



American Finance Association

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Source: *The Journal of Finance*, Vol. 36, No. 5 (Dec., 1981), pp. 1157-1168

Published by: Blackwell Publishing for the American Finance Association

Stable URL: <http://www.jstor.org/stable/2327306>

Accessed: 27/11/2009 08:38

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The Economic Impact of the Federal Credit Union Usury Ceiling

JOHN D. WOLKEN and FRANK J. NAVRATIL*

ABSTRACT

This study measures the impact of the Federal credit union usury ceiling on consumer credit availability and loan rates. When binding, the ceiling keeps loan rates low, but it reduces credit union lending. There is also evidence that a binding loan rate ceiling affects the competitiveness of credit unions in the market for deposits. Although the Federal Credit Union Act specifically mandates federally chartered credit unions to be a source of low cost consumer credit and to promote thriftiness, it is not at all clear that the intent of the Act is served by a binding usury ceiling.

WHILE THERE HAVE BEEN many theoretical and empirical studies concerned with the economics of usury laws [1, 7, 8, 9, 11, 12, 18, 20], to date no one has focused on the impact such laws have on credit unions (CUs). Empirical research which included CUs has been inconclusive [15, 17], although studies concerning other financial institutions indicate that the existence of effective usury ceilings leads to: (i) reduced credit availability, especially for higher risk groups; (ii) increased rejection rates of loan applicants; (iii) reduced loan losses; and (iv) more stringent nonprice loan terms (e.g., shorter maturities, lower loan-to-value ratios, and higher minimum loan amounts).

Yet, the credit union industry provides an excellent opportunity to study the effects of usury ceilings. Prior to 31 March 1980, *federally chartered* credit unions (FCUs) were prohibited by Congressional legislation from charging more than twelve percent per annum effective interest on any loan, including any service charges or loan origination fees. On the other hand, *state chartered* credit unions (SCUs) were subject to usury ceilings set by state authorities.¹ In several states, SCUs could charge higher interest rates than FCUs.²

The purpose of this study is to estimate the impact of the federal loan rate ceiling, using data from four states for the years 1978 and 1979. Each of these states had higher ceiling rates for SCUs in both years. There are several important

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¹ As of April 1979, twenty-nine states set their usury ceilings for credit unions at the federal maximum. In twenty states, the state CU usury ceiling was higher than the federal ceiling rate. Only in Arkansas was the state usury rate of ten percent lower than the federal limit.

² Between April 1979, and March 1980, five states adjusted their ceilings upward. Thus, just prior to the passage of the Depository Institutions Deregulation and Monetary Control Act of 1980, only twenty-four states had the same usury ceiling for SCUs and FCUs.

results of this study. First, it appears that the level of the ceiling is unimportant when market forces cause CU loan rates to be well below the ceiling. Second, an *effective* ceiling does lead to lower loan rates, but it tends to restrict credit availability as well. Finally, there is evidence that CUs subject to the federal ceiling did not (or were not able to) compete as vigorously for savings deposits during high interest rate periods.

I. Methodology and Experimental Design

There are several approaches which might be employed to determine, first, the existence of a binding usury ceiling and, second, the impact of that ceiling on affected firms. The methodology of this study employs combined cross-sectional-time-series data to address these issues.

A. Testing for the Existence of a Binding Usury Ceiling

In order to determine the existence of binding usury ceilings, it was necessary to select states in which the federal ceiling was different from the maximum applied to state chartered CUs. Four of the twenty states which allowed SCUs to charge more than the federal maximum were chosen for this analysis.

In order to ensure an adequate data base, it was necessary that each chosen state have a substantial number of: (i) federally chartered credit unions; and (ii) state chartered credit unions which use federal share insurance offered by the National Credit Union Administration (NCUA). State-chartered, federally-insured CUs are likely to have operating characteristics similar to FCUs. Also, a large number of each charter type within a state may indicate that other regulations and laws, besides ceiling legislation, affect both groups in a similar fashion. Finally, local economic conditions which might affect the demand for loans, but for which data are unavailable, can be accounted for when there are several credit unions of each type within a given geographical market. These local economic variables include the level and growth of personal income, the unemployment rate, and competitors' interest rates. The states used in this study are listed in Table I, which also shows the number of credit unions by charter type in each state and pertinent usury ceiling information.

