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Characteristics of Notes Insured

THIS chapter presents an analysis of modernization notes insured by the Federal Housing Administration from August 1934 to April 1937¹ with reference to the principal characteristics for which data are available,² namely: the size of the insurance reserve operative at the time the notes were written; their distribution among the various types of insured lending institutions; the type of property and the nature of the improvement for which they were to be used; the length of time they were to run; and the size of the notes.

DISTRIBUTION OF NOTES INSURED BY SIZE OF INSURANCE RESERVE

It will be recalled that in April 1936 an amendment to the National Housing Act reduced the insurance reserve maintained by FHA from 20 to 10 percent of the aggregate modernization loans made by each institution. The lenders themselves, therefore, were responsible for all losses in excess of 10 percent of the amount they advanced from April 1936 until April 1937.³ The cutting down of the insurance re-

¹The totals used in most tabulations throughout this study are adjusted through December 31, 1937. The act expired on March 31, 1937, but lending institutions took advantage of a grace period of 31 days to report the later loans. The totals do not include those catastrophe notes which were insured from May 1 to December 31, 1937. Face value represents sum of proceeds to borrower plus time payment charges; "loans" and "notes" are used interchangeably unless otherwise specified.

²FHA required very little information from the cooperating institutions as to the characteristics of the borrowers themselves. These may be inferred to some extent from the analysis of notes as presented in this chapter.

³Loans under both reserves were reported for insurance during April 1936.

serve does not appear to have caused a reduction in either number or size of loans. It is true that just over 1,000,000 notes having a face value of nearly \$370,000,000 were insured under the 20 percent reserve, while only 400,000, amounting to \$190,000,000, were insured under the 10 percent provision,⁴ but the drop is accounted for in part by the fact that the larger reserve was in effect for about 20 months while the 10 percent reserve was in effect for only about 12 months.⁵ As will be shown in Chapter 4, the number of institutions which used as much as 10 percent of their insurance reserve, even when they were entitled to 20 percent, was negligible.

The contention that the reduction did not act as a deterrent to lending is borne out further by a comparison of loans insured (1) for the first ten months under the 20 percent reserve, (2) for the second nine months under the same reserve when loans for the purchase and installation of movable equipment were eligible for insurance, and (3) for the thirteen months April 1936 to April 1937 when equipment

⁴Included in the 10 percent reserve group are also the disaster or catastrophe notes. This type of insurance was first authorized on April 17, 1936 under Section 6, Title I, of the National Housing Act, as amended, and was limited to one year, but was admitted again under the Act of April 22, 1937. (See Chapter 2, fn. 6.) The 159 notes for \$135,335 (149 notes of \$2,000 or less amounting to \$78,787 and 10 of \$2,000-50,000 amounting to \$56,548) insured under this section from April 1936 through April 1937 are included in the above totals and in subsequent tables. From May 1 to December 31, 1937, 357 disaster notes totaling \$145,010 (353 of \$2,000 or less amounting to \$134,045 and 4 of \$2,000-50,000 and totaling \$10,965) were insured, but these are not included in the above totals or in the subsequent tables.

⁵Since 1 percent of the number but 10 percent of the total dollar volume were notes of over \$2,000 (all insured after May 1935), while the remaining 99 percent of the number and 90 percent of the amount were for \$2,000 or less, it is of interest to point out that their distribution between the two reserves varied mainly with the number of months each type was eligible. The notes for \$2,000-50,000 were almost equally divided between the 20 and 10 percent reserves, both by number and amount, but 71 percent of the number and 66 percent of the amount of the smaller-size notes were insured under the 20 percent plan, while the remainder, 29 percent and 34 percent respectively, had only 10 percent protection. (See Table 5 for details.)

was no longer admitted and the reserve had been cut to 10 percent.⁶ These findings are summarized in Table 5, which shows that the average number of notes per month as well as the average size of notes actually rose under the 10 percent reserve as compared with the ten months under the 20 percent reserve when equipment was likewise ineligible for insured loans, and indicates that it was most probably the admissibility of equipment that accounted for the large number of loans insured during the second 10 months of the 20 percent reserve.⁷

