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Chapter Title: The Concept of Credit Quality

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## 2. The Concept of Credit Quality

In most discussions of consumer "credit quality," first consideration is given to the terms on which credit is granted. In 1955 Allan Sproul, then president of the New York Federal Reserve Bank, directed attention to the problem in this way: "I am disturbed not by the total amount of consumer credit, but by the fact or the indication that successive relaxation of terms has been largely responsible for keeping the ball in the air. This is a process which cannot go on indefinitely."<sup>1</sup>

There is a strong suggestion here that quantitative changes were being brought about by changes in quality,<sup>2</sup> and that the process might have undesirable consequences. Analysis of this process will be aided by defining and measuring credit quality as precisely as possible, so that the effect of changes in it can be identified.

The consumer credit industry has long recognized the need for maintaining "sound terms," but there has never been any agreement within the industry on how to define these terms. Some early attempts were made to use specific characteristics of the loan contract for this purpose, but these broke down because the guidelines were never very clear. Again, there have been efforts within the industry to define credit terms as sound if the loan was granted on a collateralized basis. The collateralized definition suggests that terms may safely be liberalized as long as the value of the note outstanding will at no time during the life of the contract exceed the market value of the commodity covered by the loan.<sup>3</sup> Others emphasize the character and capacity of

<sup>1</sup> Allan Sproul, "Reflections of a Central Banker," *Journal of Finance*, March 1956, p. 11.

<sup>2</sup> For some evidence on this point, see Appendix G.

<sup>3</sup> For a brief statement of this position, see Thomas W. Rogers, *Easy Credit Can be Tough*, American Finance Conference, December 1955.

the borrower, rather than the terms on which he borrows, as the essential ingredient of loan quality.<sup>4</sup>

Loan terms and borrower characteristics, however, constitute only one aspect of the concept of credit quality, albeit an important one. To quote an earlier paper, "Deterioration of credit quality can . . . mean at least four different things: (1) a decline in actual quality, as indicated by loss rates, foreclosure rates, default or delinquency rates determined after the event . . . (2) a decline in estimated quality as indicated by loss reserves, interest differentials, examiners' appraisals, and the like; (3) a shift toward types of loan contracts or types of borrowers that may be expected to involve higher delinquency or loss rates; or (4) a change for the worse in the economic prospects of debtors."<sup>5</sup>

It is important to note that deterioration in credit quality is not necessarily synonymous with a reduction of standards on the part of lenders. Such a reduction may be the cause of the deterioration described in the first definition cited, and it is suggested by the third definition (although the shift mentioned may take place not because lenders relax their standards but because the relative volume of credit handled by lenders with lower standards increases). The other two definitions of quality deterioration do not necessarily imply a lowering of standards on the part of lenders, although the second definition does imply a shift in the way lenders appraise their standards.

This distinction between credit standards and credit quality is important because some deterioration in quality may well be viewed as a necessary accompaniment to any expansion in credit. The major policy implications have to do with the question of how far the credit deterioration can safely go. This in turn can be answered only if we know how far it has in fact gone and what the consequences may be.

The distinction between credit standards and credit quality can perhaps be clarified by the distinction between *ex ante* and *ex post* quality, a distinction utilized extensively in the analysis below. By *ex ante* quality is meant the *prospective* risk attached to a given volume of credit. A decline in *ex ante* quality, therefore, means an increase in

<sup>4</sup> Otto C. Lorenz, in *The American Banker*, April 25, 1957, stated: "Successful consumer credit operators will tell you, quite simply, that loan quality is the customer's character, ability, and willingness to pay. That's basic."

<sup>5</sup> Geoffrey H. Moore, "The Quality of Credit in Booms and Depressions," *Journal of Finance*, May 1956, p. 293.

loans which possess characteristics of one sort or another which may be *expected on the basis of past experience at the time the loans are made* to result in increased delinquency, repossession, or loss rates. The bases upon which these expectations are formulated are indicated in the third definition cited above, and the credit market's actual evaluation of them is described by the measures in the second definition.

*Ex ante* quality may be said to deteriorate when there is deterioration in the conditions of lending that pertain to risk. These conditions in turn consist of the terms on which credit is extended and the characteristics of the borrowers who obtain it. Credit terms, as used in this study, include primarily the percentage which the down payment constitutes of the amount paid for the product, the number of months for which the credit contract is drawn, and related variables such as the cash selling price of the car or the trade-in allowance (which is sometimes taken into consideration by expressing the down payment as a ratio to the "real" car price rather than to the contract price, which may include an inflated trade-in allowance). The borrower characteristics relevant to *ex ante* quality are those that pertain to or reflect willingness and ability to repay debt. In the following pages much attention will be directed to the question of whether greater risk is attached to borrowers possessing such characteristics as youth, low income, or unstable employment than to other borrowers not possessing these characteristics. The hallmark of *ex ante* quality deterioration, therefore, is a change in loan terms or borrower characteristics such that, other things remaining the same, worsened collection experience may be expected to result.

