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**Effects of Consumer Loan Rate Ceilings  
on Competition Between Banks  
and Finance Companies**

**EFFECTS OF CONSUMER LOAN RATE CEILINGS ON COMPETITION  
BETWEEN BANKS AND FINANCE COMPANIES  
A. Charlene Sullivan\***

Abstract

Whether or not commercial banks and consumer finance companies compete in making loans to consumers is an issue that has been addressed by the Federal Reserve Board and the Justice Department in a series of cases involving mergers of banks and finance companies and among finance companies. Generally, the Federal Reserve Board has concluded that consumer finance companies compete with commercial banks in the area of personal loans to individuals. Yet in recent cases, the Justice Department argued that these lenders do not compete. This paper reconciles the opposing points of view regarding the extent of competition between banks and finance companies for direct consumer loans. The data used in this paper provided the opportunity to examine interinstitutional competition in two local markets which differ extremely in terms of consumer loan rate structures. In addition, superior measures of consumer credit risk for a sample of borrowers from banks and finance companies were analyzed.

Our results support the hypothesis that consumer loan markets are not segmented by risk when lenders operate under equal and unrestrictive consumer loan rate ceilings. However, in markets where there exists different and restrictive rate ceilings for banks and finance companies, the consumer loan market is segmented by risk. Thus, the anti-competitive effects of a merger between a bank and a finance company or between two finance companies must be considered in the context of the rate ceiling applicable in the markets common to the two lenders.

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## **EFFECTS OF CONSUMER LOAN RATE CEILINGS ON COMPETITION BETWEEN BANKS AND FINANCE COMPANIES**

**A. Charlene Sullivan**

Whether or not commercial banks and consumer finance companies compete in making loans to consumers is an issue that has been addressed by the Federal Reserve Board and the Justice Department in a series of cases involving mergers of banks and finance companies and among finance companies.<sup>1</sup> Generally, the Federal Reserve Board has concluded that consumer finance companies compete with commercial banks in the area of personal loans to individuals.<sup>2</sup> Until recently, this position has been echoed by the Justice Department.<sup>3</sup> However, in 1979, Justice opposed the acquisition of American Investment Company by Household Finance Corporation, principally on the grounds that making of direct cash loans by finance companies was a line of commerce within the meaning of section 7 of the Clayton Act.<sup>4</sup>

The two opposing points of view were brought into sharp focus in the differing opinions of the judges at the District Court and Court of Appeals levels. At the trial court level the judge held that the "market for the business of making direct cash loans consists of the consumer loan activities of commercial banks, credit unions, thrift institutions and finance companies."<sup>5</sup> The opposed merger was, therefore, not anticompetitive and the complaint of Justice was dismissed. In reversing that judgment, the Court of Appeals ruled that "finance companies offer unique products and services to a class of higher-risk customers than are serviced by other financial institutions."<sup>6</sup>

This study uses a significant body of empirical evidence not available at the time of the trial to reconcile these diverse positions. The data permit an improved analysis in three important respects. First, although the Federal Reserve Board has recognized that the market for personal loans to individuals is limited geographically to local markets,<sup>7</sup> significant weight in the Household case was given to a national survey of consumer loans [5]. This analysis remedies that deficiency by focusing on two local markets subject to diverse rate ceilings on commercial banks and finance companies.

Second, the Court of Appeals placed great emphasis upon differences in the risk characteristics of borrowers from banks and finance companies, although several of the research studies introduced as evidence provided incomplete measures of risk [5, 7, 9, 10, 16]. Later studies have suffered from similar deficiencies in the adequacy of their databases [11, 12]. In contrast to these studies, the data used in this research were obtained

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<sup>1</sup> In November 1980, banks held 47 percent of total outstanding consumer installment credit and finance companies held 25 percent. [Federal Reserve Statistical Release, G.19.]

<sup>2</sup> Order dated January 30, 1974 Denying Acquisition of Dial Financial Corporation by The Chase Manhattan Corporation 39 Federal Register 4814 (1974); Order dated August 3, 1973 Denying Acquisition of Public Loan Company by Bankers Trust Corporation, 38 Federal Register 21822 (1973), 59 Federal Reserve Bulletin 694 (1973).

