervals, say every week or every 30 or 60 days. Clearly, this procedure makes for a higher effective per annum rate on money in use than does the method of immediate application.

The effect of these two procedures cannot be determined without knowing the experience of banks with the timing of collections. If collections are received most heavily at or near the time when they are to be applied to the loan balance (as may well be the case if the loan balance is adjusted every 30 days and if the receivables have an average maturity of about 30 days), the effective rate would be only slightly higher than the quoted rate. On the other hand, if collections are received at a constant rate and are sufficient to pay the loan balance out entirely when the date arrives for them to be applied to the loan, then the effective rate calculated on a “money in use” basis is approximately twice the quoted rate.

On the basis of the present study’s findings with respect to the average life of assigned receivables, and in view of the bank practice of usually writing the collateral notes arising out of these loans with a term matching the anticipated maturity of the receivables serving as collateral, we may conclude that the effective rate on money in use under these customer charges would not generally be more than one-third in excess of the quoted rates. It seems reasonable, therefore, to estimate that on a quoted interest rate of 5 or 6 percent per annum on average balances the annual effective rate would be not over 8 percent and possibly less.

In order, however, to compute total borrower cost in receivables financing it is necessary to take account of service charges. Nearly every commercial bank that was found in the present study to be making a substantial effort to increase its accounts receivable lending business charged a rate of interest on average loan balances plus a service charge. Some of the bases on which service charges were calculated include the following:

1. A certain percentage of the face amount of receivables accepted as collateral (e.g., $\frac{1}{2}$ to 2 percent on the face of receivables acquired)
2. A certain sum per account or invoice assigned (e.g., 20 cents per account or 10 cents per invoice)
3. A certain sum per posting operation (e. g., 5 cents, including original listing, final collection and partial payments, or credits arising out of merchandise returns, etc.) or a certain rate on outstanding balances (e.g., $\frac{1}{2}$ percent per month), whichever is higher
4. A fixed sum on the average loan balance, payable monthly (e.g., \$1 or \$2 per \$1,000 of average loan balance)
5. A variable rate charged on collateral acquired (e.g., 1 percent of all collateral acquired in units of \$50 or more, $1\frac{1}{2}$ percent on all other units)
6. A certain fee for each audit, calculated to cover costs⁸
7. A certain rate chargeable on the amount of the note (e.g., $1\frac{1}{2}$ percent per annum on the outstanding balance).

Finally, the basic per annum interest rate plus the service charge may be combined in a graduated rate, which, while charged on balances, is based on the volume of receivables acquired (for example, 12 percent per annum on balances up to \$15,000 and 9 percent per annum on that part of the balance in excess of this amount).

Summarizing, the level of charges in accounts receivable financing, expressed in annual effective rates on money in use, varies all the way from a low of 5 or 6 percent for certain receivables loans of commercial banks to a high of 20 percent (exclusive of bonding expense, delinquency charges, etc.) for certain of the clients of commercial finance companies. In gen-

⁸ The amount of the audit fee is not known but one bank stated that a 6 percent charge on the outstanding loan balance plus an audit fee averaged out to a 7 percent per annum effective rate.

eral, these differentials represent differences in (a) the character and extent of the financing service being supplied to the client or borrower, (b) the risk involved in the loan, and (c) the expense incurred by the financing agency in handling the clients' accounts.

Costs of Operation

The relative importance of different expense items for one factoring company and one commercial finance company is shown in Tables 18 and 19, respectively. Salaries, write-offs, additional provisions for losses, and interest on borrowed funds are the most important expense items. Table 18 shows that salaries tend to be somewhat inflexible as an expense item and that write-offs on customer accounts and additional provisions for such losses are not only high, relative to total expenses, but that changes in these accounts are primarily responsible for the operating profit or loss. It is interesting also that the relative importance of the interest expense on borrowed funds has tended to decline over the period 1933-41 for the factoring company studied. Expressed in terms of gross income, interest expense was 10 percent in 1933 and about 5 percent in both 1940 and 1941. That this represented mainly an ability to borrow funds on more favorable rates is borne out by the fact that the ratio of notes payable to total assets was 36 percent for this company in 1934 and 35 percent in 1940. It was somewhat higher in 1941, reflecting increased borrowings to finance a sharp increase in the volume of sales factored. Information on another factoring company, not presented here, shows that interest expense on borrowed funds fell from 23 percent of gross income in 1926 to 11 percent in 1932. This decline, however, seems to have been due in large part to an increased dependence on equity funds.

