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Volume Title: Government Agencies of Consumer Instalment Credit

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Volume Publisher: NBER

Volume ISBN: 0-870-14464-2

Volume URL: http://www.nber.org/books/copp40-1

Publication Date: 1940

Chapter Title: Claims Paid on Defaulted Notes

Chapter Author: Joseph D. Coppock

Chapter URL: http://www.nber.org/chapters/c4942

Chapter pages in book: (p. 54 - 90)

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Claims Paid on Defaulted Notes

One of the most important aspects of this study of consumer credit is the performance of borrowers in paying off the insured loans. It would be desirable, for example, to know how many paid off their loans in advance of the maturity date, how many were delinquent at different times, how many defaulted; and also the variations in behavior for borrowers of different types with respect to the diverse kinds of contract. Unfortunately, not all these questions can be answered satisfactorily. No data are available on the subject of prepayments, either for particular instalments or for entire loans, and there is little information concerning delinquencies, since collection of the instalment payments was left entirely to the individual insured institutions which sent FHA reports on this item only about once a year. On the other hand there are rather extensive data on defaults, which gave rise to claims by the lending institutions against FHA under the contracts of insurance. When borrowers had been in arrears on their instalments for a period of 60 days, insured institutions, provided they had attempted to collect the sums due, could within a period of 13 months after default file claims for the losses incurred.[1] After ascertaining the validity of the

[1] "Claim for reimbursement for loss on a qualified note may be made to the Administrator at any time after payment of such note has been in default for a period of 60 days and demand has been made upon the debtor for the full unpaid balance. . . . If within the first year after default the borrower has not made payments on his obligation aggregating at least 10 percent of the balance due on the date of default, claims must be made within 30 days thereafter."—Regulation No. 15, FHA Form FHE 1 (Revised July 20, 1936), p. 24. Thus institutions had 13 months during which claims could be filed after default on a single instalment.

claims, the Administration paid them promptly, and then itself attempted to recover the unpaid balance on the note from the borrower who had defaulted.

In this chapter, after a brief and necessarily sketchy treatment of delinquencies, attention will be concentrated upon the claims paid to lending institutions, the ratio of claims paid to loans insured with reference to the principal characteristics of the loans, and the distribution of claims cases according to the number of payments made before default.

DELINQUENCIES

Although the most satisfactory method of measuring delinquency is to express the number and dollar amount of delinquent instalments as percentages of the number and dollar amount of instalment payments due as of a specified date, FHA records do not provide sufficient information to allow for such calculations. It is necessary, therefore, to adopt what are evidently the next best measures, namely, the ratio of the number of loans on which there were delinquent payments to the number of loans outstanding and the ratio of the unpaid balances on delinquent loans to the total balances on all loans outstanding.

Delinquency estimates, obtained from reports sent to FHA by insured lending institutions, are available for only three dates:[2] November 30, 1936, February 28, 1938 and

[2] Estimates of outstandings, as of December 31, calculated on the basis of the distribution according to duration of loans and the distribution of notes insured by half years, were as follows for the years 1934-41:

	Estimated Outstandings (as of December 31)		*Outstandings as Percent of Total Notes Insured*	
Year	Number	Amount	By Number	By Amount
1934	73,000	$ 28,000,000	100.0	100.0
1935	701,000	205,000,000	99.0	81.0
1936	1,222,000	339,000,000	92.0	68.0
1937	1,052,000	187,000,000	73.0	33.0
1938	516,000	68,000,000	36.0	12.0
1939	123,000	16,000,000	9.0	3.0
1940	25,000	3,000,000	2.0	.5
1941	11,000	500,000	1.0	.1

January 31, 1939. For the first date, loan accounts which were delinquent 30 days or more constituted 4.6 percent of the total number of loans outstanding and the unpaid balances on all of these delinquent loans equaled 4.1 percent of the total dollar volume of outstandings as of that date.[3] For February 28, 1938, delinquent accounts amounted to 10.3 percent of the total number of loans outstanding, and the unpaid balances on these loans accounted for 8.9 percent of the total dollar volume of loans outstanding.[4] Outstandings dropped sharply as of January 31, 1939, when delinquencies amounted to 15.0 percent of the number of outstandings and unpaid balances on delinquent accounts to 14.5 percent of the dollar amount of outstandings.[5]

Delinquency ratios for finance companies, industrial banking companies and building and loan associations were approximately twice as high as those for commercial banks

[3] Outstandings as of November 30, 1936 were approximately 1,190,000 for about $333,000,000; delinquencies numbered 54,500 with unpaid balances of $13,500,000. This outstandings estimate was derived from the table in footnote 2, above. The estimate of delinquencies is based on reports from 530 of the 545 insured lending institutions, each of which had notes insured of $100,000 or more as of that date. These institutions accounted for over 80 percent of the total of notes insured, and it is assumed that the other institutions would have had the same delinquency ratio. The "unpaid balances" represent the total amount due on the notes, not merely the amount of the delinquent payments.

[4] Outstandings as of February 28, 1938 were estimated at 775,000 for approximately $198,000,000, delinquencies at 79,800, with unpaid balances of $17,600,000. These figures are derived from a tabulation of reports by 4,504 out of 6,289 institutions under the 20 percent reserve, and by 3,031 out of 4,154 institutions under the 10 percent reserve, a sample covering 72 percent and 73 percent respectively of the two totals.

[5] Outstandings as of January 31, 1939, numbering 309,819 for $53,457,340, apply to the notes insured under the original 20 percent reserve and the 10 percent reserve immediately following; they are short of the actual total by 10,251 for $2,600,123 because of failure of institutions to report. Only 10.7 percent of the number and 4.3 percent of the dollar amount of notes backed by the 20 percent insurance reserve were outstanding as of this date; 48.2 percent of the number and 20.0 percent of the amount of the old 10 percent reserve notes. Delinquencies noted by reporting institutions were 46,297, with unpaid balances of $7,791,911.

and savings banks.[6] As of February 28, 1938 delinquencies of 30 to 60 days amounted to 3.5 percent of the number of loans outstanding, those of 60 to 90 days to 1.9 percent, and those of over 90 days to 4.9 percent.[7] Notes insured under the 20 percent reserve plan which was in effect from August 1934 to April 1936 showed a higher delinquency ratio than did notes insured under the 10 percent reserve plan in operation from April 1936 to April 1937.[8]

CLAIMS PAID TO INSURED INSTITUTIONS, 1935-38

Claims[9] were first paid on Title I modernization notes during the second quarter of 1935; by the end of 1938, 84,598 claims for a total of $19,138,100 had been paid to insured institutions under the original act (see Table 11).[10] Of this

[6] See Table A-9, (1).
[7] See Table A-9, (2).
[8] See Table A-9, (3).
[9] Subject to the limitations imposed upon FHA by its maximum liability and upon individual insured institutions by the size of the insurance reserve, claims may include:

"(1) Net unpaid amount of advance actually made or the actual purchase price of the note, whichever is the lesser;

"(2) Uncollected earned interest (after default interest is not to be claimed at a rate to exceed 6 percent per annum and will be calculated to the date the claim is certified for payment . . .);

"(3) Uncollected late charges (see Regulation No. 4); [Regulation No. 4 reads as follows: 'Notes may provide for the payment by the maker of a late charge not to exceed five cents for each $1 of each payment more than 15 days in arrears, but not to exceed $5 in respect of any one such late payment. In lieu of, but not in addition to, late charge, the note may provide for interest on overdue payments from the due date of the payment at a rate not to exceed the maximum legal rate permitted in the jurisdiction where the loan is made.']

"(4) Uncollected court costs, including fees paid for issuing, serving, and filing summons;

"(5) Attorney's fees not exceeding 15 percent of the amount collected on the defaulted note;

"(6) Handling fee of $5 for each note, if judgment is secured, plus 5 percent of amount collected subsequent to return of unsatisfied property execution." —FHA Regulation No. 14, Form FHE 1 (Revised July 20, 1936).