<sup>3</sup> "Today, banks and finance companies compete in supplying retail credit needs for consumers; this is present in various forms of consumer loans and credit card transactions. In the long run, with the merging electronic technology, banks and finance companies are likely to become competitors for consumer services on an even broader scale." Department of Justice letter reacquisition of GAC Finance by Bank America Corporation, June 26, 1973.

<sup>4</sup> *United States vs. Household Finance Corporation, HFC American, Inc., and American Investment Company*. Hereinafter cited as *U.S. vs. HFB*. U.S. District Court for the Northern District of Illinois, Eastern Division, No. 79 C 80.

<sup>5</sup> *Ibid.*, Judgment Order, March 22, 1979.

<sup>6</sup> *U.S. vs. HFB*, U.S. Court of Appeals for the Seventh Circuit, No. 79-1313, Decision August 10, 1979.

<sup>7</sup> For example, in his order approving the acquisition of Local Finance Corporation by Fidelity Corporation of Pennsylvania (May 29, 1973) the Federal Reserve Board was concerned with the proximity of some of Local's consumer finance subsidiaries to the offices of Fidelity. It concluded, however; "Although there may be some overlap in the customers served by Local and Applicant's banking subsidiary, it does not appear that consummation of the proposed acquisition would have a significantly adverse effect on competition for consumer loans . . . in view of the small amount of outstanding held by Local's subsidiaries in these areas and the great number of consumer loan sources present in those markets."

from banks and finance companies, as well as from personal interviews with consumers in local markets. Consequently, a more refined measure of risk can be applied to borrowers from the two institutions in order to assess the degree of risk segmentation in these local markets.

Finally, the chief economic witness for the Justice Department appropriately criticized then existing studies that included borrowers from both banks and finance companies.<sup>8</sup> He pointed out that, if the bank loan had been obtained first, the borrower might have been in a higher risk class when the loan from the finance company was obtained. Hence, the existence of loans from the two lenders was not evidence that these lenders were competing for consumers in the same risk class. This study meets that problem by analyzing the risk characteristics of only two classes of consumers; those that had loans only from commercial banks and those that had loans only from finance companies.

The analysis enabled by this unique database permits a reconciliation of the two opposing points of view. Where rate ceilings were nonrestrictive and equally applicable to banks and finance companies, the institutions competed actively for consumer loan customers.<sup>9</sup> This conclusion supports the position taken by the District Court. However, in the market where the two types of lenders operated under different rate ceilings, the credit risk characteristics of borrowers from banks and finance companies were significantly different--the position of the Court of Appeals. Thus, competition among banks and finance companies and appropriate policies relating to their proposed mergers are largely a function of the rate ceilings applicable to the local markets affected by the merger.

The next section of the paper examines the economic rationale for risk segmentation of the consumer loan market and the results of empirical studies of the phenomenon. In Section II, the data are described and in Section III the analyses and results are presented. We conclude in Section IV with a discussion of the public policy implications of the results.

## **I. Segmentation in the Market for Consumer Loans**

In this section we examine the economic rationale for segmentation and review the evidence of the segmentation in the consumer loan market from prior analyses of the phenomenon.

Is Segmentation Rational? Boczar stated ([5], p. 245) in his study of segmentation: "Consumer credit researchers have, generally believed that the market for consumer credit is substantially segmented on the basis of risk. That is banks supposedly serve low risk borrowers while finance companies cover the high-risk borrower. This market risk segmentation is thought to be caused by regulatory constraints and the historical practices of the two industries."

Regulatory constraints aside, is there an economic rationale for segmentation?<sup>10</sup> Risk segmentation in the consumer loan market could be the result of economies of scale attainable from specialization in a particular risk class. In general, one might expect the contract enforcement efforts required for low-risk consumers to be substantially greater than those required for high-risk consumers. Credit contracts with high-risk consumers often involve small loans with low monthly payments and inadequate collateral.<sup>11</sup> Since enforcement costs are largely fixed in relation to the size of loan lenders who have made the investment necessary to enforce high-risk

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<sup>8</sup> U.S. vs HFB. U.S. District Court for the Northern District Illinois, Eastern Division, Affidavit of Jon M. Joyce, January 8, 1979.

<sup>9</sup> Outside of about nine states that have adopted the Uniform Consumer Credit Code (UCCC), most states have rate ceilings that are different for finance companies and other lenders.

<sup>10</sup> Stigler [17] proposes product differentiation as a type of collusion which reduces the risk of price cutting in an oligopolistic market.

