Appendix B

Credit Union to Mutual Conversion: Do Rates Diverge?

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Executive Summary

This study conducts a cross-sectional analysis of 175 depository institutions, assessing the impact on the interest rates charged on loan products and offered on savings products by the size of the institution, its liquidity, its net worth, its tax and salary payments, and its status as a credit union, a traditional banking institution, or a converted credit union (i.e., an institution that recently converted from a credit union charter to a banking institution charter). The principal findings are:

- Credit unions offer significantly higher rates on savings accounts and lower rates on many loan products than do banking institutions after accounting for all other variables.

- Credit unions offer significantly higher interest rates on all savings products examined and charge lower interest rates on three of four loan products examined compared to converted credit unions after accounting for all other variables.

- Although we identify a significant credit union pricing advantage compared to both traditional banking institutions and converted credit unions, we are unable to conclude that this advantage arises simply from differences in tax status or salary levels. This suggests that other factors associated with the cooperative structure of credit unions also play a role in the credit union pricing advantage.

1. INTRODUCTION

Over the past ten years, roughly 30 credit unions in the U.S. have converted to mutual banking institutions. The majority of these institutions have subsequently converted to stockholder-owned banking institutions. This activity, while very limited in terms of number of institutions, has been hotly debated. Advocates of this activity say that converted credit unions can maintain and even improve the level of financial benefits delivered to members. They argue these conversions increase flexibility and make institutional growth easier. Opponents, on the other hand, say that in almost every case this process has been motivated by insider greed because it results in a massive transfer of wealth from credit union members to insiders. Opponents also say that the financial benefits provided to credit union members are substantially reduced after conversion. Further, opponents argue, credit union members are not properly informed of these negative consequences of the conversions.

In a recent directive, the National Credit Union Administration (NCUA) proposed that a converting credit union include the following disclosures in each written communication it sends members regarding conversion: "Credit union directors and committee members serve on a volunteer basis. Directors of a mutual savings bank are compensated. Credit unions are exempt from federal tax and most state taxes. Mutual savings banks pay taxes, including federal income tax. If [insert name of credit union] converts to a mutual savings bank, these additional expenses may contribute to lower savings rates, higher loan rates, or additional fees for services".

This powerful paragraph intends to warn credit union members of the consequences of demutualization. However, this statement is without citation or evidence by the regulators. It could be argued that, without evidence supporting this claim, the NCUA is simply protecting its turf and conducting an argument that retains membership. As a result, several considerations demand examination. All relate to the issue of member/owner benefits and include considerations of the financial benefits associated with interest rates on deposits and loans. First,

do recently converted credit unions charge lower loan interest rates and/or pay higher dividend rates on savings than credit unions? Second, do salary differences, which would to some extent reflect the compensation of directors, result in significant consumer interest rate-related pricing differences between institutions? We approach these questions by comparing not just traditional banking institution rates to credit union rates, but also by analyzing the interest rate differentials between credit unions and recently-converted credit unions (i.e., institutions that converted from credit union charters to banking institution charters).

2. LITERATURE REVIEW

While relatively small, credit unions hold a material position in the market as a supplier of financial services: credit unions' provide for 12.4% of the consumer credit market (Srinivasan and King, 1998). Feinberg (2002) argues that credit unions serve the market on the fringe, resulting in lower loan interest rates. Feinberg based his argument on the relationship between credit union concentration and interest rates on unsecured loans at banks: as the share of deposits held in credit unions rise, bank loan interest rates fall. Tokle and Tokle (2000) determine that large, chain banks pay lower interest rates on deposits than do credit unions. Tokle and Tokle (2000) also do not address a critically important question: do banking institutions and credit unions offer significantly different interest rates? This idea, that there is an institutional difference in interest rates, recognizes that other factors may also account for interest rate differentials between institutions. These factors, which we use as independent variables, include salary payment differences, size differences (economies of scale), and differences in market concentration. Institutional differences owing to philosophical differences between credit unions and banking institutions, or differences in institutional objectives may be important but we do not attempt to quantify those factors as such here.

