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Repossession Experience: Electric Appliances

In the financing of electric appliances, the second major field of sales finance company operations, the significance of contract terms and cash selling price as factors affecting the likelihood of repossession is on the whole consistent with what has been indicated for automobile financing. For appliances, however, it is possible to consider the relevance of certain additional factors on which no data were available for automobiles, and to consider more extensively the interrelationship of various factors.

In the following discussion, as in the preceding chapter, repossession experience is measured by the number of repossessions per hundred contracts financed. A ratio indicating dollar losses is even less significant in appliance financing than it is in automobile financing, for the former is usually conducted on a recourse basis, and thus it is in most cases the dealer who assumes any loss that may be incurred.

CHARACTERISTICS OF THE DATA

The most extensive data available on appliance repossessions are those of the Electric Home and Farm Authority, which, though a public agency, operates after much the same fashion as a private finance company. The following analysis is based primarily on these EHFA records.[1] In appliance

[1] For a more detailed tabulation of this material see National Bureau of Economic Research (Financial Research Program), *Government Agencies of Consumer Instalment Credit*, by Joseph D. Coppock (ms. 1940) Appendix B.

financing, as in automobile financing, no single company can be considered typical in every detail, but this consideration does not invalidate the present body of data, for we are here interested in general relationships rather than absolute figures. On the significance of two important items, down payment and length of contract, supplementary information is available on the experience of a large private sales finance company in regard to its "new retail diversified financing." The latter data do not cover exactly the same types of commodities as those financed by EHFA, for they are not limited to electric appliances, and some light producer goods are included. The great majority of this private company's contracts, however, are for refrigerators sold to householders, and refrigerator contracts constituted well over half of all contracts bought by EHFA during the main period under discussion.

Table 41, which presents comparative figures for refrigerator contracts financed during the calendar year 1937 by EHFA and the private company, gives some indication of the extent to which EHFA contracts are typical. On the principle that relatively easy terms would result in satisfactory performance on contracts, EHFA has from the beginning encouraged smaller down payments and smaller monthly payments spread over longer periods of time than private finance companies typically accept. Also, it has from the beginning made a comparatively low finance charge—5 percent a year on the original unpaid balance, or an annual interest charge of 9.23 percent. On the private company's contracts that are tabulated here the rate of finance charge was 6 percent on the initial unpaid balance—equivalent to an annual interest charge of 11.08 percent.

EHFA has no complete record of repossessions from its beginning in 1934, but a fairly full record has been kept since January 1937. Obviously the longer the time that contracts have been outstanding when repossession ratios are

TABLE 41

CHARACTERISTICS OF REFRIGERATOR CONTRACTS FINANCED BY A PUBLIC AND BY A PRIVATE SALES FINANCE COMPANY, 1937[a]

Item	Public Company		Private Company	
	Average Amount	% of Cash Selling Price	Average Amount	% of Cash Selling Price
Cash selling price	$178.00	100	$192.00	100
Down payment	25.00	14	28.00	15
Original unpaid balance	153.00	86	164.00	85
Finance charge	20.00	11	25.00	13
Amount of note	173.00[b]	97[b]	189.00	98
Monthly payment	5.40	3	6.50	3
Average length of contract	32 months[c]		29 months[c]	

[a] Based on data supplied by Electric Home and Farm Authority and by a large private sales finance company, covering, respectively, 14,632 and 101,111 refrigerator contracts financed during calendar year 1937.
[b] Calculated on basis of contracts financed from January through June 1938.
[c] Number of contracts rather than dollar value of contracts was used in weighting various length-of-contract classes.

calculated, the greater the confidence that can be placed in those ratios. Therefore the present analysis is based primarily on the 16,007 contracts financed from January through June 1937. Of these contracts 1,049, or 6.6 percent, had repossessions reported on them by June 30, 1938, when the contracts had been outstanding for an average of 15 months. It is true that not all of the ultimate total of repossessions on these contracts had occurred by the end of June 1938—some of the contracts were for as long as five years and will not be liquidated until 1942—but we have estimated[2] that the 1,049 re-

[2] On the basis of all repossessions reported by October 31, 1938, on contracts purchased during the 18 months from January 1937 through June 1938. The method used was the arbitrary one of extrapolating a curve passed through the given proportions of repossessions occurring at the end of each monthly interval after purchase. At 15 months—which, for the smaller sample of contracts used in our analysis, was the average length of time after purchase —the proportion of final repossessions was found to be 80 percent. The curve flattened out at 30 months, suggesting that 100 percent of repossessions are

possessions constitute approximately 80 percent of the future final total. In no cases do the ratios based on these repossessions show notably different tendencies from those based on the less adequate data of later samples.