[10] During the last quarter of 1938, 262 additional claims for $101,437 were paid to institutions insured under the revived act of February 3, 1938.

TABLE 11

CUMULATIVE NUMBER AND AMOUNT OF CLAIMS PAID ON NOTES INSURED WITH FHA, 1934–37, BY QUARTER-YEAR WHEN CLAIM WAS PAID[a] AND BY INSURANCE RESERVE

Year	*Quarter Ending*	*20 Percent Reserve*		*10 Percent Reserve*		*Both Reserves*	
		Number	Amount	Number	Amount	Number	Amount
1935	June 30	86	$ 36,496	...	...	86	$ 36,496
	Sept. 30	335	135,013	...	...	335	135,013
	Dec. 31	1,288	447,448	...	...	1,288	447,448
1936	Mar. 31	4,485	1,223,536	...	...	4,485	1,223,536
	June 30	9,191	2,249,035	...	...	9,191	2,249,035
	Sept. 30	17,825	4,223,607	7	$ 4,540	17,832	4,228,147
	Dec. 31	26,494	6,283,324	109	49,009	26,603	6,332,333
1937	Mar. 31	33,927	7,995,694	543	231,770	34,470	8,227,464
	June 30	40,307	9,421,831	1,476	563,875	41,783	9,985,706
	Sept. 30	45,651	10,588,673	2,865	1,075,198	48,516	11,663,871
	Dec. 31	50,794	11,509,410	4,633	1,713,820	55,427	13,223,230
1938	Mar. 31	55,338	12,303,234	6,507	2,375,621	61,845	14,678,855
	June 30	62,105	13,404,992	9,551	3,343,982	71,656	16,748,974
	Sept. 30	66,701	14,058,813	12,186	4,076,093	78,887	18,134,906
	Dec. 31	70,407	14,504,432	14,191	4,633,668	84,598	19,138,100

[a] Based on claims paid June 1935-December 1938.

total, 70,407 claims for $14,504,432 were paid out under the 20 percent insurance reserve plan and the remainder, 14,191 for $4,633,668, under the 10 percent reserve plan. Claims under the smaller reserve were first paid out during the latter part of 1936. Cumulative totals, as of selected dates, are shown in Table 11 for both reserves.[11] On the assumption that the final dollar amount of claims paid will equal 5 percent of the face value of notes insured,[12] the total payment to lending institutions by 1942 is estimated at $28,000,000, a figure considerably below the $100,000,000 allowed by Congress. The major portion of the claims paid will reimburse institutions for funds advanced and not repaid, while the remainder will represent a gross return to the lending institutions above funds advanced.[13] The size of this return, as calculated on the basis of the claims paid through February 1938, is shown in Table 12. The average net proceeds outstanding on claims paid notes from the date the loan was made to the date when the claim was paid (estimated at one year) was $235, and the average amount received in addition to the original net proceeds advanced was $25. This is an average rate of gross return per annum on claims paid notes of 10.6 percent, and is to be compared with the 9.7 percent return on non-defaulting notes.[14]

Since administrative costs for the whole period 1934-42 are

[11] Only 15 claims for $2,237 were paid by December 31, 1938 on the catastrophe loans insured in 1936, 1937 and 1938; all of these claims were on loans of $2,000 or less, with $1,731 under the 20 percent reserve in effect on catastrophe loans after April 1937 and $506 under the 10 percent reserve in effect April 1936 to April 1937. Of the claims paid on insured loans under the 20 percent reserve plan through December 31, 1938, $13,790,671 were on loans of $2,000 or less and $712,030 on loans of $2,000-50,000. Under the 10 percent reserve there were claims for $4,233,537 on loans of $2,000 or less and of $399,625 on loans of $2,000-50,000. Thus the total claims paid on loans of $2,000 or less amounted to $18,024,208, or 94 percent of the dollar amount of all claims paid.

[12] See Table 13, below, for method of estimate.

[13] See footnote 9, above, for items included in claims.

[14] It is recognized, of course, that a considerable part of this return of $25 might well be set off against expenses incurred in attempts to collect the loan.

TABLE 12

AVERAGE VALUES OF CERTAIN CHARACTERISTICS OF NOTES OF $2,000 OR LESS INSURED WITH FHA, 1934–37, ON WHICH CLAIMS WERE PAID[a]

Characteristic	*Average Value*
Amount of defaulted note	$318
Amount of credit[b]	$277
Amount of finance charge[c]	$ 41
Amount received by institution from borrower[d]	$ 69
Amount of claim paid	$233
Total amount received by institution	$302
Amount received by institution above net proceeds	$ 25
Net proceeds outstanding from date of loan to date claim was paid[e]	$235
Per annum rate of gross return realized on claims paid notes[f]	10.6 percent

[a] Based on claims paid through February 1938.
[b] Net proceeds to borrower.
[c] At 5 percent per annum discount on a 36-month note, as shown in FHA "Discount Table." Average length of contract was weighted by amount.
[d] On the average, 6.8 monthly payments, averaging $10.12 each and totaling $69, were remitted to the lending institution by the borrower before default.
[e] Weighted average of net proceeds outstanding.
[f] Since the time period is one year, $25 as a percent of $235 (10.6 percent) is the rate of gross return per annum.

estimated at only $12,000,000,[15] the $28,000,000 claims paid will constitute the principal cost of the FHA modernization insurance program. Recoveries by FHA on defaulted loans amounted to $6,000,000 by December 31, 1938 and are expected to reach $10,000,000 by 1942, so that the total esti-

[15] FHA total administrative expenses for July 1, 1934 to June 30, 1937 ($29,000,000) are apportioned arbitrarily between Title I and Title II on the basis of volume of loans insured, so that Title I is charged with about $10,000,000; another $2,000,000 is added as expense of handling claims for 1937-42.

mated net expense to the government by that date comes to $30,000,000.[16] Thus for the 1,450,503 notes insured, the cost to the government per note is estimated at $21, as of 1942, and the payment to the insured institutions per note insured at $19.[17]

RATIO OF CLAIMS PAID TO NOTES INSURED

Although the analysis of experience for a large body of loans is of some assistance in the development of credit standards, it should be recognized that the persons to whom FHA loans were made represent a selection not only from the general population but also from the applicants themselves, and that the different patterns which emerge in the present discussion must not be considered altogether representative of consumer-borrowers in general. Nevertheless, empirically-developed lending standards can be formulated only on the basis of actual experience, and the FHA record, thanks to the breadth of its coverage, must therefore be regarded with appreciable interest.

Most of the remainder of this chapter is given over to the comparison of "claims paid percentages"—number of claims paid as a percent of the number of notes insured, and dollar amount of claims paid as a percent of the dollar amount of notes insured—with the view to discovering the conditions, either in the terms of the loan contracts or in the situations of the borrowers, which underlay the chief differences in

[16] Accounts on which claims had been paid to insured lending institutions were turned over to the United States Treasury for collection or settlement. See above, Chapter 2, p. 26.