While there is limited literature regarding interest rate differentials specifically in the area of credit union vs banking institutions, there is research within the banking sector that analyzes a variety of determinants within the industry. McCall (1980) determined that higher bank

concentration results in lower deposit interest rates and higher interest rates on loans. Focarelli and Panetta (2003) find that there is an inverse and significant relationship between asset size and deposit interest rates.

Berger and Hannan (1989) find that banks in markets with a high local banking wage rate witness significantly higher deposit interest rates. Hannan (2003) finds that thrifts offer higher rates on money market deposits than banks. In addition, Hannan finds negative relationships between a) asset size and deposit interest rates, and b) teller wages and deposit interest rates. Feinberg and Rahman (2001) find that there is a competitive interaction between credit unions and banks within a defined market: the greater the presence of credit unions, the lower the interest rates on loans charged by banks. Feinberg (2003), in his comparison of credit unions and bank rates, finds that loan interest rates fall with asset size for both unsecured and new vehicle loans, and in a follow-up piece [Feinberg (2004)] based on those results calculates that a halving of credit union market share would imply an increase in nationwide bank customer borrowing costs of $1.73 billion annually.[1]

There is no readily available research regarding the impact taxes have on interest rates. However, the general expectation is that banking institutions have less favorable interest rates than credit unions to compensate for the taxes that are paid to the government. If this is accurate, it is argued that the tax exempt status of credit unions is simply a subsidy. However, due to methodological difficulties it is not possible for us in this paper to evaluate this claim.

3. METHODOLOGY

In all of the regressions that are presented, the dependent variable is the interest rate for a savings or loan product. The seven products in question are standard savings accounts; interest-bearing checking accounts; 1-year Certificates of Deposit; money market accounts; 48-month

[1] In a related exercise, Tokle (2005) uses the estimates from Tokle and Tokle (2000) and Hannan (2002) to estimate that a decline in credit union market share of one deviation would decrease bank customer interest payments on CDs by $203 million and $726 million, respectively, and decrease bank customer interest payments on money market deposits by $1.67 billion and $1.8 million respectively.

used car loans; 60-month new car loans; and regular visa credit cards[2]. A number of independent variables are employed across all regressions and consistent with similar measures found in the literature. One is a measure of market concentration, the Herfindahl-Hirschman Index (HHI index). The HHI is a widely-accepted measure of market concentration calculated by squaring the market share of each firm competing in a market and then summing the resulting numbers. The HHI can range from close to zero to 10,000, with higher values corresponding to higher levels of market concentration. This analysis uses the HHI for each Metropolitan Statistical Area (MSA), expressed in log form (*lnHHI*). Other independent variables include total assets of the institution as a measure of size, also in log form (*lnAssets*); the Capital-to-Asset ratio as a measure of the institution's net worth (*Capital/A*); the Loan-to-Asset ratio as a measure of institutional liquidity (*Loan/A*); and the salary-to-asset ratio as a measure of labor costs which will to an uncertain extent indirectly include director compensation differentials (*Salary/A*).

In addition, we include a dummy variable to help us identify institutional pricing differences that are not captured by the aforementioned independent variables. The dummy simply identifies the row in the regression as a credit union, a recently-converted credit union, or a banking institution. If, for example, a regression is conducted in which we are comparing the current credit union loan rates with banking institutions, the banking institution is given a value of one (1) while the credit union is provided a value of zero (0). If the coefficient on banking institution is positive and significant, it means that the banking institution will charge a higher loan interest rate than a credit union. For each product, three regressions are run corresponding to three sets of institutions included in the sample:

1. Regressions "a" include credit unions and all banking institutions (i.e., thrifts, and commercial banks, including recently converted credit unions);

[2] We also ran regressions for home equity loans, 36-month unsecured loans and gold credit cards, but these regressions yielded no results of any statistical significance with regards to our primary concern, namely the impact of credit union conversion.