DISTRIBUTION OF NOTES INSURED BY TYPE OF LENDING INSTITUTION

When notes insured are examined with reference to their distribution among the different types of lending institutions, the national banks head the list with 619,000 notes for \$246,000,000, or about 43 percent of both the total number and dollar volume of notes insured.⁸ State banks and trust companies come next, with about one-fourth of the total number and volume, followed closely by finance companies. Industrial banking companies, principally Morris Plan, provide 6 percent of the remaining dollar volume, and the residual small fraction is furnished by building and loan associations, savings banks, credit unions, and a few miscellaneous types of financial institutions. Except for a few finance companies rather closely connected with the building materials industry, FHA insurance appears to have served as a protective device for the commercial banks of the country.

⁶ See Table A-1 for distribution of notes insured by months of insurance. Hereafter Appendix A tables are referred to as "A-2," "A-3," etc., and those in Appendix B as "B-1," "B-2," etc.

⁷ Loans of \$2,000-50,000 during the second 10 months under the 20 percent reserve did not contribute appreciably to the increased lending in this period, for these larger loans aggregated only \$2,909,407 per month as compared with \$27,362,242 for all loans insured.

⁸ See Chapter 2, Table 3.

TABLE 5
 PERCENTAGE DISTRIBUTION OF NUMBER AND AMOUNT OF NOTES INSURED WITH FHA,
 1934-37, AVERAGE NUMBER AND AMOUNT OF NOTES INSURED PER MONTH, AND AVER-
 AGE NOTE, BY INSURANCE RESERVE^a

Insurance Reserve	Period ^b	Percentage Distribution of Notes Insured		Notes Insured Per Month		Average Note
		Number	Amount	Average Number	Average Amount	
20 per cent	August 1934 to March 1936	71.0	65.8	50,883	\$78,280,475	\$358
	August 1934 to August 1934 to June 1935 ^c	15.5	16.4	22,476	9,725,611	409
	July 1935 to March 1936 ^e	55.5	49.4	79,291	27,362,242	346
10 percent	April 1936 to April 1937 ^d	29.0	34.2	36,092	76,239,645	456
	BOTH RESERVES, August 1934 to April 1937	100.0	100.0	45,328	\$17,514,319	\$386

^a Based on 1,450,503 notes for \$560,458,230 insured August 1934 to April 1937.

^b The 20 percent insurance reserve was in effect from August 1934 through March 1936; the 10 percent reserve from April 1936 to April 1937.

^c Detachable equipment loans were eligible after May 28, 1935; few were insured, however, before July 1935.

^d Detachable equipment loans made after March 31, 1936 were not eligible; some were reported for insurance in April 1936, as permitted by FHA rules.

The change in the insurance reserve discussed in the preceding section made little difference in the percentage distribution of insured notes among the various types of institutions. Whereas commercial banks, both national and state, accounted for 69 percent of the dollar volume under the 20 percent reserve plan in effect from August 1934 to March 1936, they furnished 73 percent, under the 10 percent reserve plan operative from April 1936 to April 1937.⁹

The institutional distribution of notes insured varied widely from state to state and from region to region, but the commercial banks, both national and state, furnished more than two-thirds of the dollar volume in almost every state.¹⁰ The decisive factor underlying this pattern would appear to be sectional differences in the relative importance of various types of institutions.

It is not surprising that as much as 70 percent of the dollar volume of notes insured should have come from commercial banks when we recall that such banks accounted for 90 percent of the insured lending institutions.¹¹ The commercial banks, furthermore, had even more than 70 percent of the total financial resources represented by the institutions using FHA insurance.

DISTRIBUTION OF NOTES INSURED BY TYPE OF PROPERTY IMPROVED AND TYPE OF IMPROVEMENT

The property eligible for improvement under the modernization insurance program may be divided into two broad

⁹ Commercial banks increased their proportion at the expense of the finance companies, while others retained almost the same fractions of the total volume. This tendency continued under the revived Act of February 1938: the proportion of the February-December 1938 volume going to commercial banks was 77.4 percent and to finance companies 14.5 percent.

¹⁰ See Table A-3. The principal exception is to be found in the case of Minnesota, where a subsidiary of a large bank, listed as a finance company, accounted for a large percentage of the volume.

