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Appendix A

QUESTIONNAIRE FOR THE SAMPLE
OF LOANS FOR COMMERCIAL
AND INDUSTRIAL PURPOSES

Sample of Loans for Commercial and Industrial Purposes

I. LOAN CHARACTERISTICS

1. Amount outstanding on 2/28/67 _____
2. Original amount of current outstanding _____
3. Interest rate face of note _____
4. Repayment method (one from Group A) _____
5. Participation with another bank (Group B) _____
6. Maximum amount of loans outstanding to this borrower in last 12 months _____
7. Is loan collateralized? If yes, estimate current collateral value relative to maximum loan balance (Group C) _____
8. If (7) yes, is collateral easily marketable. Yes? No? _____
9. If (7) yes, is any explicit payment made for investigating or handling collateral. Yes? No? _____
10. Does borrower have outstanding loan(s) from other banks Yes? No? _____

II. BORROWER CHARACTERISTICS

11. Form of bus. organ. (I) Inc. (U) Uninc. _____
12. Business of borrower (Group D)
Insert letter which best fits _____
13. Total assets fiscal or calendar year ending in 1966 _____
1965 _____
1964 _____
1963 _____

15. Current liabilities fiscal or calendar year ending 1966 _____
1965 _____
1964 _____
1963 _____
16. Net profits before taxes, fiscal or calendar year ending 1966 _____
1965 _____
1964 _____
1963 _____
17. Net worth, fiscal or calendar year ending 1966 _____
1965 _____
1964 _____
1963 _____

III. CUSTOMER CHARACTERISTICS

18. During the year the fluctuation (High to Low) in this customer's demand deposit balance is (Group E) _____
19. Average dep. balance last 12 months _____
20. Length of time this bank has had lending arrangement with this customer (Group F) _____
21. Length of time during last 12 months borrower was in debt to the bank (in months) _____
22. This customer's account activity, number of checks written & deposits made is: (Group G) _____

14. Current assets fiscal or calendar year ending
- | | |
|------|-------|
| 1966 | _____ |
| 1965 | _____ |
| 1964 | _____ |
| 1963 | _____ |
23. Does bank perform services other than lending and checking for borrower? Yes? No?
24. If (23) yes, does bank make separate charge for these services? Yes? No?
25. If (24) yes, would you estimate the net profit to the bank from providing other services to this customer, fees minus cost of providing services to be: (Group H)

NOTE: Space was provided in the original questionnaire for information on sixteen borrowers for each question. Groups A through H are listed below.

Group A: (a) Single payment; (b) Paid in installments with interest added on; (c) Paid in installments with interest charged on unpaid balance.

Group B: (a) No; (b) Originated with your bank; (c) Originated with another bank; (d) Pool type participation.

Group C: (a) No; (b) 50 per cent or less, (c) 51 to 75 per cent; (d) 76 to 99 per cent; (e) 100 per cent or more.

Group D: (a) Manufacturing and mining; (b) Wholesale trade and distributors, (c) Retail trade; (d) Commodity, bond, and stock dealers—members of recognized exchange; (e) Finance companies—Sales, small loan and commercial; (f) Real estate and construction—Does not include mortgage financing; (g) Service firms—Repair services, medical and dental, legal and other; (h) All others, specify.

Group E: (a) Very small; (b) Moderate; (c) Very wide.

Group F: (a) Less than 1 year; (b) 1 through 3 years; (c) More than 3 years.

Group G: (a) Small; (b) Moderate; (c) Large; (d) Very large.

Group H: (a) Losses; (b) Break even; (c) Some profit; (d) Highly profitable.

Appendix B

THE SAMPLE OF BANK
CUSTOMER PROFILES

Appendix B

THIS APPENDIX describes the bank customer profile data used in the empirical sections of this study. A sample of banks were requested to supply data describing the characteristics of a number of their borrowing customers. A copy of the questionnaire and the instructions which accompanied the questionnaire are shown in Appendix A. Banks were chosen from among the population of all banks in the three asset sizes: \$40–\$60 million, \$80–\$120 million, and \$200–400 million. A small proportion of the banks in these size classes domiciled outside of SMSA's were sampled; almost all banks in these size classes domiciled in SMSA's were sent requests for data. The banks were chosen at random from the SMSA's that had a very large number of banks with assets between \$40–\$400 million. The goal was to have representation from as large a number of SMSA's as possible, with a distribution among the three types of branch restrictions. Responses were received from 160 banks domiciled in 107 SMSA's. Appendix Table B-1 shows the distribution of responding banks by type of bank organization, whether unit or branch, and by degree of branching restriction. The distribution of responding banks by asset size and SMSA designation is shown in Appendix Table B-2.

The largest banks were requested to supply 80 customer profiles, the middle size banks were asked to supply 60 customers,

Appendix Table B-1
Number of Branch and Unit Banks by State and Branching Regulation

| State Code | Within SMSA | | Outside SMSA | |
|----------------------|-------------|------|--------------|------|
| | Branch | Unit | Branch | Unit |
| Unit | 7 | 47 | 0 | 6 |
| Restricted branching | 73 | 5 | 4 | 0 |
| Statewide branching | 13 | 4 | 1 | 0 |

Appendix Table B-2
 Location and Size Class of Responding Banks

| SMSA | Total Number of Banks | Number of Banks With Assets of | | |
|------|-----------------------------|--------------------------------|-----------------------|------------------------|
| | | \$40-\$60 Million | \$80-\$120 Million | \$200-\$400 Million |
| 000 | 11 | 5 | 5 | 1 |
| 002 | 1 | 0 | 1 | 0 |
| 005 | 1 | 1 | 0 | 0 |
| 008 | 1 | 0 | 0 | 1 |
| 010 | 1 | 0 | 1 | 0 |
| 012 | 1 | 0 | 0 | 1 |
| 013 | 1 | 0 | 1 | 0 |
| 015 | 1 | 0 | 1 | 0 |
| 017 | 1 | 0 | 0 | 1 |
| 018 | 4 | 3 | 1 | 0 |
| 019 | 1 | 0 | 0 | 1 |
| 022 | 1 | 0 | 1 | 0 |
| 023 | 1 | 1 | 0 | 0 |
| 024 | 1 | 0 | 0 | 1 |
| 025 | 2 | 0 | 2 | 0 |
| 027 | 1 | 0 | 0 | 1 |
| 028 | 8 | 3 | 3 | 2 |
| 030 | 2 | 1 | 1 | 0 |
| 033 | 2 | 0 | 0 | 2 |
| 034 | 1 | 1 | 0 | 0 |
| 037 | 1 | 0 | 0 | 1 |
| 040 | 2 | 0 | 1 | 1 |
| 042 | 1 | 1 | 0 | 0 |
| 043 | 1 | 0 | 1 | 0 |
| 046 | 2 | 1 | 1 | 0 |
| 047 | 2 | 0 | 2 | 0 |
| 048 | 1 | 1 | 0 | 0 |
| 052 | 1 | 0 | 0 | 1 |
| 057 | 1 | 1 | 0 | 0 |
| 059 | 1 | 1 | 0 | 0 |
| 060 | 1 | 1 | 0 | 0 |
| 062 | 1 | 1 | 0 | 0 |
| 065 | 1 | 1 | 0 | 0 |
| 069 | 2 | 0 | 0 | 2 |
| 070 | 1 | 1 | 0 | 0 |

Appendix Table B-2-(Continued)

| SMSA | Total Number of Banks | Number of Banks With Assets of | | |
|------|-----------------------------|--------------------------------|-----------------------|------------------------|
| | | \$40-\$60 Million | \$80-\$120 Million | \$200-\$400 Million |
| 071 | 1 | 0 | 1 | 0 |
| 072 | 1 | 0 | 1 | 0 |
| 073 | 1 | 0 | 0 | 1 |
| 076 | 2 | 1 | 1 | 0 |
| 077 | 1 | 0 | 1 | 0 |
| 078 | 1 | 1 | 0 | 0 |
| 081 | 1 | 1 | 0 | 0 |
| 082 | 1 | 0 | 1 | 0 |
| 083 | 1 | 0 | 1 | 0 |
| 084 | 1 | 1 | 0 | 0 |
| 086 | 2 | 0 | 0 | 2 |
| 088 | 2 | 1 | 1 | 0 |
| 090 | 1 | 0 | 1 | 0 |
| 095 | 2 | 1 | 1 | 0 |
| 096 | 1 | 0 | 1 | 0 |
| 100 | 1 | 0 | 0 | 1 |
| 102 | 1 | 1 | 0 | 0 |
| 104 | 1 | 0 | 0 | 1 |
| 105 | 1 | 1 | 0 | 0 |
| 108 | 1 | 1 | 0 | 0 |
| 109 | 1 | 1 | 0 | 0 |
| 110 | 1 | 1 | 0 | 0 |
| 112 | 5 | 2 | 0 | 3 |
| 114 | 1 | 1 | 0 | 0 |
| 117 | 2 | 0 | 2 | 0 |
| 119 | 1 | 1 | 0 | 0 |
| 120 | 1 | 1 | 0 | 0 |
| 121 | 1 | 1 | 0 | 0 |
| 123 | 1 | 0 | 0 | 1 |
| 124 | 1 | 0 | 0 | 1 |
| 125 | 1 | 1 | 0 | 0 |
| 126 | 1 | 0 | 0 | 1 |
| 127 | 1 | 0 | 1 | 0 |
| 131 | 2 | 1 | 0 | 1 |
| 132 | 2 | 0 | 0 | 2 |
| 133 | 1 | 1 | 0 | 0 |