Information on purchasers' income—an item which was not covered in the sample for January-June 1937—has been derived from the contracts financed during January-March 1938. Repossessions on this body of contracts were tabulated as of September 30, 1938, when the contracts had been outstanding for an average of 7½ months; at this time, according to our estimates,[3] less than half the final total of repossessions had occurred.

REPOSSESSION EXPERIENCE ACCORDING TO NUMBER OF INSTALMENTS PAID

Appliance repossessions, like those for automobiles, tend to concentrate in the early months of the span. Table 42 shows that over a third of the total number of repossessions estimated to occur on EHFA contracts purchased during January-June 1937 took place before three payments were made; practically half occurred before five payments, and more than three-fourths came within ten payments. This latter proportion may be still higher after all the repossessions on these contracts are tabulated.

In repossession cases there is always, of course, a period of

probable within a 30-month span. The cumulative percentage of repossessions, by number of months after purchase, was found by this method to be as follows:

2 months— 9%	9 months—55%	16 months— 82%
3 " —17	10 " —59	17 " — 84
4 " —24	11 " —64	18 " — 86
5 " —32	12 " —68	19 " — 88
6 " —38	13 " —72	20 " — 90
7 " —45	14 " —76	25 " — 96
8 " —50	15 " —80	30 " —100

[3] See footnote 2, above.

TABLE 42

PERCENTAGE DISTRIBUTION AND CUMULATIVE PERCENTAGE OF REPOSSESSIONS, JANUARY 1937–JUNE 1938, ON APPLIANCES FINANCED DURING JANUARY–JUNE 1937, BY NUMBER OF INSTALMENTS PAID[a]

Number of Instalments Paid	*Percentage Distribution of Repossessions*	*Cumulative Percentage of Repossessions*
0	18	18
1	8	26
2	8	34
3	7	41
4	7	48
5	7	55
6	5	60
7	4	64
8	5	69
9	4	73
10	3	76
11	2	78
12[b]	2	80
Over 12	20	100

[a] Based on data supplied by Electric Home and Farm Authority, covering 1,049 repossessions reported on 16,007 contracts; it is assumed that these repossessions constitute 80 percent of the final future total.

[b] Of the 1,049 repossessions reported, 1,027 had had 12 or fewer instalments paid; for most of the remaining 22 there was no information.

delinquency in addition to the number of months required for any given number of instalments, and EHFA has found that this delinquency period averages three to four months. It will be remembered that June 30, 1938, when 80 percent of the total repossessions on January-June 1937 contracts are estimated to have occurred, represented an average of 15 months after the contracts were financed; on this date, however, no more than 12 instalments had been paid on the repossessed appliances.[4] This relatively long delinquency pe-

[4] Of the 1,049 repossessions that had occurred by this date, 1,027 had had 12 or fewer instalments paid; for most of the others there was no information.

TABLE 43

NUMBER OF INSTALMENTS PAID BEFORE REPOSSESSION, JANUARY 1937–JUNE 1938, ON APPLIANCES FINANCED DURING JANUARY–JUNE 1937, BY LENGTH OF CONTRACT[a]

Length of Contract[b] (in months)	*Number of Instalments Paid Before Repossession*		*Percentage Distribution of Repossessions*
	Average Number	% of Contract Length	
6	.3	5.6	.3
12	2.3	18.8	5.3
18	3.4	19.1	5.9
24	3.6	15.1	22.7
30	5.7	19.1	2.2
36	3.7	10.3	56.0
48	4.9	10.2	3.7
60	3.9	6.5	3.9
ALL APPLIANCES	4.1	12.2	100.0

[a] Based on data supplied by Electric Home and Farm Authority, covering 1,049 repossessions reported on 16,007 contracts.
[b] Equivalent to total number of payments due.

riod is due partly to a rather generous policy with reference to delinquency, but it is also partly the result of the dealers' reluctance to repossess appliances. Dealers are reluctant because the costs of recovery, repair and resale are heavy, and deficiency judgments against purchasers for the unpaid balances are usually unsatisfactory.