2. Regressions "b" include credit unions and recently-converted credit unions (i.e., former credit unions); and
3. Regressions "c" includes credit unions and banking institutions that have never been credit unions.

In each case, the dummy is assigned to all banking institutions with credit unions remaining the excluded variable. The dummies are denoted *B_All*, *ConvCU*, and *B_NoConv*, respectively. Descriptive statistics for all variables for each sub-sample we investigate are included in Table 1a, and summary averages of interest rates by product and single institution type are presented in Table 1b.

The interest rate data was obtained via a Datatrac survey of the 5 largest for-profit institutions, the 5 largest credit unions, and the converted institutions present in each of 25 MSAs for a total of 275 institutions. Other financial and demographic data was obtained from year-end 2004 regulatory reports filed by each institution (i.e., call reports). The call report data was obtained from the NCUA and FDIC websites. The data set thus represents a cross-section of the industry. From this, we removed the 100 largest institutions by assets leaving 175 institutions in the dataset. The excluded institutions proved to be nationwide banks with branches in a great number of MSAs and with little or no variation in interest rates or other variables across their branches (as call reports are on an institutional rather than branch basis). Failure to exclude these institutions would have therefore presented the estimations with a multicollinearity problem.

To maintain consistency with the literature, we utilize the basic ordinary least squares (OLS) estimation procedure in all cases. OLS is a technique that provides the summary coefficient of the extent of relationships between the dependent variable and one or more independent variables. OLS is a regression analysis that develops an equation describing the nature of the relationship between these variables.

One of the more recent studies regarding interest rate differentials is by Tokle and Tokle (2000). That paper strictly focused on saving products and limited the scope of its data to May

27th and 28th of 1998, and to a defined area in Idaho and Montana. This paper extends the Tokle and Tokle focus to both loan and savings products on a national scope. This paper also focuses on one day, June 27, 2005. Surveying on multiple dates adds substantial data collection costs.

We also ran these regressions adding a CAMEL rating variable synthesized by a private sector firm. In no case did the camel rating, a proxy for safety and soundness, serve as a significant determinant of interest rates for credit unions and banks and so the regressions including the camel rating are not reported here. The fit of the regressions varies substantially, with the R-squared's on average rather low in an absolute sense but are still consistent with the earlier literature, in particular Feinberg (2002) and Berger and Hannan (1989).

4. RESULTS

Savings Products

Table 2 presents the regression results for the interest rate on four savings products; standard savings accounts (1), interest-bearing checking accounts (2), 1-year certificates of deposit (3), and money market accounts (4) with three regressions for each dependent variable as noted. In the case of savings products (regressions 1-4), the first thing to note is that for all products but interest-bearing checking accounts, we find that there is a significant difference between credit unions and other institutions as evidenced by the coefficients on the for-profit dummy variable. Aside from the impact of any of the other included variables, we find for three of the products that credit unions offer interest rates on savings products typically around 30 basis points higher than the rates offered by banking institutions, including former credit unions. The difference, independent of other included variables, between credit unions and former credit unions is estimated to be largest for standard savings accounts. The exception is for checking accounts, where we find no significant difference between credit unions and converted institutions. However, there is a significant difference between credit unions and all banking institution checking accounts. This is estimated at 13.6 basis points, but as we do not find any difference significantly different from zero comparing credit unions to either converted

institutions or those that were always banking institutions, this result does not seem particularly robust. Notably, credit union conversion seems to prompt the greatest decrease in savings rates in the case of standard savings accounts.