<sup>11</sup> This is the rationale for special exemptions of lenders of small loans from state usury ceilings.

contracts would be expected to specialize in order to reduce unit costs.<sup>12</sup> It is generally believed that consumer finance companies evolved as specialists to serve the needs of the low- and middle-income consumer who were considered as high risk.<sup>13</sup>

It is also generally believed that by historic practice banks emphasize stability and soundness and thus serve low-risk commercial and consumer customers. However, there are factors influencing bank management that reduce the probability that management would follow such a business strategy.

Commercial banks have been the only issuers of demand deposits and received a large percentage of loanable funds from such deposits at a zero explicit interest rate.<sup>14</sup> Thus, the cost of those funds was not related to the risk of banks' assets. In addition, the Federal Deposit Insurance premiums paid by a bank are unrelated to the probability of failure for that bank. With this subsidized source of funds commercial banks, compared to other lenders who did not have consumer demand deposits, could very profitably serve low-risk consumers. However, using results from the option literature, we know that if bank equity holders are viewed as holders of call options to buy the bank from the deposit-holders for the face amount of their demand deposits, the value of the option<sup>15</sup> increases with the variance in the value of the bank. Thus, holding other things constant, bank management would increase the risk of their investment portfolio in order to maximize shareholders' wealth.

In summary, we would not expect commercial banks to segment the consumer loan market on the basis of risk unless they were explicitly limited from serving high-risk consumers by restrictive rate ceilings on consumer loans. I tested this hypothesis by, analyzing the credit risk characteristics of borrowers of banks and finance companies serving markets with, restrictive and unrestrictive loan rate ceilings. The data analyzed allow us to supplement the results of that analysis with information collected from the two types of lenders concerning the "most likely" rate of charge on personal loans and managements' impressions of competitive conditions in each market.

Previous Empirical Evidence. Empirical studies of competition between banks and finance companies for consumer loans have been of two types. The first type involves estimation of the effect of one type of lender on performance measures of other types of lenders in the same market. Smith [16] found, in state-by-state analysis of a national sample of bank loans, that the number of finance companies in a market had a significant negative effect on bank loan rates. In contrast, Greer [9] found no evidence that the existence of alternative sources of consumer loans, in a market had an effect on loan rejection rates of consumer finance companies. Both of these studies used data collected at the state level to estimate local market conditions which may have led to the inconsistent conclusions. Heggstad ([11], p. 45) analyzed auto loan rates in a national sample of SMSAs and concluded that "bank rates are not affected by competition from consumer finance companies, credit unions or savings and loan associations." He also found that finance company rates were adversely affected by the presence of mutual savings banks, savings and loan associations and commercial banks. He concluded that "credit markets are not segmented by risk class" and that "commercial banks are able to compete effectively for most consumer loan accounts. The segmentation that does occur is due to the advantage of low cost demand deposits. Other firms are not able to compete effectively with commercial banks as their costs are

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<sup>12</sup> Benston ([3], p. 154) found that the cost of servicing finance company borrowers was high by bank standards. On average finance companies had \$64-\$72 per loan in operating costs compared to \$24 per loan for banks. "Knowing customers individually, working with them when they miss payments, etc., is expensive, but no doubt cheaper than accepting losses or engaging in court action to collect past due accounts.

<sup>13</sup> Boczar ([5], p. 247) points out "The risk segmentation hypothesis had traditionally been applied to consumer finance companies. It has usually not been alleged that banks and sales finance companies, particularly the captive companies, engage in risk segmentation.

<sup>14</sup> The Federal Deregulation and Monetary Control Act enabled banks and thrift institutions to have interest bearing checking accounts called NOW accounts but the explicit rate paid on these accounts is still limited by law and decontrol will be gradual over a 6-year period. In addition, credit unions may offer share draft accounts and money market funds offer check-writing capability.

<sup>15</sup> See Galai and Masulis [8].

significantly higher." ([11], p. 45). However, his conclusion is suspect given the data analyzed. The loan rates studied were those quoted by various lenders on a \$1400 auto loan secured by a vehicle valued at \$3869. For such a well-secured loan the risk characteristics of the borrowers are largely irrelevant to the quality of the loan [14]. Thus, one would expect to find wide variance and a great deal of overlap in the credit risk characteristics of consumers who were granted secured auto loans of this quality by banks and finance companies.