It is clear from these data that, even in years when the ratio of total expense to gross income has been relatively low, net write-offs on customer accounts and additions to loss reserves are highly significant expense items. This is true despite the fact that the ratio of losses to receivables acquired is remarkably small. For example, one of the largest factoring com-

Table 18—PERCENTAGE DISTRIBUTION OF TOTAL EXPENSES OF ONE FACTORING COMPANY, 1933-41, BY TYPE OF EXPENSE ^a

Expense Item	1941	1940	1939	1938	1937	1936	1935	1934	1933
Salaries ^b	..	..	30.1%	19.9%	31.5%	40.7%	42.6%	39.5%	28.1%
Rent ^c	..	..	..	1.5	1.7	1.8	2.8	2.9	1.9
Taxes (other than income)	3.0%	..	3.6	3.6	4.1	3.0	1.1	2.6	.9
Write-offs (net) ^d	28.1	21.1	21.0	16.1	18.1	7.8	11.2	5.1	11.0
Additions to loss reserve	..	..	..	31.6	12.9	12.3	8.6	14.5	26.4
Interest on borrowed funds	9.1	6.9	6.3	4.6	9.5	11.2	9.4	10.4	13.0
Other expenses	59.8	68.7	39.0	22.7	22.2	23.2	24.3	25.0	18.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total expense (000)	\$1,142	\$1,028	\$1,630	\$2,343	\$1,539	\$963	\$795	\$729	\$809
Total expense in percent of gross income	61.3%	70.0%	86.6%	116.9%	74.1%	56.4%	58.7%	65.1%	78.1%

^a Based on a report to the Securities and Exchange Commission.

^b Salaries are included in "other expenses" after 1939.

^c Rent is included in "other expenses" after 1938.

^d Includes all provisions for losses, 1939-41.

panies has reported that net losses on factored receivables acquired from January 1 to September 30, 1936 was .242 percent. Further, a recent study stated that the losses of a medium-sized finance company acquiring open accounts receivable on a non-notification basis had amounted to less than .05 percent of total receivables acquired.⁴ The meaning of the latter figure is different from that of the loss ratios for factors since it refers to paper acquired on a recourse basis and the losses it represents arise out of fraud or the failure of clients. Since commercial banks also acquire receivables on a recourse basis, their loss ratios should be comparable to those of commercial finance companies. Only a very small number of all banks interviewed had suffered any losses at all and invariably these were attributed to fraudulent acts on the part of the client, such as the assignment of fictitious receivables, duplicate assignments, the diversion of collections or failure to account for merchandise returns.

Barring contingencies such as the above, and granted a sound lien on the assigned receivables, the important question is the collectability of the receivables. This is best shown by data on the loss experience of factoring companies. Few companies report these figures, but one large factoring company reported net losses on customer accounts of .2, .5, .3 and .3 percent of volume acquired in 1926, 1930, 1931 and 1932, respectively. Another company, reporting for each year from 1934 to 1940, had net losses varying from lows of .1 percent in three different years, 1934-36, to a high of .5 percent in 1938. Very scattered information is available on other companies; what there is confirms the results cited above.

The cost structure of the commercial finance company shown in Table 19 is basically similar to that of the factoring company discussed earlier, with the exception of the item representing expenses incurred in promoting new business. Since this company is relatively new, the item is doubtless larger than it would be for a company of longer standing, but in part its size probably reflects a real operating difference

⁴ TNEC Monograph No. 17, *op. cit.*, p. 348.

Table 19—EXPENSE ITEMS OF ONE COMMERCIAL FINANCE COMPANY, SEPTEMBER 2, 1937 TO DECEMBER 31, 1938, IN PERCENT OF TOTAL EXPENSE AND IN PERCENT OF GROSS INCOME ^a

<i>Expense Item</i>	<i>In Percent of Total Expense</i>	<i>In Percent of Gross Income</i>
Operating Expense	70.3%	41.6%
Salaries	35.6	21.1
Commissions	5.9	3.5
New business	11.7	6.9
Credit agency fees	3.2	1.9
Legal and accounting	2.2	1.3
Rent	1.6	.9
Printing and stationery	3.7	2.2
Telephone and telegraph	1.6	.9
Other operating expense	4.9	2.9
Other Expense	29.7	17.5
Taxes (other than income)	2.9	1.7
Provision for losses	11.0	6.5
Provision for depreciation	.7	.4
Interest on borrowings	15.1	8.9
TOTAL	100.0%	59.1%
	\$121,413	\$205,089

^a Based on a report to the Securities and Exchange Commission.

between the factor and the commercial finance company.

