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An Aggregate Model of the Credit Union Industry

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I. Introduction

PRIOR TO 1971, CREDIT UNIONS (CUs) were almost exclusively short-term lenders with their deposit base consisting primarily of passbook share accounts. Radical institutional changes during the 1970's have reshaped the industry and increased the competition between CUs and other financial institutions. The introduction of Federal share insurance in 1971, coupled with the highest deposit ceiling allowed by regulators, allowed CUs to attract funds from other intermediaries. While CUs have a yield advantage, they have been much slower to introduce day-of-deposit to day-of-withdrawal interest accumulation, so that many CU deposits may be regarded more as short-term certificate accounts rather than open passbooks. Thus, as The Federal Reserve System and The Federal Home Loan Bank Board have liberalized CU yields, maturities and minimum denominations, it has affected CUs' ability to attract share deposits. Substantial competition exists in loan markets as well. Banks, finance companies, and the credit acceptance subsidies of many manufacturing corporations also extend consumer credit, while CUs have entered mortgage markets.

In this study, a six-equation simultaneous model is developed to estimate three different aggregate flows within the industry (new loan extensions, net share flows, and net change in financial investments); two price variables (the average CU loan rate and average dividend rate); and the median maturity on newly extended loans (to account for endogenous changes in non-price terms which may affect both the supply and demand for loans).

This study is important to both researchers and policymakers. Despite the movement to make credit unions more like and more competitive with other financial institutions, there remains a general perception that CUs are "different"; that they cannot be analyzed by applying well-known economic theories and methods; and that they remain insulated from both general economic conditions and competition. The evidence from this study suggests that those perceptions are in error, even though the industry remains small relative to other providers of consumer financial services. Because CUs are no longer insulated, it is important to know the impact of changing economic conditions on the industry.

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Increased inter-institutional competition also suggests that policymakers at all regulatory agencies should maintain and even expand their efforts at policy coordination.

II. The Model

Because the individual CU is a cooperative, its underlying behavioral objective is not well defined. Indeed, three different models of CU behavior have been identified by economists [4, 14], but the economic implication of these differences in behavioral objectives is reduced or eliminated if competitive market forces are strong, since cooperatives will be forced to act like cost-minimizing competitors in order to remain in business.[1] Therefore, structural models of supply and demand in both loan and share markets will be developed below. A demand function for financial assets other than loans also is specified to investigate CU behavior in that market.

A. Loan Market

Previous research by the author developed an econometric model of the CU loan market [12]. The basic features of that model are incorporated in the current work.[2] Specifically, month-to-month differences in shares, and non-loan financial assets are used as measures of CU activity. New loan extensions during the month, rather than the differences in loans outstanding, is included, as the former should be more indicative of current loan market conditions.

The proper price variable for consumer credit is also an important consideration. The variety of loans which fall under the rubric of consumer credit suggests that compromises must be made if an "average" interest rate is used. In this study, the average interest rate on 36-month new car loans at CUs and at banks are both used as loan price variables. Automobile loans account for over thirty-five percent of all bank consumer credit, and nearly fifty percent of the CU total. Because of the homogeneous nature of the 36-month new car loan, it is assumed that its interest rate is indicative of the entire structure of rates at both institutions.

The quantity of new loans demanded by members (D_{NLE}) is assumed to be a function of the interest rate on those loans (r_{CU}), the bank loan rate (r_B), the interest rate on Treasury Bills (r_{TB}), the unemployment rate (Un), an index of consumer sentiment (Con), real personal income (Y_P), and the median maturity on newly extended loans (Mat). Additionally, it is assumed that seasonal variations in demand are better accounted for through the use of seasonal dummies

[1] This analysis ignores the role of sponsor subsidization and volunteerism in CUs, which may allow inefficient CUs to remain in business. Since both factors are inversely related to credit union size and since the industry's total assets are highly skewed toward larger firms, ignoring these factors is unlikely to cause serious biases in an aggregate study such as this.