¹¹ See Chapter 2, Table 3.

classes: single-family dwellings, covered by the plan for the entire period 1934-37, and other than single-family structures,¹² admitted in May 1935 and continuing until the close of the period under discussion. Two-thirds of the number and 54 percent of the dollar amount of all notes insured were applied to the improvement of single-family dwellings; all of these loans were for \$2,000 or less, as the law stipulated. The remainder of the notes insured, 33 percent of the number and 46 percent of the dollar amount, were used for the improvement of other than single-family structures.¹³

Of the total loans insured, those intended primarily for additions, alterations and repairs constituted a larger proportion (53 percent of the number and 63 percent of the dollar amount) than did those used mainly for purchasing and installing machinery and equipment (47 percent and 37 percent respectively). Of loans for single-family dwellings, 55 percent of the number and 68 percent of the dollar amount went for additions, alterations and repairs and 45 percent of the number but only 32 percent of the amount for machinery and equipment. The proportion of machinery and equipment loans was somewhat higher for both the \$2,000-and-under and the \$2,000-and-over classes in the other than single-family group. If all of the notes of \$2,000 or less are combined, the division between additions, alterations and repairs on the one hand, and machinery and equipment on the other, is 64-36 by amount and 53-47 by number. In short, the distribution of the insured notes between these two broad types of improvements was not substantially different for the two major classes of property, nor did it vary markedly as between the small- and large-size notes in the other than single-family group.¹⁴

¹² From 1934 until such use was barred by the amendments of April 1936, a small but uncertain amount of funds from insured loans went for the placing of new structures upon unimproved real estate.

¹³ See Table 6.

¹⁴ See Table A-2 for a detailed breakdown of loans of \$2,000 or less.

TABLE 6

PERCENTAGE DISTRIBUTION OF NUMBER AND AMOUNT OF NOTES INSURED WITH FHA, 1934-37, WITH AVERAGE NOTE, BY TYPE OF PROPERTY AND TYPE OF IMPROVEMENT^a

<i>Type of Property</i>	<i>Additions, Alterations and Repairs</i>	<i>Machinery and Equipment</i>	<i>Both Types of Improvement</i>	<i>Percentage Distribution of Both Types of Improvement</i>
SINGLE-FAMILY DWELLINGS				
<i>Notes of \$2,000 or Less</i>				
Percentage distribution				
Number	55.4	44.6	100.0	66.8
Amount	68.4	31.6	100.0	53.8
Average note	\$ 385	\$ 220	\$ 311	...
OTHER THAN SINGLE-FAMILY DWELLINGS				
<i>Notes of \$2,000 or Less</i>				
Percentage distribution				
Number	48.8	51.2	100.0	32.4
Amount	57.4	42.6	100.0	36.2
Average note	\$ 507	\$ 359	\$ 432	...
<i>Notes of \$2,000-50,000</i>				
Percentage distribution				
Number	59.9	40.1	100.0	.8
Amount	57.8	42.2	100.0	10.0
Average note	\$4,501	\$4,909	\$4,664	...
BOTH TYPES OF PROPERTY				
Percentage distribution				
Number	53.2	46.8	100.0	100.0
Amount	63.4	36.6	100.0	100.0
Average note	\$ 460	\$ 303	\$ 386	...

^a Based on 1,450,503 notes for \$560,458,230 insured August 1934 to April 1937.

It should be pointed out, however, that most of the loans were for mixed purposes and that it is generally understood that a larger proportion of the loaned funds went for machinery and equipment than the tables indicate. Under

any circumstances too much weight should not be given to the stated purposes for which loans were made because many borrowers took advantage of the possibilities of reallocating expenditures. Superficially, the loans of \$2,000 or less for the improvement of other than single-family structures would appear to be quite different from the loans advanced for the single-family dwellings, but when it is considered that the average size of the former was only \$432 as compared with \$311 for the single-family dwelling notes it appears justifiable to treat all of the loans of \$2,000 or less as a roughly homogeneous group.