*Ex post* quality, on the other hand, refers to actual collection experience on a given volume of loans and is measured by such factors as delinquency rates, repossession rates, and loss rates (cf. the first definition above). Though it may be a major determinant, *ex ante* quality is not the sole determinant of *ex post* quality. The latter is determined partly by changes in economic conditions or collection policy *subsequent* to the granting of the loans whose quality is under consideration (as the fourth definition implies). Hence it is possible that a deterioration in *ex ante* quality, brought about, say, by a change in credit standards, may not be followed by a decline in *ex post*

quality if economic conditions improve sufficiently to offset the change.

In short, to analyze prospective risk and actual collection experience on a given volume of loans, one must study lending terms and borrower characteristics at the time the loans were made as well as subsequent changes in economic conditions and collection policy. It is to the isolation, analysis, and evaluation of these strategic variables that the present study is devoted. We shall not, incidentally, concern ourselves with a related question—namely, to what extent lenders attempt to offset the greater risk of easier credit standards by charging higher rates. The National Bureau's study of consumer finance rates, under the direction of Robert P. Shay, is concerned, in part, with this problem. Shay's tentative results do not suggest that there is any close adjustment of rates to prospective risk as indicated by credit terms or borrower characteristics.<sup>6</sup>

Before turning in Chapter 3 to a consideration of the relations between credit conditions and collection experience, it is appropriate to consider briefly the interrelations among the several aspects of credit conditions. These aspects—down payments, maturities, and various borrower characteristics—together make up what we have termed *ex ante* quality. Conceivably, easier terms may be associated with an improvement in the borrower's creditworthiness, so that these shifts in *ex ante* quality offset one another. Or longer maturities may go hand in hand with larger down payments, so that an easing in one direction is offset by tightening in another. But is this usually the case, or is the opposite association more typical? By first looking at the evidence on this point, we shall be in a better position to study the relation be-

<sup>6</sup> For example, in our analysis of the 1954-55 Federal Reserve survey of new-auto contracts (Table 36), we find that repossession and delinquency rates vary sharply with the size of down payment and the liquid assets held by the borrower. But the finance rates paid do not appear to vary systematically with either down payments or liquid asset holdings, or, indeed, with the corresponding repossession and delinquency rates. The average finance rates corresponding to the entries in Table 36 are:

| Liquid Asset<br>Holdings (\$) | Effective Down Payment (%) |       |             |
|-------------------------------|----------------------------|-------|-------------|
|                               | Under 30                   | 30-39 | 40 and over |
| None                          | 11.1                       | 11.1  | 10.2        |
| 1-499                         | 11.2                       | 10.6  | 12.1        |
| 500-1,999                     | 11.0                       | 10.6  | 11.4        |
| 2,000 & over                  | 10.7                       | 11.2  | 10.5        |

tween credit conditions and collection experience, because much of the evidence on the latter takes into account only one kind of condition at a time.

#### MATURITIES AND DOWN PAYMENTS

Data provided by a large sales finance company for the United States as a whole and for separate regions make it possible to examine the interrelation between down payments and contract maturities.<sup>7</sup> Table 16 shows the median maturity for new-automobile credit contracts classified according to down payment percentage in July 1956. The results, both for the country as a whole and for the individual regions, suggest that (1) the contracts in the highest down payment group (50 per cent and over) have decidedly shorter maturities than those with smaller down payments; (2) maturities are progressively longer the smaller the down payment, up to a point; and (3) beyond that point (down payments about 25 per cent) maturities tend to be somewhat shorter. In general, low down payment contracts have longer maturities than high down payment contracts; that is, terms are eased in both directions at once. The relation noted has been tested by means of chi-square analysis and has been found to be statistically significant in each region.<sup>8</sup>

Table 17 shows the median down payment percentage for contracts classified by maturity. Again the conclusion which emerges is that the down payment percentages are typically larger when the maturities are shorter, and smaller when the maturities are longer. This relationship is evident to some extent for every region as well as for the United States as a whole. It is noteworthy, however, that the very longest maturity contracts often have somewhat higher down payment percentages than those of intermediate maturity, just as the very smallest down payment contracts had somewhat shorter maturities than those with down payments of intermediate proportions. This sug-

<sup>7</sup> The regional data utilized here and in subsequent sections are based on samples of actual contracts purchased through the branch offices of a large sales finance company, and consist of all contracts purchased during the first ten days of the month, collected periodically since 1953. We have examined three of these surveys, for June 1953, July 1956, and July 1957, but the present discussion is confined to the July 1956 survey. See Appendix B.