(Continued)

Appendix Table B-2-(Concluded)

| SMSA | Total Number of Banks | Number of Banks With Assets of | | |
|------|-----------------------------|--------------------------------|-----------------------|------------------------|
| | | \$40-\$60 Million | \$80-\$120 Million | \$200-\$400 Million |
| 136 | 1 | 0 | 1 | 0 |
| 137 | 1 | 0 | 0 | 1 |
| 141 | 1 | 1 | 0 | 0 |
| 142 | 1 | 0 | 0 | 1 |
| 143 | 3 | 1 | 1 | 1 |
| 147 | 1 | 0 | 1 | 0 |
| 149 | 2 | 0 | 2 | 0 |
| 155 | 1 | 0 | 0 | 1 |
| 156 | 1 | 0 | 0 | 1 |
| 159 | 3 | 2 | 0 | 1 |
| 160 | 1 | 0 | 1 | 0 |
| 161 | 3 | 1 | 1 | 1 |
| 163 | 1 | 0 | 0 | 1 |
| 165 | 2 | 0 | 2 | 0 |
| 166 | 1 | 0 | 0 | 1 |
| 167 | 1 | 1 | 0 | 0 |
| 168 | 2 | 2 | 0 | 0 |
| 171 | 1 | 0 | 1 | 0 |
| 173 | 1 | 0 | 1 | 0 |
| 176 | 2 | 0 | 1 | 1 |
| 177 | 1 | 0 | 1 | 0 |
| 178 | 3 | 0 | 3 | 0 |
| 179 | 1 | 1 | 0 | 0 |
| 183 | 1 | 0 | 1 | 0 |
| 185 | 1 | 0 | 1 | 0 |
| 188 | 1 | 0 | 0 | 1 |
| 189 | 1 | 0 | 1 | 0 |
| 190 | 3 | 1 | 2 | 0 |
| 191 | 4 | 0 | 1 | 3 |
| 192 | 1 | 1 | 0 | 0 |
| 194 | 1 | 1 | 0 | 0 |
| 197 | 1 | 1 | 0 | 0 |
| 201 | 1 | 1 | 0 | 0 |
| 202 | 1 | 0 | 1 | 0 |
| 203 | 1 | 1 | 0 | 0 |
| 205 | 1 | 0 | 1 | 0 |
| 209 | 1 | 0 | 1 | 0 |
| 216 | 1 | 1 | 0 | 0 |
| 220 | 1 | 0 | 1 | 0 |
| 223 | 1 | 1 | 0 | 0 |

and the smallest banks were asked for 40 customers. The coded questionnaires produced 8,157 customer profiles which have been used in the estimates and statistical tests in this study. The number of customer profiles by SMSA is shown in Appendix Table B-3.

Appendix Table B-3
Number of Customer Profiles by SMSA

| SMSA | Number of Customers | SMSA | Number of Customers |
|------|---------------------|------|---------------------|
| 2 | 32 | 70 | 25 |
| 5 | 40 | 71 | 52 |
| 8 | 77 | 72 | 62 |
| 10 | 64 | 73 | 79 |
| 12 | 55 | 76 | 95 |
| 13 | 60 | 77 | 48 |
| 15 | 64 | 78 | 42 |
| 17 | 76 | 81 | 40 |
| 18 | 153 | 83 | 58 |
| 19 | 79 | 84 | 43 |
| 22 | 60 | 86 | 156 |
| 23 | 40 | 88 | 99 |
| 24 | 80 | 90 | 23 |
| 25 | 100 | 95 | 85 |
| 27 | 71 | 96 | 58 |
| 28 | 341 | 100 | 30 |
| 30 | 51 | 102 | 40 |
| 33 | 126 | 104 | 80 |
| 34 | 40 | 108 | 31 |
| 37 | 78 | 109 | 39 |
| 40 | 139 | 110 | 41 |
| 42 | 40 | 112 | 221 |
| 43 | 60 | 114 | 40 |
| 46 | 106 | 117 | 64 |
| 47 | 106 | 119 | 40 |
| 48 | 40 | 120 | 33 |
| 52 | 80 | 121 | 14 |
| 57 | 40 | 123 | 80 |
| 59 | 40 | 124 | 79 |
| 60 | 39 | 125 | 40 |
| 62 | 39 | 126 | 56 |
| 65 | 40 | 127 | 54 |
| 69 | 159 | 131 | 90 |

(Continued)

Appendix Table B-3-(Concluded)

| SMSA | Number of Customers | SMSA | Number of Customers |
|------|---------------------|------|---------------------|
| 132 | 120 | 173 | 11 |
| 133 | 40 | 176 | 142 |
| 136 | 56 | 177 | 30 |
| 137 | 76 | 178 | 115 |
| 141 | 40 | 183 | 41 |
| 142 | 29 | 185 | 60 |
| 143 | 132 | 188 | 63 |
| 147 | 59 | 189 | 46 |
| 149 | 113 | 190 | 116 |
| 155 | 80 | 191 | 293 |
| 156 | 80 | 192 | 46 |
| 159 | 160 | 194 | 40 |
| 160 | 60 | 197 | 35 |
| 161 | 182 | 201 | 40 |
| 163 | 80 | 202 | 60 |
| 165 | 119 | 203 | 16 |
| 166 | 85 | 205 | 51 |
| 167 | 16 | 209 | 64 |
| 168 | 40 | 216 | 40 |
| 171 | 64 | 223 | 16 |

Some requests for clarification of responses were sent to banks but generally when particular customer profiles were not complete in a number of key variables, e.g., when no loan data was provided, or the data were obviously inconsistent, the customer was dropped from the sample. This is the major reason for the odd number of customers in some SMSA's. In a number of instances, however, banks supplied more or less customers than were requested.

Bank files do not contain balance sheet or income statements for many customers. The lack of these data did not cause the customers to be dropped from the sample. Of the 8,157 customer profiles in the sample only 5,265 have business asset figures for 1965 (see Appendix Table B-4).

Thus, the sample of customer profiles contains different numbers of observations when the purpose for which it is used changes. If the focus is upon the supply of bank services to

Appendix Table B-4
Number of Customer Profiles by Data Partition

| Customers | | |
|--|-------|-------|
| Total | | 8,157 |
| In SMSA's | 7,614 | |
| Outside of SMSA's | 543 | |
| With business assets | | 5,265 |
| In SMSA's | 4,957 | |
| Outside of SMSA's | 308 | |
| With more than one bank | | 2,112 |
| In SMSA's | 1,987 | |
| Outside of SMSA's | 125 | |
| With no collateral | | 4,213 |
| With any collateral | | 2,714 |
| With collateral greater than 100 per cent | 1,861 | |
| With collateral blank | | 1,230 |

business and only customer characteristics at the bank are considered, all observations, both in SMSA's and outside SMSA's, can be used. The sample size for this analysis would be the full 8,157 customers. If the analysis also considers bank market characteristics, only customers of banks domiciled in an SMSA can be used and the sample is 7,614. When business asset size is used the sample declines to 5,265, and if market variables and business assets are used in the same equation the sample is 4,957. Sample sizes by these and other partitions can be seen in the data contained in Appendix Table B-4.

To keep the customer profiles as homogenous as possible, banks were instructed to include only short-term borrowers. This request was aimed at reducing the price variability because of difference in the original maturity of the loan. Customers were to be chosen from those who had received their loan after the last prime rate change or who had their loan rate renegotiated after the last change. There is some indication that this request was heeded by bankers, since a number of respondents included fewer than the requested number of customers and noted that this number was 100 per cent of their business customers that fell into the above category. Moreover, this requirement brought a

large number of requests for clarification from bankers. But most probably the sample is not completely homogenous in this dimension.

Some indication of the potential problem of heterogeneous rate, because of differences in the date the rate was negotiated during a period of changing rates, is given by the distribution of customer time in debt during the last twelve months (see Appendix Table B-5). Seventy-six per cent of the customers

Appendix Table B-5
Length of Time During Last Twelve Months
Customer Was in Debt to Bank

| Months | Number of Customers | Percentage |
|--------|---------------------|------------|
| 1 | 214 | 03 |
| 2 | 176 | 02 |
| 3 | 213 | 03 |
| 4 | 181 | 02 |
| 5 | 194 | 02 |
| 6 | 361 | 04 |
| 7 | 251 | 03 |
| 8 | 329 | 04 |
| 9 | 360 | 04 |
| 10 | 403 | 05 |
| 11 | 445 | 05 |
| 12 | 5,019 | 62 |
| Blank | 11 | 00 |

included in the sample were in debt to their bank for nine or more months in the twelve months preceding the survey date. It is possible that a substantial fraction of the customers in debt for a major part of the year renewed their notes periodically or that the rate was tied to the prime rate. But, there is certainly reason to believe that some error in variable exists in the loan rate data, if this rate is meant to depict the rate accorded to short-term loans granted at the time the survey was conducted. The survey was taken about a month after the prime bank rate had fallen from 6 per cent to 5.75 per cent. Thus, there is probably some upward bias in the interest rates in some of the

customer profiles. It should be noted that this potential bias is most troublesome for direct comparisons of rates or distributions of rates. For the major purpose for which these data are used, in regressions with other customer profile variables, concern about this bias is reduced. There is no reason to believe the bias is not randomly distributed with regard to the structural variables.