The property-improvement breakdown yields some fairly satisfactory clues to the economic position of FHA borrowers.¹⁵ In the first place, loans for the improvement of farm dwellings and other farm structures amounted to only 3.9 percent of the total dollar volume of notes insured.¹⁶ It is clear, then, that the farm population, a group which constitutes about one-fourth of all the inhabitants of the country, made very little use of FHA insured modernization loans. One plausible reason for the small representation of farmers' loans would seem to be the rather extensive credit facilities otherwise available to farmers. FHA did, however, permit the insurance of loans repayable on other than a monthly basis in order that payments might be adapted to the seasonal flow of farm incomes.

In the second place, it may be assumed that large property owners did not figure prominently among the FHA borrowers, since they ordinarily have easy access to loanable funds, can usually furnish mortgage or other collateral security as demanded, and can make rather extensive use of open-book credit. With farmers and large property owners virtually eliminated, it may be concluded that the persons who used

¹⁵ No tabulations are available to show occupation, income or property holdings of all borrowers.

¹⁶ See Table A-11.

FHA insured loans were predominantly small urban property owners.

DISTRIBUTION OF NOTES INSURED BY REGION AND STATE

Properties improved by expenditure of funds from insured modernization loans were located in every state and in all but 34 of the 3,074 counties in the United States. The largest dollar volume of notes insured resulted from improvements on property in the Middle Atlantic states of New York, New Jersey and Pennsylvania, which together accounted for 412,000 notes (28 percent of the total) with a total face value of \$187,000,000 (33 percent of the total). The region with the smallest volume insured was the Mountain group of states with 44,000 notes for \$18,000,000 (3.1 and 3.2 percent respectively of the totals). Concentration was quite heavy in a few states. Five of them—New York with 21 percent, California with 14 percent, New Jersey with 7 percent, Pennsylvania with 6 percent and Illinois with 5 percent—contributed over half of the dollar volume. Seven more states—Michigan, Massachusetts, Ohio, Washington, Texas, Missouri and Indiana—added nearly a fourth, so that about three-fourths of the volume came from 12 states. The fairly small differences in this distribution between the number of notes and the dollar volume may be seen in Table 7, which demonstrates also that the average size of note did not vary greatly among the regions.

The most striking observation to be made concerning the distribution of notes insured among the 3,074 counties of the United States¹⁷ is that 98 counties, or 3 percent of all the counties in the country, with notes insured amounting to \$1,000,000 or more, furnished 66 percent of the dollar

¹⁷ District of Columbia is treated as one county, and various independent cities are included in contiguous counties.

TABLE 7

PERCENTAGE DISTRIBUTION OF NUMBER AND AMOUNT OF NOTES INSURED WITH FHA, 1934-37, AMOUNT AND INDEX OF AVERAGE NOTE, BY LOCATION OF PROPERTY^a

Region ^b	Percentage Distribution of Notes Insured		Average Note	
	Number	Amount	Amount	Index ^c
New England	6.7	6.8	\$395	102
Middle Atlantic	28.4	33.3	453	117
East North Central	17.9	15.9	345	89
West North Central	6.8	6.2	351	91
South Atlantic	7.5	8.1	417	108
East South Central	3.4	3.3	366	95
West South Central	5.8	5.0	333	86
Mountain	3.1	3.2	401	104
Pacific	20.4	18.2	345	89
ALL REGIONS	100.0	100.0	\$386	100

^a Based on 1,450,503 notes for \$560,458,230, insured August 1934 to April 1937.

^b The Pacific region includes territories and adjustments; otherwise these regions follow the classifications of the United States Census.

^c Average amount of note for all regions equals 100.

volume of notes insured by FHA from August 1934 to April 1937; that is, \$371,000,000 of the \$560,000,000 total came from this very small group. Within these 98 counties were located all of the 40 largest cities in the United States and 68 of the 93 cities with over 100,000 inhabitants.¹⁸ It is worth noting also that 553 counties (18 percent of the counties in the United States) had more than \$100,000 worth of notes insured and made up 91.5 percent of the dollar volume. At the lower end of the scale were the 34 counties with no notes insured, while in between were the 2,487 counties—with some notes insured but with a volume of less than

¹⁸ See Table A-7 for region, state and largest city of 98 counties with volume of notes above \$1,000,000.