[2] Several variables were considered but dropped from the model due to their statistical insignificance, and will not be shown here. See Navratil [13] for a more complete discussion of this research.

(S_i) rather than seasonally adjusted data.[3] Symbolically,

$$D_{NLE} = f(\overset{-}{r_{CU}}, \overset{+}{r_B}, \overset{?}{r_{TB}}, \overset{?}{Un}, \overset{+}{Con}, \overset{+}{Y_P}, \overset{+}{Mat}, S_i) \quad (1)$$

where the symbol over each variable indicates its anticipated effect. Discussion will be limited to those variables which do not lend themselves to standard economic analysis.

The interest rate on U.S. Treasury Bills measures the tradeoff between holding real goods or holding financial assets. Higher T-Bill rates might reduce demand for consumer credit because financial assets should generate higher returns, causing people to forego present consumption in the hope that future consumption will be enhanced. Recent research [1, 3] suggests that T-Bill rates may also be a surrogate for inflationary expectations, which would lead to the opposite impact. Thus, the effect cannot be determined *a priori.*

Rising unemployment rates are likely to dampen durable goods expenditures, but short-term borrowing for personal reasons might rise simultaneously. Therefore, the impact of the unemployment rate on demand is indeterminate. The index of consumer sentiment is an attitudinal variable which has been used in research on consumer durable goods expenditures [8]. Since consumption of durables is positively related to the index, so should CU loan demand.

Loans are heterogeneous because of collateral and maturity provisions. While collateral stipulations are usually determined by the purpose of the loan (e.g., car loans are almost always collateralized while personal loans are not), maturity is mutually agreed upon. Since monthly payments, which are sometimes used as price variables in consumer credit studies, are influenced by the loan amount, interest rate, and maturity, the latter is included as an additional endogenous variable in the model. Its impact on loan demand should be positive, since longer maturities are indicative of easier credit terms.

Loan supply (S_{NLE}) is assumed to be a function of the interest rate on loans (r_{CU}), the interest rate on investments (measured by the interest rate on Treasury Bills, r_{TB}),[4] the dividend rate (r_{Div}), and the median maturity on new loans (Mat). As in the demand equation, seasonal dummies are also included. Mathematically,

$$S_{NLE} = f(r_{CU}, r_{TB}, r_{Div}, \text{Mat}, S_i) \quad (2)$$

For estimation purposes it will be assumed that supply and demand are in

[3] The one problem that might be encountered using seasonally unadjusted data in this manner is changing seasonal patterns in the variables. Trends in seasonal variation can lead to biased and inconsistent results, since interaction terms between the seasonals and a trend variable would be required. During the period covered by this study, NCUA's seasonal adjustment factors varied little from year to year and no trends in any could be discerned. Thus, the author believes that seasonal variations are better controlled through the use of dummy variables rather than applying seasonal adjustments to the variables, as this might introduce spurious correlation into the model. For additional justification see Maddala [11; p. 340] and Navratil [13; fn. *4*].

[4] Authorized CU investments include U.S. Treasury and agency securities, common trust investments available from two industry-wide mutual funds, deposits in insured banks and S&Ls, and vault cash. Balance sheet information available from yearly reports filed with NCUA shows that U.S. obligations, including those held by the common trust funds, account for over fifty percent of non-loan financial assets in every year of this study.

constant equilibrium. If the amount of new lending is primarily determined by the demand side of the market, while pricing is primarily conducted on the supply side, then the dollar amount of new loan extensions (NLE) should be estimated by Equation (1). Equation (2) will be modified to solve for the equilibrium interest rate,

$$r_{CU} = f(\overset{+}{\text{NLE}}, \overset{+}{r_{TB}}, \overset{+}{r_{Div}}, \overset{?}{\text{Mat}}, S_i) \tag{3}$$

To the extent that CU portfolio composition is a function of the alternative returns from financial investments *vis a vis* loans, higher T-Bill rates should reduce loan supply, and thus put upward pressure on CU loan rates. Longer loan maturities and lower CU interest rates may both be indicative of easier credit conditions. On the other hand, managers may be more willing to extend maturities when interest rates are high, since by doing so they can "lock in" higher rates over a longer period of time. Thus, its impact on the loan rate is indeterminate.