The nature of the data requested reduced concern about bias being introduced by bankers purposefully choosing customers to include in the sample. Moreover, bankers were asked for a substantial body of data that was time consuming and difficult to supply. Thus, no complicated sampling procedures could be attempted. Nonetheless some simple rules were given for the sample of customers to be included from among the eligible customers (see the instructions in the questionnaire in Appendix A). The major bias in this regard is probably due to the desire of bankers to supply data for all boxes in the questionnaire for the customers included. Bankers, therefore, would be expected to choose customers for whom their files were most complete. The replies indicating that many small banks were hard put to supply the requested number of customers, even when all eligible customers were listed, precluded any sophisticated sampling design.

Banks were asked to give the interest rate on the face of the note and indicate the method of repayment in separate questions. The effective loan rate was then computed from the responses to these two questions. Considerable correspondence was required to clarify these data to assure that interest rates were properly stated.

The periodic Federal Reserve Business Loan Surveys and the Quarterly Survey of Interest Rates on Short & Intermediate Term Loans request data on loan rates and amount of loan outstanding on the survey data. Such data have serious shortcomings as estimates of the current interest price bank borrowers must pay for loans. The interest rates observed on loans in the banks portfolio at any moment of time depend on the date the notes were written

and the recent movement in interest rates. The computed average rate depends on these two factors and the mix of the customer population that happens to be in debt to the bank at the time the survey is conducted. In addition to the problems of timing and mix, one of the major hypotheses of this study, that banks price their services on a package basis, implies that the current loan outstanding when the survey is taken is not the appropriate measure of the loan on which the price is based. The bank pricing model implies that the maximum loan which the bank expects to be called upon to grant the customer is an important determinant of the loan price; however, pretesting of the questionnaire with a number of banks demonstrated that a request for an estimate of the maximum loan which would be made could rarely be specified. Bankers demonstrated an aversion to estimating any number, especially one which was in dollars and essentially unconstrained. It was even difficult to get estimates where a choice of three or four possibilities was listed. In an attempt to develop data to represent the expected maximum loan, the questionnaire requested three loan size parameters, the current loan outstanding (question 1), the original amount of the currently outstanding loan (question 2), and the maximum amount of loans outstanding to this borrower in the last twelve months (question 6). The distribution of these three variables is shown in Appendix Table B-6. As can be seen there is no substantial difference between the three measures of loans outstanding, which suggests that any of the alternate loan measures will not prove a substantial improvement as a proxy for the theoretically correct loan variable.

The deposit size distribution of the customer profiles is shown in Appendix Table B-7. Of major interest is the fact that only 10 per cent of the customers with loans outstanding did not have deposits with the bank during the preceding twelve months. The presumption is, of course, that this is a good estimate of the proportion of business customers who do not have deposits with the bank from whom they borrow.

The distribution of the ratio of deposits to outstanding loans

Appendix Table B-6
Size of Loan, Number, and Percentage Distribution

| Loan Size (dollars) | Current Loan Outstanding | | Maximum Loan Outstanding | | Original Loan Outstanding | |
|------------------------|--------------------------|------------|--------------------------|------------|---------------------------|------------|
| | Number | Percentage | Number | Percentage | Number | Percentage |
| 1- 10,000 | 2,569 | 31 | 2,552 | 31 | 2,284 | 23 |
| 10,001- 20,000 | 1,154 | 14 | 898 | 11 | 1,111 | 14 |
| 20,001- 40,000 | 1,124 | 14 | 1,146 | 14 | 1,177 | 14 |
| 40,001- 80,000 | 1,029 | 13 | 1,263 | 15 | 1,090 | 13 |
| 80,001-120,000 | 516 | 06 | 481 | 06 | 551 | 07 |
| 120,001-200,000 | 618 | 08 | 556 | 07 | 683 | 08 |
| 200,001-400,000 | 602 | 07 | 627 | 08 | 640 | 08 |
| 400,001 < | 545 | 07 | 634 | 08 | 621 | 08 |

Appendix Table B-7
Distribution of Customers by Deposit Size

| Deposit Size (dollars) | Number of Customers | Percentage |
|---------------------------|------------------------|------------|
| 0 | 801 | 10 |
| 1- 2,500 | 1,595 | 20 |
| 2,501- 5,000 | 980 | 12 |
| 5,001- 10,000 | 1,047 | 13 |
| 10,001- 20,000 | 1,126 | 14 |
| 20,001- 40,000 | 986 | 11 |
| 40,001- 60,000 | 497 | 06 |
| 60,001- 80,000 | 315 | 04 |
| 80,001-100,000 | 202 | 02 |
| 100,001 < | 658 | 08 |

by asset size of business is shown in Appendix Table B-8. The ratios are partitioned into three groups, 30 per cent or less, greater than 30 per cent and less than 60 per cent, and greater than 60 per cent; collateralized and noncollateralized customers are shown separately. As size of firm increases, the ratios change very markedly. As expected, the changes are most pronounced for the noncollateralized customers. Among customers that collateralize their loan, the smallest sized firms are less than half as likely to be in 0-30 per cent deposit to loan category than the very largest firms and are three times more likely than the largest firms to be in the 60 per cent and over category. Although the differences are much less substantial for collateralized customers, the same pattern exists. It is interesting to note that the ratio of loans to deposits for all customers is not greatly different from this ratio for customers with asset size data.

As can be seen in Appendix Table B-4, 2,714 customers collateralized their loans. Of this number the collateral of 1,861 customers was considered to be greater than 100 per cent of the loan. Collateral can have many forms, with varying costs associated with handling and varying degrees of reduction in risk exposure. Collateral which is readily marketable affords the bank the maximum reduction in risk per dollar of collateral. Moreover, marketable collateral consists mainly of securities and

Appendix Table B-8
 Distribution of the Ratio of Average Deposit Balance to Outstanding Loan, by Size of Firm and All Customers

| Firm Size (dollars) | Percentage of Noncollateralized Customers With a | | | Percentage of Collateralized Customers With a | | | Percentage of All Customers With a | | |
|------------------------|---|-------------------|-----------------|--|-------------------|-----------------|---------------------------------------|-------------------|-----------------|
| | Deposit-Outstanding Ratio of | | | Deposit-Outstanding Ratio of | | | Deposit-Outstanding Ratio of | | |
| | 0-30 Per Cent | 31-60 Per Cent | >60 Per Cent | 0-30 Per Cent | 31-60 Per Cent | >60 Per Cent | 0-30 Per Cent | 31-60 Per Cent | >60 Per Cent |
| 0- 100,000 | 34.75 | 25.79 | 39.48 | 51.62 | 23.10 | 25.28 | 40.47 | 22.08 | 37.46 |
| 100,001- 250,000 | 37.86 | 21.10 | 41.04 | 62.43 | 15.61 | 21.95 | 47.51 | 18.37 | 34.12 |
| 250,001- 500,000 | 37.95 | 24.12 | 37.94 | 64.31 | 17.04 | 18.65 | 50.59 | 19.58 | 29.85 |
| 500,001- 1,000,000 | 45.09 | 18.85 | 36.07 | 62.97 | 17.17 | 19.84 | 52.98 | 18.15 | 28.86 |
| 1,000,001- 5,000,000 | 51.85 | 19.74 | 28.42 | 65.80 | 16.73 | 17.48 | 56.88 | 17.68 | 25.44 |
| 5,000,001-20,000,000 | 57.66 | 16.56 | 25.76 | 71.15 | 9.62 | 19.24 | 61.57 | 12.54 | 25.89 |
| 20,000,001 < | 71.95 | 15.84 | 12.22 | 73.68 | 15.78 | 10.53 | 71.48 | 15.63 | 12.89 |
| Total with asset data | 44.26 | 21.83 | 34.40 | 61.99 | 17.43 | 20.56 | 50.88 | 18.69 | 30.40 |
| All customers | 45.33 | 20.35 | 34.32 | 65.70 | 16.21 | 18.09 | 54.18 | 18.42 | 27.40 |

bonds, which are usually the least costly to handle. It is, therefore, significant that the collateral of only 19 per cent of the collateralized loan customers was considered easily marketable by their banks. Thus, the loans of four-fifths of the customers that maintained some collateral as backing of their loans still had some elements of risk to the bank. Of interest also is the fact that only 3 per cent of the customers that presented collateral were charged an investigating and handling fee. This suggests these costs are mainly recaptured through interest charges on loans and in other revenues from the relationship.

In general a balance that fluctuates is less valuable to the bank than one that is more stable. The distribution of replies to question 18, which requested a qualitative judgment about the fluctuation of the deposit balance, is shown in Appendix Table B-9. The deposit balance of 42 per cent of the customers

Appendix Table B-9
Fluctuation in Deposit Balance

| Deposit Fluctuation | Number of Customers | Percentage |
|---------------------|---------------------|------------|
| Very small | 2,221 | 27 |
| Moderate | 3,438 | 42 |
| Very wide | 1,592 | 20 |
| Blank | 906 | 11 |

fluctuated moderately; something more than a quarter of the customers had a very small fluctuation; 20 per cent fluctuated very widely. The 11 per cent nonresponse is explained largely by the fact that approximately 10 per cent of the customers did not have deposits. Some customers, however, may have absolutely stable deposit balances; mainly customers whose deposit is the minimum required compensating balance. But the majority of the extra 1 per cent must be attributed to nonresponse to a qualitative question.