In Table 43 the average number of instalments paid before repossession is shown in relation to contract length, thus indicating the extent to which purchasers had fulfilled their obligations by the time repossession occurred. On the average about 4 payments were made before repossession—approximately 12 percent of the total number due. On repossession cases having contract lengths of 30 months or less,[5]

[5] With the exception of the small proportion having 6-month contracts.

the proportion of payments made to payments contracted for was fairly uniform, but considerably higher than it was on those with contracts longer than 30 months. Data are less complete, however, on the cases having contracts longer than 30 months,[6] and it has not been feasible to make any correction of them.

PURCHASER'S INCOME AS A FACTOR IN REPOSSESSION

In discussing automobile repossessions it was mentioned that the purchaser's income is an important factor which should be taken into account in any study of repossession experience. The absence of information precluded any consideration of this factor in connection with the retail financing of automobiles, but EHFA data, while not so complete on this as on other aspects of repossession experience, enable us to consider it in regard to appliance repossessions. The significance of income lies not only in its absolute amount but also in the proportion of monthly income required for monthly payments, since the latter are necessarily a fixed charge for the period of the instalment contract.

Table 44, based on a special tabulation of contracts financed in the first quarter of 1938, shows a pronounced tendency for the repossession ratio to decline as purchaser's monthly income increases. The ratio is less than average for purchasers receiving over $125 a month, and decidedly worse than average for those receiving under that amount. The better-than-average group accounted for 57 percent of the contracts, and the worse-than-average accounted for 38 per-

[6] Since contracts written for 30 months or under were more nearly paid off by June 30, 1938, it is plausible that repossessions subsequent to this date would be relatively more numerous on contracts running longer than 30 months, thus tending to raise, for this group of cases, both the average number of payments made and the relationship of this number to the total number of payments contracted for.

TABLE 44

REPOSSESSION EXPERIENCE, JANUARY–SEPTEMBER 1938, ON APPLIANCES FINANCED DURING JANUARY–MARCH 1938, BY PURCHASER'S MONTHLY INCOME[a]

Monthly Income[b]	*Repossession Ratio*[c]	*Index of Repossession Experience*[d]	*% Distribution of All Contracts Financed*
Under $50	5.0	+ 35	1.0
50– 75	8.4	+127	4.0
75–100	6.7	+ 81	10.3
100–125	4.9	+ 32	22.5
125–150	2.6	– 30	16.3
150–200	2.8	– 24	22.4
200 & over	1.7	– 54	18.5
No information	2.6	– 30	5.0
ALL APPLIANCES	3.7		100.0

[a] Based on data supplied by Electric Home and Farm Authority, covering 10 percent of a sample of 7,680 contracts.
[b] Each level is inclusive of the lower figure and exclusive of the higher.
[c] Number of repossessions per hundred contracts financed.
[d] Obtained by calculating each repossession ratio as a percent of average repossession ratio and subtracting 100; the result shows each level's deviation from the average of all levels, the plus indicating worse than average and the minus indicating better than average.

cent. This experience conforms closely with that encountered in another field of consumer instalment credit—personal small loans. The pattern of personal finance company charge-off experience—which is the cash loan equivalent of repossession experience in sales financing—is strikingly similar, in its general outlines, to the pattern which is indicated in Table 44.[7]

[7] See National Bureau of Economic Research (Financial Research Program), *Personal Finance Companies and Their Credit Practices,* by Ralph A. Young and Associates (1940) p. 97, for the charge-off experience of one large chain of personal finance lenders during 1934-37. In this study the $100-150 income bands were found to have about the average proportion of charge-offs and to include about one-third of the loans; in Table 44 the $100-150 income bands have about the average proportion of repossessions and include 39 percent of the contracts covered by the sample.

The significance of purchaser's income as an indicator of the likelihood of repossession appears, on the whole, to be irrespective of other factors. Supplementary tabulations of EHFA data indicate that as income increases, repossession ratios tend to decline for all down payments, all contract lengths, all note amounts (with noteworthy regularity) and all types of appliances (though not so conspicuously for radios). The only factor that seems to outweigh that of absolute income is the related one of monthly payment in percent of monthly income. For those contracts—less than a third of the total—on which monthly payment represented less than 2½ or more than 7½ percent of monthly income the purchaser's absolute monthly income appeared to be of relatively minor significance.