[17] FHA was also prepared to make loans to cooperating lending institutions. Section 3 (Title I) of the National Housing Act authorized the Administration to advance loans secured by insured modernization notes to institutions holding them. It was repealed April 3, 1936. "Six loans were made under section 3, totaling $141,000. Five of these loans have been entirely repaid. The sixth loan, originally for $5,000 was still outstanding on December 31, 1937, in the amount of $2,199.95."—*Fourth Annual Report of the Federal Housing Administration* for the year ending December 31, 1937, p. 96.

performance on contracts. In the discussion to follow, the "claims paid percentage by amount" is ordinarily stressed because FHA was concerned primarily with the dollar amount of such claims in relation to the dollar volume of loans insured; most tables, however, show also the "claims paid percentage by number" because this ratio is useful in comparing the experience of FHA with that of other institutions. Presumably all insured financial institutions took full advantage of their right to file claims for payment with FHA, so that the record of experience may be considered essentially correct in showing the FHA insured loans on which further collections were extremely unlikely. It is reasonable, then, to regard the claims paid experience of FHA as analogous to the "charge-off" experience of personal finance companies, the "repossession" experience of sales finance companies, the "loans defaulted" experience of other lending institutions, or the "bad accounts" experience of business organizations that sell goods on credit.[18]

The data show that no claims were paid on the modernization loans until the second quarter of 1935, after which time the claims paid percentage increased. The claims paid percentages, cumulative through December 31, were as follows:

	Claims Paid as Percent of	
Year	Number of Notes	Amount of Notes
1935	.2 %	.2 %
1936	2.0	1.3
1937	3.8	2.4
1938	5.8	3.4

By December 31, 1938 this entire body of loans had been

[18] The reader should be cautioned against interpreting the claims paid experience as "loss experience," for two reasons: (1) some recoveries were made by FHA on the defaulted loans for which insured institutions had received payments from FHA; and (2) except for this offsetting item of recoveries on defaulted loans, all of the outlays of FHA in connection with the Title I modernization loan insurance were "losses," for neither the insured institutions nor the borrowers paid a premium to FHA and there was no way of allocating FHA expenditures between the loans which were repaid as scheduled and those which defaulted.

outstanding anywhere from 20 months to 52 months, but an average of 36 months. The rate of increase of the claims paid percentage slowed down markedly in 1938; thus the percentage by amount was 2.5 as of February 28, 3.2 as of September 30, 3.3 as of October 31, and 3.4 as of December 31, 1938.[19]

What are the best estimates that can be made of the claims paid percentage over the years 1939-42 and of the final claims paid percentage? Evidently the most satisfactory procedure for deriving such estimates is to extend the trend through the average claims paid percentages arranged according to the number of months elapsed after the month of insurance. For a body of loans outstanding twelve months, therefore, the most likely claims paid percentage by amount is 1.4, i.e., the average of the 33 claims paid percentages for notes insured in each of the 33 months (August 1934 through April 1937) after each month's notes had been outstanding 12 months. For loans which had been outstanding 24 months, the average claims paid percentage is 2.9 and for those which had been outstanding 36 months, 3.8. Extension of this trend up to 60 months, the maximum duration of FHA insured loans, would seem to indicate a final claims paid percentage of less than 5 by dollar amount. These estimates have been made on the basis of the claims paid through October 1938, and are shown in Table 13.

The validity of this extrapolation depends, of course, upon whether substantially the same influences on borrowers' re-

[19] The increase in these ratios was almost inevitable after the early part of 1937, for no regular modernization notes were insured after that time under the original plan and any claims paid would have had the effect of raising the claims paid percentages. The divergence in the claims paid percentages by number and by amount arises from the fact that the dollar amount of claims paid tends to become smaller the longer notes have been outstanding, since they have smaller unpaid balances when they go into default. The average size of claim paid per defaulted note in 1935 was $347, in 1936, $232, in 1937, $241 and in 1938, $203. The claims paid percentage by number was not affected by this decline in the dollar amount of claims.

TABLE 13

AVERAGE CLAIMS PAID PERCENTAGES BY AMOUNT FOR NOTES INSURED WITH FHA, 1934–37, AND PERCENT OF ESTIMATED TOTAL CLAIMS, BY NUMBER OF MONTHS ELAPSED BETWEEN DATE OF NOTE AND DATE OF PAYMENT[a]

Number of Months Elapsed	*Average Claims Paid Percentage*[b]	*Percent of Estimated Total Claims*
0	.00	.0
2	.02	.4
4	.1	2.5
6	.4	7.4
8	.7	14.5
10	1.1	21.0
12	1.4	27.8
18	2.2	43.0
24	2.9	58.1
30	3.4	68.8
36	(3.8)	76.0
42	(4.1)	82.0
48	(4.4)	88.0
54	(4.7)	94.0
60	(5.0)	100.0

[a] Based on claims paid through October 1938.

[b] Simple average of claims paid percentages for notes insured in each month. Percentages in parentheses were derived from straight-line trend, on the assumption that final claims paid percentage would be 5 percent of the dollar volume of notes insured for the entire period from August 1934 to April 1937. Insured notes had a maximum duration of 60 months.

payment habits will obtain in 1939-42 as in the period 1934-38, or at least upon the presence of equivalent offsetting factors. There is no satisfactory statistical technique for estimating the probable error in the suggested final claims paid percentage of 5.0. Data were not readily available for estimating the final claims paid percentage by number, but that ratio will almost certainly be higher.[20] This method of esti-

[20] Because smaller-than-average notes had a worse record than those of larger-than-average size, and claims paid per note varied directly with size of note. See below, pp. 81-83.

mating the volume of claims to be paid is probably superior to the mere extension into the future of the claims paid percentage on a body of loans as of a given date, regardless of the time of their origin, since this method takes more accurately into account the length of time that the loans have been outstanding.

CLAIMS PAID BY SIZE OF INSURANCE RESERVE

The notes insured under the 20 percent reserve in effect from August 1934 to April 1936 had a higher claims paid percentage than those insured under the 10 percent reserve from April 1936 to April 1937. As of December 31, 1938 the claims paid percentage on modernization loans under the 20 percent reserve was 3.9 and under the 10 percent reserve 2.4, as compared with the general ratio of 3.6. The consistently lower claims paid percentage under the 10 percent reserve is not, however, to be attributed to the difference in insurance reserve *per se*—although it may be assumed that a drop in insurance protection would tend to make lenders more cautious—but rather to the inclusion of loans for the purchase and installation of detachable equipment for the last 10 months during which the 20 percent reserve was in effect as well as to the fact that by December 31, 1938 the 20 percent reserve notes had been outstanding, on the average, almost a year longer than the 10 percent reserve notes.[21]

Table 14 shows variations in the claims paid percentages, as of October 31, 1938, according to both the quarter of the year in which the notes were written and the size of the insurance reserve. The range by quarters extended from a

[21] It might be supposed that loans of $2,000-50,000, first insured in July 1935 under the May 28, 1935 amendments, would have contributed to the higher claims paid percentage from that date onward. This was not the case, however, for the ratio for these loans as of December 31, 1938 was lower (2.0 percent by amount) than that for all notes (3.4 percent by amount).

TABLE 14

PERCENTAGE DISTRIBUTION OF AMOUNT OF NOTES INSURED WITH FHA, 1934–37, AND OF CLAIMS PAID, WITH CLAIMS PAID PERCENTAGES, BY INSURANCE RESERVE AND QUARTER-YEAR WHEN LOANS WERE MADE[a]

Insurance Reserve	*Year*	*Quarter Ending*	*Percentage Distribution*		*Claims Paid Percentage*
			Amount of Notes Insured	Amount of Claims Paid	
20 percent			*65.8*	*77.0*	*3.8*
	1934	Sept. 30[b]	1.0	.4	1.2
		Dec. 31	4.9	3.4	2.3
	1935	Mar. 31	4.6	3.2	2.3
		June 30	9.7	7.2	2.4
		Sept. 30	14.6	19.7	4.5
		Dec. 31	15.2	21.1	4.6
	1936	Mar. 31	15.8	22.0	4.6
10 percent			*34.2*	*23.0*	*2.2*
	1936	June 30	7.4	4.1	1.8
		Sept. 30	9.7	7.2	2.4
		Dec. 31	8.8	7.6	2.9
	1937	Mar. 31	8.3	4.1	1.6
BOTH RESERVES			100.0	100.0	3.3

[a] Based on claims paid through October 1938. Loans had to be reported to FHA within 31 days after being made; hence tabulations according to the quarter-year when the notes were insured would be slightly different from these figures.