Salary-to-asset variation only seems significant for standard savings accounts, but this appears to be the case in all regressions for that product.[3] The *Salary/A* variable is weakly significant for checking accounts in regressions including banks and for money market accounts in the regression including only current and former credit unions. Thus, it would seem that the extent to which institutions have higher costs, perhaps due to having salaried directors, these are passed on to customers primarily through lower interest rates on savings products, primarily standard savings accounts. Indeed, no lending product indicates any sensitivity to variation in salaries.

Industry concentration amongst banking institutions negatively impacts rates paid to checking accounts and CDs across all three regressions in each case. As to other independent variables, institutions which have a higher proportion of loans to assets are estimated to offer lower savings rates, though why this should be is not clear. Institutions that have higher total assets seem to offer higher rates on CDs, though this could reflect an endogeneity problem as it is just as plausible that an institution with higher CD rates and thus more deposits ends up with higher assets.

Loan Products

Table 3 shows the results with the rates for three loan products as the independent variable: 48-month used car loans; 60-month new car loans; and regular credit cards. The best fit of all regressions in this paper occurs for the car loans, though less so for the 'b' regressions. At the same time, the only variable which consistently shows any significance in these regressions is

[3] The range for the *Salary/A* variable is from a low of zero to a high of about .04 with an average around .014, which means the practical range implied by the estimated coefficient is in the low tens of basis points.

the for-profit dummy, suggesting that something about banking institutions not accounted for in the other independent variables leads to them charging higher interest rates on car loans. Also, the coefficient on the dummy for converted credit unions (in 5b and 6b) suggests that the differential is not as large between credit unions and converted credit unions as it is between banks and credit unions, in fact at best half as large in our estimations. However, this still translates into at least a full percentage point in all regressions except 6b. This could possibly be the result of a convergence process where there is a phase-in period as converted credit unions raise their car loan interest rates from the level typical to a credit union to the level typical of banks, though it is not possible with our cross-sectional data to shed any light on this hypothesis.[4] The level of firm concentration does not seem to impact car loan rates.

For regular credit cards, there is again a consistently lower interest rate amongst credit unions compared to other institutions, and further it seems that the differential between credit unions and converted credit unions is larger than the differential between credit unions and banks or all for-profits, nearly two full percentage points. Curiously, it seems that institutions in more concentrated markets offer lower interest rates, a result for which we cannot offer any explanation. We do not find any impact of the salary-to-asset ratio on loan rates.

Overall, it seems clear that there are structural differences in the interest rate structures between credit unions and banking institutions that are clearly to the benefit of credit union members which are in most cases difficult to attribute to anything other than institution type. Salary levels seem important to the interest rates offered on savings deposits, but otherwise do not seem to be a deciding factor. Industry concentration seems to lower rates paid on some savings products and credit cards, but also seems otherwise neutral.

5. CONCLUSIONS

[4] Our data does include the number of years since a former credit union converted to for-profit status, but a casual examination of this data yielded no insights into this speculation.

The purpose of this paper was twofold. First, the paper seeks to review the strong admonition provided by the NCUA against mutualization. Second, to evaluate the unique interest rate benefits provided to credit union members. Both inquiries provide intriguing results.

The results presented here suggest that both loans and savings accounts offered by credit unions offer favored rates to the member for all products studied except interest-bearing checking accounts, and this result is robust across all specifications. This is especially notable in the area of former credit unions. This result is an addition to the credit union and bank literature. It argues that credit union rates are not solely the result of differences in salary payments which might be due to director compensation; the estimations indicate a good portion if not all of the differential is independent of this advantage. It determines that while higher concentration results in lower rates to savers, bank rates are independently lower for most savings products and higher for lending products excepting home equity and unsecured loans.

In terms of the warnings by the NCUA: the concern over the impact salaries will have on interest rates is mixed. While higher salary payments consistently associate with lower rates on standard savings accounts, no such association is found with any of the other products examined. Nonetheless, in many cases credit unions offered higher rates on savings products, while banks did not offer higher rates in any savings products. The NCUA may not have correctly identified the source of credit union financial benefits, at least in terms of director salaries and the impact on interest rates. It is entirely possible that director compensation or indeed tax burdens might be passed on in other forms, such as through fees. Nonetheless, NCUA did ultimately correctly conclude that the financial benefits provided by member-owned, not-for-profit credit unions either disappear or are much diminished when those institutions convert to banking institutions.