The expected stability of the bank-customer relationship is borne out by the replies to question 20, shown in Appendix Table B-10. Three-fourths of the customers had been with the

Appendix Table B-10
Distribution of Length of Customer Lending Arrangement

| Length of Lending Arrangement | Number of Customers | Percentage |
|-------------------------------|---------------------|------------|
| Less than one year | 718 | 09 |
| One through three years | 1,296 | 16 |
| More than three years | 6,138 | 75 |
| Blank | 5 | 00 |

bank for more than three years. Less than 10 per cent were customers for less than a year.

Account activity of the customer is an important measure of the services performed by the bank. But activity has a number of components, such as deposits, checks, currency and coins supplied and/or counted, and returned items. Therefore, a qualitative measure was the only feasible method of describing this variable. The distribution of responses to question 22, which probed this element of the customer relationship, is shown in Appendix Table B-11. One-quarter of the customers had large

Appendix Table B-11
Distribution of Customer Account Activity

| Account Activity | Number of Customers | Percentage |
|------------------|---------------------|------------|
| Small | 2,215 | 27 |
| Moderate | 3,095 | 38 |
| Large | 1,469 | 18 |
| Very large | 549 | 07 |
| Blank | 829 | 10 |

or very large amounts of activity and, therefore, this element of the relationship must have been considered an important component of the revenue that the bank expected to receive from these customers. About a quarter of the customers were considered by the bank to have a small amount of activity and more than 40 per cent had moderate activity.

It is, of course, well understood by both bankers and custo-

mers that services are bartered for deposit balances. In large measure the services purchased are loans and deposit related activity. An unknown fraction of bank customers purchase additional services, which are paid for with deposits or explicit fees. Questions 23-25 developed information about this element of the business-customer-bank relationship. Twenty-four per cent of customers in the sample receive services other than borrowing and fund transfer from their banks. Approximately 80 per cent of these customers pay for these services by separate charges. Unfortunately, the questionnaire did not probe into the distribution of these charges between balances and fees.

The distribution of answers to question 25, which requested a qualitative evaluation of the profitability of charges made for these services, is shown in Appendix Table B-12. As can be

Appendix Table B-12
Estimate of Net Profit to Bank of Providing Other Services

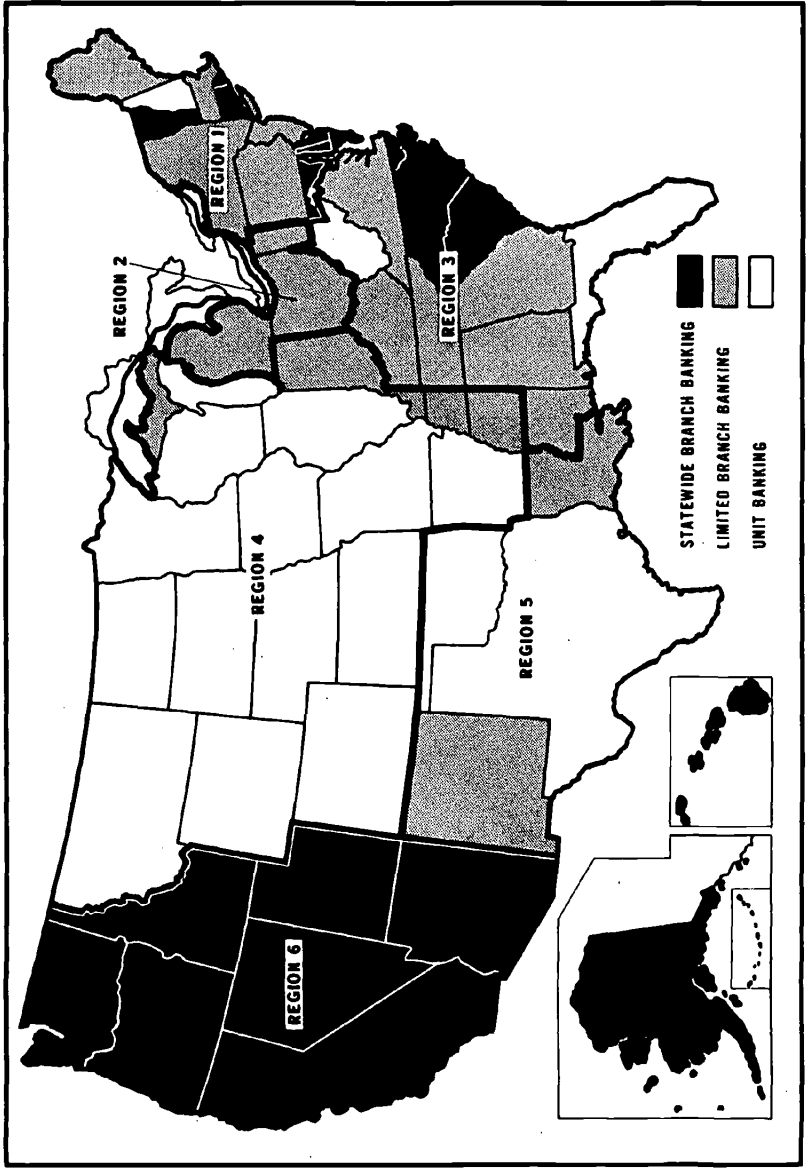
| Profitability | Number of Customers | Percentage |
|-------------------|---------------------|------------|
| Losses | 122 | 07 |
| Break even | 476 | 29 |
| Some profit | 857 | 54 |
| Highly profitable | 160 | 10 |

seen, 64 per cent of these customers are considered to provide net profit from these services, whereas only 7 per cent are considered to cause a loss.

Appendix C

FORMS OF BANKING ORGANIZATION

FORMS OF BANKING ORGANIZATION



Appendix D

REGRESSIONS ON MODEL 3

Appendix Table D-1

Regressions on Model 3, All Customers With Asset Data, Three Size Classes, With
A Six Partition Regional Variable, Interest Rate Dependent

| | Asset Size (millions of dollars) | | |
|------------------------------|----------------------------------|-------------------|-------------------|
| | $0 \leq .5$ | $.5 \leq 1$ | $1 \leq 5$ |
| Interest rate (mean) | 6.527 | 6.383 | 6.275 |
| 1. Region 6 | 1.0018 (2) | .5418 (1) | .7586 |
| | .05 | .07 | .07 |
| | 14.04 ^a | 3.68 ^a | 6.22 ^a |
| | .25 | .14 | .21 |
| 2. Population increase | .0148 (1) | .0156 (4) | .0105 |
| | 7.36 | 7.26 | 7.02 |
| | 8.06 ^a | 4.16 ^a | 3.85 ^a |
| | .15 | .16 | .13 |
| 3. Concentration | .4813 (4) | .4107 (8) | .4752 |
| | .67 | .68 | .67 |
| | 5.62 ^a | 2.27 ^b | 3.37 ^a |
| | .10 | .09 | .12 |
| 4. Log total deposits (SMSA) | .1362 (6) | .1024 (3) | .1718 |
| | 1.9893 | 1.9990 | 2.0124 |
| | 5.35 ^a | 1.88 | 3.97 ^a |
| | .10 | .07 | .14 |
| 5. Unit bank dummy | .9397 (13) | .0987 (14) | .1236 |
| | .34 | .35 | .36 |
| | 4.80 ^a | .67 | 1.03 |
| | .09 | .03 | .04 |
| 6. Log original amount | -.0933 (16) | -.0196 (11) | -.0703 |
| | 2.2420 | 2.8376 | 3.1357 |
| | 4.21 ^a | .42 | 1.92 |
| | .03 | .02 | .07 |
| 7. Average deposit | -2.2204 (3) | -1.1701 (9) | -.5081 |
| | .0118 | .0374 | .0773 |
| | 4.04 ^a | 2.56 ^b | 3.00 ^a |
| | .08 | .10 | .11 |
| 8. Deposit fluctuation | .0403 (7) | .0470 (19) | .0030 |
| | 1.73 | 1.85 | 1.87 |
| | 3.08 ^a | 1.82 | .15 |
| | .06 | .07 | .01 |
| 9. Region 5 | .1500 (18) | .0186 (6) | .2790 |
| | .12 | .12 | .10 |
| | 2.93 ^a | .19 | 3.50 ^a |
| | .06 | .01 | .12 |
| 10. Region 4 | .1411 (5) | .1706 (2) | .3952 |
| | .23 | .26 | .29 |
| | 2.93 ^a | 1.97 ^b | 5.97 ^a |
| | .05 | .07 | .21 |