<sup>8</sup> For an explanation of the chi-square test, see Appendix B. The 5 per cent level of significance is used throughout this study.

TABLE 16

*Median Maturity of New-Automobile Contracts Classified by Down Payment, United States Total and Nine Regions, A Large Sales Finance Company, July 1956*

| Down Payment<br>as a percentage<br>of Cash Selling<br>Price | Median Maturity <sup>a</sup> (months) |          |                          |                          |                          |                          |                   |                    |                |       | Total<br>U.S. |
|---|---------------------------------------|----------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------|--------------------|----------------|-------|---------------|
|   | Pacific                               | Mountain | West<br>North<br>Central | West<br>South<br>Central | East<br>North<br>Central | East<br>South<br>Central | South<br>Atlantic | Middle<br>Atlantic | New<br>England | Total |               |
| Under 20  | 37.2*                                 | 29.1     | 38.0*                    | 30.5                     | 30.7                     | 30.8                     | 30.0              | 39.9*              | 39.2*          | 32.2  |               |
| 20-24   | 38.3*                                 | 31.0     | 38.0*                    | 31.0                     | 31.4                     | 32.1                     | 31.1              | 40.3*              | 40.0*          | 33.7  |               |
| 25-29   | 39.7*                                 | 31.1     | 38.0*                    | 31.2                     | 31.1                     | 33.3                     | 31.2              | 40.8*              | 40.3*          | 35.8  |               |
| 30-34   | 39.1*                                 | 32.2     | 37.8*                    | 30.1                     | 30.0                     | 32.3                     | 30.5              | 39.7*              | 39.0*          | 34.8  |               |
| 35-49   | 37.2*                                 | 31.1     | 29.3                     | 27.8                     | 26.5                     | 28.8                     | 24.6              | 38.2*              | 39.2*          | 30.5  |               |
| 50 and over   | 33.2                                  | 19.9     | 20.5                     | 22.5                     | 24.0                     | 19.0                     | 20.8              | 23.0               | 18.6           | 21.7  |               |
| All contracts <sup>b</sup>                                  | 38.6*                                 | 30.4     | 37.4*                    | 30.5                     | 30.4                     | 31.4                     | 30.1              | 39.6*              | 38.9*          | 33.2  |               |
| No. of contracts  | 551                                   | 248      | 680                      | 1,078                    | 548                      | 1,824                    | 1,059             | 1,211              | 313            | 7,512 |               |

Source: Appendix Table B-2.

<sup>a</sup>Medians were calculated from the frequency distributions. Where the median value fell in the class 36 months and over (marked with an \*) it was interpolated on the assumption that there were no loans with maturities more than 46 months. Other evidence for this period suggests this is a reasonable assumption.

<sup>b</sup>Excludes contracts for which either down payment or maturity was not stated.

Note: For states included in the various regions see Appendix Table B-1. Chi-square results significant for all regions and for total United States at the 5 per cent level (App. Table B-2).

TABLE 17

*Median Down Payment Percentage, New Automobile Contracts Classified by Maturity, United States Total and  
Nine Regions, A Large Sales Finance Company, July 1956*

| Maturity<br>(mos.)            | Median Down Payment as Percentage of Cash Selling Price <sup>a</sup> |          |         |       |         |       |         |       |         |       |                | Total<br>U.S. |
|-------------------------------|--|----------|---------|-------|---------|-------|---------|-------|---------|-------|----------------|---------------|
|                               | Pacific  | Mountain | West    |       | East    |       | East    |       | North   |       | New<br>England |               |
|                               |  |          | Central | South | Central | South | Central | South | Central | South |                |               |
| 12 and under                  | 28.8   | 52.3*    | 37.5    | 35.8  | 32.5    | 44.6  | 29.8    | 51.7* | 53.4*   | 40.2  |                |               |
| 13-24                         | 30.0   | 30.8     | 29.3    | 24.1  | 28.2    | 30.0  | 31.4    | 40.8  | 34.7    | 30.2  |                |               |
| 25-35                         | 24.2   | 26.0     | 23.6    | 22.9  | 24.2    | 23.1  | 24.8    | 27.8  | 29.3    | 23.8  |                |               |
| 36 and over                   | 26.1   | 31.1     | 23.9    | 23.8  | 25.3    | 26.0  | 26.3    | 27.5  | 27.6    | 26.2  |                |               |
| All contracts <sup>b</sup>    | 25.7   | 28.1     | 24.4    | 23.5  | 25.4    | 24.7  | 26.1    | 28.6  | 28.9    | 25.7  |                |               |
| No. of contracts <sup>b</sup> | 551  | 248      | 680     | 1,078 | 548     | 1,824 | 1,059   | 1,211 | 313     | 7,512 |                |               |

Source: Appendix Table B-2.