[b] Two months only.

low of 1.2 to a high of 4.6 and the average was 3.3. The first quarter of 1936 had the highest claims paid percentage by amount; this period preceded the reduction of insurance protection from 20 to 10 percent and the elimination of movable equipment loans from the eligible list. The lowest claims paid percentage applied to notes written in the two months

August and September 1934, when the plan was just getting started.[22]

The quarter-to-quarter changes in the claims paid percentages seem to be connected with the modifications of the regulations governing eligibility of type of improvement rather than with the time of year in which the loans were made and insured or with the size of the insurance reserve. The claims paid percentage was twice as high (4.6) for the period from July 1935 to April 1936, when movable equipment loans could be insured, as for the periods from August 1934 to June 1935 and from April 1936 to April 1937, during which such equipment loans were not insurable. When the same rules regarding type of improvement applied under the 20 and 10 percent reserves, the claims paid percentages were 2.3 and 2.2, respectively.[23] It seems probable that the final claims paid percentage for the July 1935-April 1936 groups will be between 6 and 7 percent, for the August 1934-June 1935 groups between 3 and 4 percent, and for the months May 1936-April 1937 slightly lower still.[24]

Since the claims paid percentages for the two periods August 1934-June 1935 and April 1936-April 1937 followed such similar directions, the presumption is that the change from a 20 percent to a 10 percent reserve did not have any appreciable effects upon the claims paid ratio. The slightly higher percentage which prevailed for the earlier period

[22] FHA has prepared tables showing the claims paid percentages according to the month when loans were made, but their accuracy for general purposes is impaired by administrative complications, most of which do not affect the quarterly breakdown. According to these tables the highest percentage for any single month in the entire range of 33 months is credited, as of October 1, 1938, to August 1934 (6.2 percent); this high percentage for the first month of operation cannot be explained satisfactorily.

[23] These percentages are not strictly comparable because the first group of loans had been outstanding an average of three and one-half years as of October 31, 1938, when these tabulations were made, and the second group only an average of two years.

[24] See Table A-10 for a projection of the claims paid percentage on notes insured in these three periods.

when the 20 percent reserve was in force might, however, indicate an initial tendency toward laxity on the part of lending institutions in extending these loans.

CLAIMS PAID BY TYPE OF PROPERTY AND TYPE OF IMPROVEMENT

The percentage of notes insured on which claims were paid varied according to the general type of property improved (single-family as compared with other than single-family structures) and according to the type of improvement (alterations, additions and repairs as compared with detachable equipment). For loans of $2,000 or less,[25] as of February 28, 1938, the claims paid percentage by dollar amount was 2.4 for single-family dwelling loans and 3.2 for loans applied to other than single-family structures, as is shown in Table 15. Other than single-family dwelling notes had a comparatively high claims paid percentage not only because they represented a larger proportion of machinery and equipment loans than did those for single-family dwellings, but also because they had a worse record for alterations, additions and repairs.[26] If all of the residential property[27]—single-family houses, multiple dwellings and farms—is considered as a group, the

[25] For notes of $2,000-50,000 (all for the improvement of other than single-family structures) the claims paid percentage was 2.0 by amount, as of December 31, 1938. The ratio was 2.5 for 20 percent reserve notes and 1.5 for 10 percent reserve notes, but on December 31, 1938 the latter had been outstanding about one year less than the former. See below for fuller discussion of the experience with these larger notes.

[26] It is perhaps appropriate to point out here that claims paid on catastrophe notes, first insured in April 1936, were very small; they made up 0.2 percent by amount of the notes of $2,000 or less, and were not represented at all among notes of more than $2,000, as of December 31, 1938. The claims paid percentage on these $2,000 or less catastrophe notes was 0.64 under the 10 percent reserve (April 1936-April 1937) but only 0.15 under the 20 percent reserve (April 1937-December 1938). The 20 percent reserve applied only to catastrophe notes written after April 1937 and before February 1938.

[27] Total residential property accounted for 88 percent of the number and 80 percent of the volume of notes insured.

TABLE 15

PERCENTAGE DISTRIBUTION OF NOTES OF $2,000 OR LESS INSURED WITH FHA, 1934–37, AND OF CLAIMS PAID, WITH CLAIMS PAID PERCENTAGES, BY TYPE OF PROPERTY AND IMPROVEMENT[a]

Type of Property and Improvement	PERCENTAGE DISTRIBUTION				*Claims Paid Percentage*	
	Notes Insured		*Claims Paid*			
	No.	Amt.	No.	Amt.	No.	Amt.
Single-family dwellings	*67.4*	*59.8*	*60.8*	*52.6*	*3.7*	*2.4*
Additions, alterations or repairs	37.3	40.9	24.8	29.3	2.7	1.9
Machinery and equipment	30.1	18.9	36.0	23.3	4.9	3.3
Other than single-family dwellings	*32.6*	*40.2*	*39.2*	*47.4*	*4.9*	*3.2*
Additions, alterations or repairs	15.9	23.1	11.3	19.5	2.9	2.3
Machinery and equipment	16.7	17.1	27.9	27.9	6.7	4.4
Both types of property	*100.0*	*100.0*	*100.0*	*100.0*	*4.1*	*2.7*
Additions, alterations or repairs	53.2	64.0	36.1	48.8	2.8	2.1
Machinery and equipment	46.8	36.0	63.9	51.2	5.5	3.8

[a] Based on claims paid through February 1938.

claims paid percentage by amount was 2.6, somewhat less than that for all non-residential property.[28] As has been suggested above, the claims paid percentage was higher on loans for improvements classified as machinery and equipment than on those for additions, alterations and repairs. For loans

[28] For the different types of non-residential property, retail stores and manufacturing plants had the worst records, while non-residential farm property and institutions (hospitals, churches, schools, etc.) had the best. See Table A-11.

of $2,000 or less, as of February 28, 1938, the claims paid percentage by dollar amount was 3.8 for machinery and equipment loans and 2.1 for additions, alterations and repair loans. Too much significance should not be attached to this difference, for the division of loans into these two categories was necessarily arbitrary and in many cases a loan was used for more than a single purpose.

It is possible that lenders were less careful in making loans for the purchase and installation of removable machinery and equipment than they were in making loans for additions, alterations and repairs because they assumed that durable chattels could be recovered in fairly good condition in case of default, whereas additions, alterations or repairs would become a part of the real property and would be difficult to repossess, while the loans advanced to cover them would be hard to collect through legal action.[29] It may be that in the case of durable articles purchased on time, lenders tried to arrange the duration of the contracts so that they would not lose much, if anything, by repossessing, reconditioning and reselling the chattels; and it is equally understandable that when the loan was to be used to make attached improvements which were not susceptible of such relatively easy physical recovery, the lenders would insist on compensating credit requirements, and that the final claims paid percentage would therefore be lower for this type of loan.

As between the two characteristics considered in this section, type of property and type of improvement, the latter appears to be the more crucial test of credit risk. This conclusion is based upon the fact that the claims paid percentage on loans for the improvement of other than single-family structures was only 33 percent above that on loans for single-family dwelling changes, whereas the claims paid percentage

[29] Especially if there are prior mortgage liens on the property it is difficult, if not impossible, to make physical repossession of improvements.

for machinery and equipment loans was 80 percent above that for loans for additions, alterations and repairs.

The underlying reasons for the tendencies just noted appear to center around the divergent attitudes of borrowers with respect to home and business properties and obligations. Many individuals, especially those of the small-propertied group which is credited with supplying most of the borrowers under the FHA insured loan plan, are seemingly disposed to keep their homes free from financial involvements, whether because of sentiment regarding the home, a desire to maintain social prestige, or other motives. On the other hand, it may be assumed that they have fewer qualms about being sued in connection with business deals. Although these explanations are offered only as hypotheses, it is likely that there are some elements in the customs or attitudes of the middle class—over and above any specific differences in the loan contracts or even variations among the borrowers themselves—which are basic to the performance pattern here described.[30]

CLAIMS PAID BY TYPE OF LENDING INSTITUTION

By December 31, 1938, 2,142 institutions, or about one-third of the 6,433 which made insured loans under the original