As discussed above, loans may be heterogeneous due to maturity and collateral agreements. Therefore, a median maturity equation is specified to adjust for one of the non-price terms of the loan contract as well as accounting for the endogeneity of the median maturity variable in Equations 1 and 3. In general functional notation:

$$\text{Mat} = f(\overset{?}{r_{CU}}, \overset{-}{r_{TB}}, \overset{-}{Un}, \overset{+}{\text{ASL}}, \overset{-}{\%\text{Car}}, S_i) \tag{4}$$

As the T-Bill rate rises, credit conditions might tighten and managers should be less willing to extend credit for long periods. Thus, holding r_{CU} constant, it is hypothesized that r_{TB} will have a negative impact on the median maturity of newly extended loans. The remaining elements all attempt to account for the changing composition of new loans. As unemployment rises, less lending for durables should be made, while short-term personal loans should rise in volume. Thus, median maturity should fall as unemployment rises. As the average size of loans (ASL) rises, so should the median maturity. New auto loans tend to be among the longest loans traditionally made by CUs. Therefore, as the percentage of money borrowed for new auto loans (%Car) rises, so should median maturity.

B. Non-Loan Financial Assets Equation

CUs can commit funds to consumer lending or to several different non-loan financial assets (see Footnote 4). Profit-maximizing intermediaries should respond to the relative returns available from each asset, but the non-profit, cooperative nature of CUs might yield different behavior. To date, no one has documented the responsiveness of CU portfolio composition to changes in the amount of funds available or relative returns. While it would be interesting and useful to develop equations for each investment separately, the monthly data necessary to do so is not available. Rather a series for total financial investments of the industry on a monthly basis was constructed.[5]

It is hypothesized that the net change in CU financial investments (ΔI) is a positive function of the returns available from such assets (r_{TB}), and the share flow during the month ($\Delta Share$). ΔI should be negatively affected by changes in

[5] See Appendix A of [13] for a discussion of this series.

new loans (NLE), and the return available from them (r_{CU}). Mathematically,

$$\Delta I = f(\overset{-}{r_{CU}}, \overset{+}{r_{TB}}, \Delta \overset{+}{Share}, \overset{-}{NLE}, S_i) \tag{5}$$

C. Share Market

There have been three previous investigations of member share market behavior, but no one has estimated CU pricing behavior. Flannery [4] and Taylor [16] both used cross-sectional data to estimate the demand for shares by members. Taylor found the advertised dividend rate and per capita income to be significantly positive, while the CU loan rate was significantly negative. Flannery's results showed that the dividend rate was significantly positive, but the loan rate was insignificant. A crude proxy for income, the average size of outstanding loans, was also significant. Flannery also found that larger accounts tended to be more dividend-rate elastic, which indicates that shares are close substitutes for the liabilities of other intermediaries [4; p. 135]. Koot [10], utilizing aggregate data on a semiannual basis, found share flows to be sensitive to the yield on both share accounts and alternative assets. However, income was insignificant in his estimated equation.

One note concerning terminology is in order. The share studies cited above typically defined the demand for shares as the demand by CU members. Within the context of this simultaneous model, it is better to view shares as a necessary input into the production of financial services, as do several studies on costs and scale economies [15, 17, 18]. Viewed as an input, it is more meaningful to discuss the *demand* for shares by *credit unions* and the *supply* of those shares from their *members.* That terminology will be utilized in this study.