This latter factor—the proportion of monthly income (as of the time when the contract begins) that is required for monthly payment—is probably the most adequate single measure of the purchaser's financial capacity to meet his obligation. As shown in Table 45, the likelihood of repossession is much greater if monthly payment takes a larger share of monthly income. The repossession ratio is roughly twice as high when the monthly payment is 5 to 10 percent of the monthly income as it is when the payment is less than 5 percent.

It will be noticed, however, that when monthly payment is over 10 percent of income the repossession ratio is somewhat lower. This reversal of the trend is not readily explainable, but careful sifting of contracts by dealers and credit men is the most likely reason that can be adduced for it. The number of cases represented by the group is very small, however—less than 3 percent of the total.

The tendency for repossession ratios to increase as the monthly payment percentage rises is shown by additional EHFA data to hold mainly for the groups receiving incomes

TABLE 45

REPOSSESSION EXPERIENCE, JANUARY–SEPTEMBER 1938, ON APPLIANCES FINANCED DURING JANUARY–MARCH 1938, BY MONTHLY PAYMENT AS PERCENT OF MONTHLY INCOME[a]

Monthly Payment as % of Monthly Income[b]	*Repossession Ratio*[c]	*Index of Repossession Experience*[d]	*% Distribution of All Contracts Financed*
Under 2½	2.4	−35	19.5
2½–5	3.3	−11	47.1
5–7½	5.3	+43	21.0
7½–10	6.5	+76	4.8
10–22½	4.0	+ 8	2.6
No information	2.6	−30	5.0
ALL APPLIANCES	3.7		100.0

[a] Based on data supplied by Electric Home and Farm Authority, covering 10 percent of a sample of 7,680 contracts.
[b] Each level is inclusive of the lower figure and exclusive of the higher.
[c] See Table 44, footnote c.
[d] See Table 44, footnote d.

of less than $125; the relationship tends to be reversed for groups receiving monthly incomes of $125 or more. It would be obviously absurd to conclude that the larger proportion of income used by the higher income groups is an influence making for a low repossession ratio, but it does appear plausible that "monthly payment as a percent of monthly income" is a much more important factor among the lower than among the higher income groups. The increase in repossession ratios as higher proportions of monthly income are required for monthly payment remains roughly true, however, for all down payments, all contract lengths (very irregularly for those 12 months and under and for those 36 months and over), all note amounts and all types of appliances (though here again the pattern is somewhat irregular for radios).

CONTRACT TERMS AS FACTORS IN REPOSSESSION

The principal terms stipulated in the contract are those covering down payment, number of payments (length of contract) and finance charges. No data are available on the relation of finance charges to repossession experience, but it is possible to draw certain conclusions regarding the significance of down payment and length of contract.

As the down payment on electric appliances increases, the repossession ratio decreases markedly, according to data shown in Table 46 from both the public and the private company under consideration. Supplementary tabulations of EHFA data indicate that this tendency of repossession ratios to decline as down payment increases is irrespective

TABLE 46

REPOSSESSION EXPERIENCE, JANUARY 1937–JUNE 1938, AND 1936–37, ON APPLIANCES FINANCED BY A PUBLIC AND BY A PRIVATE SALES FINANCE COMPANY, JANUARY–JUNE 1937, AND 1936, BY DOWN PAYMENT[a]

Down Payment[b] (in % of cash selling price)	*Repossession Ratio*[c]		*Index of Repossession Experience*[d]		*% Distribution of All Contracts Financed*	
	Pub. Co.	Priv. Co.	Pub. Co.	Priv. Co.	Pub. Co.	Priv. Co.
Under 10	9.0	7.6	+36	+46	52.7	27.2
10–20	4.5	5.4	–32	+ 4	31.0	48.7
20–30	2.8	2.2	–58	–58	9.9	24.1
30–40	2.0		–70		4.0	
40 & over	1.3		–80		2.4	
ALL APPLIANCES	6.6	5.2			100.0	100.0

[a] Based on data supplied by Electric Home and Farm Authority, covering 16,007 contracts, and on data supplied by a large private sales finance company, covering 106,170 contracts, mostly for refrigerators.
[b] Each level is inclusive of the lower figure and exclusive of the higher.
[c] See Table 44, footnote c.
[d] See Table 44, footnote d.

of contract length, amount of note or type of appliance financed, and irrespective of purchaser's income and the proportion of it required for monthly payment.