<sup>a</sup>Medians were calculated from the frequency distributions. Where the median value fell in the open-end class (marked with an \*) it was interpolated on the assumption that all contracts were accounted for by limiting the open-end class to 65 per cent of the cash selling price.

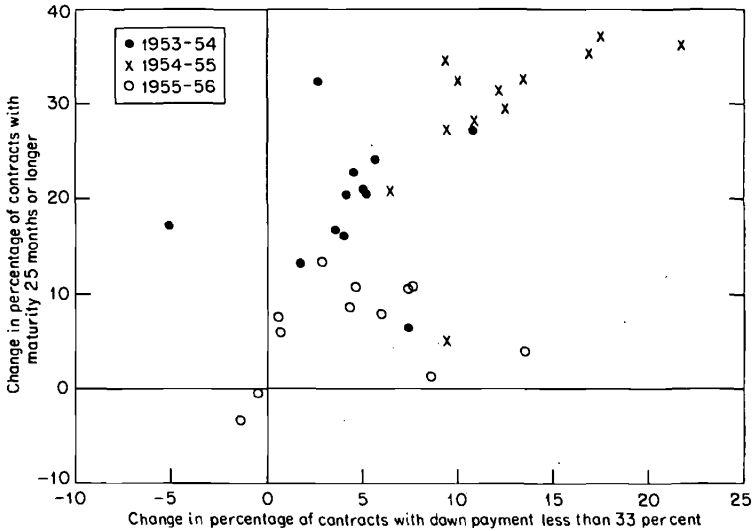
<sup>b</sup>Excludes contracts for which either down payment or maturity was not stated.

Note: For states included in the various regions see Appendix Table B-1. Chi-square results significant for all regions and for total United States at the 5 per cent level (App. Table B-2).



CHART 6

Change in Down Payments and Maturities on New-Automobile Contracts, Twelve Metropolitan Areas, 1953-56



SOURCE: Table G-1. Data from a large sales finance company; 1955-56 based on January and April.

gests that lenders place some restriction on one dimension of the credit contract when the other is being extended, presumably to limit the risk.

The regional evidence that small down payments and long maturities tend to occur together is supported by examination of local area data on changes in these two aspects of credit quality. Chart 6, based on data from another large sales finance company for twelve metropolitan areas, illustrates the point well.<sup>9</sup> Whereas the regional evidence pertained to only one point in time, Chart 6 relates to changes over time. Year-to-year changes in the percentage of contracts issued with maturities twenty-five months or longer are compared with corresponding changes in the proportion of contracts with down payments less than 33 per cent. For all areas and for all three yearly changes a large increase in long-maturity paper is generally associated with a large

<sup>9</sup> For a list of the areas and the basis for their selection, see Appendix F.

increase in low-down-payment paper, and vice versa. The positive association justifies the conclusion that these two factors, more often than not, move together so as to magnify rather than offset the qualitative implications of either one.

#### LOAN TERMS AND BORROWER CHARACTERISTICS

Do the borrowers who obtain credit contracts involving low down payments or long maturities differ in relevant characteristics from those who obtain credit on less easy terms? It is important to consider this question because it is a necessary step in determining whether any observed relation between credit terms and collection experience merely reflects an association between the terms and some more fundamental characteristic of the borrowers, or whether the terms themselves have an independent bearing on collection experience. There is another reason also. If it can be shown that those borrower characteristics that are associated with poor collection experience are often found in loans with terms that are also associated with poor collection experience, these two factors may reinforce one another in accounting for changes in *ex post* quality. If the reverse is true, they may offset one another. We wish, therefore, to know what types of borrowers obtain the "easiest" terms.

Our data enable us to consider five borrower characteristics and the down payment and maturity requirements associated with them. Tables 18 through 22, on which the discussion will be based, are derived from the tables in Appendix B which present the results of a chi-square analysis of the significance of the relations considered. The data pertain to contracts made in June 1953 and in July 1957. One of their most striking features, but one which we shall ignore for the moment, is the decrease in average down payment and the increase in average maturity between these two dates. This change, which pervades all types of borrower groups, is far wider than any variation we shall discover among the borrower groups at either date. Nevertheless, we shall for the present concentrate attention on the variations among borrowers.