This paper presents a static view of an interest rate environment based on a single day. While there is no cause to believe that that day was unusual, time series data would offer additional insight. Through the collection of data over several time periods, panel data can be assembled. This would offer additional information regarding the sequence or timing of the

changes in pricing behavior following conversion to for-profit status. Finally, it should give insight into the increasing or decreasing impact of consolidation on interest rates.

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Table 1a - Descriptive Statistics by Sample, Savings Products

Checking with Interest			
All Institutions	**Mean**	**StdDev**	**N**
APY-checking with interest	0.4296	0.3114	128
Log HHI/1000	6.9841	0.3697	128
Log Assets	20.1866	2.0547	128
Capital/Asset	0.1108	0.0771	128
Salary/Asset	0.0139	0.0076	128
Loan/Asset	0.6345	0.1722	128
B_All	0.4688	0.5010	128
Current and Converted CUs			
APY-checking with interest	0.4620	0.3077	85
Log HHI/1000	7.0109	0.3603	85
Log Assets	19.2407	1.2296	85
Capital/Asset	0.1168	0.0909	85
Loan/Asset	0.6318	0.1744	85
Salary/Asset	0.0154	0.0077	85
ConvCU	0.2000	0.4024	85
Banks & CUs Excl. Converted			
APY-checking with interest	0.4316	0.3091	111
Log HHI/1000	6.9853	0.3711	111
Log Assets	20.3319	2.1439	111
Capital/Asset	0.1138	0.0820	111
Loan/Asset	0.6200	0.1704	111
Salary/Asset	0.0146	0.0067	111
B_NoConv	0.3874	0.4894	111

Regular Savings			
All Institutions	**Mean**	**StdDev**	**N**
APY--regular savings	0.8121	0.5595	164
Log HHI	6.9749	0.3550	164
Log Assets	19.6031	2.2768	164
Capital/Asset	0.1110	0.0693	164
Salary/Asset	0.0144	0.0077	164
Loan/Asset	0.6315	0.1796	164
B_All	0.3963	0.4906	164
Current and Converted CUs			
APY--regular savings	0.8736	0.4869	120
Log HHI	6.9952	0.3452	120
Log Assets	18.7142	1.6067	120
Capital/Asset	0.1149	0.0777	120
Loan/Asset	0.6332	0.1772	120
Salary/Asset	0.0156	0.0077	120
ConvCU	0.1750	0.3816	120
Banks & CUs Excl. Converted			
APY--regular savings	0.8420	0.5754	143
Log HHI	6.9731	0.3563	143
Log Assets	19.6636	2.4091	143
Capital/Asset	0.1137	0.0734	143
Loan/Asset	0.6170	0.1798	143
Salary/Asset	0.0152	0.0070	143
B_NoConv	0.3077	0.4632	143

One Year CD			
All Institutions	**Mean**	**StdDev**	**N**
APY-1 year CD	3.0547	0.5820	156
Log HHI	6.9811	0.3554	156
Log Assets	19.7076	2.2327	156
Capital/Asset	0.1108	0.0704	156
Loan/Asset	0.6445	0.1703	156
Salary/Asset	0.0147	0.0077	156
B_All	0.4231	0.4956	156
Current and Converted CUs			
APY-1 year CD	3.1199	0.5327	111
Log HHI	7.0065	0.3457	111
Log Assets	18.7895	1.5313	111
Capital/Asset	0.1144	0.0800	111
Loan/Asset	0.6529	0.1632	111
Salary/Asset	0.0161	0.0076	111
ConvCU	0.1892	0.3934	111
Banks & CUs Excl. Converted			
APY-1 year CD	3.0563	0.5572	135
Log HHI	6.9800	0.3569	135
Log Assets	19.7879	2.3649	135
Capital/Asset	0.1136	0.0749	135
Loan/Asset	0.6311	0.1703	135
Salary/Asset	0.0156	0.0069	135
B_NoConv	0.3333	0.4732	135