The mere existence of differential usury ceilings does not guarantee that the lower ceiling is effective, since a ceiling ceases to have any economic impact whenever market forces keep interest rates below it. Thus, it was decided to use data on CUs operating within the selected states for different time periods. Optimally, the time periods should be close to each other, so that dramatic structural changes are unlikely to have occurred between them. But most importantly, there should be a high likelihood that the ceiling is binding during one period and not binding during the other. The years 1978 and 1979 appear to fit these requirements.

It is beyond the scope of this paper to review the recent history of interest rates in detail. But it is important to recall the level and changes in interest rates throughout both years. During 1978, interest rates rose slowly but persistently

Table I
Characteristics of States Chosen for Analysis

State	Total Number of ^a :		Credit Unions Included in This Study ^b :		Maximum Allowable Interest Rate ^c	Year Loan Ceiling Rate Enacted
	Federally Chartered Credit Unions	State Chartered Credit Unions	Federally Chartered Credit Unions	State Chartered Credit Unions		
Georgia	313	161 (42) ^d	238	33	15%	1976
Kansas	58	191 (82)	53	73	18% < \$1000	1976
Michigan	345	584 (584)	302	512	14% > \$1000	1976
North Carolina	139	207 (186)	114	151	15%	1976

^a As of year-end 1979. There were no substantial changes between 1978 and 1979 in the number of credit unions by charter type in any of the states.

^b Data on several credit unions were incomplete causing those CUs to be dropped from this analysis.

^c Which can be charged by state chartered CUs. As explained in the text, all federal CUs are subject to the federal ceiling.

^d Numbers in parentheses indicate the number of state chartered CUs which use federal share insurance.

Sources: Number of Credit Unions obtained from *The Annual Report of the National Credit Union Administration* and *The Annual Report for State Chartered Credit Unions*, both published by the National Credit Union Administration for various years.

Allowable Interest Rate and Enactment (along with appropriate state statutes) obtained from Von Der Ohe [19].

until the fall. Between September and the end of the year, Treasury Bill rates rose from 7.5% to 9.5%. In late November, NCUA allowed CUs to offer money market share certificates, but few CUs issued them by year end. While share deposit growth suffered, particularly during the last half of the year, loan growth continued at a heady pace all year long. Throughout the year, credit unions had adequate spreads between their share account costs and the federal loan ceiling, so it is unlikely that there were any serious restrictions on CU lending.

Open market interest rates at the beginning of 1979 were fully 350 basis points higher than at the beginning of 1978. They dropped during the first quarter, then fluctuated in a relatively narrow range until mid-August. Interest rates climbed steadily throughout September, then shot up dramatically from early October until the end of the year, in response to Federal Reserve tightening. In December, T-Bill rates were pushing twelve percent and the prime rate was near fourteen percent, which almost ensures that FCUs faced binding usury ceilings.

The experimental design used in this study consists of observations on two groups of credit unions (FCUs and SCUs) during a low interest rate (1978) and a higher interest rate (1979) period. If these two groups are similar to each other and operate in the same competitive environment, then there should be few differences, on average, between them in 1978. Those differences which are found might reflect unique structural characteristics or consistently different operating

regulations.³ Most importantly, loan interest rates should be approximately the same for each group, and well below the federal usury ceiling, under the assumption that market forces during 1978 caused CUs to price their loans lower than the ceiling.

The 1978 findings can be compared to results for 1979 when it appears that the federal ceiling was binding for at least part of the year. If the relationship between the average loan rate charged by the two groups changed dramatically from 1978 to 1979, with SCUs having significantly higher rates in 1979, then it is likely that the federal usury ceiling effectively constrained FCUs during that year.

Usable data for 1476 credit unions in the selected states were obtained for both years from annual reports which all federally insured CUs must file with NCUA. In order to test for the existence of an effective federal usury ceiling, a univariate analysis was performed on the average effective loan rate charged by each group in 1978 and 1979.⁴ The results are shown in Table II.

In 1978, the typical FCU in the sample charged approximately the same effective interest rate as the typical SCU. Given the previous discussion on recent interest rate movements, it is likely that loan rates on new extensions pressed upward throughout 1978, but SCUs do not appear to have taken advantage of their higher loan rate ceiling, since there is no statistically significant difference between the two groups.