\$100,000 each—which supplied only 8.5 percent of the total volume.¹⁹

Differences in the dollar volume of notes insured among regions, states and counties would seem to be explained by variations in the number of notes insured rather than in the size of notes. The number of notes insured was conditioned primarily by the density of population and secondarily by the size of family incomes and the rate of population growth. The residuum of variation in the distribution of modernization loans among the regions and states appears to be related to a large number of other factors such as climate, race, cultural tradition, degree of urbanization, occupation, industry, system of property ownership, and an array of intangibles.²⁰

DISTRIBUTION OF NOTES INSURED BY LENGTH OF CONTRACT

The length of contract or duration of a loan is the period of time between the date when the loan is made and the date when it is scheduled to be paid in full. Since borrowers in the consumer-loan market usually make their remittances monthly, length of contract is commonly stated in terms of months. There are two principal reasons why contract length must be considered an important factor. In the first place, given the total amount of the obligation and the requirement of equal periodic remittances, it determines the size

¹⁹ See Table A-6 for distribution of notes among counties by volume groups.

²⁰ Some of these differences might be thought to be covered by the composite index of the relative demand for housing in the different states prepared by the Federal Housing Administration (Chart No. 92A). Population, number of non-farm dwellings, value of home, purchasing power and number of building outlets were the factors considered. The correlation coefficient (r) between notes insured and the relative housing market, by states, is +0.85, as compared with +0.82 between notes insured and population, by states. This general index, therefore, does not seem to account for as much of the variation as population growth and income, for which the coefficient of multiple correlation (R), by states, is +0.89.

TABLE 8

PERCENTAGE DISTRIBUTION OF NUMBER AND AMOUNT OF NOTES INSURED WITH FHA, 1934-37, AMOUNT AND INDEX OF AVERAGE NOTE, BY CONTRACT LENGTH^a

Contract Length ^b	Percentage Distribution of Notes Insured		Average Note	
	Number	Amount	Amount	Index ^c
12 months	12.2	5.9	\$ 187	48
18 "	9.2	4.8	202	52
24 "	15.5	11.5	287	74
30 "	5.6	3.6	248	64
36 "	52.2	60.5	448	116
48 "	2.0	2.9	560	145
60 "	3.3	10.8	1,265	327
ALL LENGTHS	100.0	100.0	\$ 386	100

^a Estimated from a 5 percent representative sample selected from all notes (including notes of \$2,000 to \$50,000) insured from August 1934 through November 1936, except approximately 25,000 notes for about \$400,000 which were payable on other than a monthly basis.

^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.

^c Average amount of note for all contract lengths equals 100.

of the periodic payments. Secondly, length of contract is an important influence on risk because with the passage of time the repayment capacity of the borrower may be weakened and in addition the property improvement made with the proceeds of the loan may suffer so much deterioration that it may cease to have any value to the lender in case of its recovery.

The most impressive feature of the distribution of insured modernization notes among duration classes was the concentration at 36 months.²¹ Over 52 percent of the number and 60 percent of the dollar amount of notes insured were of this length. The notes in the 60-month class were few (only

²¹ See Table 8.

3.3 percent by number) but because of their high average size they accounted for 10.8 percent of the dollar volume. The average duration was 30.3 months, and if weighted by the dollar volume, 35.1 months. The median duration by number was 30.8 months; in other words half of the notes had a longer and half a shorter maturity than 30.8 months. Somewhat over 90 percent of the number and volume fell exactly on the customary maturities of 12, 18, 24, 30, 36, 48 and 60 months, while nearly all of the remainder matured at intermediate three-month intervals.

Average length was 31 months for notes insured from August 1934 to April 1936, when the 20 percent insurance reserve was in effect and machinery and equipment loans were eligible for insurance, but fell to 28 months for the period from April 1936 to April 1937, when the reserve was 10 percent and only attached improvements were eligible for insured loans. This drop is explained by the decrease in the number of 36-month contracts in the later period.

In general, the distribution of notes insured, by contract length, from 1934 to 1937 was determined, first, by the wide range of terms permitted by FHA for insured loans; second, by the competitive, institutional and technical (durability and obsolescence) factors making for a typical term of 36 months; and third, by the disposition of over half of the instalment purchaser-borrowers to commit themselves to obligations extending through a period of three years.