Table 18 shows a fairly consistent tendency for borrowers in the lowest and in the highest income brackets to obtain shorter maturities, and the relation is statistically significant in both 1953 and 1957. As for down payments, there appears to be no statistically significant

TABLE 18

*Median Maturity and Down Payment, New-Automobile Contracts  
Classified by Income of Borrower, 1953 and 1957,  
A Large Sales Finance Company*

| Monthly Income<br>(dollars) | June<br>1953                              | July<br>1957 | June<br>1953                   | July<br>1957 |
|-----------------------------|---|--------------|--------------------------------|--------------|
|                             | <i>Median<br/>Maturity (mos.)</i>         |              | <i>Number of<br/>Contracts</i> |              |
| Under 250                   | 20.1                                      | 37.0*        | 491                            | 509          |
| 250-349                     | 21.1                                      | 37.8*        | 1,245                          | 1,609        |
| 350-499                     | 21.2                                      | 37.5*        | 1,475                          | 3,315        |
| 500-999                     | 20.3                                      | 36.1*        | 983                            | 2,489        |
| 1,000 and over              | 19.7                                      | 31.3*        | 125                            | 281          |
| All contracts               | 20.8                                      | 37.2*        | 4,319                          | 8,203        |
| Chi-square test             | S   | S            |                                |              |
|                             | <i>Median<br/>Down Payment (per cent)</i> |              | <i>Number of<br/>Contracts</i> |              |
| Under 250                   | 38.3                                      | 33.1         | 489                            | 510          |
| 250-349                     | 38.1                                      | 32.0         | 1,244                          | 1,612        |
| 350-499                     | 37.8                                      | 31.9         | 1,482                          | 3,311        |
| 500-499                     | 38.4                                      | 32.1         | 988                            | 2,484        |
| 1,000 and over              | 38.6                                      | 32.9         | 123                            | 278          |
| All contracts               | 38.1                                      | 32.1         | 4,326                          | 8,195        |
| Chi-square test             | N   | N            |                                |              |

Source: Appendix Tables B-3 and B-4.

Chi-square test (S = significant, N = not significant, at the .05 level) is based on data in the appendix tables.

\*Median value falls in open-end class. Cf. note a, Table 16.

relationship to income, although in both years borrowers in the middle income brackets made slightly smaller down payments (as a percentage of purchase price) than the lower or higher income groups, on the average. Some further evidence on this point, pertaining to 1954-55 and utilized in another connection in Chapter 5, suggests that low in-

TABLE 19

*Median Maturity and Down Payment, New-Automobile Contracts  
Classified by Sex of Borrower, 1953 and 1957,  
A Large Sales Finance Company*

| Sex             | June<br>1953                              | July<br>1957 | June<br>1953                   | July<br>1957 |
|-----------------|---|--------------|--------------------------------|--------------|
|                 | <i>Median<br/>Maturity (mos.)</i>         |              | <i>Number of<br/>Contracts</i> |              |
| Male            | 20.7                                      | 37.1*        | 4,207                          | 7,870        |
| Female          | 20.4                                      | 37.0*        | 393                            | 620          |
| All contracts   | 20.7                                      | 37.1*        | 4,600                          | 8,490        |
| Chi-square test | N   | N            |                                |              |
|                 | <i>Median<br/>Down Payment (per cent)</i> |              | <i>Number of<br/>Contracts</i> |              |
| Male            | 36.1                                      | 32.2         | 4,215                          | 7,853        |
| Female          | 36.0                                      | 32.0         | 391                            | 623          |
| All contracts   | 36.1                                      | 32.2         | 4,606                          | 8,476        |
| Chi-square test | N   | N            |                                |              |

Source: Appendix Tables B-5 and B-6.

Chi-square test (S = significant, N = not significant, at the 0.5 level) is based on data in the appendix tables.

\*Median value falls in open-end class. Cf. note a, Table 16.

come borrowers typically make smaller down payments than high income borrowers, but that the longest maturities go to borrowers in the middle income range.<sup>10</sup> It does not appear, therefore, that credit

<sup>10</sup> The proportions of new-auto contracts with low down payments and long maturities are as follows (Tables 36 and 37):

|                                | <i>Income of Borrower in<br/>Year of Purchase</i> |                             |                             |                               |
|--------------------------------|---|-----------------------------|-----------------------------|-------------------------------|
|                                | <i>Under<br/>\$3,000</i>                          | <i>\$3,000-<br/>\$4,999</i> | <i>\$5,000-<br/>\$7,499</i> | <i>\$7,500<br/>&amp; over</i> |
| Percentage with:               |   |                             |                             |                               |
| Down payment under 30 per cent | 59  | 55                          | 53                          | 48                            |
| Maturity 30 months and over    | 49  | 53                          | 48                          | 37                            |

