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Credit Unions: Theory, Empirical Evidence and Public Regulation: Discussion

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## DISCUSSION

RICHARD L. PETERSON\*: Based on practical experience, I think the papers presented at this session may have underplayed the *tremendous* influence that loan and deposit rate ceilings have had on credit unions in recent years. Loan rate ceilings reduce net revenues. Further, deposit rate ceilings cause credit unions to wrestle with the quandry of whether they should offer money market certificates to match bank and S&L competition and retain interest sensitive funds or pay the maximum passbook rate and hope they don't lose too many funds. If they offer high-rate savings certificates they may experience large turnovers from low-rate to high-rate deposits—which will raise their costs of funds sharply while their returns on illiquid and rate constrained loans remain fixed. This will reduce their profitability unless they can convert their loan holdings into high-yielding *non-loan* investments (which many will not or cannot do). If they do not offer higher rates to savers, they may experience a runoff of deposits and find themselves illiquid. In either case, their profitability will suffer when market interest rates are high. Further, those that do not offer higher rates will become less liquid and grow more slowly. These phenomena, I believe, account for the slow aggregate growth in credit union assets and elevated liquidation rate that Black and Dugger observed from 1978 to 1980.

Given the major influence that the initiation of high-rate savings certificates has had on credit union growth and policies, I do not feel that the very promising Smith-Cargill-Meyer model will be complete unless it adds explicit consideration of multiple rate ceilings. Also, I believe credit union behavior can't simply be classed as saver-oriented, borrower-oriented, or managerial. Our credit union frequently makes "uneconomic" decisions in order to be "fair" or "altruistic" ("help the little guy"—by making very small loans, providing share-draft services with no service charge, or charging below market rates on used-car loans). However, such behavior may help our credit union attract or retain deposits when interest rates are high. Many savers appear to be willing to sacrifice some yield to support an institution that is equitable and charitable. Thus, I believe Smith, et al. should consider altruistic motives for credit union behavior.

Finally, models of credit union behavior must be dynamic. The question of whether a credit union should offer savings certificates or not essentially depends on complex judgments regarding (i) how fast savings would flow out otherwise, (ii) how fast existing savings will "roll-over" into the (higher cost) new certificates, (iii) how fast the loan portfolio will be paid down, or can be expanded if new funds become available, and (iv) what is likely to happen to the term structure of interest rates.

Dynamic considerations, I believe, account for Navratil's finding that credit unions' use their non-loan assets as a "buffer stock" to insulate loan availability from short-run changes in savings flows. Even if non-rate assets pay a higher yield, Navratil found that credit unions were "irrationally" willing to accommodate loan demand. However, their behavior isn't irrational if, given the constraints

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under which they operate, credit unions obtain their highest return from loans rather than financial investments. In particular, rates on short-term securities are often mercurial while rates on (longer maturity) loans may average out to be higher in the long run. Further, an "open" loan window helps credit unions perform the "altruistic function" that I believe helps them attract and retain deposits (at lower cost than would otherwise be the case). Given these long-run rate of return considerations, plus the fact that direct loans cannot be acquired or disposed of instantly, credit unions will try to make loans whenever loan demand exists and they have funds available.

The ignoring of dynamic considerations highlights a conceptual problem with Navratil's paper. While his model explained financial flows, it did not relate those flows to stocks. He used Cochran-Orcutt techniques and tried various lag structures but did not develop a theoretical structure to justify using "speed-of-adjustment" or "lagged-adjustment" models.

Another specification problem I found with Navratil's paper involved his treatment of loan maturities. In his model, he used three simultaneous equations to explain the credit union loan market: one for loan demand (which he adapts to explain loan extensions), one for loan supply (which he adapts to explain loan rates), and one for the median maturity of loans (which he uses both as an instrument in the other equations and as a separate equation). Supply and demand equations make great sense, but the author's justification for a median maturity equation is weak. In addition, the median maturity variable took the "wrong" sign in his "demand equation."

What I would like to suggest is that loan maturity should be viewed as an element in the loan price vector. Clearly, loan prices are not simply loan rates. When downpayments are raised borrowers often must tap more expensive sources of funds before they can purchase a good and lenders' net expected returns increase because expected losses fall. When maturities are reduced, loan payouts are faster and more certain, and monthly payments are higher. This increases cash flows to lenders but raises effective loan "prices" to credit-rationed borrowers (see Juster and Shay).

If loan maturities are an element of loan prices, then credit unions can shorten maturities (thereby raising loan prices) when they need to ration excess demand for credit at existing (ceiling) rates. Thus, it is not surprising that Navratil found loan maturities and loan demand were inversely related. If loan demand is strong, maturities may be shortened to raise loan prices and reduce excess demand. However, this is a credit supply, not a credit demand phenomena. Thus, I believe the "wrong" sign he observed in his "demand" equation really reflected supply effects of this sort, and that his specification would have been improved if he had explicitly considered non-rate aspects of loan pricing.

Navratil found very high loan rate elasticities. This is curious because many investigators feel consumers are loan rate insensitive. However, if nonrate terms are an element of loan prices, and vary widely with loan rates, Navratil's high loan rate elasticities can be more easily explained.

I have other quibbles with Navratil's paper. For instance, I don't think the short-term T-bill rate really explains consumers longer-term investment behavior. Nonetheless, overall, I feel Navratil is to be commended for explaining the

demand and supply of credit union shares, loans, and non-loan investments simultaneously. By so doing, he provides useful insights into credit union behavior. To my knowledge, his finding that credit unions use their non-loan assets as a buffer, either to finance share outflows or extraordinary loan demands or to absorb temporarily excessive inflows of funds, has not been previously documented. In addition, he has effectively documented the relationships that exist between loan flows, loan rates, dividend rates, and share flows as credit unions attempt to (1) accommodate loan demand by attracting additional funds and, (2) pass on additional earnings to their savers. Thus, his paper, along with the others presented here, is a valuable addition to credit union literature.

#### REFERENCES

1. Juster, F. T. and R. P. Shay, *Consumer Sensitivity to Finance Rates: An Empirical and Analytic Investigation*, Occasional Paper No. 88, National Bureau of Economic Research, New York, NY 1964.

#### DISCUSSION

CARL M. GAMBS\*: The paper by Harold Black and Robert Dugger provides an excellent survey of the current state of credit union industry—the best one that I am aware of. I would, however, have preferred that the paper deal more with some of the issues raised in its concluding section. While the sharp slowdown in credit union growth that occurred in the last two years was primarily a result of developments in financial markets, it may well be that recent legislative and regulatory developments mean that credit unions will never again resume the rapid growth that had come to characterize them. I think that the paper would have been much more valuable if it had spent more time analyzing the likely effect of the Depository Institutions Deregulation and Monetary Control Act of 1980, as well as the effects of other technological and regulatory developments.

Since the paper is primarily a survey of the credit union industry, I would be remiss if I did not note what seems to me to be an important omission. The paper does not discuss the increasingly important role of the corporate central credit unions. These institutions today provide a surprisingly sophisticated and efficient nationwide system for managing credit union liquidity and for channeling funds to credit unions with liquidity needs. One rather odd aspect of this situation is that there is a great deal of rivalry between these institutions and the NCUA's Central Liquidity Facility, as the two are alternative sources of borrowed funds for credit unions. It may well be that the growth of corporate centrals will leave the CLF with only a minor role to play in supplying funds to credit unions.

The very existence of credit unions presents problems for the economist's standard way of thinking. Individuals are supposed to maximize utility and firms are supposed to maximize profits, but in credit unions we have an entity that

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