DISTRIBUTION OF NOTES INSURED BY AMOUNT OF NOTE

The average amount of note²² was \$386 for all insured loans, and \$351 for the loans for \$2,000 or less which made

²²In most cases the amount of note is derived from the addition of two quantities, the net proceeds of the loan, or advance of credit to the borrower, and the time payment charge. The cases in which the time payment charge is not incorporated in the note are relatively few and are not separately

up 99 percent of the total number. The median was \$251, half of the notes covering less and half more than this amount. Only 6 percent of all the insured loans were for more than \$1,000, 20 percent exceeded \$500 apiece, and 9 percent were for as little as \$100 or less. Dollar volume was, quite naturally, differently distributed among the amount-of-note classes, as may be seen in Table 9. Fifty percent of the dollar amount of notes insured were represented by notes of less than \$546 (median value) and 50 percent by notes made out for more than this amount. At the two extremes, the 9 percent of the number of notes for \$100 or under furnished less than 2 percent of the total dollar amount, while the 1 percent of the number of loans of over \$2,000 constituted 10 percent of the total dollar amount.

The only breakdown of this frequency distribution is that provided by the cross-classification, also to be found in Table 9, according to size of insurance reserve. Under the 20 percent reserve the average amount of note was \$358, and under the 10 percent reserve, \$456. On the other hand, notes insured during the August 1934-June 1935 period of the 20 percent reserve, when equipment loans were not permitted, averaged \$409 as compared with \$345 during the July 1935-April 1936 period when loans for the purchase of equipment were eligible for insurance. Particularly noteworthy is the fact that 44 percent of the notes were for \$200 or less under the 20 percent reserve while only 27 percent were of this size under the 10 percent reserve. This difference is apparently accounted for in substantial measure by loans for the purchase of refrigerators and other movable equipment insured from June 1935 to April 1936.

Considerable variation is found in the amounts for which

tabulated. Strictly speaking, "amount of loan" refers to the net proceeds to the borrower, while "amount of note" signifies the sum of the net proceeds and the finance charge, but this study follows FHA practice in employing the two terms interchangeably.

TABLE 9
 PERCENTAGE DISTRIBUTION OF NUMBER AND AMOUNT OF NOTES INSURED WITH FHA,
 1934-37, AMOUNT AND INDEX OF AVERAGE NOTE, BY AMOUNT OF NOTE AND INSUR-
 ANCE RESERVE^a

Amount of Note ^b	20 PERCENT RESERVE ^c			10 PERCENT RESERVE ^d			BOTH RESERVES					
	Percentage Distribution		Average Note	Percentage Distribution		Average Note	Percentage Distribution		Average Note			
	No.	Amt.	Amt. Index ^e	No.	Amt.	Amt. Index ^e	No.	Amt.	Amt. Index ^e			
\$ 100 and under	10.6	2.2	\$ 72	19	4.6	.7	81	21	8.9	1.7	\$ 73	19
100- 200	33.1	14.2	149	39	22.6	7.5	168	44	30.1	11.9	153	40
200- 300	20.4	13.7	240	62	22.2	11.3	236	61	20.9	12.9	238	62
300- 400	11.5	10.6	329	85	15.5	11.6	347	90	12.5	10.9	334	87
400- 500	6.8	8.4	440	114	10.4	10.0	445	115	7.9	8.9	442	115
500- 1,000	12.0	22.5	679	176	17.7	25.5	640	166	13.6	23.5	670	174
1,000- 1,500	3.1	10.5	1,218	316	3.7	9.6	1,196	310	3.3	10.1	1,203	312
1,500- 2,000 ^f	2.0	10.1	1,842	477	1.8	9.8	1,648	427	2.0	10.1	1,772	459
2,000-50,000	.5	7.8	5,257	1,362	1.5	14.0	4,157	1,077	.8	10.0	4,664	1,208
ALL AMOUNTS	100.0	100.0	\$ 358	93	100.0	100.0	\$ 456	118	100.0	100.0	\$ 386	100

^a Estimated from a 5 percent representative sample selected from all notes (including notes of \$2,000 to \$50,000) insured from August 1934 through November 1936, except approximately 25,000 notes for about \$400,000 which were payable on other than a monthly basis.

^b Each level excludes the lower figure and includes the higher.

^c The 20 percent insurance reserve was in effect from August 1934 through March 1936.