TABLE 20

*Median Maturity and Down Payment, New-Automobile Contracts  
Classified by Marital Status of Borrower, 1953 and 1957,  
A Large Sales Finance Company*

| Marital<br>Status | June<br>1953                              | July<br>1957 | June<br>1953               | July<br>1957 |
|-------------------|---|--------------|----------------------------|--------------|
|                   | <i>Median Maturity (mos.)</i>             |              | <i>Number of Contracts</i> |              |
| Married           | 20.8                                      | 37.2*        | 3,779                      | 7,215        |
| Single            | 20.2                                      | 36.4*        | 790                        | 1,244        |
| Divorced-Widowed  | 28.1                                      | a            | 15                         | a            |
| All contracts     | 20.7                                      | 37.1*        | 4,584                      | 8,459        |
| Chi-square test   | S   | S            |                            |              |
|                   | <i>Median<br/>Down Payment (per cent)</i> |              | <i>Number of Contracts</i> |              |
| Married           | 38.3                                      | 32.2         | 3,783                      | 7,205        |
| Single            | 38.8                                      | 32.1         | 792                        | 1,246        |
| Divorced-Widowed  | 33.8                                      | a            | 16                         | a            |
| All contracts     | 38.3                                      | 32.2         | 4,591                      | 8,451        |
| Chi-square test   | N   | N            |                            |              |

Source: Appendix Tables B-7 and B-8. Chi-square (S = significant, N = not significant, at the .05 level) is based on data in the appendix tables.

<sup>a</sup>Data not collected.

\*Median value falls in open-end class. Cf. note a, Table 16.

agencies offset to any marked degree whatever greater risk is associated with low income borrowers by requiring higher down payments or shorter repayment periods, although there may be a modest tendency of this sort, particularly with respect to maturities. As a rule, the highest income groups make the largest down payments and the shortest commitments.

Here, as in the case of other borrower characteristics, it is important to bear in mind that the contracts being analyzed reflect the

TABLE 21

*Median Maturity and Down Payment, New-Automobile Contracts  
Classified by Age of Borrower, 1953 and 1957,  
A Large Sales Finance Company*

| Age (yrs.)      | June<br>1953                              | July<br>1957 | June<br>1953                   | July<br>1957 |
|-----------------|---|--------------|--------------------------------|--------------|
|                 | <i>Median<br/>Maturity (mos.)</i>         |              | <i>Number of<br/>Contracts</i> |              |
| 30 and under    | 20.7                                      | 37.4*        | 1,452                          | 2,678        |
| 31-40           | 21.1                                      | 37.4*        | 1,446                          | 2,774        |
| 41-50           | 20.4                                      | 36.6*        | 1,058                          | 1,964        |
| Over 50         | 20.1                                      | 36.0*        | 612                            | 1,052        |
| All contracts   | 20.7                                      | 37.1*        | 4,568                          | 8,468        |
| Chi-square test | S   | S            |                                |              |
|                 | <i>Median<br/>Down Payment (per cent)</i> |              | <i>Number of<br/>Contracts</i> |              |
| 30 and over     | 35.7                                      | 31.4         | 1,450                          | 2,679        |
| 31-40           | 39.0                                      | 31.9         | 1,450                          | 2,765        |
| 41-50           | 38.8                                      | 32.6         | 1,061                          | 1,959        |
| Over 50         | 41.7                                      | 34.1         | 615                            | 1,053        |
| All contracts   | 38.3                                      | 32.1         | 4,576                          | 8,456        |
| Chi-square test | S   | S            |                                |              |

Source: Appendix Tables B-9 and B-10.

Chi-square test (S = significant, N = not significant, at the .05 level) is based on data in the appendix tables.

\*Median value falls in open-end class. Cf. note a, Table 16.

terms agreed upon by borrower and lender. Borrowers' demands are tempered in the light of what terms are offered, and the offers are governed in part by what borrowers demand. That the result of this process can change dramatically is indicated by the marked shift between 1953 and 1957 in the terms accepted by both parties.