[30] It is possible that this difference in the claims paid percentage was a temporary phenomenon, brought about by the fact that business activity went into a sharp decline in late 1937, but it seems unlikely that such was the case. The only factual information whereby this suggestion may be tested is that provided by a tabulation of the number of applications for claims by lending institutions according to the month when the applications were received by FHA: the number per month rose from 2,028 in August 1937 to 3,060 in January 1938; this change represented an even greater percentage of outstandings, inasmuch as outstandings were probably declining during the period following the expiration in April 1937 of the privilege of insuring new loans. Since the monthly average of claims applied for was 2,534 for 1936, 2,427 for 1937, and 2,528 for 1938—although these were set against a declining volume of outstandings beginning in 1937—it does not appear reasonable to attribute to the decline in business activity much influence on the difference in the claims paid percentages for single-family and other types of structures.

modernization program, had received payments on the basis of claims they had filed with FHA. About a third (1,903) of the 5,808 commercial banks participating in the scheme received payments, while claims were paid to nearly three-fourths of the finance companies and industrial banking companies which had insured loans with FHA.[31]

The fact that more than twice as large a proportion of the insured finance companies and industrial banking companies, as compared with the commercial banks, received payments from the government for losses incurred on modernization loan contracts may be attributed chiefly to two circumstances. In the first place, it seems probable that finance companies and industrial banking companies tended to make loans to persons who had smaller economic resources than the customers of commercial banks. In the second place, it is likely that most of the finance companies and industrial banking companies which participated in the program expected to make substantial use of the insurance, while many commercial banks had apparently joined up merely as an experimental or cooperative gesture in response to local or governmental persuasion. Furthermore, the higher proportion of institutions of all types receiving payments under the 10 percent reserve as compared with the 20 percent reserve would seem to indicate that those which found that they were incurring only insignificant losses did not continue to insure loans after April 1936.

Although it is of interest to determine what proportion of the various types of insured institutions received any payments at all from FHA, a more accurate measure of the differences among them is provided by the claims paid percentages for the notes insured according to type of institution (see Table 16). These data bear out the observation that the collection experience of commercial banks was better than

[31] See Table A-12, which shows what percent of institutions had received payments from FHA by size of insurance reserve, as of December 31, 1938.

TABLE 16

PERCENTAGE DISTRIBUTION OF NOTES INSURED WITH FHA, 1934–37, AND OF CLAIMS PAID, WITH CLAIMS PAID PERCENTAGES, BY TYPE OF INSTITUTION[a]

Type of Institution	PERCENTAGE DISTRIBUTION				*Claims Paid Percentage*	
	Notes Insured		*Claims Paid*			
	No.	Amt.	No.	Amt.	No.	Amt.
Commercial banks	*67.0*	*70.5*	*51.2*	*53.7*	*4.4*	*2.6*
National banks	42.8	44.1	33.8	34.9	4.6	2.7
State banks and trust companies	24.2	26.4	17.4	18.8	4.2	2.4
Other lending institutions	*33.0*	*29.5*	*48.8*	*46.3*	*8.6*	*5.4*
Finance companies	25.3	22.0	36.7	36.4	8.5	5.6
Industrial banking companies	6.3	5.8	11.5	9.2	10.5	5.4
Building and loan associations	.6	.8	.2	.2	1.5	1.0
Savings banks	.7	.7	.3	.4	2.6	1.9
Credit unions	.1	.1	(.01)	(.02)	1.3	1.2
Others	(.04)	.1	.1	.1	9.2	5.0
ALL INSTITUTIONS	100.0	100.0	100.0	100.0	5.8	3.4

[a] Based on claims paid through December 1938.

that of all other institutions taken as a group. Whereas the claims paid percentage by number of notes insured was 4.4 for commercial banks, it was 8.6 for the remaining types, and whereas it was 2.6 by amount for commercial banks, it was 5.4 for all the other types together. National banks had slightly higher percentages than state banks. Finance companies had the worst record by dollar amount and industrial banking companies the worst by number of notes insured.

Building and loan associations and credit unions, on the other hand, reported the best performances.

There is some indication that the claims paid percentage varies inversely with the average size of note insured for all types of insured institutions. The notes insured by the commercial banks were, on the whole, larger than the average of $386 and their claims paid percentage was smaller. The notes insured by finance companies and industrial banking companies were lower on the average than $386 while in general their claims paid percentages were above average. All of the different types of institutions except those classed as "others" evidenced this inverse relationship between average amount of note and percentage of claims paid.[32]

The four principal types of financial institutions—national banks, finance companies, state banks and industrial banking companies—had substantially the same rankings with respect to claims paid percentages in the different census regions of the country: Finance companies were highest in every region except the Middle Atlantic, where they dropped into second place after industrial banking companies.[33]

If types of lending institutions are cross-classified according to volume groups, it is found that the claims paid percentage rose in proportion to the volume of notes insured. As is

[32] The four types of institutions which furnished 98 percent of the number and dollar amount of notes insured under the two reserves combined—national banks, finance companies, state banks and industrial banking companies—had higher claims paid percentages (by amount) under the 20 percent reserve than under the 10 percent reserve; the other four types had the opposite experience. The claims paid percentage by amount for all types was 3.9 under the 20 percent reserve and 2.4 under the 10 percent reserve. Finance companies and industrial banking companies had the highest claims paid percentages under both reserves and national banks had a somewhat poorer record than state banks for both reserves. Building and loan associations had the lowest claims paid percentages for both reserves, with credit unions only slightly higher. This tabulation was made as of December 31, 1938.

[33] See Table A-5 for cross-classification with reference to region and state where institutions were located, and type of institution.

TABLE 17

PERCENTAGE DISTRIBUTION OF NOTES INSURED WITH FHA, 1934–37, AND OF CLAIMS PAID, WITH CLAIMS PAID PERCENTAGES, BY VOLUME GROUPS[a]

Volume of Notes Insured Per Institution[b]	PERCENTAGE DISTRIBUTION				*Claims Paid Percentage*	
	Notes Insured		*Claims Paid*			
	No.	Amt.	No.	Amt.	No.	Amt.
Under $100,000	*15.9*	*16.4*	*8.2*	*7.3*	*2.7*	*1.7*
100,000 & over	*84.1*	*83.6*	*97.8*	*92.7*	*4.5*	*2.8*
100,000–500,000	16.0	16.9	13.6	12.4	3.5	1.9
500,000–1,000,000	6.5	6.9	5.9	6.6	3.7	2.4
1,000,000 & over	61.6	59.8	72.3	73.7	4.8	3.1
ALL GROUPS	100.0	100.0	100.0	100.0	4.1	2.5

[a] Based on claims paid through February 1938.
[b] Each level includes the lower figure and excludes the higher.

shown in Table 17, institutions which insured $1,000,000 or more of notes had an average claims paid percentage by amount of 3.1 as compared to the general average of 2.5 (as of February 28, 1938). Institutions with less than $100,000 of notes insured had an average claims paid percentage by amount of only 1.1. Intermediate-volume institutions had slightly higher claims paid percentages. The same point can be brought out also from the following data: the 596 institutions, each of which had insured notes of $100,000 or more, and which together accounted for 84 percent of the total dollar volume of notes insured, received 93 percent of the dollar amount of claims; but the 5,837 institutions which had insured less than $100,000 worth of notes apiece furnished 16 percent of the number and received only 7 percent of the dollar amount of claims.[34]

[34] By February 28, 1938, claims had been paid to all of the 121 institutions with more than $500,000 of notes insured, to 421 of the 475 with a volume of $100,000-500,000, and to 1,256 of the 5,837 with less than $100,000 volume. Only 28 percent of the total number of institutions which had insured loans had received payments from FHA as of this date.