Money Market Account			
All Institutions	**Mean**	**StdDev**	**N**
APY-Money Market	1.0547	0.5463	130
Log HHI	6.9943	0.3643	130
Log Assets	20.1374	2.0540	130
Capital/Asset	0.1070	0.0735	130
Loan/Asset	0.6585	0.1662	130
Salary/Asset	0.0146	0.0077	130
B_All	0.4692	0.5010	130
Current and Converted CUs			
APY-Money Market	1.1526	0.4584	87
Log HHI	7.0351	0.3515	87
Log Assets	19.1921	1.2096	87
Capital/Asset	0.1100	0.0862	87
Loan/Asset	0.6747	0.1518	87
Salary/Asset	0.0161	0.0076	87
ConvCU	0.2069	0.4074	87
Banks & CUs Excl. Converted			
APY-Money Market	1.0627	0.5538	112
Log HHI	6.9958	0.3810	112
Log Assets	20.2743	2.1518	112
Capital/Asset	0.1089	0.0786	112
Loan/Asset	0.6468	0.1670	112
Salary/Asset	0.0154	0.0068	112
B_NoConv	0.3839	0.4885	112

Table 1a (cont.) - Descriptive Statistics by Sample, Loan Products

48 month Used Car Loan				60 month New Car Loan			
All Institutions	**Mean**	**StdDev**	**N**	**All Institutions**	**Mean**	**StdDev**	**N**
APY--used car loan	6.0654	1.4861	153	*APY--new car loan*	5.7842	1.2524	158
Log HHI	6.9888	0.3585	153	*Log HHI*	6.9788	0.3592	158
Log Assets	19.4647	2.2597	153	*Log Assets*	19.4927	2.2551	158
Capital/Asset	0.1084	0.0364	153	*Capital/Asset*	0.1137	0.0708	158
Loan/Asset	0.6293	0.1765	153	*Loan/Asset*	0.6254	0.1803	158
Salary/Asset	0.0147	0.0076	153	*Salary/Asset*	0.0145	0.0075	158
B_All	0.3529	0.4795	153	*B_All*	0.3734	0.4852	158
Current and Converted CUs				**Current and Converted CUs**			
APY--used car loan	5.5526	1.0916	119	*APY--new car loan*	5.2804	0.8345	119
Log HHI	7.0010	0.3439	119	*Log HHI*	6.9986	0.3453	119
Log Assets	18.6970	1.6246	119	*Log Assets*	18.6737	1.6164	119
Capital/Asset	0.1097	0.0361	119	*Capital/Asset*	0.1172	0.0786	119
Loan/Asset	0.6250	0.1858	119	*Loan/Asset*	0.6265	0.1840	119
Salary/Asset	0.0157	0.0076	119	*Salary/Asset*	0.0157	0.0076	119
ConvCU	0.1681	0.3755	119	*ConvCU*	0.1681	0.3755	119
Banks & CUs Excl. Converted				**Banks & CUs Excl. Converted**			
APY--used car loan	6.0378	1.5216	133	*APY--new car loan*	5.7780	1.2919	138
Log HHI	6.9872	0.3597	133	*Log HHI*	6.9759	0.3604	138
Log Assets	19.5002	2.3975	133	*Log Assets*	19.5309	2.3872	138
Capital/Asset	0.1107	0.0377	133	*Capital/Asset*	0.1166	0.0749	138
Loan/Asset	0.6133	0.1754	133	*Loan/Asset*	0.6094	0.1794	138
Salary/Asset	0.0155	0.0067	133	*Salary/Asset*	0.0153	0.0067	138
B_NoConv	0.2556	0.4379	133	*B_NoConv*	0.2826	0.4519	138