The terms of new-automobile contracts in our sample do not seem to differ significantly according to whether the borrowers were men

TABLE 22

*Median Maturity and Down Payment, New-Automobile Contracts  
Classified by Occupation of Borrower, 1953 and 1957,  
A Large Sales Finance Company*

| Occupation      | June<br>1953                              | July<br>1957 | June<br>1953                   | July<br>1957 |
|-----------------|---|--------------|--------------------------------|--------------|
|                 | <i>Median<br/>Maturity (mos.)</i>         |              | <i>Number of<br/>Contracts</i> |              |
| Farm            |   |              |                                |              |
| Operators       | 14.5                                      | 28.3         | 150                            | 205          |
| Wage earners    | 18.0                                      | 32.8         | 49                             | 86           |
| Nonfarm         |   |              |                                |              |
| Proprietors     | 19.5                                      | 33.7         | 493                            | 632          |
| Professional    | 20.2                                      | 35.3         | 269                            | 462          |
| Salaried        | 20.9                                      | 37.3*        | 1,544                          | 2,809        |
| Wage earners    | 21.4                                      | 37.5*        | 1,726                          | 3,796        |
| Miscellaneous   | 20.9                                      | 37.3*        | 346                            | 492          |
| All contracts   | 20.7                                      | 37.1*        | 4,577                          | 8,482        |
| Chi-square test | S   | S            |                                |              |
|                 | <i>Median<br/>Down Payment (per cent)</i> |              | <i>Number of<br/>Contracts</i> |              |
| Farm            |   |              |                                |              |
| Operators       | 42.1                                      | 38.0         | 148                            | 213          |
| Wage earners    | 41.0                                      | 35.0         | 48                             | 88           |
| Nonfarm         |   |              |                                |              |
| Proprietors     | 39.4                                      | 33.6         | 495                            | 630          |
| Professional    | 39.1                                      | 32.9         | 270                            | 461          |
| Salaried        | 37.6                                      | 31.2         | 1,540                          | 2,795        |
| Wage earners    | 38.2                                      | 32.1         | 1,728                          | 3,791        |
| Miscellaneous   | 37.6                                      | 32.8         | 350                            | 490          |
| All contracts   | 38.3                                      | 32.2         | 4,579                          | 8,468        |
| Chi-square test | S   | S            |                                |              |

Source: Appendix Tables B-11 and B-12.

Chi-square test (S = significant, N = not significant, at the .05 level) is based on data in the appendix tables.

\*Median value falls in open-end class. Cf. note. a, Table 16.

or women, although the great majority of borrowers were men (Table 19). With regard to marital status, Table 20 suggests that while married borrowers tend to obtain loans with significantly longer maturities, the difference is not great. Moreover, marital status is not significantly associated with stringent or liberal down payment terms. On balance, the evidence does not suggest that one can attach great importance to the interrelation of loan terms with this borrower characteristic.

The classification of borrowers by age reveals consistent and significant associations with loan terms. Younger borrowers obtain more liberal terms, i.e., longer maturities as well as lower down payments. This result appears both in 1953 and in 1957 (Table 21).

We find occupation to be one of the borrower characteristics most consistently associated with loan terms. Table 22 indicates the median down payment and the median maturity associated with each occupational class in the two periods. The most striking finding is that not only are the maturities and down payments quite different for the various occupations, but the longer maturities and smaller down payments are concentrated in the same occupational classes in both 1953 and 1957.

The shortest maturities and largest down payments, i.e., the most conservative terms, are found in the farm operator group, with farm wage earners next. Somewhat longer maturities and smaller down payments characterize the nonfarm proprietor and professional groups. Salaried workers and nonfarm wage earners secure the easiest terms, the salaried group making smaller down payments than the wage earner group but receiving slightly shorter maturities, on the average. These findings pertain to samples considered on a national basis, without regard to the region where they originate. Analysis of separate samples for each region yields broadly similar conclusions (Table 23).

The over-all conclusion which emerges from this examination of the interrelationship of credit contract terms and borrower characteristics is that terms vary systematically with the age and occupation of the borrower, to a lesser extent with his income, and scarcely at all with the borrower's sex or marital status. These results obtained both before the extensive liberalization of lending terms that occurred in 1954-55 as well as after. It is unfortunate that data are not available to test the relations of loan terms to the liquid asset holdings, net worth, and life cycle status of the borrowers, because there is evidence



that these borrower characteristics, as well as those we have just considered, are significantly related to collection experience (cf. Chapter 4). Moreover, it would be useful to study the impact on credit quality of social and economic instability, as indicated by such factors as the borrowers' length of residence, marital stability (divorce rate), whether they live in their own or a rented home, and the average number of times the borrowers have changed employment in the recent past. There is reason to think these factors might affect credit quality, but we have not been able to examine the possible relationships.

To return to the question asked at the beginning of this section: Is consumer credit extended in such a way that liberality in one dimension is accompanied by liberality in another, or is it generally true that an easing in one direction is offset by tightening in another? We can offer only a partial answer at this point. Although we have observed some offsetting tendencies, for the most part easier down payments and longer maturities go together. The relation of these factors, separately and together, to credit risk will be examined in Chapter 3. We have found also that easier terms are significantly associated with certain borrower characteristics. Whether this association offsets or reinforces prospective lender risk must await the analysis of Chapter 4, which examines the relation between borrower characteristics and collection experience.