A detailed analysis of the experience of these 596 institutions with the largest volume reveals that size of lending institution as measured by total resources had no significant effect on the claims paid percentage, that neither size of the city nor region of the country where the institution was located had any appreciable influence, and that the pattern with reference to type of lending institution and average size of note was substantially the same for this large-volume group as for the general body of insured institutions.[35]

CLAIMS PAID BY LOCATION OF PROPERTY

Claims paid percentages varied substantially from state to state but only slightly from region to region (see Table 18). Whereas the claims paid percentage by number, as of October 31, 1938, was 5.6 for the entire United States, it was highest (8.3) in the West South Central region and lowest in the Mountain states (4.2). Calculated by amount, the percentage likewise was highest for the West South Central region (4.6) and lowest for the Mountain region (2.5), as compared to the national average of 3.3 percent.[36] The seven states with the highest claims paid percentages were, in order, Arkansas (13.7 by number and 8.3 by amount), Florida (9.3 by number and 5.7 by amount), South Carolina (8.9 by number and 4.7 by amount), New Jersey (8.8 by number and 4.9 by amount), Michigan (8.6 by number and 4.2 by amount), Oklahoma (8.2 by number and 4.1 by amount) and Louisiana (8.0 by number and 4.5 by amount). Five of these seven states are in southern regions, but the claims paid percentages for the three southern regions as a whole virtually equaled the national average. The two states with the largest dollar volume of loans, New York and California, had slightly better than average performance records.

[35] The tables giving this detailed analysis have not been reproduced.
[36] Table A-8 provides a more detailed record by states and by regions.

TABLE 18

PERCENTAGE DISTRIBUTION OF NOTES INSURED WITH FHA, 1934–37, AND OF CLAIMS PAID, WITH CLAIMS PAID PERCENTAGES, BY REGIONS[a]

Region	PERCENTAGE DISTRIBUTION				Claims Paid Percentage	
	Notes Insured		Claims Paid			
	No.	Amt.	No.	Amt.	No.	Amt.
New England	6.7	6.8	5.3	6.1	4.4	3.0
Middle Atlantic	28.4	33.3	32.3	37.0	6.3	3.7
East North Central	17.9	15.9	17.5	14.2	5.5	2.9
West North Central	6.8	6.2	6.3	5.7	5.2	3.0
South Atlantic	7.5	8.1	7.7	8.1	5.7	3.3
East South Central	3.4	3.3	3.5	3.2	5.7	3.2
West South Central	5.8	5.0	8.7	7.0	8.3	4.6
Mountain	3.1	3.2	2.3	2.4	4.2	2.5
Pacific	20.4	18.2	16.4	16.3	4.5	2.9
ALL REGIONS	100.0	100.0	100.0	100.0	5.6	3.3

[a] Based on claims paid through October 1938.

The seven states with the lowest claims paid percentages were Montana (2.7 by number and 1.2 by amount), Minnesota (2.2 by number and 1.3 by amount), Wisconsin (3.0 by number and 1.8 by amount), District of Columbia, here considered as a state (2.7 by number and 1.9 by amount), Wyoming (2.9 by number and 1.9 by amount), New Mexico (3.5 by number and 2.0 by amount), and Iowa (3.4 by number and 2.0 by amount). With the exception of the District of Columbia all of these states were in the Middle West and Mountain regions.

Several correlation tests were made in an attempt to explain the variations in the claims paid percentage among states. It was found that as the average size of note increased, the claims paid percentage decreased; that as per capita income increased, the claims paid percentage decreased; and that as the ratio of note to per capita income increased, the claims paid percentage likewise increased.[37] These findings, nevertheless, failed to account for all the variations observed. It is possible that most of the differences reflect other and perhaps more complex factors than those which have been singled out for analysis.

CLAIMS PAID BY LENGTH OF CONTRACT

When claims paid percentages are compared with respect to the duration of loans insured, it appears that the loans for 30 and 36 months had the worst records. Both these classes had higher-than-average claims paid percentages, while shorter- and longer-term notes had lower percentages. The lowest claims paid percentage, both by number and by amount, was for notes of 12 months or less, although 60-month notes had only slightly higher ratios. The divergence in the relative positions of the claims paid percentages by number and by amount arises from the fact that longer-term notes tended to have larger claims paid by amount because they were usually written for larger sums than the shorter-term notes. In general, as may be seen in Table 19, the claims paid percentage increased until it reached a maximum at 30-36 months and then declined as length of contract increased up to 60 months.

[37] The coefficient of correlation (r) between average amount of note insured and the claims paid percentage by number, by states, was —0.405; and between average amount of note insured and claims paid percentage by amount, by states, —0.393. These values are probably high enough to indicate a directional tendency.

The coefficient of correlation (r) between per capita income in 1929 (as estimated by the Brookings Institution) and claims paid percentage by number, by states, was —0.421; and between per capita income and claims paid percentage by amount, by states, —0.834. These values, especially the latter, are probably large enough to be accepted as significant.

The coefficient of correlation (r) between the ratio of average amount of note insured to per capita income and the claims paid percentage by number, by states, was +0.341; and between the ratio of average amount of note insured to per capita income and the claims paid percentage by amount, by states, +0.116. These values cannot be considered significant.

TABLE 19

PERCENTAGE DISTRIBUTION OF NOTES INSURED WITH FHA, 1934–37, AND OF CLAIMS PAID, WITH CLAIMS PAID PERCENTAGES, BY CONTRACT LENGTH[a]

Contract Length[b]	PERCENTAGE DISTRIBUTION				Claims Paid Percentage	
	Notes Insured		Claims Paid			
	Number	Amount	Number	Amount	Number	Amount
12 months	12.2	5.9	6.5	2.6	2.2	1.2
18 "	9.2	4.8	8.6	3.5	3.8	2.0
24 "	15.5	11.5	14.3	8.8	3.7	2.1
30 "	5.6	3.6	7.8	4.6	5.7	3.4
36 "	52.2	60.5	59.8	71.6	4.6	3.2
48 "	2.0	2.9	1.1	2.3	2.3	2.1
60 "	3.3	10.8	1.9	6.6	2.3	1.6
ALL LENGTHS	100.0	100.0	100.0	100.0	4.1	2.7

[a] The percentage distribution of notes insured was estimated from a 5 percent representative sample selected from all notes (including notes from $2,000 to $50,000) insured August 1934 through November 1936, except approximately 25,000 for about $400,000 payable on other than a monthly basis.

Notes of $2,000 to $50,000, however, were unavoidably excluded from the claims paid tabulation; but since there is no evidence that their percentage distribution by contract length differed significantly from that of notes of $2,000 or less, and since they constituted only .8 percent of the total number and 10 percent of the total dollar amount of note insured from August 1934 to April 1937, the comparison presented in this table would seem to be reasonably reliable.

[b] These exact contract lengths include over 90 percent of the notes insured and represent the actual situation more accurately than 1-12 months, 13-18 months, etc., which were the classes employed in the original FHA tabulation.

It has ordinarily been assumed in discussions of consumer credit that performance on contracts becomes progressively worse as length of contract increases. This view is not fully sustained by the experience of FHA, which departed from prevailing policy by sanctioning unusually long terms. It is to be recognized, of course, that claims paid from 1938 to

1942 will necessarily mount for the longer-term loans, so that eventually the claims paid percentages for these loans will not differ as much from percentages for the shorter-term notes as they do in the figures for February 28, 1938 (Table 19). The relatively low claims paid percentages for the higher duration classes (37 to 60 months) can be explained in part also by the fact that these longer-term loans were larger on the average, so that the lenders tended to be more cautious in granting them.[38] Furthermore, the burden of the monthly payment would tend to be less if a loan of a given size were spread over 48 or 60 months.

The comparatively low claims paid percentage for loans maturing within 12 months or less is probably explained by the fact that persons who obligated themselves for substantial sums for a rather short period tended to have superior resources, and further by the general consideration that the financial capacity of borrowers is less likely to be disturbed over a short period than over a long one. Improvements in economic resources are reflected simply in fulfilment of a borrower's obligations and do not show in the statistics, while a diminution of economic power is manifested in default. Since with the passage of time a borrower is likely either to raise or to lower his standing rather than to maintain it at a constant level, it may be presumed that the shorter the term the less the risk, provided other factors remain about equal. Clearly, a borrower or an instalment purchaser cannot meet an obligation for $600 in 12 months as easily as he can meet one for $150 in the same length of time, and the situation is similar, of course, with respect to other variables.