Appendix Table D-1—(Concluded)

| | Asset Size (millions of dollars) | | |
|-----------------------------------|----------------------------------|-------------------|--------------------|
| | 0 ≤ .5 | .5 ≤ 1 | 1 ≤ 5 |
| 11. Other services | -.0699 (14) | -.0243 (16) | -.0150 |
| | .23 | .28 | .30 |
| | 2.67 ^a | .51 | .40 |
| | .05 | .02 | .01 |
| 12. Length of lending arrangement | -.0429 (12) | -.0309 (7) | -.1126 |
| | 2.65 | 2.79 | 2.77 |
| | 2.40 ^b | .67 | 3.41 ^a |
| | .04 | .03 | .12 |
| 13. Limited branch dummy | .1285 (19) | .0020 (12) | .1680 |
| | .56 | .55 | .55 |
| | 2.23 ^b | .02 | 1.58 |
| | .04 | .01 | .06 |
| 14. Region 2 | .0706 (17) | -.0289 (13) | .0798 |
| | .17 | .12 | .11 |
| | 2.07 ^b | .38 | 1.31 |
| | .04 | .01 | .05 |
| 15. Region 3 | -.0354 (10) | -.0974 (10) | .1348 |
| | .14 | .16 | .19 |
| | .95 | 1.35 | 2.50 ^b |
| | .02 | .05 | .09 |
| 16. Other bank | -.0157 (11) | .0420 (15) | .0234 |
| | .14 | .27 | .42 |
| | .50 | .83 | .66 |
| | .01 | .03 | .02 |
| 17. Time in debt | -.0018 (9) | .0130 (5) | .0210 |
| | 9.95 | 10.56 | 10.29 |
| | .49 | 1.53 | 3.50 ^a |
| | .01 | .06 | .12 |
| 18. Log bank size | -.0114 (8) | -.1195 (18) | -.0103 |
| | 2.0649 | 2.1143 | 2.1664 |
| | .36 | 1.81 | .19 |
| | .01 | .07 | .01 |
| 19. Account activity | .0041 (15) | -.0105 (17) | .0032 |
| | 1.79 | 2.07 | 2.20 |
| | .32 | .44 | .19 |
| | .01 | .02 | .01 |
| Intercept | 5.854 | 5.915 | 5.537 |
| R ² | .21 | .14 | .20 |
| F | 40.27 ^a | 6.09 ^a | 10.91 ^a |
| N | 2868 | 712 | 827 |

NOTE: See the notes to Table 2.

^a Significant at the .01 level.^b Significant at the .05 level.

Appendix Table D-2

Regressions on Model 3, All Noncollateralized Customers With Asset Data, Three Size Classes, With a Six Partition Regional Variable, Interest Rate Dependent

| | Asset Size (millions of dollars) | | |
|------------------------------|----------------------------------|-------------------|---------------------|
| | $0 \leq .5$ | $.5 \leq 1$ | $1 \leq 5$ |
| Interest rate (mean) | 6.484 | 6.272 | 6.217 |
| 1. Region 6 | 1.0272 (1) | .6875 (1) | .7645 |
| | .06 | .06 | .07 |
| | 14.18 ^a | 5.00 ^a | 6.48 ^a |
| | .34 | .26 | .30 |
| 2. Log original amount | -.1946 (4) | -.1284 (4) | -.1459 |
| | 2.1471 | 2.7556 | 3.1305 |
| | 7.22 ^a | 2.50 ^b | 3.5001 ^a |
| | .18 | .13 | -.17 |
| 3. Population increase | .0110 (3) | .0170 (19) | -.0001 |
| | 8.06 | 7.83 | 7.30 |
| | 4.86 ^a | 3.72 | .04 |
| | .12 | .20 | .01 |
| 4. Unit bank dummy | .3423 (11) | .2407 (17) | .0481 |
| | .25 | .28 | .30 |
| | 4.36 ^a | 1.70 | .38 |
| | .11 | .09 | .02 |
| 5. Region 2 | .1334 (18) | .0215 (8) | .1251 |
| | .15 | .14 | .12 |
| | 3.42 ^a | .29 | 1.96 |
| | .09 | .02 | .09 |
| 6. Log total deposits (SMSA) | .0945 (10) | .0934 (3) | .1808 |
| | 2.0856 | 2.0855 | 2.0842 |
| | 3.30 ^a | 1.72 | 3.96 ^a |
| | .08 | .09 | .19 |
| 7. Concentration | .3228 (6) | .4046 (5) | .4503 |
| | .66 | .67 | .66 |
| | 3.17 ^a | 2.10 ^b | 2.93 ^a |
| | .08 | .11 | .14 |
| 8. Average deposit | -1.8760 (8) | -1.0076 (10) | -.2742 |
| | .0126 | .0409 | .0812 |
| | 2.78 ^a | 1.85 | 1.54 |
| | .07 | .16 | .07 |
| 9. Deposit fluctuation | .0397 (9) | .0459 (18) | .0023 |
| | 1.74 | 1.89 | 1.86 |
| | 2.55 ^b | 1.73 | .10 |
| | .07 | .09 | .01 |
| 10. Other services | -.0577 (15) | -.0328 (12) | -.0630 |
| | .20 | .28 | .33 |
| | 1.83 | .65 | 1.48 |
| | .05 | .04 | .07 |

Appendix Table D-2—(Concluded)

| | Asset Size (millions of dollars) | | |
|-----------------------------------|----------------------------------|-------------------|-------------------|
| | 0 ≤ .5 | .5 ≤ 1 | 1 ≤ 5 |
| 11. Limited branch dummy | .0948 (14) | .0976 (16) | .0910 |
| | .62 | .61 | .59 |
| | 1.62 | .84 | .89 |
| | .04 | .05 | .04 |
| 12. Region 5 | .0947 (19) | .0174 (6) | .2965 |
| | .08 | .08 | .08 |
| | 1.47 | .16 | 2.90 ^a |
| | .04 | .01 | .14 |
| 13. Region 4 | .0720 (16) | .0377 (2) | .3399 |
| | .20 | .24 | .26 |
| | 1.24 | .41 | 4.63 ^a |
| | .03 | .02 | .22 |
| 14. Time in debt | -.0036 (12) | .0085 (7) | .0130 |
| | 9.62 | 10.18 | 9.96 |
| | .90 | 1.08 | 2.08 ^b |
| | .02 | .06 | .10 |
| 15. Log bank size | .3414 (17) | .0281 (15) | -.0711 |
| | 2.1135 | 2.1854 | 2.1950 |
| | .85 | .40 | 1.16 |
| | .02 | .02 | .06 |
| 16. Other bank | .0229 (2) | .2225 (9) | .0710 |
| | .11 | .24 | .42 |
| | .59 | 3.99 ^a | 1.82 |
| | .02 | .21 | .09 |
| 17. Account activity | .0078 (7) | -.0491 (11) | -.0279 |
| | 1.82 | 2.14 | 2.21 |
| | .54 | 2.00 ^b | 1.52 |
| | .01 | .11 | .07 |
| 18. Length of lending arrangement | -.0033 (13) | .0480 (13) | -.0488 |
| | 2.67 | 2.82 | 2.77 |
| | .16 | .93 | 1.37 |
| | .01 | .05 | .07 |
| 19. Region 3 | .0005 (5) | -.1762 (6) | .2965 |
| | .12 | .14 | .08 |
| | .01 | 2.36 ^b | 2.90 ^a |
| | .01 | .13 | .14 |
| Intercept | 6.078 | 5.601 | 5.973 |
| R ² | .28 | .30 | .30 |
| F | 31.46 ^a | 7.62 ^a | 9.50 ^a |
| N | 1530 | 360 | 449 |

NOTE: See the notes to Table 2.

^a Significant at the .01 level.^b Significant at the .05 level.

Appendix Table D-3

Regressions on Model 3, All Fully Collateralized Customers With Assets Less Than or Equal to \$½ Million, With a Six Partition Regional Variable, Interest Rate Dependent.

| | | | |
|--------------------------------------|-------------------|--------------------------|-------------------|
| Interest rate (mean) | 6.702 | 11. Unit bank dummy | .5574 |
| 1. Log total deposits (SMSA) | .3057 | | .52 |
| | 1.8949 | | 1.22 |
| | 3.84 ^a | | .05 |
| | .16 | 12. Account activity | .0396 |
| 2. Other services | -.2496 | | 1.69 |
| | .28 | | 1.02 |
| | 3.29 ^a | | .04 |
| | .14 | 13. Average deposit | -1.1145 |
| 3. ^{BT} Population increase | .0191 | | .0114 |
| | 6.60 | | .94 |
| | 3.16 ^a | | .04 |
| | .13 | 14. Region 4 | .1511 |
| 4. Concentration | .6835 | | .34 |
| | .70 | | .93 |
| | 2.40 ^b | | .04 |
| | .10 | 15. Region 5 | .1464 |
| 5. Region 6 | 1.0482 | | .18 |
| | .07 | | .90 |
| | 2.28 ^b | | .04 |
| | .10 | 16. Log bank size | -1.1006 |
| 6. Deposit fluctuation | .0790 | | 2.0169 |
| | 1.76 | | .90 |
| | 1.98 ^b | | .04 |
| | .08 | 17. Limited branch dummy | .3478 |
| 7. Other bank | -.1197 | | .41 |
| | .19 | | .79 |
| | 1.39 | | .03 |
| | .06 | | .03 |
| 8. Region 3 | -.1687 | 18. Time in debt. | .0083 |
| | .15 | | 10.48 |
| | 1.35 | | .69 |
| | .06 | | .03 |
| 9. Length of lending arrangement | -.0683 | 19. Region 2 | -.0318 |
| | 2.59 | | .12 |
| | 1.35 | | .25 |
| | .06 | | .01 |
| 10. Log original amount | -.0858 | Intercept | 5.372 |
| | 2.4583 | R ² | .208 |
| | 1.29 | F | 7.75 ^a |
| | .05 | N | 580 |

NOTE: See the notes to Table 2.