The results for 1979 are radically different. While loan rates rose for both groups, the rise in yields for SCUs was more than twice as great as that for FCUs. A statistically significant difference in the average interest rate between the two groups emerged during the year, which is consistent with the hypothesis that the federal usury ceiling became binding in 1979 and effectively constrained increases in the interest rates charged by federal credit unions.

B. Testing the Impact of a Binding Usury Ceiling

Given the strong empirical support for the hypothesis that the federal usury ceiling was effective during 1979, it is appropriate to discuss the impact which it should have on affected CUs. Theoretical work on the economics of usury ceilings [1, 7, 8, 12] has repeatedly demonstrated that effective ceilings should restrict credit availability, especially to high risk borrowers, regardless of the underlying market structure.⁵ Effective usury ceilings should affect several other CU operating characteristics as well.

³ For example, in almost all states, SCUs have broader investment and borrowing powers than allowed by federal regulations. SCUs were allowed to enter mortgage markets well before FCUs, so mortgages comprise a greater proportion of all assets for SCUs. On the other hand, FCUs have broader branching powers.

⁴ The effective interest rate was computed by subtracting loan refunds from income from loans and dividing by the average amount of loans outstanding during the year. The latter is the simple average of the beginning and end-of-year amount of loans outstanding. While it would be better to use the average loan rate on new extensions during the year, those data are not available.

⁵ Under some highly restrictive assumptions concerning the relationship between marginal cost, demand and the ceiling price, it is possible to show that a monopolistic seller might lower price and *increase* the supply of credit, as first discussed by Bronfenbrenner [3] and elaborated upon by Brucker [4]. This would occur only if the ceiling is set below the monopoly price (which maximizes profit) and the point where marginal cost crosses the demand curve (which is akin to competitive equilibrium).

Table II
Univariate Analysis of Average Loan
Rates: 1978–1979

Year	Average Loan Rate at ^a :		t-ratio ^b
	Federal CUs	State CUs	
1978	11.04% (0.05%)	11.06% (0.06%)	0.22
1979	11.22% (0.05%)	11.46% (0.05%)	3.53***
Number of CUs	707 ^c	769 ^c	

^a Standard errors for the estimate of each average are in parentheses below the appropriate average.

^b The t-ratio is used to test for differences in mean values between FCUs and SCUs in a given year. It was computed using separate variance estimates for each group.

^c See Table I for a breakdown of the number of credit unions by charter type in each state.

*** Significant at the 0.01 level.

For example, restricted loan rates should affect dividend rates. While other depository institutions and some SCUs could profitably offer money market certificates when T-Bill rates were in the 9%–12% range, it is unlikely that FCUs could. As a result, dividend rates should be lower for FCUs than SCUs in 1979. Inability to raise dividend rates as quickly as other financial institutions should result in slower share growth, which in turn affects FCUs' ability to extend loans. Those share accounts retained by FCUs might be more profitably invested in other financial assets, such as T-Bills, common trust funds, or CDs in other institutions.

To assess the impact of the federal usury ceiling, several statistical analyses are employed. To determine the comparability of the state and federal CUs chosen for analysis, as well as to obtain insights into differences among these institutions during 1978 and 1979, a simple univariate analysis of the type performed in Table II is conducted on several other CU operating characteristics.

Four variables which might be affected by a binding usury ceiling will also be analyzed through the use of a two-way Analysis of Variance (ANOVA) model. These include CU loan rates, loan growth, share rates, and share growth. Utilizing the experimental design discussed above, the basic model can be expressed by

The likelihood of placing the ceiling in such an optimal fashion depends on the slope of the marginal cost curve and the elasticity of demand. As the marginal cost curve becomes flatter and the demand curve more elastic, it is less likely that the ceiling will increase supply. This analysis also assumes that there is only one output for the firm (loans), yet all financial institutions have a variety of different assets in which they may invest. Thus, imposition of an interest rate ceiling on a monopolistic provider of loans may cause him to reallocate his assets so that a smaller amount of his total portfolio is tied up in less profitable loans. Also, recent empirical evidence suggests that credit unions operate in highly competitive markets. See Navratil [16].

the following equation:

$$X_{it} = a + bSF_i + cT_t + dSF_i^*T_t \quad (1)$$

where

X_{it} = variable under consideration

SF_i = 0 for federally chartered credit unions

= 1 for state chartered credit unions

T_t = 0 for 1978

= 1 for 1979

$SF_i^*T_t$ = 1 for SCUs in 1979

= 0 otherwise

The coefficient b measures any differences in the dependent variable due to the type of charter, holding the effects of time constant. Likewise, c measures the effect of time, holding constant differences due to charter type.