The other type of empirical studies of interinstitutional competition used cross-sectional analyses of risk characteristics of bank and finance company customers to evaluate the extent to which the two lenders segmented the consumer population by credit risk characteristics. Using national data, Boczar *151* found that two out of three finance company personal loan customers had risk-related characteristics that made them indistinguishable from bank loan customers. He concluded that "risk segmentation was not an effective barrier to interindustry competition" ([5], p. 255). However, he noted a need for more analysis with better risk measures and consideration of the effect of local market conditions such as loan rate ceilings on interinstitutional competition. Eisenbeis and Murphy ([7], p. 122) concluded that analysis of similar data from the state of Maine provided "little support for the belief that certain lender types are in fact segmenting markets or are serving significantly different customers." Finally, Johnson and Sullivan [12] found substantial overlap in the risk characteristics of a national sample of bank and finance company consumers. In the same study, personal interviews of finance company managers operating in Massachusetts revealed that, after a reduction in the small loan rate ceiling in that state, national finance companies actively pursued customers of "bankable" quality while managers of local, independent finance companies indicated that most of their customers could not get a loan from a bank. Each of these studies used a limited number of personal characteristics of borrowers in an attempt to measure credit risk.

## II. The Data Base

The data used in the study were collected in early 1979 in personal interviews of credit managers of banks and finance companies and consumers living in similar local markets in Waukegan/North Chicago, Illinois and Lake Charles, Louisiana. These local markets were chosen such that the economic conditions and socio-economic and demographic characteristics of the populations were basically similar but state consumer loan rate ceilings were extremely different.<sup>16</sup> The markets were also selected because they were relatively isolated. In other words, lenders in the selected markets primarily served only consumers living in the markets, and consumers in the area limited their search for consumer loans to the lenders in the local market.<sup>17</sup>

These data provide a unique opportunity to analyze the effects of rate ceilings on market segmentation. Gathered at the local market level, the data set contains finance company and bank managers' perceptions of competition between the two types of creditors. In addition, extensive data reflecting the credit risk of a sample of consumers from the same local markets who had personal loans either from a bank or from a finance company are available. The creditor and consumer data are described below.

Bank Data. Consumer credit managers from each of the 12 commercial banks serving the two local markets in Illinois and Louisiana cooperated in the survey. Thus, although the number of observations was not large, the data fully represent bank activity in each of the local markets. On average, banks in Illinois were smaller than banks in Louisiana, a difference that is probably explained largely by the fact that Illinois is a unit

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<sup>16</sup> The creditors' remedy restrictions in the two markets were also different. However, the restrictions were the same for each lender within a market and thus were not expected to affect the results of this study.

<sup>17</sup> A summary of the demographic characteristics of the populations in the two local markets are available from the author.

banking state, while Louisiana has countywide branching.<sup>18</sup> The concentration index indicates that the banking industry in the Louisiana market was considerably more concentrated than that in the Illinois market.<sup>19</sup>

Finance Company Data. Thirty-two managers of 44 offices of consumer finance companies serving the local markets in Louisiana and Illinois were personally interviewed, for a response rate of 73 percent. About 90 percent of the finance companies offices in the sample from the Illinois market were offices. of chains; 90 percent of those companies responding to the survey were national or regional chains. Only 36 percent of the finance company managers interviewed in Louisiana managed offices of finance company chains.<sup>20</sup> On average, offices of the finance companies providing data in Louisiana had twice the dollar amount of loans outstanding as did the finance companies in Illinois.

Consumer Data. The consumer data were taken from personal interviews of consumers who had either a bank loan(s) but no finance company loan or a finance company(s) but no bank loan. The types of loans the subjects in the two groups could have were direct home improvement, durables, hobby and recreation or personal.<sup>21</sup> Auto loans were not included because most consumer finance companies did not make direct auto loans in the two market areas and because of the effect of down payments on loan risk.<sup>22</sup> The size of the consumer samples analyzed in the two markets is shown in Exhibit 1.

Rate Ceilings in Local Markets. The rate ceilings, at the time of the survey for unsecured personal loans applicable to banks and finance companies in the two markets are shown below:

**RATE CEILINGS (APR) 1979**

Terms of Loan	Bank	Finance Co.	Bank	Finance Co.
\$500	12 months	12.68	28.80	36.00
\$1000	12 months	12.68	25.67	35.45
\$2000	24 months	12.91	18.57	32.19
\$3000	36 months	12.83	20.24	29.56

The rate ceilings for banks in Illinois were low relative to those for finance companies. In contrast, banks and finance companies in Louisiana operated under the same high (by national standard) rate ceilings for unsecured personal loans.