^a Significant at the .01 level.

^b Significant at the .05 level.

Appendix E

DISTRIBUTION OF CUSTOMERS

Appendix Table E-1
Customers Distributed by Region and Branching Restriction

| | Region 1 | Region 2 | Region 3 | Region 4 | Region 5 | Region 6 | Total |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| All customers, branching law: | | | | | | | |
| Unit | 0 | 46 | 226 | 1583 | 739 | 0 | 2594 |
| Limited | 1861 | 1121 | 868 | 165 | 191 | 0 | 4206 |
| Statewide | 190 | 0 | 120 | 0 | 0 | 504 | 814 |
| Total | 2051 | 1167 | 1214 | 1748 | 930 | 504 | 7614 |
| No collateral, branching law: | | | | | | | |
| Unit | 0 | 0 | 95 | 745 | 264 | 0 | 1104 |
| Limited | 1232 | 578 | 412 | 104 | 61 | 0 | 2387 |
| Statewide | 136 | 0 | 77 | 0 | 0 | 296 | 509 |
| Total | 1368 | 578 | 584 | 849 | 325 | 296 | 4000 |
| 100 per cent collateral, branching law: | | | | | | | |
| Unit | 0 | 0 | 73 | 514 | 248 | 0 | 835 |
| Limited | 285 | 207 | 198 | 19 | 51 | 0 | 760 |
| Statewide | 8 | 0 | 2 | 0 | 0 | 124 | 134 |
| Total | 293 | 207 | 273 | 533 | 299 | 124 | 1729 |

Appendix Table E-2
Customers With Asset Data, Distributed by Region and Branching Restriction

| | Region 1 | Region 2 | Region 3 | Region 4 | Region 5 | Region 6 | Total |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| All customers, branching law: | | | | | | | |
| Unit | 0 | 19 | 158 | 1105 | 445 | 0 | 1727 |
| Limited | 1243 | 711 | 540 | 146 | 122 | 0 | 2762 |
| Statewide | 108 | 0 | 70 | 0 | 0 | 290 | 468 |
| Total | 1351 | 730 | 768 | 1251 | 567 | 290 | 4957 |
| Nonsecured customers with data on assets, branching law: | | | | | | | |
| Unit | 0 | 0 | 64 | 541 | 173 | 0 | 778 |
| Limited | 865 | 377 | 258 | 93 | 40 | 0 | 1633 |
| Statewide | 89 | 0 | 43 | 0 | 0 | 164 | 296 |
| Total | 954 | 377 | 365 | 634 | 213 | 164 | 2707 |
| Fully secured customers with data on assets, branching law: | | | | | | | |
| Unit | 0 | 0 | 41 | 332 | 141 | 0 | 514 |
| Limited | 137 | 98 | 108 | 15 | 34 | 0 | 392 |
| Statewide | 4 | 0 | 1 | 0 | 0 | 73 | 78 |
| Total | 141 | 98 | 150 | 347 | 175 | 73 | 984 |

Appendix Table E-3
 Customers With Assets Less Than or Equal to \$500,000, Distributed by
 Region and Branching Restriction

| | Region 1 | Region 2 | Region 3 | Region 4 | Region 5 | Region 6 | Total |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| All customers, branching law: | | | | | | | |
| Unit | 0 | 10 | 95 | 587 | 277 | 0 | 969 |
| Limited | 756 | 472 | 254 | 65 | 76 | 0 | 1623 |
| Statewide | 78 | 0 | 41 | 0 | 0 | 157 | 276 |
| Total | 834 | 482 | 390 | 652 | 353 | 157 | 2868 |
| Nonsecured customers, assets \leq \$500,000, branching law: | | | | | | | |
| Unit | 0 | 0 | 23 | 189 | 91 | 0 | 389 |
| Limited | 530 | 231 | 120 | 42 | 29 | 0 | 952 |
| Statewide | 63 | 0 | 32 | 0 | 0 | 94 | 189 |
| Total | 593 | 231 | 187 | 299 | 126 | 94 | 1530 |
| Fully secured customers, assets \leq \$500,000, branching law: | | | | | | | |
| Unit | 0 | 0 | 23 | 189 | 91 | 0 | 303 |
| Limited | 81 | 72 | 61 | 6 | 16 | 0 | 236 |
| Statewide | 2 | 0 | 1 | 0 | 0 | 38 | 41 |
| Total | 83 | 72 | 85 | 195 | 107 | 38 | 580 |

Appendix Table E-4
 Customers With Assets Greater Than \$500,000 and Less Than or Equal to
 \$1 Million, Distributed by Region and Branching Restriction

| | Region 1 | Region 2 | Region 3 | Region 4 | Region 5 | Region 6 | Total |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| All customers, branching laws: | | | | | | | |
| Unit | 0 | 4 | 22 | 159 | 63 | 0 | 248 |
| Limited | 165 | 83 | 87 | 29 | 25 | 0 | 389 |
| Statewide | 14 | 0 | 8 | 0 | 0 | 53 | 75 |
| Total | 179 | 87 | 117 | 188 | 88 | 53 | 712 |
| Nonsecured customers, assets \$500,000 \leq \$1 million, branching laws: | | | | | | | |
| Unit | 0 | 0 | 9 | 70 | 21 | 0 | 100 |
| Limited | 114 | 49 | 36 | 15 | 7 | 0 | 221 |
| Statewide | 11 | 0 | 5 | 0 | 0 | 23 | 39 |
| Total | 125 | 49 | 50 | 85 | 28 | 23 | 360 |
| Fully secured customers, assets \$500,000 \leq \$1 million, branching laws: | | | | | | | |
| Unit | 0 | 0 | 9 | 63 | 22 | 0 | 94 |
| Limited | 17 | 13 | 18 | 3 | 9 | 0 | 60 |
| Statewide | 2 | 0 | 0 | 0 | 0 | 14 | 16 |
| Total | 19 | 13 | 27 | 66 | 31 | 14 | 170 |

Appendix E

Appendix Table E-5
 Customers With Assets Greater Than \$1 Million and Less Than or Equal to
 \$5 Million, Distributed by Region and Branching Restriction

| | Region 1 | Region 2 | Region 3 | Region 4 | Region 5 | Region 6 | Total |
|--|-------------|-------------|-------------|-------------|-------------|-------------|------------|
| All customers, branching laws: | | | | | | | |
| Unit | 0 | 5 | 29 | 198 | 65 | 0 | 297 |
| Limited | 190 | 89 | 117 | 39 | 18 | 0 | 453 |
| Statewide | 15 | 0 | 7 | 0 | 0 | 55 | 77 |
| Total | 205 | 94 | 153 | 237 | 83 | 55 | 827 |
| Nonsecured customers, assets \$1 million \leq \$5 million, branching law: | | | | | | | |
| Unit | 0 | 0 | 15 | 89 | 32 | 0 | 136 |
| Limited | 124 | 56 | 54 | 27 | 3 | 0 | 264 |
| Statewide | 14 | 0 | 3 | 0 | 0 | 32 | 49 |
| Total | 138 | 56 | 72 | 116 | 35 | 32 | 449 |
| Fully secured customers, assets \$1 million \leq \$5 million, branching law: | | | | | | | |
| Unit | 0 | 0 | 6 | 60 | 20 | 0 | 86 |
| Limited | 29 | 10 | 25 | 4 | 9 | 0 | 77 |
| Statewide | 0 | 0 | 0 | 0 | 0 | 17 | 17 |
| Total | 29 | 10 | 31 | 64 | 29 | 17 | 180 |

Appendix F

REGRESSIONS ON MODEL 4

Appendix Table F-1

Regressions on Model 4, All Customers With Asset Data, Three Size Classes, With a Six Partition Regional Variable, Mean Deposits Dependent

| | Asset Size (millions of dollars) | | |
|----------------------------------|----------------------------------|-------------------|-------------------|
| | 0 ≤ .5 | .5 ≤ 1 | 1 ≤ 5 |
| Average deposit (mean) | 118.29 | 373.94 | 773.15 |
| 1. Original amount | .0863 (3) | .0436 (1) | .1064 |
| | 346.51 | 1149.96 | 2579.41 |
| | 12.51 ^a | 3.04 ^a | 8.22 ^a |
| | .23 | .11 | .28 |
| 2. Account activity | 43.50 (1) | 122.86 (2) | 181.86 |
| | 1.79 | 2.07 | 2.20 |
| | 10.25 ^a | 6.45 ^a | 5.40 ^a |
| | .19 | .24 | .19 |
| 3. Interest rate | -.3046 (4) | -.8447 (3) | -2.4596 |
| | 652.74 | 638.30 | 627.52 |
| | 4.77 ^a | 2.69 ^a | 3.43 ^a |
| | .09 | .10 | .12 |
| 4. Log bank size | 51.55 (2) | 198.43 (4) | 229.54 |
| | 6.0649 | 6.1443 | 6.1664 |
| | 4.75 ^a | 3.66 ^a | 2.07 |
| | .09 | .14 | .07 ^b |
| 5. Length of lending arrangement | 21.48 (18) | -3.69 (9) | 88.88 |
| | 2.65 | 2.79 | 2.77 |
| | 3.50 ^a | .10 | 1.30 |
| | .07 | .01 | .05 |
| 6. Other services | 30.66 (12) | 19.54 (19) | 2.28 |
| | .23 | .28 | .30 |
| | 3.42 ^a | .49 | .03 |
| | .06 | .02 | .01 |
| 7. Time in debt | -4.03 (17) | -1.52 (7) | -21.08 |
| | 9.95 | 10.56 | 10.29 |
| | 3.33 ^a | .22 | 1.71 |
| | .06 | .01 | .06 |
| 8. Unit bank dummy | -70.26 (10) | -67.16 (12) | -211.90 |
| | .34 | .35 | .36 |
| | 2.90 ^a | .55 | .86 |
| | .05 | .02 | .03 |
| 9. Region 4 | 43.09 (11) | -35.79 (8) | 219.78 |
| | .23 | .26 | .29 |
| | 2.61 ^a | .50 | 1.58 |
| | .05 | .02 | .06 |
| 10. Region 6 | -65.10 (5) | -237.64 (13) | -214.20 |
| | .05 | .07 | .07 |
| | 2.59 ^a | 1.93 | .84 |
| | .05 | .07 | .03 |