The interaction coefficient, d , is most important for testing the implications of the federal usury ceiling. A statistically significant value for d indicates that SCUs operated differently in 1979 than did FCUs during that year, after accounting for charter effects and the effects of time common to both groups. Because the years were chronologically contiguous, and the same institutions were used in both years of the analysis, it is unlikely that structural changes other than the binding ceiling are being captured by this variable. Thus, d is used to measure the impact of the federal usury ceiling.

Since the most important impact of a binding ceiling is its effect on the loan market, and because it can rightfully be argued that other factors, besides charter type and time, might influence this market (and consequently a valid test can be performed only after accounting for differences in supply and demand factors affecting loans), a simple reduced form model of the loan market is also developed. The endogenous variables for the loan market model are the average interest rate charged by each credit union (LRATE) and the growth in loans outstanding during the year for each CU (LGROW).⁶

Dummy variables are included to reflect the type of charter, year of operation, and any possible interaction, as discussed above. Because of rapidly rising market rates during 1979, the effect of time should be negative for loan growth, and positive for the rate equation. If the ceiling restricted credit supply and loan rates in 1979, as theoretically anticipated, then the interaction effect should be positive

⁶ The growth of loans from one year to the next is used as a measure of loan flows for several reasons. While information on new loan extensions during the year is available, there is no information on loan type and maturity. For a given asset size, CUs which make longer loans will have fewer dollar extensions during any given period, since the repayments from long term loans of a given size are lower than that for short term loans. Thus, a better measure of loan activity may be the change in outstandings during the period. To adjust for size effects and reduce any potential econometric problems, the growth rate was used rather than the absolute difference.

in both the growth and the rate equations. The effect that the type of charter has on these variables is unknown *a priori*.

Other structural variables included are assets (A), maximum unsecured loan size (MAX), number of share accounts less than \$2,000 at year end (SMAL), operating expense to asset ratio (OP/A), share growth during the year (SGROW), and average share rate (SRATE). Assets are included to account for any scale effects that may exist in either equation. The maximum size of unsecured loans is included as a proxy for other terms and conditions of loan supply. One method CUs use to restrict credit is to limit the size of unsecured loans. An increase in this variable is consistent with increased supply, and hence should be associated with greater loan growth and smaller loan rates, *ceteris paribus*. The operating expense ratio is interpreted as a supply factor, with increases in operating expenses associated with reductions in supply.

An increase in share growth is indicative of a greater supply of loanable funds, and consequently should be associated with greater loan supply. On the other hand, an increase in the average share rate is consistent with a reduction in the supply of funds to the credit union, and should result in reduced loan supply. Finally, the number of small share accounts is included as a demand factor (see Flannery [6]). In order to be a member of a credit union, and thus eligible for a loan, an individual must maintain at least a nominal share account. As the proportion of small share accounts increases, it is likely that the number of members who joined primarily for borrowing privileges increases as well. Hence, this variable should be positively related to both loan growth and the loan rate.

Symbolically, the equations to be estimated are⁷:

$$LGROW = f(\overset{?}{A}, \overset{+}{MAX}, \overset{+}{SMAL}, \overset{+}{OP/A}, \overset{+}{SGROW}, \overset{?}{SF}, \bar{T}, \overset{+}{SF^*}T) \quad (2)$$

$$LRATE = f(\overset{?}{A}, \bar{MAX}, \overset{+}{SMAL}, \overset{+}{OP/A}, \overset{+}{SRATE}, \overset{?}{SF}, \bar{T}, \overset{+}{SF^*}T) \quad (3)$$

where the symbols represent the expected signs of coefficients associated with the variables, as discussed above.