The supply of shares (S_s) is assumed to be positively related to the dividend rate (r_{Div}), and negatively related to the yield on other savings instruments (such as the commercial bank deposit rate on passbook accounts, r_{PB}, or consumer certificates of deposit, r_{CD}), and the yield on open market instruments (r_{TB}). Personal income (Y) should have a positive impact on supply. The unemployment rate is also included in the estimated equation to determine its impact on savings flows. While fewer people may be able to save as unemployment rises, those who can may increase their savings rate because of fears over their future economic position. Therefore, its impact cannot be determined *a priori.* Symbolically,

$$S_s = f(\overset{+}{r_{Div}}, \overset{-}{r_{PB}}, \overset{-}{r_{CD}}, \overset{-}{r_{TB}}, \overset{+}{Y}, \overset{?}{Un}, S_i) \tag{6}$$

Credit union demand for shares (D_s) is hypothesized to be a function of the dividend rate (r_{Div}), the loan rate (r_{CU}), new loan extensions (NLE), and the rate on other potential liabilities. CUs may obtain funds by issuing certificates of indebtedness or by borrowing. Rates on these non-share liabilities are unavailable, therefore the Treasury Bill rate (r_{TB}) will be used as a surrogate. Mathematically,

$$D_s = f(r_{Div}, r_{CU}, NLE, r_{TB}, S_i) \tag{7}$$

Under the assumption that the share market is always in equilibrium, the change in shares ($\Delta Share$) will be estimated using Equation 6, while the dividend rate will be estimated by rewriting Equation 7 with r_{Div} as the dependent variable:

$$r_{Div} = f(\Delta \overset{-}{Share}, \overset{+}{r_{CU}}, \overset{+}{r_{TB}}, \overset{+}{NLE}, S_i) \tag{8}$$

Higher share flows may actually reduce dividend rates, since, holding loan rates and new loan extensions constant, the additional funds are placed, at least temporarily, in assets which yield less than that available from lending activity. Since lower yields reduce the marginal return on the portfolio, the average portfolio yield falls as well.[6]

III. Estimation and Results

Monthly data on all of the variables were collected for the period from January, 1972 to December, 1978. Dividend rates and the deposit rates at banks were only available quarterly, but were converted to a monthly basis by using the quarterly value for all three monthly observations within the quarter. While not totally satisfactory, this transformation allows estimation of savings market pricing behavior. More information concerning the data is available in [13].

Results were obtained through two-stage least-squares regression analysis. Carets ($\wedge$) over variables indicate that the first stage estimates were substituted for the original variables in the second stage. Table I displays the results for the loan market equations, while Table II reports coefficients for the CU investment equation and the share market.[7] Seasonal coefficients are not reported, but are available in [13].

The estimated loan demand equation is very similar to that in [12]. Most striking is the importance of relative pricing between CUs and banks.[8] Demand is highly elastic with respect to both, suggesting that competition among financial institutions in the consumer credit market is quite strong. Computing elasticities at the means of the appropriate variables yields an own price elasticity of 24, while the cross-elasticity with respect to the bank loan rate is 11. The elasticity with respect to real personal income is also high, 17, and is probably best viewed as reflecting the dramatic growth of the industry during the 1970's. Rising Treasury Bill yields reduce demand, most likely because members make a portfolio adjustment between real and financial assets. Consumer optimism, indicated by the index of consumer sentiment, leads to greater borrowing from CUs.

The coefficient of the median maturity variable is negative, which suggests that CU loan demand *falls* as credit terms ease. Two plausible explanations can be

[6] Note that the two equations which estimate CU pricing behavior (Eq. 3 and 8) do *not* include the prices of their competitors. Because both equations will be used to estimate structural relationships under the assumption of competition, inclusion of competitor's prices would lead to specification bias. For example, bank loan rates should not shift CU loan supply. Rather, the impact of bank loan rates on CU pricing comes from shifts in the demand for CU loans. Higher bank rates should increase loan demand at CUs, which, with supply constant, should lead to higher CU loan rates. Inclusion of the bank loan rate in the CU loan supply equation would lead to identification problems, since a demand "shift" variable would be incorrectly attempting to account for changes in CU loan supply. A similar argument can be made concerning Eq. 8.