The data in Table 46 indicate that the repossession ratio is cut approximately in half if the down payment is increased from less than 10 percent to 10-20 percent of cash selling price, and is again cut in half if down payment is 20 percent or more. It is not to be inferred, however, that these would be the results if dealers required higher down payment percentages from all purchasers, because "other things" might not remain equal. Specifically, if the purchaser groups who have not found it feasible to make larger down payments were requested to do so, they might be eliminated from the market or they might default on their contracts in as high a proportion as they would under easier terms, perhaps even higher. For those purchasers who may eventually default because, though financially able, they are unwilling to pay, the requirement of a larger down payment percentage, with the view to establishing a substantial equity in the appliance, would appear to be an effective method. But it is difficult, of course, to single out these latter purchasers.

As shown in Table 47, the repossession ratio increases as the length of contract increases until the contract reaches 36 months. This conclusion, based on data from the two agencies already mentioned, is supported by the experience of a second private company.[8]

For contracts running longer than 36 months there are no conclusive figures. Of the three agencies whose data have

[8] For the repossession experience of this company the only available data are with reference to length of contract, for the years 1936-38. According to a memorandum sent to the National Bureau of Economic Research (Financial Research Program) on January 19, 1939, "Repossessions on contracts running from 13 to 24 months inclusive are about 20 percent greater than on contracts running 12 months or less. Repossessions on contracts running from 25 to 36 months inclusive are about 65 percent greater than on contracts running 12 months or less; and about 35 percent greater than on contracts running from 13-24 months."

TABLE 47

REPOSSESSION EXPERIENCE, JANUARY 1937–JUNE 1938, AND 1936–37, ON APPLIANCES FINANCED BY A PUBLIC AND BY A PRIVATE SALES FINANCE COMPANY, JANUARY–JUNE 1937, AND 1936, BY LENGTH OF CONTRACT[a]

Length of Contract[b] (in months)	*Repossession Ratio*[c]		*Index of Repossession Experience*[d]		*% Distribution of All Contracts Financed*	
	Pub. Co.	Priv. Co.	Pub. Co.	Priv. Co.	Pub. Co.	Priv. Co.
1– 6	3.2	1.5	−52	−71	.6	9.4
7–12	4.4		−53		7.9	
13–18	6.5	3.0	− 2	−42	6.0	6.1
19–24	6.5	5.0	− 2	− 4	22.9	29.1
25–36	7.4	6.2	+12	+19	51.3	55.4
37–48	5.2	..	−21	..	4.7	..
49–60	3.9	..	−41	..	6.6	..
ALL APPLIANCES	6.6	5.2			100.0	100.0

[a] Based on data supplied by Electric Home and Farm Authority, covering 16,007 contracts, and on data supplied by a large private sales finance company, covering 106,170 contracts, mostly for refrigerators.

[b] In each level over 90 percent of the contracts were for exactly the span of the second figure. Of the private company's contracts less than 0.1 percent were for more than 36 months.

[c] See Table 44, footnote c.

[d] See Table 44, footnote d.

been used here, only EHFA granted such terms. But only about 11 percent of its contracts were for more than 36 months, and supplementary tabulations show that such terms are not granted at all on refrigerators and washing machines, which together account for about two-thirds of all contracts financed by EHFA. Also, on these longer contracts (mainly for ranges and combination purchases) figures concerning repossession experience are necessarily incomplete since none extended in the period covered by this study had reached maturity.