Appendix Table F-1—(Concluded)

| | Asset Size (millions of dollars) | | | | |
|-------------------------------|---|------------------|-------------------------------|------------------|---|
| | 0 ≤ .5 | .5 ≤ 1 | 1 ≤ 5 | | |
| 11. Deposit fluctuation | 10.72 1.73 2.39 ^b .04 | (14) | 6.61 1.85 .31 .01 | (11) | 46.14 1.87 1.10 .04 |
| 12. Limited branch dummy | -42.68 .57 2.17 ^b .04 | (19) | -2.29 .55 .02 .01 | (16) | -38.00 .55 .17 .01 |
| 13. Log total deposits (SMSA) | 11.27 5.9893 1.29 .02 | (15) | 11.21 5.9990 .25 .01 | (10) | 99.63 6.0124 1.11 .04 |
| 14. Region 5 | -18.01 .12 1.04 .02 | (9) | -51.98 .12 .65 .02 | (14) | -135.24 .10 .82 .03 |
| 15. Concentration | -28.97 .68 .98 .02 | (7) | -145.08 .68 .96 .04 | (6) | 521.25 .67 1.79 .06 |
| 16. Region 2 | -10.66 .17 .91 .02 | (16) | -14.27 .12 .22 .01 | (17) | 15.35 .11 .12 .01 |
| 17. Population increase | .26 7.36 .40 .01 | (13) | 1.01 7.26 .32 .01 | (5) | 11.49 7.02 2.03 ^b .07 |
| 18. Region 3 | 4.84 .14 .38 .01 | (6) | -60.62 .16 1.01 .04 | (15) | 34.49 .19 .31 .01 |
| 19. Other bank | 2.27 .14 .21 .01 | (8) | -31.50 .27 .75 .03 | (18) | -7.31 .42 .10 .01 |
| Intercept | -149.98 | | -499.24 | | -863.44 |
| R ² | .15 | | .16 | | .20 |
| F | 26.32 ^a | | 6.92 ^a | | 10.50 ^a |
| N | 2868 | | 712 | | 827 |

NOTE: See the notes to Table 2.

^a Significant at the .01 level.^b Significant at the .05 level.

Appendix Table F-2

Regressions on Model 4, All Noncollateralized Customers With Asset Data, Three Size Classes, With a Six Partition Regional Variable, Mean Deposits Dependent

| | Asset Size (millions of dollars) | | |
|----------------------------------|----------------------------------|-------------------|-------------------|
| | 0 ≤ .5 | .5 ≤ 1 | 1 ≤ 5 |
| Average deposit (mean) | 125.56 | 409.37 | 811.60 |
| 1. Original amount | .1312 | (2) .0631 | (1) .1598 |
| | 260.39 | 924.55 | 2285.81 |
| | 9.58 ^a | 2.92 ^a | 7.76 ^a |
| | .24 | .16 | .35 |
| 2. Account activity | 31.69 | (1) 130.63 | (2) 144.04 |
| | 1.82 | 2.14 | 2.21 |
| | 5.78 ^a | 5.58 ^a | 2.99 ^a |
| | .15 | .29 | .14 |
| 3. Interest rate | -.4077 | (5) -1.0784 | (5) -2.1911 |
| | 648.44 | 627.15 | 621.68 |
| | 4.19 ^a | 2.02 ^b | 1.74 |
| | .11 | .11 | .08 |
| 4. Log bank size | 55.49 | (4) 170.92 | (18) 99.00 |
| | 6.1135 | 6.1854 | 6.1950 |
| | 3.91 ^a | 2.47 ^b | .61 |
| | .10 | .13 | .03 |
| 5. Deposit fluctuation | 22.80 | (19) -.10 | (16) 47.13 |
| | 1.74 | 1.89 | 1.86 |
| | 3.80 ^a | .01 | .76 |
| | .10 | .01 | .04 |
| 6. Other services | 33.60 | (3) 126.44 | (8) 118.99 |
| | .20 | .28 | .33 |
| | 2.76 ^a | 2.57 ^b | 1.05 |
| | .07 | .14 | .05 |
| 7. Length of lending arrangement | 21.35 | (18) 5.04 | (11) 89.17 |
| | 2.67 | 2.82 | 2.77 |
| | 2.61 | .10 | .95 |
| | .07 | .01 | .05 |
| 8. Time in debt | -3.39 | (17) .97 | (12) -15.23 |
| | 9.62 | 10.18 | 9.96 |
| | 2.26 ^b | .13 | .92 |
| | .06 | .01 | .04 |
| 9. Region 6 | -66.50 | (14) -35.85 | (13) 297.80 |
| | .06 | .06 | .07 |
| | 2.25 ^b | .25 | .92 |
| | .06 | .01 | .04 |
| 10. Region 5 | -46.58 | (7) -132.37 | (9) -266.36 |
| | .08 | .08 | .08 |
| | 1.88 | 1.65 | .98 |
| | .05 | .09 | .05 |

Appendix Table F-2—(Concluded)

| | Asset Size (millions of dollars) | | |
|-------------------------------|----------------------------------|-------------------|-------------------|
| | $0 \leq .5$ | $.5 \leq 1$ | $1 \leq 5$ |
| 11. Limited branch dummy | -31.23 | (9) 150.00 | (6) 418.24 |
| | .62 | .61 | .59 |
| | 1.39 | 1.31 | 1.56 |
| | .04 | .07 | .07 |
| 12. Other bank | -20.21 | (8) -76.36 | (19) 33.16 |
| | .11 | .24 | .42 |
| | 1.34 | 1.35 | .32 |
| | .03 | .07 | .02 |
| 13. Unit bank dummy | -26.65 | (11) 134.32 | (10) 311.96 |
| | .25 | .28 | .30 |
| | .88 | .95 | .95 |
| | .02 | .05 | .05 |
| 14. Region 2 | -12.46 | (13) -25.24 | (17) 116.71 |
| | .15 | .14 | .12 |
| | .83 | .34 | .69 |
| | .02 | .02 | .03 |
| 15. Log total deposits (SMSA) | 8.04 | (10) 56.22 | (7) 159.51 |
| | 6.0856 | 6.0855 | 6.0842 |
| | .73 | 1.04 | 1.30 |
| | .02 | .06 | .06 |
| 16. Concentration | -26.50 | (6) 330.46 | (4) 723.41 |
| | .66 | .67 | .66 |
| | .67 | 1.72 | 1.79 |
| | .02 | .09 | .09 |
| 17. Region 4 | -13.88 | (16) 16.12 | (14) 163.63 |
| | .20 | .24 | .26 |
| | .62 | .18 | .82 |
| | .02 | .01 | .04 |
| 18. Region 3 | -9.32 | (12) -70.76 | (15) -123.85 |
| | .12 | .14 | .16 |
| | .56 | .95 | .79 |
| | .01 | .05 | .04 |
| 19. Population increase | -3.35 | (15) 1.12 | (3) 18.05 |
| | 8.06 | 7.83 | 7.30 |
| | .40 | .24 | 2.44 ^b |
| | .01 | .01 | .12 |
| Intercept | -93.55 | -1026.07 | -1316.03 |
| R ² | .17 | .25 | .23 |
| F | 15.87 ^a | 6.07 ^a | 6.57 ^a |
| N | 1530 | 360 | 449 |

NOTE: See the notes to Table 6.

^a Significant at the .01 level.^b Significant at the .05 level.