Additional information on the cost structure of commercial finance companies is given in Table 20. This table is based on income and expense statements of three companies that do open accounts financing along with other financing, such as the purchasing of instalment sales contracts arising out of the sale of consumer durable goods and income-producing equipment. For these companies, interest expense on borrowed funds has declined from 29 percent of total expenses in 1932 to 14 percent in 1940. However, there has been no marked decline in the relative importance of charge-offs or of general operating expenses.

The only information available on the cost of handling open accounts receivable in terms of the volume of business transacted covers the operations of two factoring companies. A factoring company reporting for the years 1934 to 1940

Table 20—PERCENTAGE DISTRIBUTION OF TOTAL EXPENSES OF THREE COMMERCIAL FINANCE COMPANIES, 1932-40, BY TYPE OF EXPENSE ^a

<i>Expense Item</i>	1940	1938	1936	1934	1932
Operating expenses	48.1%	47.1%	39.9%	49.8%	47.9%
Depreciation	1.0	1.1	.9	.3	.8
Taxes (other than income)	2.7	3.2	1.6	1.9	.9
Rents	1.9	2.2	1.9	3.1	4.4
Reserve for doubtful accounts	13.3	9.4	12.8	12.3	16.1
Other reserves	11.7	11.8	12.9	2.9	.5
Interest and discount	14.1	16.6	13.7	26.4	29.4
Other expenses	7.2	8.6	16.3	3.3	..
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%
Total expense (000)	\$2,459	\$1,973	\$1,627	\$419	\$517
Total expense in percent of gross income	68.1%	68.1%	70.1%	66.4%	84.7%

^a Based on reports to the Securities and Exchange Commission and reports to stockholders.

incurred total expenses varying from 1.2 to 2.8 percent of receivables acquired. In the year of the highest ratio, 1938, it had a net operating loss equal to .4 percent of receivables acquired. Another large factor for which information is available for an earlier period shows ratios of total expense to receivables acquired of 3.6, 2.6, 2.5 and 3.4 percent during the years 1926, 1930, 1931 and 1932, respectively.

Comparable estimates of the ratios of total expense to receivables acquired cannot be made for commercial finance companies since the expenses incurred in their receivables financing cannot be distinguished from expenses incurred in connection with other financing activities. To distinguish between these expenses would involve the same problems of cost allocation that are met in determining commercial bank costs in receivables financing.

One bank indicated that it had attempted to determine the costs of its accounts receivable loans by setting up an independent department to handle them and charging to the department all expenses except executive salary costs. This experiment demonstrated to the bank that a service fee of

2¾ percent per annum, charged on average daily balances outstanding, about covered the special costs of handling accounts receivable loans. In addition the bank charged a basic interest rate on average daily balances of 5 or 6 percent per annum. Out of this interest income the department pays 3½ percent per annum on the funds in use in receivables financing into the general revenues of the bank and uses the remainder to set up a reserve against its own receivables lending operations.

Gross Income, Gross Expense and Net Profits

It has been shown that the gross income of factors and commercial finance companies is derived from a combination of commissions, service fees and interest charges, all of which must be taken account of in determining the cost of the service to clients. In general, but by no means invariably, these charges are higher than those commonly associated with short-term bank credit. It was pointed out, however, that in a large degree this is to be explained by reference to the nature of the services obtained by the borrower and the costs of administering these credits.

An analysis has been made of the profitability of the different types of receivables financing agencies, but information is available on so few companies that the results can be used only to support very general statements. One of the interesting results that comes from this analysis of the income and expense accounts of factors and commercial finance companies is that while their operating income is relatively high, as contrasted to a similar measure for commercial banking institutions, their operating expenses are likewise high. Thus, one factoring company had \$10.64 gross income and \$7.45 gross expenses for each \$100 of total assets in 1940. It is the order of magnitude and general relation of these two figures that is important and not their exact amount, for it is not certain how representative this company is of factoring companies as a whole. A study of these same items for three of the larger commercial finance companies shows that gross

income was \$9.90 per \$100 of total assets for 1940, and gross expenses \$5.90. Comparable figures for commercial banking operations are obviously quite different; these institutions carry a large percentage of their assets in cash or deposits to satisfy the legal requirements for reserve balances and the bank's own policy with respect to liquidity and have heavy investments in government obligations bearing low interest rates. It is to be expected, therefore, that income and expense totals, when related to total assets, will be lower than for other types of financing agencies. Thus, gross income was \$2.98 per \$100 of assets for all insured banks in 1940 and gross expenses were \$2.37.

One general statement can be made, however, with respect to the net profitability of the various types of agencies. Taken as a whole, it appears that the ratio of net profit to net worth for factoring companies and commercial finance companies is both higher and more variable than is the comparable measure of profitability for commercial banks.