These data indicate, however, a decrease in the repossession ratio for contracts running 37-48 months, and a still further decline for those running 49-60 months. And the tendency of repossession ratios to increase as contracts become longer, but to drop again for contracts running more than 36 months, appears to be independent of amount of note, for the same trend is roughly discernible in each amount-of-note level. Still more disruptive of conventional assumptions is the indication that declining repossession ratios for contracts running longer than 36 months are general, regardless of down payment: this rough trend is observable in each down payment classification.[9]

It will be remembered that also in used-car financing, repossession ratios declined on longer contracts. Careful selection by credit men and the granting of longer contracts mainly on higher-priced, lower-risk cars were suggested as possible explanations. In appliance financing too the dealers and credit men probably select with special care the customers who receive longer contracts, but in the absence of adequate evidence this factor should not be considered a complete explanation. Nor can the price of the commodities that are typically financed on longer contracts explain the

[9] On deals carrying less than 10 percent down payment, data are available also for the private company, for the various contract lengths, and show a trend different from that of EHFA figures. The two agencies' indices of repossession experience, based on the average for all contract lengths, are as follows:

Contract Length	*Pub. Co.*	*Priv. Co.*
Under 13	− 8	− 41
13-18	+ 17	− 38
19-24	+ 7	− 33
Over 24	− 3	+ 8

The data from which these figures were computed covered, for EHFA, 762 repossessions occurring by June 30, 1938, on 8,436 contracts financed during the first six months of 1937; and, for the private company, 1,864 repossessions occurring by December 31, 1937, on 36,119 contracts financed during 1937. EHFA contracts had been outstanding an average of 15 months, the private company's contracts an average of only 6 months. It is impossible to say whether these contradictions will remain when both bodies of contracts are finally liquidated.

present finding: on most range contracts the note was for \$100-300, a level that had about an average repossession record; and only about a quarter of the combination contracts were for a note-amount level that showed notably better-than-average performance (\$300-400). It would seem plausible that on these longer contracts monthly payments would take a smaller proportion of monthly income, but payments taking less than 5 percent of income—the proportion that seems to make for the best repossession record—were less prevalent among 48-month contracts than among those of any other length; such payments characterized more than nine-tenths, however, of the 60-month contracts.

The most adequate explanation that seems possible from statistical analysis is purchaser income. It is true that within each monthly income level, and also within each level of monthly payment in percent of income, the repossession ratios show no discernible trend as contract length increases. But 70 percent of the holders of contracts running 48 months, and 85 percent of those whose contracts ran 60 months, had monthly incomes of more than \$125, in other words, belonged to the income group that consistently showed better-than-average performance on contract obligations. This finding is confirmed by a tabulation which indicates that two-thirds of those whose contracts were for ranges and combination purchases fell within this income level.

In general, however, it would seem that the significance of contract length in indicating the likelihood of repossession is particularly subject to misinterpretation and exaggeration. Very short contracts seem to be, indeed, a good risk, but in EHFA experience with appliance financing, contracts of one to three years have a fairly average repossession record and those of three to five years show even a better-than-average performance. Careful credit selection, and the fact that such contracts go mainly to income groups above \$125 a month, may partially, or even wholly, explain this finding, but in any case the tendency should be given some weight in appraising the influence of lending policy on collection experience.

AMOUNT OF NOTE AND MONTHLY PAYMENT AS FACTORS IN REPOSSESSION

As the amount of note (original unpaid balance plus time-payment charge) increases, the repossession ratio decreases slightly and irregularly, as shown in Table 48. The same generalization could be made for the repossession ratio in relation to cash selling price, because in EHFA contracts the latter is approximately the same as the amount of note. It is quite possible, however, that later repossessions on the longer contracts (a majority of the contracts for $300 and over were for 48 months or longer) will increase their re-

TABLE 48

REPOSSESSION EXPERIENCE, JANUARY 1937–JUNE 1938, ON APPLIANCES FINANCED DURING JANUARY–JUNE 1937, BY AMOUNT OF NOTE[a]

Amount of Note[b]	*Repossession Ratio*[c]	*Index of Repossession Experience*[d]	*% Distribution of All Contracts Financed*
$40– 100	7.0	+ 6	25.0
100– 200	6.4	– 3	50.2
200– 300	6.8	+ 3	19.4
300– 400	4.4	–33	3.8
400–1000	5.9	–11	1.6
ALL APPLIANCES	6.6		100.0

[a] Based on data supplied by Electric Home and Farm Authority, covering 16,007 contracts.

[b] Each level is inclusive of the lower figure and exclusive of the higher.

[c] See Table 44, footnote c.

[d] See Table 44, footnote d.

possession ratios, and in this case the ratios of all amount-of-note levels would be very close to average.