<sup>18</sup> Kidwell and Peterson [13] found that inter-bank competition for direct consumer loans was greater in unit banking states than in branching states.

<sup>19</sup> The Herfindahl index for banks in the Louisiana market was .376 compared to an index of .204 in the Illinois market.

<sup>20</sup> The cost of capital for a national finance company was lower than the cost for a local finance company which borrows primarily from banks [1980 NCFB Fact Book, p. 69]. Thus, the local finance company may not effectively compete for the bankable loan customer. The fact that the majority of firms providing data in the Louisiana market were local offices would increase the probability of rejecting the null hypothesis of no segmentation in that market.

<sup>21</sup> A borrower could have multiple loans but had to have loans from only banks or only finance companies. Fourteen respondents from the two markets had personal loans from both banks and finance companies and were excluded from the analysis. Consumers in either group could have had a credit card from either a bank or a finance company.

<sup>22</sup> See [14] for an empirical analysis of the relationship between borrower characteristics, ex post probability of default and size of down payment for auto loans.

### III. The Analysis and Results

The consumer data set contained several indicators of the credit risk of borrowers. In the analysis, we tested for the significance of differences in the consumer risk measures of borrowers from banks and finance companies in these two local markets that differed primarily in terms of applicable consumer loan rate ceilings. We expected to find that bank borrowers in the high rate market were not significantly different from finance company customers in terms of risk characteristics.

#### **EXHIBIT 1 RESPONDENTS WITH LOANS FROM A BANK OR FINANCE COMPANY ONLY**

	Illinois	Louisiana
Bank only	61 (72%)	61 (69%)
Finance Company only	24 (28%)	28 (31%)
	85 (100%)	89 (100%)

Source: 1979 CRC Creditors' Survey, Credit Research Center, Purdue University

The null hypothesis is that the distribution of credit risk characteristics of personal loan customers of the two types of lenders were the same. In contrast, in the market with different rate ceilings for banks and finance companies, we expected to find that bank customers were significantly less risky than finance company customers. The data from the creditors' survey contained two variables that were used to augment the consumer data revealing the extent to which banks and finance companies were in competition for the same set of loan customers; the manager's perception of competition between the two types of lenders and the most likely rates of charge on unsecured consumer loans.

Risk Indicators. To evaluate the risk characteristics of the borrowers we calculated a credit score for each consumer, using a credit scoring system adapted from that of a major commercial bank.<sup>23</sup> Several other variables that are generally regarded as being indicative of individual credit risk such as debt-to-income ratios and loan turndown experience were also analyzed.

The consumer samples were divided into high-risk and low-risk segments by the credit score (Exhibit 2).<sup>24</sup> A chi-square test of the distributions of credit scores for customers of banks and finance companies in Illinois revealed that the distributions were significantly different at the one percent level. In contrast, the null hypothesis that the credit scores of customers of banks and finance companies in the Louisiana market were drawn from the same distribution could not be rejected at the one percent level. These results support our hypothesis that in a market with a uniform and nonrestrictive rate ceiling, banks and finance companies will not segment the unsecured 13 loan market by credit risk. However, in both markets, more than 50 percent of finance company customers were in the high-risk category and more than 50 percent of bank customers were in the low-risk category.

<sup>23</sup> The variables included in the scoring system were years on job, employment status, industry of job, education, occupation, have checking and savings accounts, credit cards, number of dependents, total outstanding debt excluding mortgage and credit card debt.

<sup>24</sup> The raw credit scores ranged from 114 to 250. Those with scores less than 180 were classified as high risk; those with scores greater than or equal to 180 were classified as low-risk.

## EXHIBIT 2

### PERCENTAGE DISTRIBUTION OF CREDIT SCORES

#### Illinois

	High Risk	Low Risk	Total
Bank	36.1%*	63.9%	100%
Finance Company	70.8	29.2	100%
			$X^2 = 7.04^{**}$

#### Louisiana

	High Risk	Low Risk	Total
Bank	44.3%	55.7%	100%
Finance Company	64.3	35.7	100%
			$X^2 = 2.33$

\*Thirty-six percent of bank customers in Illinois had credit scores such that they would have been classified as high-risk; 64 percent had credit scores that would have indicated low credit risk.