II. Empirical Analysis of Ceiling Effects

Table III shows the results of the univariate analysis for several variables which were selected because either they indicate the similarities of the CUs in the sample, or are likely to be affected by the existence of a binding usury ceiling. *t* tests were performed to determine whether or not there was a significant

⁷ Both the ANOVA and the regression model were estimated with state dummy variables included. While several of these dummies were significant, their inclusion had little impact on the coefficients as reported here, and those results will not be reported. Several other variables were included in preliminary models, but proved to be ineffective. The existence of payroll deductions, the borrower-saver ratio, average loan size, and average share size were all used by Flannery as demand factors in his cross-sectional study. Only the average loan size was significant in the present study, but it was always negative, while demand factors should exert a positive impact on both of the endogenous variables. Since the average loan size may be affected by the CUs' loan policies as well as demand factors, it was decided to remove this variable from the model.

Table III

Univariate Analysis of State Chartered versus Federal Chartered Credit Unions

Variable	FCUs ^a	1978	t ratio ^b	FCUs ^a	1979	t ratio ^b
		SCUs ^a			SCUs ^a	
Assets	3067981	3062309	0.01	3345089	3327328	0.04
Loans Outstanding	2560706	2608548	0.14	2787745	2813473	0.07
Loan Extensions	2492546	2337849	0.49	2093243	1988506	0.43
During Year						
Share Growth	19.02%	15.34%	3.57***	9.21%	8.27%	1.03
Asset Growth	17.70%	13.84%	4.02***	6.26%	5.37%	1.12
Loan Growth	21.15%	15.36%	4.03***	4.92%	4.17%	0.79
Maximum Unsecured Loan	2230	2848	5.30***	2321	2994	5.83***
Average Loan	1843	2114	5.99***	1964	2164	2.25***
No. of Members	2482	3213	0.91	2598	2617	0.06
Shares < \$2K	2007	1910	0.44	2218	2234	0.06
Op Ex/Asset	3.97%	3.76%	2.95***	4.19%	3.94%	3.39***
Share Rate	5.44%	5.62%	3.65***	5.64%	5.85%	3.70***

^a The number of credit unions each year was 707 FCUs and 769 SCUs.

^b The t-ratio is used to test for differences in mean values between FCUs and SCUs in a given year. It was computed using separate variance estimates for each group.

*** Significant at the 0.01 level.

** Significant at the 0.05 level.

* Significant at the 0.10 level.

difference in the average value between federal and state chartered CUs in each year. No between-year tests for differences were performed.

Several variables indicate the similarities of the CUs included in each group. There is no significant difference in any of the size variables (assets, loans outstanding, loan extensions, and number of members) for either year, which implies that there should be no biases in the estimates from this source.

Several facets of CU operations do show significant differences for 1978. Regardless of the growth measure used, FCUs grew significantly more rapidly in 1978 than did SCUs. Their share growth was greater, even though they paid significantly lower dividends. FCUs had significantly higher ratios of operating expenses to total assets, perhaps reflecting differences in regulatory and/or reporting requirements. SCUs made larger loans, both on average and when loans were unsecured.

The major change between 1978 and 1979 is the much slower growth for both groups, but particularly for FCUs during the year. While the point estimates of average growth rates for FCUs are still greater than for SCUs, there are no longer statistically significant differences. Several factors which might be affected by a binding usury ceiling act in the manner discussed in Section II. A binding ceiling should keep share rates and maximum unsecured loan amounts down, while the average loan size should rise. Collection and credit checking policies should expand, thus the operating expense ratio should rise. While there were no major changes in the relationship between FCUs and SCUs from 1978 to 1979 for any of these variables, relative changes in the point estimates were in accord with the hypothesis that the ceiling was binding. For example, both FCUs and SCUs increased their maximum unsecured loan limit; however, the difference between them increased from \$618 in 1978 to \$663 in 1979.

Results of the ANOVA are presented in Table IV. The most important finding is the impact of the binding federal usury ceiling on three of the four variables. The loan rate equation reaffirms the findings of Section II, in that loan rates between FCUs and SCUs were not statistically different from one another in 1978 (evidence supporting the lack of a binding ceiling in that year), while the loan rate for FCUs is estimated to be significantly lower in 1979. Loan growth and share growth were significantly greater for SCUs in 1979, which suggests that FCUs were constrained by the ceiling during that year. Only the share rate was not influenced in accord with the discussion of Section I.