TABLE 23

Summary of Regional Evidence on the Association Between Credit Terms and Borrower Characteristics,  
New-Automobile Contracts, 1953 And 1957, A Large Sales Finance Company

|   | June 1953 Sample |                          |                          |                          |                          |                   |                    |                   |                  |                 | Total<br>New England<br>U.S. <sup>a</sup> |   |
|---|------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------|--------------------|-------------------|------------------|-----------------|---|---|
|   | Pacific          | West<br>North<br>Central | West<br>South<br>Central | East<br>North<br>Central | East<br>South<br>Central | South<br>Atlantic | Middle<br>Atlantic | South<br>Atlantic | North<br>Central | East<br>Central |   |   |
| Maturity as compared with   |                  |                          |                          |                          |                          |                   |                    |                   |                  |                 |   |   |
| Income per month  | N                | S                        | N                        | S*                       | N                        | N                 | S                  | N                 | N*               | N               | N   | S |
| Sex   | N                | N                        | N                        | N                        | N                        | N                 | N                  | N                 | N                | N               | N   | N |
| Marital status  | N                | N                        | N                        | S                        | N*                       | N*                | N*                 | N                 | N*               | N               | N   | S |
| Age   | N                | N*                       | N                        | S*                       | N                        | N                 | S*                 | N*                | N                | N               | N   | S |
| Occupation  | N                | S                        | S                        | S                        | N                        | N                 | S                  | S*                | N                | N               | N   | S |
| Down Payment as percentage<br>of cash selling price as<br>compared with |                  |                          |                          |                          |                          |                   |                    |                   |                  |                 |   |   |
| Income per month  | N                | N                        | N                        | N                        | S                        | N                 | N                  | N                 | N                | N               | N   | N |
| Sex   | N                | S                        | N                        | N                        | N                        | N                 | N                  | S                 | N                | N               | N   | N |
| Marital status  | N                | N                        | N                        | N                        | N                        | N                 | N                  | N                 | N                | N               | S   | N |
| Age   | N                | N                        | N                        | S                        | N*                       | N                 | S*                 | N                 | N*               | N               | N   | S |
| Occupation  | N                | N                        | N                        | N                        | N                        | N                 | N                  | N                 | N                | N               | N   | S |

(continued)

TABLE 23 (concluded)

|                            | West    |          | East    |         | East     |          | East     |          | Total             |
|----------------------------|---------|----------|---------|---------|----------|----------|----------|----------|-------------------|
|                            | Pacific | Mountain | North   | South   | South    | Central  | North    | Central  |                   |
|                            |         |          | Central | Central | Atlantic | Atlantic | Atlantic | Atlantic | U.S. <sup>a</sup> |
| <i>July 1957 Sample</i>    |         |          |         |         |          |          |          |          |                   |
| Maturity as compared with  |         |          |         |         |          |          |          |          |                   |
| Income per month           | S*      | N        | S*      | N       | S*       | S*       | S*       | S        | S                 |
| Sex                        | N       | N        | N       | N       | N        | N        | N        | N        | N                 |
| Marital status             | N*      | N*       | N*      | N*      | S        | N*       | N*       | N        | S                 |
| Age                        | N*      | S        | N*      | N       | S*       | S*       | S*       | S*       | S                 |
| Occupation                 | S       | S*       | S       | S*      | S        | S*       | S        | S        | S                 |
| Down Payment as percentage |         |          |         |         |          |          |          |          |                   |
| of cash selling price as   |         |          |         |         |          |          |          |          |                   |
| compared with              |         |          |         |         |          |          |          |          |                   |
| Income per month           | S       | N        | S       | N       | N        | N        | N        | N        | N                 |
| Sex                        | N       | N        | N       | N       | N        | N        | N        | N        | N                 |
| Marital status             | N       | N        | N       | N       | N        | N        | N        | N        | N                 |
| Age                        | N       | N        | S*      | N*      | N        | S        | S*       | N        | S                 |
| Occupation                 | S       | N        | S*      | S       | N        | N        | N        | N        | S                 |

<sup>a</sup>For states included in each region, see Appendix Table B-1.

S = Chi-square values are significant at the .05 level.

N = Chi-square values are not significant at the .05 level.

\* = Regional pattern is similar to the U.S. pattern (where it was significant). The measure of similarity is the percentage of like signs in the regional and U.S. patterns. Where this percentage is 75 or more, an asterisk is shown.