[7] It should be emphasized that all equations were estimated simultaneously; results are reported separately because it is convenient to do so.

[8] Finance companies also control a substantial portion of the consumer credit market, although their share is smaller than that of banks. Bank loan rate data was available on a monthly basis while finance company data was not. The two series do appear to move in a similar fashion, though, so that collinearity would likely result if both were included. Therefore, only the bank loan rate was used as a substitute price.

Table I:

LOAN MARKET EQUATIONS[a]

Equation: Dependent Variable:	Loan Demand New Loan Extensions	Loan Supply CU Auto Loan Rate	Median Maturity Median Maturity
Intercept	5580.57	5.682***	−54.677***
	(8297.84)	(0.709)	(14.941)
r_{TB}	−576.63***	−0.073***	−0.708***
	(144.39)	(0.018)	(0.164)
Un	131.10		−1.015***
	(117.56)		(0.291)
Con	23.41**		
	(9.89)		
r_B	2781.00***		
	(729.82)		
Y_p	57.54***		
	(12.52)		
ASL			0.0038***
			(0.0006)
%Car			33.239**
			(15.256)
r_{CU}	−6159.93***		6.149***
	(2091.90)		(0.972)
$\widehat{NLE}$		0.000012	
		(0.000048)	
$\widehat{Mat}$	−525.40***	−0.0094	
	(165.04)	(0.0306)	
$\widehat{r_{Div}}$		0.907***	
		(0.147)	
df	64	67	66
Rho	0.26	0.09	0.07

[a] Cochrane-Orcutt correction used for all equations in second stage with final iteration value of autocorrelation coefficient shown as "Rho." Standard errors shown beneath coefficients in parentheses. The intercept terms and their standard errors were properly adjusted (See Kmenta [9; p. 587]). Results for seasonal coefficients are available in [13].

*** Significant at the 0.01 level

** Significant at the 0.05 level

* Significant at the 0.10 level

given for this unexpected result. Credit terms at CUs might change at the same time that they are adjusted by other lenders. Because CUs cannot lend through retailers, they suffer a competitive disadvantage. Since the cost of obtaining information on pricing and loan terms may be quite high relative to the anticipated monetary benefits [5, 7], members may opt for the convenience of "dealer" financing, especially during low-interest-rate, easy-credit periods. As credit conditions stiffen, however, members may perceive positive net benefits accruing from CU loans. If so, loan demand may rise, even though CU terms might be tightening.

This scenario may be particularly relevant when interest rates are near the maximum that CUs can charge, as occurred from mid-1974 to early-1975. Because of the legislated twelve percent ceiling effective at that time, CU loan rates did not rise dramatically, although bank loan rates did. As a result, loan demand at CUs should have increased. However, at the same time, share flows slowed and

Table II:

NON-LOAN FINANCIAL ASSETS AND SHARE MARKET EQUATIONS[a]

Equation: Dependent Variable:	Non-Loan Assets ΔI	Share Supply ΔShare	Share Demand CU Dividend Rate
Intercept	−2899.76	−2126.58*	4.806***
	(2163.09)	(1088.64)	(1.002)
Un		30.78*	
		(16.00)	
r_{CD}		−122.38***	
		(27.29)	
Y		0.11	
		(0.26)	
r_{TB}	6.26		0.030***
	(24.04)		(0.010)
$\widehat{r_{Div}}$		395.24	
		(262.49)	
$\widehat{\Delta \text{Share}}$	0.52*		−0.00015**
	(0.32)		(0.00006)
$\widehat{\text{NLE}}$	−0.23***		0.00016***
	(0.07)		(0.00004)
$\widehat{r_{CU}}$	291.53		0.140**
	(212.10)		(0.068)
df	67	67	67
Rho	−0.08	−0.21	0.97

[a] Cochrane-Orcutt correction used for all equations in second stage with final iteration value of autocorrelation coefficient shown as "Rho." Standard errors shown beneath coefficients in parentheses. The intercept terms and their standard errors were properly adjusted (See Kmenta [9; p. 587]). Results for seasonal coefficients are available in [13].