It is difficult to explain, on the basis of available statistical evidence, the fact that a duration of 30 or 36 months was accompanied by a high claims paid percentage. Three years

[38] There are no cross-classifications available with reference to duration, nor are there any tabulations of claims paid percentages with respect to the size of the monthly payment.

appears to have been a popular term with borrowers: 60 percent of the dollar volume and 52 percent of the number of loans insured were contracted for this period. This length of contract, furthermore, was generally the maximum which most lending institutions would grant for these loans: only 5 percent of the notes insured ran for longer periods. It may be argued, then, that the relatively poor credit risks would try to secure the longest terms possible in order that they might more easily meet the monthly instalments. As for the 30-month loans, since their average size approximated that of the 18-to-24-month loans they may well have resulted from a compromise between lenders and borrowers, with the latter seeking to extend the terms as far as they could, and the former refusing to advance the date of maturity to 36 months.[39]

CLAIMS PAID BY AMOUNT OF NOTE

As the size of insured note increased from less than $100 to $400-500, the claims paid percentage fell from 5.4 by number and 5.1 by amount to 2.9 and 2.1 respectively. As the size increased from $500 to $2,000, however, the claims paid percentage rose to 4.0 by number and to 3.2 by amount (see Table 20). Notes of over $2,000 had a lower-than-average claims paid percentage.[40]

No cross-classifications are available for testing the diverse hypotheses which might explain this pattern, but it seems probable that the high claims paid percentages on notes of less than $400-500 are to be attributed largely to the fact that these low-amount classes contained a more than proportionate share of loans contracted mainly for the purchase and

[39] No cross-classifications are available with respect to length of contract.

[40] As of December 31, 1938 notes of over $2,000 (not covered in Table 19) had a claims paid percentage of 2.0 by amount, as compared with a percentage of 3.6 for notes of $2,000 or less.

TABLE 20

PERCENTAGE DISTRIBUTION OF NOTES OF $2,000 OR LESS INSURED WITH FHA, 1934–37, AND OF CLAIMS PAID, WITH CLAIMS PAID PERCENTAGES, BY AMOUNT OF NOTE[a]

Amount of Note[b]	PERCENTAGE DISTRIBUTION				Claims Paid Percentage	
	Notes Insured		Claims Paid			
	Number	Amount	Number	Amount	Number	Amount
$ 100 and under	9.0	1.9	11.9	3.5	5.4	5.1
100–200	30.3	13.2	35.6	16.9	4.8	3.4
200–300	21.1	14.3	21.8	16.4	4.2	3.1
300–400	12.8	12.1	9.9	10.5	3.1	2.3
400–500	7.9	9.9	5.7	7.8	2.9	2.1
500–600	5.5	8.9	4.3	7.2	3.1	2.2
600–800	5.1	9.8	3.9	8.3	3.1	2.3
800–1,000	3.0	7.4	2.2	6.2	3.0	2.2
1,000–1,500	3.3	11.3	2.7	10.1	3.3	2.4
1,500–2,000[c]	2.0	11.2	2.0	13.1	4.0	3.2
ALL CLASSES	100.0	100.0	100.0	100.0	4.1	2.7

[a] Based on claims paid through February 1938.
[b] Each level excludes the lower figure and includes the higher.
[c] Includes notes which exceeded $2,000 because of finance charges.

installation of movable household equipment.[41] The coincidence of the lowest claims paid percentage with notes of $400-500 may reflect the prevailing use of loans within this range for additions, alterations and repairs and also a tendency on the part of bankers to grant loans of this amount only after a rather careful credit examination.

The increase in the claims paid percentage for the amount-of-note groupings from $500 to $2,000 cannot be explained on the same basis. Since almost all of the insured loans were for improvements which would not ordinarily make much

[41] See Table 15, above, and discussion pertaining thereto.

contribution to the borrowers' incomes, at least in the short period, increased monthly payments would tend to tax the economic capacity of the borrowers quite severely. To increase the size of the loan is to make repayment that much more difficult; and it appears that even the longer terms which tended to prevail for the larger-size notes were not sufficient to ease the drain on the income of the borrowers.[42]

Prior to the authorization of insurance for notes of $2,000 to $50,000, FHA officials, among others, feared that the percentage of claims would be much higher on these large loans.[43] Actually, however, the percentage paid on these notes turned out to be lower than that paid on loans of $2,000 or less. It is probable that lenders tended to accept only the preferred risks for the larger notes and it is probably true also that only borrowers highly confident of their ability to repay requested them.[44] No detailed cross-classifications are available to explain further why these larger notes should

[42] It seems probable that a cross-classification of loans according to size and income of borrower, if such were available, would show an increase in the claims paid percentage with increases in size of loan for the different income classes treated separately; or, more precisely, that as monthly payment as a percent of monthly income increased the claims paid percentage would increase also. This was true for the instalment contracts purchased by the Electric Home and Farm Authority. See Part Two, Chapter 7, below.

[43] James A. Moffett, Federal Housing Administrator: "As a result of talking to quite a number of people in financial institutions, and so forth, we agree that the loss in this type of business will be much greater than in the $2,000 class. They also feel that the examination of the financial structure of these industrial companies will be quite expensive, particularly in the installation of new machinery. The general recommendation that I have had from everybody I have talked with—and it has been unanimous—is to continue the same discount rate as will apply to the $2,000 . . . That works out actually 9.72, as a maximum."—Hearings before a subcommittee of the Committee on Banking and Currency, United States Senate, 74th Congress, 1st session, on S. 1771 and H. R. 6021 (March 20-29, 1935) p. 65.

[44] Since these loans were not completely paid off as of December 31, 1938, it is conceivable, though unlikely, that the claims paid percentage may be considerably higher when all of them are liquidated. See Chapter 2, p. 27. for discussion of the small volume of insured notes in this category. It is probable that recoveries on defaulted loans of this class will be relatively high because mortgage security was recommended by FHA to lenders and presumably used by the latter in the granting of the large loans.

have had a lower claims paid percentage than the notes of $2,000 or less. Presumably the use of collateral security was an important factor. Again, it is likely that lenders considered the insurance protection insufficient to cover what may have appeared to them as highly speculative commercial and industrial loans.[45]

DISTRIBUTION OF CLAIMS PAID CASES BY NUMBER OF PAYMENTS MADE BEFORE DEFAULT

This section is concerned with an important feature of the performance picture which is brought out by an analysis of claims paid cases, namely, the number of payments made by borrowers before default.[46] As may be seen in Table 21, one-third of the claims paid cases through February 28, 1938 were credited with no more than two monthly payments before default and two-thirds with no more than eight payments. For 16 percent no payments whatsoever had been made before the account was turned over to the government. This pattern was roughly characteristic of loans for

[45] The general question underlying this problem is whether lenders were unwilling to lend or whether applicants had unacceptable propositions. The FHA program constituted only one phase of a broad effort of the Federal government to encourage investments by making credit available. Many parties contended that this and other measures of the government hampered investment more than they helped, but few interest groups complained about the subsidy provided to lenders under the FHA insurance plan.

[46] This actually means "number of payments made before borrower defaulted long enough to cause the filing of a claim of loss by the lending institution"; for present purposes, however, it is convenient to say "number of payments before default."

As of February 28, 1938, claims had been paid on a total of 59,520 separate notes amounting in all to $14,166,654, but the tabulations providing the factual basis for the present discussion relate only to claims on notes of $2,000 or less, which comprised 96 percent of the total claims paid. Omitted from this discussion are 207 claims for $591,476 on notes of $2,000-50,000 and 1,034 claims for $20,127 on notes payable on other than a monthly basis; these combined to make up the remaining 4 percent. Claims paid on 35,472 single-family dwelling notes amounted to $7,125,988 and those on 22,806 other than single-family notes to $6,429,063.