Here again other factors, especially length of contract, should be considered simultaneously. Supplementary tabulations indicate that for contracts of 24 months or less repossession experience improves conspicuously as notes become larger. For contracts of 36 months or more no clear pattern is discernible. But the general tendency of the repossession ratios to remain fairly steady, or decrease, with increasing amount of note is true, on the whole, irrespective of down payment percentage, monthly payment percentage, customer's income or type of appliance. Thus it seems probable that amount of note is not among the more significant factors that indicate the likelihood of repossession.

Monthly payment is amount of note divided by length of contract, and represents in one figure the composite influence of these two factors. It is of particular interest to see that the repossession ratio declines very clearly as the absolute

TABLE 49

REPOSSESSION EXPERIENCE, JANUARY 1937–JUNE 1938, ON APPLIANCES FINANCED DURING JANUARY–JUNE 1937, BY SIZE OF MONTHLY PAYMENT[a]

Size of Monthly Payment[b]	*Repossession Ratio*[c]	*Index of Repossession Experience*[d]	*% Distribution of All Contracts Financed*
$1.50– 4	7.1	+ 8	35.7
4– 8	6.7	+ 2	55.9
8–12	3.2	−52	6.4
12–20	3.4	−48	2.0
ALL APPLIANCES	6.6		100.0

[a] Based on data supplied by Electric Home and Farm Authority, covering 16,007 contracts.

[b] Each level is inclusive of the lower figure and exclusive of the higher.

[c] See Table 44, footnote c.

[d] See Table 44, footnote d.

size of monthly payment increases. This is evident from Table 49, which shows that the repossession ratio is twice as high when monthly payments are less than $8 as it is when they are more than this amount. Purchasers who commit themselves to larger monthly payments seem better able to judge their financial capacity and to maintain the subsequent payments, but another factor is that equity cumulates more quickly with larger instalment payments, thus heightening the customer's reluctance to lose possession of his purchase.

TYPE OF APPLIANCE AS A FACTOR IN REPOSSESSION

During the period under consideration over 80 percent of the contracts purchased by EHFA were for refrigerators, electric ranges and washing machines. Other types of electric appliances and combinations of two or more appliances accounted for the remainder. As shown in Table 50, washing machines had the highest proportion of repossessions (10 percent of all washing machines financed) and ranges had the lowest (3 percent); the repossession ratio does not show any significant variation for refrigerators, combinations, and "others."

The various appliances maintain roughly their average ranking, in regard to repossession ratio, regardless of note amount (although for notes of less than $200, combination purchases—of which one-fifth were in this class—showed the highest ratios), or down payment percentage, or contract length (except for the shortest and the longest contracts), or monthly payment percentage (although when payments took less than 2½ percent or from 5 to 7½ percent of monthly income, the miscellaneous purchases—of which over two-thirds were in these classes—had the lowest ratios). When payments took 2½ to 5 percent of monthly income, radios,

TABLE 50

REPOSSESSION EXPERIENCE, JANUARY 1937–JUNE 1938, ON APPLIANCES FINANCED DURING JANUARY–JUNE 1937, BY TYPE OF APPLIANCE[a]

Type of Appliance	*Repossession Ratio*[b]	*Index of Repossession Experience*[c]	*% Distribution of All Contracts Financed*
Refrigerators	6.5	− 2	53.4
Ranges	3.2	−52	14.8
Washing machines	9.9	+50	12.7
Combinations[d]	7.7	+17	11.7
Others[e]	6.6	0	7.4
ALL APPLIANCES	6.6		100.0

[a] Based on data supplied by Electric Home and Farm Authority, covering 16,007 contracts.

[b] See Table 44, footnote c.

[c] See Table 44, footnote d.

[d] Contracts for two or more appliances.

[e] Includes water heaters, water pumps, milk coolers, cream separators, clothes ironers, farm motors, vacuum cleaners, dishwashers, waste disposal units, feed grinders, milking machines, radios and portable space heaters; on each of these the number of repossessions was too small to allow of significant conclusions if tabulated separately.

on which information is available only for 1938,[10] showed the highest repossession ratio of any commodity (41 percent of radios were in this class), but when payments took 5-10 percent of income (45 percent of radios were in these classes) they showed notably lower ratios than most other appliances.