*** Significant at the 0.01 level

** Significant at the 0.05 level

* Significant at the 0.10 level

the return to non-loan investments approached the return available from lending to members. Thus, loan demand at the prevailing loan rate may have been restricted through non-price rationing. If the median maturity variable included in the demand equation is capturing this effect, it could lead to the observed inverse relationship.[9]

The estimated loan supply equation reveals that the loan rate is determined primarily by the dividend rate and the T-Bill rate. The coefficient of r_{Div} is not significantly different from one, which suggests that loan rates change by approximately the same absolute amount as changes in dividend rates. The T-Bill rate is significantly negative,[10] which is the opposite of theoretical expectations. Similarly poor results occur in the investments equation discussed below.

What economic interpretation can be placed on these results? It is conceivable that CUs do *not* view loans and investments as close substitutes for one another.

[9] At best, this is a crude and imprecise measure of rationing. It is probably most apropos to state that these results suggest that further research on rationing within CU loan markets is warranted. John Wolken and the author have recently initiated such a study.

[10] Variables other than the Treasury Bill yield were also used as measures of the return available on non-loan assets. However, none performed much differently than r_{TB}. Including them with the r_{TB} caused multicollinearity problems.

If the original goals of the CU movement, to promote thrift and be a source of low-cost consumer credit, are still cherished, then these assets will not be as substitutable as they would be in the portfolio of a profit-maximizing intermediary. As discussed above, tighter credit conditions may increase loan demand at CUs. If that happens, and managers respond by converting equally valuable nonloan assets to loans, CU profitability may not be impaired, but the benefits of credit unionism to borrowers would increase. This suggests that relative returns on assets may be of only secondary importance. Still, the persistence of the negative impact of r_{TB} on the CU loan rate is perplexing, since it indicates some irrationality in pricing behavior.

The median maturity equation reported in Table I performs very well. Maturities lengthen as the average loan size or the proportions of loans made for auto purchases increase. Rising unemployment rates reduce maturities, probably due to an increase in short-term personal lending when unemployment rises. The T-Bill yield has a negative impact on median maturity. Since short-term loans increase the cash flow associated with a given size of the total loan portfolio, they might be profitable alternatives to investments when open market rates rise.

With open market rates constant, an increase in the CU loan rate leads to longer maturities. Longer maturities reduce the monthly payment for a given loan size, which might make loans more attractive to members, even if they are charged a higher interest rate. From a manager's standpoint, a higher loan rate can be locked in for a longer period by extending the loan maturity. Therefore, both borrowers and savers can benefit from lengthened maturities as loan rates rise.

Table II shows the results of estimating the investments and share market equations. As mentioned in the discussion of the loan supply equation, it appears that investments are not particularly close substitutes for loans in CU portfolios. In the present equation, this point is brought home by the fact that the change in investments is primarily a function of new loan extensions and share flows. Some funds are converted from investments to finance new loan extensions, however, much of the money must come from other sources, since an increase in NLE of one dollar leads to a twenty-three cent reduction in investments. The results also show that, holding NLE constant, every dollar change in share flows leads to a fifty-two cent change in investments.