TABLE 21

PERCENTAGE DISTRIBUTION OF NUMBER OF CLAIMS PAID ON NOTES OF $2,000 OR LESS INSURED WITH FHA, 1934–37, FOR TWO TYPES OF PROPERTY, BY NUMBER OF PAYMENTS BEFORE DEFAULT[a]

Number of Payments Before Default	*Single-Family Dwellings*		*Other than Single-Family Dwellings*		*Both Types*	
	Percentage Distribution	Cumulative Percent	Percentage Distribution	Cumulative Percent	Percentage Distribution	Cumulative Percent
0	14.5	14.5	19.2	19.2	16.3	16.3
1–2	16.5	31.0	16.9	36.1	16.6	32.9
3–4	13.5	44.5	13.7	49.8	13.6	46.5
5–6	11.1	55.6	10.9	60.7	11.0	57.5
7–8	9.3	64.9	9.0	69.7	9.2	66.7
9–10	8.1	73.0	7.6	77.3	7.9	74.6
11–12	6.7	79.7	6.4	83.7	6.6	81.2
13–14	5.8	85.5	4.8	88.5	5.4	86.6
15–16	4.6	90.1	4.1	92.6	4.4	91.0
17–18	3.5	93.6	3.1	95.7	3.4	94.4
19–20	2.6	96.2	1.9	97.6	2.4	96.8
21–22	1.7	97.9	1.2	98.8	1.5	98.3
23–24	1.0	98.9	.6	99.4	.8	99.1
25 and over	1.1	100.0	.6	100.0	.9	100.0
TOTAL	100.0		100.0		100.0	

[a] Through February 1938. As of this date 35,473 claims had been paid on single-family dwelling loans and 22,806 on other than single-family dwelling loans. Figures exclude claims paid on notes which were payable on other than a monthly basis.

both major types of property, although on the whole more payments were made by the single-family dwelling owners than by owners of other than single-family structures. For example, 15 percent of the former but 19 percent of the latter made no payments whatsoever; 31 percent of the former but 36 percent of the latter made 2 or less payments;

and 65 percent of the former but 70 percent of the latter made 8 or less payments. The average number of payments made on loans for single-family dwellings before default was 7.1 and on loans for other than single-family structures 6.3. The median was approximately 5 payments for the single-family group and 4 for the other group.

More than half of the claims paid cases made 5 or less payments on their loan contracts before default, a finding attributable in part to the fact that not all of the claims had been reported by February 28, 1938, when these tabulations were made. More payments will be recorded for loans defaulted after February 1938, but there is no satisfactory basis for estimating their number.[47] Other important characteristics of defaulted loans are summarized in Table 22.[48]

A consideration of the average number of payments made with reference to several additional characteristics of the notes and of the borrowers sheds some light on the factors affecting this distribution of claims paid cases according to the number of payments made before default. These characteristics are: reason for default, occupation of borrower, duration of loan, amount of note, type of lending institution,

[47] In the study on the Electric Home and Farm Authority, Part Two of this volume, an estimated final total of repossession cases is used as the basis of the percentage distribution of cases according to the number of payments made before default. We have not made a similar estimate here for three reasons: (1) the FHA notes had been outstanding a longer time as of the date of tabulation; (2) the fact that lending institutions may file claims of losses at any time within thirteen months of the date of the borrower's default makes the basis of estimate unreliable; and (3) extensive cross-classifications with reference to the average number of payments made are available and the relationships shown therein would not be changed by such a procedure.

[48] The average size of the defaulted notes for $2,000 or less is $318, 20 percent below the average size of the entire body of notes of this class, namely $351. Average duration on defaulted notes was 31.6 months (calculated without weighting by the dollar volume of the notes), slightly higher than the average duration of all notes (including the 1 percent of $2,000-50,000 notes) of 30.3. Hence the average monthly instalment on defaulted notes was $8.85, 11 percent below the average monthly payment of $10.00 for the general body of notes of $2,000 or less.

TABLE 22

AVERAGE VALUES OF CERTAIN CHARACTERISTICS OF NOTES OF $2,000 OR LESS INSURED WITH FHA, 1934–37, ON WHICH CLAIMS WERE PAID, BY TYPE OF PROPERTY[a]

Characteristic	*Average Value*		
	Single-Family Dwellings	Other Than Single-Family Dwellings	Both Types
Length of contract (in months)[b]	31.6	31.0	31.4
Number of payments made	7.1	6.3	6.8
Number of payments made, as percent of payments contracted for	22.6%	20.3%	21.7%
Amount of monthly payment	$8.90	$12.10	$10.10
Amount of defaulted note	$ 280	$ 377	$ 318
Amount of claim paid	$ 201	$ 282	$ 233
Amount of claim paid, as percent of original amount of note	72.2%	75.0%	73.3%

[a] Based on claims paid through February 1938.
[b] Weighted by number.

type of improvement, size of city where property is located, and region where property is located. Only single-family dwelling loans on which claims had been paid by February 28, 1938 are treated in this manner, however.[49] Since the average number of monthly payments made before default

[49] FHA prepared separate sets of tables for single-family dwelling loans, other than single-family structure loans, and both types of property combined for each of the characteristics mentioned above, showing: (1) number of claims paid (through February 28, 1938), (2) dollar amount of claims paid, (3) average size of defaulted notes, (4) average amount of claim paid, (5) average claim paid as percent of average size of defaulted note, (6) average number of payments contracted for (duration in months), (7) average number of payments made, (8) average number of payments made as percent of average number contracted for, and (9) average monthly payment on defaulted notes. In the present section it has been necessary to confine the discussion to the single-family dwelling loans and to only a few of the items listed.

by this body of borrowers was 7.1, it is pertinent to point out what kinds of note were credited with a higher-than-average number of payments before default and what types of borrower tended to make the most payments before they finally defaulted. Average number of payments made before default was higher than the general average (7.1) on single-family dwelling loans when the reason for default was "foreclosure or sale of home," "miscellaneous financial causes," and "bankruptcy or failure";[50] when the occupational classification of the borrower was professional, technical or office worker; when the duration of the loan was greater than 18 months; when the size of the note was more than $200; when the lending institution was a commercial, industrial or savings bank or a building and loan association; when the type of improvement to which the loan was applied was attached additions, alterations or repairs to real property; when the property was located in cities with less than 1,000,000 inhabitants and in the New England, Mountain, Pacific or West North Central region.

Conversely, the average number of payments made by the borrower before default was lower than the general average number of payments (7.1) on single-family dwelling loans when the reason for default was "fraud or forgery," "poor credit risk," or "service complaint"; when the occupational classification of the borrower was "operative in industry," service worker, or unskilled laborer; when the length of the loan contract was 18 months or less; when the amount of note was less than $200; when the type of lending institution was a finance company; when the type of im-

[50] No special tabulation is presented of claims paid cases according to reason for default, because 50 percent of the cases reported no reasons and 20 percent were classified as "other stated reasons." The classes of reasons which accounted for the largest percent of claims paid cases were "unemployment" (9 percent), "service complaint" (8 percent), "reduced income" (5 percent), and "miscellaneous financial causes" (4 percent). Variations in the distributions were small between defaulted loans for single-family dwellings and those for other than single-family structures.

provement was movable household equipment; when the city in which the property was located had over 1,000,000 population and the region was either the East North Central or one of the three southern groups of states.

With reference to the characteristics of loan contracts and of borrowers, the close though inverse correspondence of number of payments made before default and claims paid percentage is particularly notable. The number of payments made before default was high when the claims paid percentage was low; the number of payments was low, on the other hand, when the claims paid percentage was high. It might seem that the characteristics which distinguish relatively good from relatively poor loan contracts could be discovered by an analysis confined to the "bad" cases, namely, those which defaulted; but when the claims paid percentage and the average number of payments before default are compared, it is found that they move inversely but are not very highly correlated.[51] Nevertheless, it is both statistically evident and plausible that the number of payments made before default supplements the customary ratio of "bad" loans to "good" as an index of performance.

[51] Such a comparison of these two measures was made with reference to states, since distribution by states would tend to minimize differences in other factors affecting performance. The coefficient of correlation (r) between (a) average number of payments made before default and the claims paid percentage by number, by states, was -0.461; and (b) between the average number of payments made before default as a percent of the number of monthly payments contracted for (= duration) and claims paid percentage by number, by states, was -0.458.