Estimates of the reduced form equations for the loan market are shown in Table V. The loan rate equation performs quite well, with all of the significant variables exerting the effects posited in Section I. Loan rates primarily depend on share rates and the operating expense ratio. The latter has a much larger impact, perhaps due to variations in volunteer labor and subsidized capital across credit unions. Larger CUs have lower loan rates, which implies that they can operate on smaller margins than small credit unions, perhaps due to having a larger proportion of equity reserves to total assets.⁸

The impact of the time dummy variable is significantly reduced when economic factors are introduced. Much of the time impact appears to be captured by the share rate and operating expense variables. However, the interaction term ($SF \cdot T$) actually shows a larger coefficient and a greater statistical significance, compared to the pure ANOVA results. *Had FCUs not been subject to a binding usury ceiling, their average loan interest rate during 1979 would have been twenty-four basis points higher.*

Loan growth depends importantly on share growth and operating expenses (see Table V). Two variables, MAX and SMAL, have signs different than expected. The latter is a surrogate for demand, while the former is included as a supply factor. However, neither is a "pure" variable, in the sense that each may be affected by both supply and demand factors within the individual CU, which may confound their effects. The coefficient for the time variable indicates the dramatic difference which economic conditions had on loan growth between 1978 and 1979, *even after adjusting for share growth.* As before, SCUs tend to show less loan growth than FCUs do.

The interaction term, which measures the impact of the binding federal usury ceiling, is again significant in the anticipated direction. The ceiling restricted loan growth by 3.13% below what it would have been, had there been a less restrictive ceiling. FCUs began 1979 with \$27.7 billion in outstanding loans. *Because of the federal usury ceiling, loans outstanding at FCUs at year end 1979 were approximately \$870 million lower than if the ceiling had been higher or nonexistent.*

Referring to Table III, one notices that there was a substantial gap between the growth of shares and the growth of loans among both FCUs and SCUs in 1979. While assets grew more slowly than loans for both groups in 1978, they grew faster during 1979. This suggests that even among the SCUs in our sample, nonloan assets expanded more rapidly than normal during 1979. Perhaps SCUs

⁸ Equity reserves in CUs are similar to retained earnings and reserves for bad debt in profit making institutions. These funds can be used to leverage share accounts, which reduces the spread between dividend rates and loan rates.

Table IV
ANOVA Results for the Impact of a Binding Usury Ceiling^a

Variable on which ANOVA is Performed ^b :				
Factor	Loan Rate	Loan Growth	Share Rate	Share Growth
Constant	11.04 (208.26)***	21.15 (24.49)***	5.44 (141.66)***	19.02 (27.38)***
SF	0.02 (0.23)	-5.79 (-4.84)***	0.19 (3.50)***	-3.68 (-3.82)***
T	0.18 (2.33)**	-16.23 (-13.29)***	0.20 (3.75)***	-9.81 (-9.99)***
SF*T	0.22 (2.16)**	5.04 (2.98)***	0.02 (0.24)	2.74 (2.01)**
$\bar{R}^2$	0.0132	0.0866	0.0186	0.0529
F	14.15**	94.24***	19.68**	55.89***

^a Degrees of freedom is 2948 for every equation. t ratios are reported in parentheses.

^b All coefficients are in percentage terms, e.g., 11.04 is actually 11.04%.

*** Significant at the 0.01 level.

** Significant at the 0.05 level.

* Significant at the 0.10 level.

Table V
Estimates for Reduced Form Equations for Loan Rates and Loan Growth

Dependent Variable:				
Variable	Loan Rate		Loan Growth	
	Coefficient ^a	t ratio	Coefficient ^a	t ratio
Intercept	7.74	(39.07)***	16.68	(12.42)***
A	-2.1×10^{-8}	(-4.13)***	1.1×10^{-7}	(1.43)
MAX	-2.5×10^{-5}	(-2.42)**	-3.9×10^{-4}	(-2.47)**
SMAL	3.2×10^{-5}	(3.53)***	-3.7×10^{-4}	(-2.70)***
OP/A	52.52	(26.05)***	-188.24	(-7.12)***
SGROW			69.49	(37.11)***
SRATE	23.45	(8.96)***		
SF	0.10	(1.51)	-3.41	(-3.45)***
T	0.01	(0.21)	-8.92	(-8.77)***
SF*T	0.24	(2.58)***	3.13	(2.26)**
$\bar{R}^2$	0.2203		0.3902	
F	105.24***		237.05***	
df	2943		2943	