Both share market equations perform well with regard to theoretical expectations, although the statistical significance of two variables in the share supply equation is low.[11] The bank CD rate performed better than the passbook rate, and it was retained in the model.[12] Share flows react elastically to changes in the returns available to members. While the statistical significance of the bank CD rate is higher than that of the dividend rate, the elasticity of share flows with respect to the dividend rate is higher (5.85 versus −1.78 for the bank CD rate). These elasticities are somewhat higher than those reported by Flannery and

[11] r_{TB} was consistently insignificant and reduced the statistical significance of r_{CD} and r_{Div}. Therefore, it was dropped from the analysis.

[12] It may also be true that the more relevant substitute for a share account is a CD at another intermediary. See the discussion of this point in the introduction.

Taylor. Share flows respond inelastically but positively to changes in the unemployment rate, suggesting that members tend to increase savings in response to higher unemployment. Personal income is insignificant here, as it was in Koot's study.

The share demand equation results correspond very closely to the discussion in Section II. Dividend rates increase as new loan extensions and loan rates rise. CUs tend to increase dividend rates as r_{TB}, a surrogate for the cost of other liabilities, rises. This indicates that managers act rationally to changes in the relative cost of funds. However, the low absolute value of this coefficient suggests that dividend rates change very slowly when open market yields change. As discussed in Section II, when loan activity is held constant, increases in share flows may reduce the average return on all assets, which puts downward pressure on dividend rates. The empirical results support this hypothesis.

Taken as a whole, the model reveals several interesting facets of the behavior of CUs and their members. Members act according to the precepts of economic rationality, in that they attempt to maximize the return on their savings and minimize the cost associated with borrowing. As a result, flows in both loan and share markets are significantly and elastically affected by changes in relative prices. Pricing effects are more elastic in loan markets, perhaps because governmental interest ceilings tend to be more binding in the savings market and CUs have a yield advantage there.

While members act in an economically rational fashion, there is some evidence that CUs do not. Although they operate in much the same fashion as profit-oriented intermediaries in savings markets, they exhibit unique behavior in the handling of assets. Specifically, it appears that loans and other assets are not considered close substitutes, as they would be in the portfolio of profit-maximizing institutions. CUs appear to be quite loyal to their historical goal of providing members with low cost consumer credit, even if some potential revenues are sacrificed in the process. Loans are granted to members at a rate high enough to cover dividend and operating expenses, provided that funds are available from current share flows, loan repayments, and the investment portfolio. Non-loan financial assets appear to be a mere residual or buffer which help smooth flows in shares and loan demand by members.

IV. Policy Implications

Three policy issues can be addressed within the context of this study. The willingness of CUs to forego some potential profitability in order to benefit borrower-members may lead to a misallocation of resources into the consumer credit sector, as discussed in Wolken and Navratil [17]. Society may have been willing to accept such distributional inefficiencies in the past, however, recent concern over the lack of funds flowing into business investment may cause a re-examination of the role which CUs play in this allocation process. If so, future legislative changes may be unfavorable toward the industry.

Recent regulatory changes which liberalized the issuance of CDs by banks and S&Ls increased the competition for deposits. Because many smaller CUs do not have the sophisticated equipment and personnel necessary to switch to daily interest accrual, their share flows may be adversely affected. It is doubtful that

Congress or NCUA can do much to shield such operations. One positive action may be to loosen the common bond provision of the chartering regulations, so that mergers among smaller CUs are facilitated.

Competition within the savings market, which is still heavily regulated by several Federal agencies, appears to be so strong that regulators must be careful to co-ordinate their actions in the move towards deregulation of that market. Certainly, the establishment of the Depository Institutions Deregulation Committee is a step in the right direction.

The Hunt Commission in 1971 argued for greater equity in the treatment of all financial institutions, as competition was forcing them to become more alike. During the 1970's, credit unions became highly competitive with other providers of consumer financial services. Yet they still retain a unique operating principle and a favorable regulatory environment. Deregulation is likely to have serious, if sometimes detrimental, effects on the industry during the 1980's. Those credit unions which survive are likely to be quite different institutions than those of the seventies, just as change reshaped the industry during the past ten years.

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