\*\*Significant at the one percent level of confidence.

Source: 1979 CRC Creditors Survey, Credit Research Center, Purdue University.

From the consumer data we were also able to evaluate several other indicators of credit risk that a creditor could learn from loan applicants' credit reports. Specifically, a person who had been turned down for credit in the past might be considered a high credit risk by other potential lenders. Each individual was asked to indicate if he or she had been turned down for credit in the past few years (Exhibit 3). In Illinois, 54.2 percent of finance company customers reported that they had been rejected for credit, compared to only 18 percent of bank customers. A chi-square test indicated that there was a significant difference between the percentages of bank and finance company customers who had been turned down by other creditors. In contrast, in Louisiana there was not a significant difference in the percentage of bank and finance company customers (18 percent vs. 21.4 percent) that had been turned down for credit in the past.

Finally, the relationship between an individual's, monthly installment debt payments to monthly income may be used as an indicator of a person's ability to repay a loan. We calculated monthly debt payments relative to pre-tax monthly family income for the consumers in our sample. Debt payments excluded mortgage debt, credit card debt, business and "other" debt greater than \$15,000. The mean ratios for bank and finance company customers in the two markets are shown below:

## EXHIBIT 3

### CUSTOMERS PREVIOUSLY REJECTED FOR CREDIT

	Illinois Percentage	(N)	Louisiana Percentage	(N)
Bank	18.0%	61	18.0%	61
Finance Company	54.2	24	21.4	28
	$X^2 = 9.39^*$		$X^2 = .01$	

Responses to the query: Have you been turned down for credit in the last couple of years?

\*Significant at the ten percent level of confidence.

Source: 1979 CRC Creditors Survey, Credit Research Center, Purdue University

### Mean Monthly Debt Payments/pretax Monthly Income

	Illinois	Louisiana
Bank customers	6.94	7.82
Finance company customers	12.06*	7.90

\*Significant at ten percent level of confidence (one-tailed test).

A one-tailed difference in means test revealed that in Illinois the mean debt/income ratio for bank customers was significantly-lower than the mean ratio for finance company customers. The ratio means were not significantly different in Louisiana. This result is consistent with those from the analyses of other risk characteristics of personal loan customers of banks and finance companies in the two markets. In Illinois, where banks and finance companies operated under different consumer loan rate ceilings, the personal consumer loan customers of the two lenders had significantly different risk characteristics. In Louisiana where banks and finance companies operated under a very high rate ceiling which applied equally to both lenders, the hypothesis that the distributions of risk characteristics of personal loan customers of the two types of lenders were the same could not be rejected at the ten percent level.

Perceived Competition. In the creditors' survey, both finance company and bank managers were asked to indicate their major competitors for direct consumer loans. In the Illinois market, 43 percent of bank managers viewed finance companies as major competitors; only 30 percent of finance company managers viewed banks as major competitors (Exhibit 4). By contrast, in Louisiana 60 and 73 percent of bank and finance company managers respectively viewed each other as major sources of competition. The major reasons given by bank managers for their perception of finance company competition in Louisiana was service provided by finance companies. Finance companies' managers in Louisiana indicated that their major reasons for perceiving banks as competitors were that banks provided loans at lower rates than finance companies and that banks provided comparable services. These data are consistent with earlier evidence that in markets with nonrestrictive rate ceilings commercial banks and finance companies actively competed for the same consumer loan customers.

### EXHIBIT 4

#### PERCEIVED COMPETITION BETWEEN BANKS AND FINANCE COMPANIES FOR DIRECT CONSUMER LOANS

	Illinois	Louisiana
Bank managers view finance companies as major competitors		
Yes	43%*	60%
No	57 100%	40 100%
Finance company managers view banks as major competitors		
Yes	30%	73%
No	70 100%	27 100%

Responses to the query: What lenders do you consider as major competitors for direct consumer loans?

\*Forty-three percent of bank managers in Illinois viewed finance companies as a major source of competition; 57 percent of bank managers did not view finance companies as a major source of competition.

Source: 1979 CRC Creditors Survey, Credit Research Center, Purdue University.