^d The 10 percent insurance reserve was in effect from April 1936 to April 1937.

^e Average amount of note for all amount-of-note classes equals 100.

^f Includes notes which exceeded \$2,000 because of finance charges.

the notes were written according to the breakdowns previously discussed in this chapter, but only averages are available. The influence of amendments to the National Housing Act²³ is vividly reflected in the difference in size of notes according to type of property and type of improvement (Table 6). The average size of single-family dwelling notes was \$311, as compared with \$432 for loans applied to other than single-family structures. Single-family dwelling notes for additions, alterations and repairs averaged \$385 while those for the purchase and installation of movable equipment averaged only \$220—little more than the usual price of an electric refrigerator. The cross-classification of loans for the improvement of other than single-family dwellings according to type of improvement shows that the average amount of note for additions, alterations and repairs was \$507, and for machinery and equipment, \$359.

When the average size of note is studied with reference to the different types of lending institutions, further variations are revealed.²⁴ Compared with the general average size of note of \$386, commercial bank loans were larger (averaging \$407) while those of all other types of institutions were smaller (averaging \$345). The highest average (\$594) was for "others," followed closely by \$533 for building and loan associations; the lowest average size was \$337 for finance companies and the next lowest was \$354 for industrial banking companies.²⁵

The average of \$533 for building and loan associations would seem to be connected with their policy of making loans for fairly substantial changes in buildings. The low averages for finance companies and industrial banking companies, on the other hand, appear to be related to the type

²³ See Chapter 2, Table 2.

²⁴ See Chapter 2, Table 3.

²⁵ The relative positions of the different types of institutions with respect to average size of note were substantially the same under both the 20 percent reserve and the 10 percent reserve.

of borrower and the purpose of the loan customarily favored by these institutions. The higher average size of note for commercial banks as a group as compared with all other institutions seems to be closely connected with the tendency of borrowers who are better risks to choose the commercial banks, and vice versa.

Analysis of the cross-classification with reference to the type of institution and the region in which the institution is located indicates that type of institution tends to be a more important determinant of the average size of note than region of the country.²⁶ The West South Central was the region with the lowest average amount of note, which fell 14 percent below the national average of \$386. Within this group was Louisiana, with the record low (for states) of 26 percent below the national average. At the other extreme was the Middle Atlantic group with an average amount of note of \$453, 17 percent above average; the figure for this group was stepped up considerably by that for New York, which was 31 percent above the average for all notes insured. Montana had the highest average of any state, 38 percent above the overall average of \$386.²⁷

The average size of note for the 98 counties furnishing 66 percent of the dollar volume of notes insured was almost the same (\$390)²⁸ as the average for all notes. Since these counties were among the 196 most populous in the entire country, this finding serves as additional evidence that density of population had virtually no effect on size of note.

Average size of note was closely related to duration of loan: increases in average size of note from one duration class to the next were roughly proportionate to increases in duration,

²⁶ See Table A-4. R. A. Fisher's analysis of variance, in *Statistical Methods for Research Workers*, was used in formulating the statement concerning relative significance.

²⁷ See Table A-8. Correlation tests show no significant relation between average size of note and population, size of note and population growth, or size of note and income, by states.

²⁸ See Table A-7.

although average size of note in the 30-month class was less than might have been anticipated, and the average size in the 60-month class was much larger than the general path of these values would lead one to expect. (Table 8). By way of explaining the general tendency for average size of note to rise with increases in duration, it may be suggested that borrowers obligated themselves more heavily because they were able to secure longer terms (and thus lower the monthly payment) and that conversely they sought longer terms because they obligated themselves more heavily. Both explanations are plausible and mutually consistent, but it must be remembered also that both size and duration depended on a variety of external factors.

The amount of note under the FHA modernization loan program was composed of two elements, the net proceeds to the borrower plus the time payment or finance charge. The maximum rate of the finance charge was the same throughout the entire period 1934-37, 5 percent per annum or 9.7 percent per annum interest, according to FHA calculations.²⁹

²⁹ It is of interest to point out that the first published draft of the FHA plan in May 1934 called for the use of a true interest rate for the basic charge plus three service fees calculated in three different ways, per note, per payment and percent per annum on volume, as follows:

- "Maximum interest, added to the principal cost of the job must not exceed 5 percent true interest per annum on decreasing balances . . .
- The authorized service fees . . . :
- "Credit investigation and entry on books, \$2 per note
- "Collection costs, 50¢ per payment
- "Supervision and legal costs, 1/2 of 1 percent per annum on amount of job."