The most plausible reason why the ratio for washing machines is more than three times that of ranges seems to be that time-purchasers of electric ranges tend to be persons

[10] Before the fiscal year 1937-38 radios constituted less than 1 percent of all contracts financed by EHFA, but in that year they amounted to 8 percent of the total. The figures for income, tabulated as of September 30, 1938, on January-March 1938 contracts, include separate information on radios. According to these data the repossession ratios of the various appliances were: radios 4.8; washing machines 4.3; combinations 4.0; refrigerators 3.5; ranges 2.7; others 2.1—an average of 3.7.

with considerably larger incomes than the general run of washing-machine instalment purchasers. Income data, available for 1938 but not for 1937, show average monthly income to be $133 for the latter, but $158 for electric-range purchasers. Within any particular purchaser-income level the average ranking of the different appliances' repossession ratios varied considerably, with no discernible pattern. Radios had higher-than-average repossession ratios in all income levels except those between $125 and $200, which contained 42 percent of the radio contracts.

These tendencies suggest that differences in performance on instalment contracts covering different types of appliances are more attributable to income than to the type of appliance. It does not appear possible to argue that some appliances are necessities and others luxuries; all are of what might be called a semi-luxury character.

IMMEDIATE REASONS FOR REPOSSESSION

For electric appliances, as for automobiles, the available categories of immediate reasons for repossession are too indefinite and overlapping to afford much significant information. In Table 51, however, the reported reasons for EHFA repossessions have been arranged roughly in accordance with the categories used in the chapter on automobile repossession, in order to suggest the relative importance of the various reasons and the way in which the repossession ratio is distributed among them. The fact that nearly half of the cases are classified under "no information" and "unable to pay" indicates the difficulty of determining precise reasons for default. The "unable to pay" classification covers a great variety of possible difficulties—and probably includes many cases that should be classed under "reverses"—but of all these causes of repossession it is the one most capable of prediction. If those who eventually proved "unable to pay"

TABLE 51

PERCENTAGE DISTRIBUTION OF REPOSSESSIONS, JANUARY 1937–JUNE 1938, ON APPLIANCES FINANCED DURING JANUARY–JUNE 1937, AND DISTRIBUTION OF THEIR REPOSSESSION RATIO, BY REASON FOR REPOSSESSION[a]

Reason for Repossession	*Percentage Distribution of Repossessions*	*Distribution of Repossession Ratio*[b]
Financial Risk	*22.6*	1.5
Unable to pay	22.6	
Moral Risk	*31.3*	2.1
Moved off electric line	12.4	
Irresponsible	10.7	
Able but unwilling	8.2	
Reverses	*20.1*	1.3
Unemployment	15.1	
Illness in family	4.5	
Marital difficulty	.5	
Dissatisfaction and misunderstanding	*5.6*	.4
No information	*20.4*	1.3
ALL APPLIANCES	100.0	6.6

[a] Based on data supplied by Electric Home and Farm Authority, covering 1,049 repossessions.

[b] Ratios for individual reasons are computed by multiplying the ratio for all reasons (total number of repossessions per hundred contracts financed) by the percentages in the preceding column.

could have been detected in advance, just over one-fourth of the classifiable repossession cases might have been avoided.

Classifications of repossession experience by various presumably relevant factors, such as those presented here, are admittedly crude but they do afford a useful guide in considering credit policy. The foregoing analyses suggest that down payment percentage, purchaser's income and the proportion of monthly income required for monthly payment may be regarded as significant indicators of the likelihood of repossession.

But this is not to deny that it may still pay both the dealer and the finance company to accept dubious paper. If finance charges, dealer reserves, merchandise mark-ups and resale prices on repossessed merchandise are high enough, dubious deals may still be profitable. Moreover, the automatic rejection of any group of contracts, for the reason that they fall within a classification considered doubtful, is likely to mean the rejection also of contracts that would have been successful. Statistical analysis, if sufficiently extensive and sufficiently refined, can do much to narrow these limits of uncertainty, but even the most complete analysis must be supplemented, and perhaps modified, by careful judgment concerning the important factors that are incapable of analysis. And always the fact remains that some proportion of unsuccessful contracts—a higher or lower proportion, depending on operating policies and volume of business—is normal and inescapable in the large-scale extension of consumer credit.