Rates (APR) of Charge. Finally, the most likely rates of charge for unsecured consumer loans from banks and finance companies would indicate the extent to which the two lenders compete for the same customers. In an efficient market financial assets will be priced such that the expected risk-adjusted rate of return on all assets will be the same. Thus, holding everything else constant, the extent to which the risk of two securities differed may be revealed by the differences in the expected gross yield (APR) of the two securities.

In the creditors' survey, we asked the credit managers of banks and finance companies to specify the most likely rate (APR) that would be charged at the time of the study on three types of unsecured personal loans.<sup>25</sup> The mean responses provided are shown in Exhibit 5. Examination of the most likely quoted rates and the ceiling rates for banks and finance companies operating in Illinois reveals that both types of lenders were charging approximately the ceiling rates for all three types of loans. And, the most likely finance company customer was more risky than the most likely bank customer.

### EXHIBIT 5

#### MEAN "MOST LIKELY" RATES ON PERSONAL LOANS (APR)

	Illinois		Louisiana	
	Bank	Finance Company	Bank	Finance Company
12-month unsecured personal loan for \$1000	11.6	25	12.5	33
N =	(7)	(9)	(5)	(16)
24-month unsecured personal loan for \$2000	13.6	19.0	15.3	29.0
N =	(7)	(9)	(5)	(15)
24-month secured loan for \$2000	13.3	19.1	15.8	33.0
N =	(6)	(9)	(5)	(18)

Responses to question "What is the 'most likely' rate you would charge on the following types of loans?"  
 Source: 1979 CRC Creditors Survey, Credit Research Center, Purdue University

In Louisiana, the mean finance company rates were about 300 basis points below the ceiling. Mean bank loan rates were considerably below the ceiling. The mean difference between finance company and bank rates in Louisiana was 1710 basis points. Although banks and finance companies in Louisiana operated under the same rate ceiling, the "most likely" personal loan customer of finance companies was more risky than the "most likely" loan customer of banks. These data are thus consistent with the results of the analysis of consumer credit scores in Louisiana. The difference between the modal rates on bank and finance company loans in that market reflects the differences revealed in Exhibit 2 between the most likely customers of banks and finance companies in Louisiana. However, these are only modal rates, and the analysis of the risk characteristics of borrowers in Louisiana has shown that the null hypothesis that these borrowers were drawn from different populations with different risk characteristics cannot be rejected. Thus, a mere difference in rates typically charged by banks and finance companies is not sufficient evidence that these lenders were not competing for the same customers in a state where rate ceilings were nonrestrictive and applicable to both types of lenders.

<sup>25</sup> One of these loan types was secured by household goods which are generally considered to have little value because of the thinness of the resale market for used household goods.

#### IV. Summary and Conclusions

Although there have been several empirical studies that concluded that banks and finance companies do compete for the same consumer customers, data problems and misspecification of markets limited the strength of the evidence. In this study we analyzed competition for direct unsecured consumer loans at the local market level under different regulatory regimes. Our results support the hypothesis that consumer loan markets will not be segmented by risk when lenders operate under equal and unrestrictive consumer loan rate ceilings. However, in markets where there are different and restrictive rate ceilings for banks and finance companies, the consumer loan market will be segmented by risk.

These results are of considerable importance in the evaluation of the anti-competitive effects of mergers of financial institutions. Most states have laws that permit banks and finance companies to make consumer loans at rates exceeding the rates provided by state usury statutes. Where the rate ceilings are significantly higher for finance companies than for commercial banks, the legislature has, in effect, artificially segmented the consumer loan market. In these states the results of this study suggest that the merger of a bank and a finance company is not anti-competitive, since they are serving different risk segments of the market. However, the merger of two finance companies could reduce competition for high-risk consumer loans in those local markets where they both have offices.

In contrast, in states with high, unrestrictive rate ceilings that are about the same (or equal) for banks and finance companies, the merger of a bank and a finance company or two finance companies serving the same local markets could result in a reduction in competition. Whether or not the merger would be anti-competitive would depend upon the resulting market share of the merged firm, as well as upon the market shares held by the leading firms operating in each local market.

An additional public policy implication of this study has to do with the issue of setting rate ceilings. Recently, both state and federal legislatures have been asked to consider revisions to laws governing maximum rates of charge for consumer loans. Given that competition in consumer loan markets is desirable, the results of this study show that restrictive rate ceilings that vary by type of lender promote risk segmentation and inhibit competition. Therefore, as rate ceilings are raised, one would also hope to see the equalization of ceilings for all lenders.

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