Hearing before the Committee on Banking and Currency, U. S. Senate, 73rd Congress, 2nd Session, on S. 3603 (May 16, 1934) p. 15.

As finally promulgated the regulation read:

"A note will be eligible for insurance if the total payment to be made by the borrower for interest, discount, and fees of all kinds in connection with the transaction is not in excess of an amount equivalent to \$5 discount per \$100 original face value of a 1-year note to be paid in equal monthly instalments, calculated from the date of the note. This charge is a permitted maximum and not a mandatory rate, and a loan at any lower rate is eligible for insurance. Such charges correctly based

No tabulations with respect to the rate of finance charge were made, but it may be assumed that a very large proportion of the number and dollar amount of notes insured bore the maximum rate.³⁰ Based on the assumption that the maximum rate of finance charge was applied to the notes covered here, Table 10 presents average finance charges for loans in various duration classes. The average net proceeds to borrower amounted to \$337 and the average duration (weighted by amount of note) was 35 months, so that the average time payment charge was \$49. Notes running for 12 months or less had finance charges averaging \$9 while those for 60 months had finance charges averaging \$251. These differences show the close relationships between increase in the size of note and increase in the length of contract.

The amount of monthly payment is obtained by division of the amount of note by the number of months the note is to run. The FHA made no tabulations with reference to size of monthly payment, but averages are obtainable from the duration distribution, as shown in Table 10. Over 99 percent of the FHA notes were to be repaid in monthly instalments and the average size of payment for all notes was almost exactly \$11. It is not possible to calculate the range in the size of monthly payments, but it may be observed that the average monthly payment for notes of \$2,000 or less was \$10 and that the average monthly instalment for different duration classes varied from \$8 for 30-month loans to \$21 for 60-month loans. The most noticeable feature of this dis-

on tables of calculations issued by the Federal Housing Administrator are deemed to comply with this regulation . . ."

These tables are based on the maximum permitted charge and conform to the regulation of the Federal Housing Administrator providing that the ratio of gross income to average outstanding balances of the institution's funds must not exceed the maximum of 0.097166 per annum for the period of the loan.

³⁰ Institutions in states whose usury laws limit interest to 8 percent, and a few institutions lending at less than the maximum FHA rate in other states, accounted for an estimated 10 percent of the total notes insured.

TABLE 10

AVERAGE TIME PAYMENT CHARGE ON ALL NOTES INSURED WITH FHA, 1934-37, AVERAGE NET PROCEEDS TO BORROWER, AMOUNT OF NOTE AND MONTHLY PAYMENT, BY CONTRACT LENGTH

<i>Contract Length^a</i>	<i>Average Time Payment Charge^b</i>	<i>Average Net Proceeds to Borrower^c</i>	<i>Average Amount of Note</i>	<i>Average Monthly Payment^d</i>
12 months	\$ 9	\$ 178	\$ 187	\$15.60
18 "	14	188	202	11.20
24 "	26	261	287	11.90
30 "	28	220	248	8.30
36 "	58	390	448	12.50
48 "	93	467	560	11.70
60 "	251	1,014	1,265	21.10
ALL LENGTHS ^e	\$ 49	\$ 337	\$ 386	\$11.00

^a 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.

^b Derived from FHA "Discount Table." These results are subject to slight error because the figures are only approximate, and about 5 percent of the amount of notes insured had a time payment charge of less than 5 percent discount.

^c Other component, with time payment charge, of amount of note.

^d Average amount of note divided by duration.

^e The average contract length was 35 months, with number of notes weighted by dollar amounts.

tribution is that the average monthly payment is almost the same for the 18-, 24-, 36- and 48-month notes. The conformity in size of monthly payments for notes of these varying durations suggests that borrowers adapt the size and the term of their loans to what they consider their capacities to meet the periodic remittances. There is no further statistical evidence, however, to support this explanation of the uniform average.