Appendix Table F-3

Regressions on Model 4, All Fully Collateralized Customers With Assets Less Than or Equal to \$½ Million, With a Six Partition Regional Variable, Mean Deposits Dependent

| | | | |
|-------------------------------------|-------------------|----------------------------------|------------------|
| Average deposit (mean) | 113.52 | 11. Region 5 | 68.22 |
| 1. Account activity | 75.03 | | .18 |
| | 1.69 | | 1.19 |
| | 5.60 ^a | | .05 |
| | .23 | 12. Interest rate | -.1254 |
| 2. Original amount | .0657 | | 670.15 |
| | 551.84 | | .84 |
| | 4.82 ^a | | .04 |
| | .20 | 13. Region 2 | 34.43 |
| 3. Region 4 | 160.01 | | .12 |
| | .34 | | .77 |
| | 2.80 ^a | | .03 |
| | .12 | 14. Population increase | - 1.40 |
| 4. Log bank size | 103.43 | | 6.60 |
| | 6.0169 | | .65 |
| | 2.63 ^a | | .03 |
| | .11 | 15. Log total deposits (SMSA) | -18.20 |
| 5. Other services | 69.70 | | 5.89 |
| | .28 | | .64 |
| | 2.58 ^a | | .03 |
| | .11 | 16. Unit bank dummy | -73.10 |
| 6. Other bank | 67.06 | | .52 |
| | .19 | | .45 |
| | 2.22 ^b | | .02 |
| | .09 | 17. Deposit fluctuation | -2.96 |
| 7. Region 3 | 63.43 | | 1.76 |
| | .15 | | .21 |
| | 1.55 | | .01 |
| | .07 | 18. Region 6 | 23.50 |
| 8. Length of lending arrangement | 24.30 | | .07 |
| | 2.59 | | .14 |
| | 1.36 | | .01 |
| | .06 | 19. Limited branch dummy | 2.03 |
| 9. Concentration | -135.83 | | .41 |
| | .70 | | .01 |
| | 1.34 | | .01 |
| | .06 | Intercept | -457.40 |
| 10. Time in debt | -5.14 | | .16 ^a |
| | 10.48 | R ² | 5.55 |
| | 1.22 | F | 580 |
| | .05 | N | |

NOTE: See the notes to Table 6.

^a Significant at the .01 level.

^b Significant at the .05 level.

Index

- Account activity in bank customer's profile data, 79-80
- Assets, *see* Bank assets; Customer assets
- Bank account activity, *see* Account activity
- Bank assets:
of banks supplying customer profiles, 66-69
and economies of scale, 31
- Bank compensation, sources of, 10, 56-57
- Bank costs:
and geographical location of customer, 22
on loan, 12
of reduced return on assets, 13
See also Communication costs
- Bank customers, *see* Customers
- Bank deposits, *see* Demand deposits; Deposit size
- Bank income:
and computation of customer profitability, 13-14
interest and deposit payments compared, 56*n*, 56-57
- Banking regulations:
goals of, 1-2
and size of business, 23
See also Branching restrictions
- Bank markets:
and branching restrictions, 2-3
competition in, 2
definition of, 21-24
estimation of performance of, 15
geographic delineation of, 23-24
and prices of bank services, *see* Price-structure relationship
SMSA definitions of, 40-41
- Bank pricing, *see* Pricing decisions
- Banks, compared with other enterprises, 7
- Bank services, price of, *see* Price-structure relationship
- Bank size:
and effect of deposit balances on interest rates, 49-50, 55
and loan rate, 30-31
and prices, 5
and price-structure relationship, 30-31, 59
and Regulation Q, 30
and supplying customer profiles, 66-69
- Bargaining:
and bank prices, 15
and deposit balances, 20, 31
- Bias, in bank customer profile data, 73
- Borrowers, *see* Customers
- Branching restrictions:
classes of, 2*n*
customers distributed by, 90-92
and customer profitability models, 16
and deposit balances, 55
and interest rates, 57-59
and loan rates, 43-44
and price-structure relationship estimates, 32-33, 37, 40
and structure of banking markets, 2-3
- Business assets:
and price-structure relationship

- estimates, 32-33
- ratio to deposit size, 74, 76-78
- Business cycles:
 - and customer profitability models, 16
 - and interest rates, 19
- Business size:
 - and communication costs, 22-23
 - and default, 29
 - and definitions of bank markets, 23
 - and effect of deposit balances on interest rates, 51, 55
 - and interest rates, 33, 35-36, 41-42, 58
 - and price-structure relationship estimates, 32-33
- Capital budgeting, 11n
- Collateral:
 - in bank customers' profile data, 71, 76, 78
 - and effect of deposit balances on interest rates, 44-55
 - on sample questionnaire, 62
- Collateralized customer-regressions, 28, 31-32, 36
- Communication costs, 22
- Competition between banks, 2
 - for demand deposits, 7-8
 - and differences in loan demands, 11
 - and industry cost structure, 1
 - and proximity of other banks, 24
- Costs, *see* Bank costs
- Customer assets:
 - and interest rates, 35-36, 42-43, 49-50, 58
 - and price-structure relationship, 84-88, 94-99
 - by region and branching restrictions, 90-92
 - on sample questionnaire, 63
- Customer-bank relationships, 8
 - and bank pricing, 11-12
 - in customer profiles data, 78-80
 - and customer profitability models, 16
 - and demand deposits, 22
 - and price-structure relationship, 25, 36, 59
- Customer characteristics, 62
 - and customer profitability models, 16
 - and effect of deposit balances on interest rates, 50
 - on sample questionnaire, 62
 - See also* Customer profile data
- Customer profile data:
 - account activity, 79-80
 - banks supplying, 65-68
 - by data partition, 71
 - debt statistics, 72-75
 - distribution of customers by deposit size, 74-78
 - and estimates of price-structure relationship, 25
 - and regressions on models, 26ff
 - by SMSA, 69-70
- Customer profitability:
 - and bank costs, 22
 - and bank services other than loans, 80
 - and collateral, 28, 32
 - expected, 24-25
 - and loan size, 29
 - See also* Customer profitability model
- Customer profitability model, 10-20
- Customer solicitation, 21
- Demand for banking services:
 - and competition, 2
 - and population increase, 29
 - and price-structure relationship, 59

- Demand deposits:
 and bank-customer relationship, 22
 and customer profitability, 12
 fluctuating and stable, 31
 prohibition of interest payments on, 7-8
See also Deposit balances
- Deposit balances:
 in bank customer profiles, 74-78
 and fee payment, 13
 and interest rates, 45-55
 and price-structure relationship, 4-5, 19-20, 25, 94-99
 ratio to business assets, 74, 76-78
 and regressions on models, 26ff
 role of, 56-57
- Discounting, and computation of customer profitability, 13-14
- Economic efficiency, and bank regulations, 1-2
- Economic theory, and bank markets, 3
- Economies of scale, and bank size, 30-31
- Elasticity of demand, and pricing policy, 8
- Errors, *see* Specification errors
- Federal Reserve Business Loan Survey, 36-37
- Fees, for nonlending services, 13, 57
- Geographical region:
 customers distributed by, 90-92
 and effect of bank deposits on interest rates, 50, 52-53
 and interest rates, 37-41, 84-88
 and price-structure relationship, 59, 94-99
- Interest rates:
 and asset size, 42-43
 in bank customer profile data, 72-74
 and branching restrictions, 33, 57-59
 and business size, 33, 41-42
 and customer profitability, 18-19
 by distribution of business loans, 18-19
 and estimates of price-structure relationship, 25
 and region, 84-88
 and region and customer assets, 84-88
 role of, 56-57
- Limited branching dummy, *see* Branching restrictions
- Liquidity, and customer profitability, 17-18
- Liquidity costs, 9
 and pricing decisions, 10n
- Loan characteristics, on sample questionnaire, 62
- Loan default, and business size, 29
- Loan demand:
 in different bank markets, 11
 and opportunity costs, 8-9
 seasonal interindustry differences in, 9
- Loan-to-deposit ratios, 13
- Loan rates:
 and bank size, 30-31
 and customer profitability, 17-18
 and deposit size, 31, 32
 and market size, *see* Price-structure relationship
 regional effect on, 37-41
 setting policies for, 19
- Loans, distribution by interest rates, 18-19

- Loan size:
 and bank costs, 13
 and collateral, 32
 and customer profitability, 17-18
 and effect of deposit balances on interest rates, 50
 and interest rates, 35-36
 and price-structure relationship, 25
 and profitability, 29
- Manufacturing employment, and interest rates on business loans, 37
- Models:
 of customer profitability, 10-20
 single-period and multiperiod, 15-16, 25
- Money, time value of, 14
- Money supply, and loan demands, 9-10, 12, 13
- Opportunity costs, and loan demand, 7-8
- Opportunity losses:
 and opportunity cost, 9
 and pricing decisions, 10n
- Package-pricing hypothesis, 8, 15, 59
- Population changes, and effect of deposit balances on interest rates, 47
- Price-structure relationship:
 and customer assets and region, 84-88
 and customer profitability, 14-15
 and deposit balances, 19-20
 estimation of, *see* Price-structure estimation
 and pricing model, 6-7
 and public policy, 57-59
- Price-structure relationship estimates, 3-5
 and customer distribution data, 90-92
 customer profiles used for, 65-80
 and definition of banking markets, 21-24
 and deposit balances, 45-55
 parameter, 41-55
 questionnaire used for, 62-63
 regressions on, *see* Regressions
 variables used, 24-25
- Pricing decisions:
 components of, 20
 and customer profitability, 14-15
 and goals, 7
 and prohibition of interest on demand deposits, 7-8
See also Pricing decisions model
- Pricing decisions model, 3-4, 4n, 56
 requirements for, 6-7
- Profitability, *see* Customer profitability; Customer profitability model
- Region, *see* Geographical region
- Regressions:
 on interest rates and deposit balances, 45-55
 on price-structure models, 26-41, 84-88, 94-99
- Regulation Q, 9
 and bank size, 30
- Risk:
 and collateral, 32
 and stable and fluctuating deposits, 31
See also Risk aversion
- Risk aversion:
 and money supply, 9-10
 and pricing decisions, 7

- Specification errors, and price-structure relationship estimates, 25
- Uncollateralized customer regressions, 28, 31-32, 36
- Tied-sale strategy, 8*n*