^a A, MAX, SMAL were measured in dollars. All other variables except dummy variables, were measured in percentages. Coefficients for intercept and dummy variables are in percentages; e.g., 7.74 = 7.74%

*** Significant at the 0.01 level.

** Significant at the 0.05 level.

* Significant at the 0.10 level.

also felt constrained, particularly during the last quarter of the year, by their own (higher) usury ceilings. If so, the true impact on loan rates and loan growth has been *underestimated* by the results shown in Table V. Thus, had there not been a binding usury ceiling during 1979, loan growth and loan rates might have been even higher than suggested by this study.⁹

III. Conclusions and Policy Implications

The purpose of this study was to determine the impact of the twelve percent loan interest rate ceiling on federally chartered credit unions during 1979, a year characterized by very high interest rates compared to the ceiling. Data were gathered on both FCUs and SCUs operating in four states which allowed SCUs to charge a higher interest rate on loans than the federal maximum. In 1978, these two groups had average loan rates which were almost identical, but in 1979 SCUs charged substantially more, which lends support to the hypothesis that the ceiling constrained FCUs during 1979.

Several variables which might be affected by a binding ceiling were also analyzed, and in each case, the results agreed with the theory. Particularly important is the finding that an effective ceiling feeds back on share growth, because affected CUs do not compete as vigorously for available funds from their members. Also, regression analysis revealed that, even after taking into account various supply and demand factors, loan interest rates and loan growth were both significantly lower at FCUs than at SCUs in 1979, due to the binding usury ceiling.

The policy implications of this study are important. Although the Federal Credit Union Act specifically mandates federally chartered credit unions to be a source of low cost consumer credit and to promote thriftiness, it is not at all clear that the intent of the Act is served by a binding usury ceiling. During periods when the federal ceiling is binding, those members who are able to borrow from affected CUs benefit from such regulation. However, those members who are rejected or who cannot borrow as much as they normally would, must turn to high priced lenders at precisely the time when the costs of borrowing are most severe. Such effects are all the more pervasive because many states set the ceiling on *all* credit unions operating within the state at the federal maximum.

Raising the federal CU usury ceiling, as was done in December 1980,¹⁰ or

⁹ It would be incorrect to infer that a higher or nonexistent ceiling would always lead to these effects, since demand factors in unconstrained markets are equally important as supply factors or constraints. As pointed out in Section I, if market conditions keep interest rates below the ceiling, supply and demand factors interact to clear the market. Thus, to infer that raising the ceiling would automatically lead to greater growth and higher interest rates in the future is unwarranted. Rather, higher ceilings may allow market forces to exert a greater impact than was the case during 1979.

¹⁰ The Depository Institutions Deregulation and Monetary Control Act of 1980 allows the Board of NCUA to set maximum interest rates on loans. Congress raised the limit to fifteen percent and gave the Board the authority to raise the ceiling in the future should economic and industry conditions warrant. On 3 December 1980, the Board raised the ceiling to twenty-one percent. However, the ceiling will drop to fifteen percent in June 1982, unless the Board takes positive action to keep it at a higher level. The Act also allows for the pre-emption of state usury laws during high interest rate periods. SCUs, as well as other financial institutions, can now charge up to the state CU usury rate, or one percent above the district Federal Reserve Bank's discount rate, whichever is higher.

abolishing it allows supply and demand factors to perform their allocative function during high interest rate periods as well as when interest rates are low. The current twenty-one percent federal maximum has no impact when market forces push the equilibrium rate below that level. However, if future interest rates exceed twenty-one percent, FCUs would be more willing to make loans if the federal ceiling was abolished, albeit at a higher cost.

Higher ceilings may also benefit members who save at CUs. Because CUs need a certain operating spread to break even on loans, the usury ceiling retards their willingness to offer money market share certificates and other high-interest certificates when open market interest rates are high. Thus, share growth slows appreciably as members find other outlets for their accumulated savings. Such deposit effects also exacerbate reductions in CU credit availability.

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