Regular Credit Card			
All Institutions	**Mean**	**StdDev**	**N**
APY-classic credit card	12.3275	2.1122	102
Log HHI	6.9986	0.3354	102
Log Assets	19.4337	1.8820	102
Capital/Asset	0.1138	0.0822	102
Loan/Asset	0.6195	0.1659	102
Salary/Asset	0.0151	0.0064	102
B_All	0.2647	0.4434	102
Current and Converted CUs			
APY-classic credit card	12.1987	2.0474	85
Log HHI	7.0108	0.3325	85
Log Assets	18.8853	1.3509	85
Capital/Asset	0.1162	0.0885	85
Loan/Asset	0.6184	0.1593	85
Salary/Asset	0.0162	0.0061	85
ConvCU	0.1176	0.3241	85
Banks & CUs Excl. Converted			
APY-classic credit card	12.2009	2.1554	92
Log HHI	6.9807	0.3254	92
Log Assets	19.4998	1.9490	92
Capital/Asset	0.1162	0.0857	92
Loan/Asset	0.6154	0.1660	92
Salary/Asset	0.0157	0.0060	92
B_NoConv	0.1848	0.3902	92

Table 1b - Average Interest Rates by Product and Institution Type			
	Always Credit Unions	Converted Credit Unions	Always Banks
Savings Products			
Regular Savings Accounts	0.93	0.61	0.64
Money Market Accounts	1.19	1.01	0.86
Checking With Interest	0.47	0.42	0.37
One Year CD	3.17	3.14	2.89
Loan Products			
Unsecured Loans	11.02	12.14	12.87
Regular Credit Cards	12.03	13.49	12.97
Gold Credit Cards	10.38	11.16	11.38
Used Auto Loans	5.41	6.25	7.86
New Auto Loans	5.17	5.83	7.21
Home Equity Loans	5.97	6.07	6.15

Table 2

	1a	1b	1c	2a	2b	2c	3a	3b	3c	4a	4b	4c
Indep. Vars	StdSav	StdSav	StdSav	Check	Check	Check	1yr CD	1yr CD	1yr CD	MonyMkt	MonyMkt	MonyMkt
R2 (AdjR2)	.186 (.155)	.335 (.299)	.201 (.166)	.154 (.112)	.124 (.057)	.144 (.095)	.137 (.102)	.234 (.190)	.169 (.130)	.085 (.040)	.085 (.016)	.106 (.055)
F	5.980***	9.470***	5.698***	3.681***	1.839	2.926**	3.926***	5.288***	4.323***	1.906*	1.238	2.079*
constant	3.107	3.381	3.330	2.407	2.681	2.335	4.617	3.164	4.617	2.566	2.513	2.665
lnHHI	-0.161	-0.232**	-0.144	-0.222***	-0.245***	-0.194**	-0.388***	-0.338**	-0.402***	-0.127	-0.095	-0.152
(t stat)	*-1.403*	*-2.096*	*-1.138*	*-3.133*	*-2.666*	*-2.527*	*-3.079*	*-2.490*	*-3.130*	*-0.961*	*-0.665*	*-1.109*
lnAssets	-0.020	0.000	-0.032	-0.022	-0.027	-0.029	0.057**	0.107***	0.074***	-0.019	-0.029	-0.009
	-0.935	*0.018*	*-1.237*	*-1.521*	*-0.941*	*-1.597*	*2.378*	*3.360*	*2.783*	*-0.717*	*-0.686*	*-0.281*
Capital/A	0.060	0.227	-0.054	-0.006	0.019	-0.018	-0.905	-0.628	-0.737	-0.106	-0.017	-0.129
	0.102	*0.460*	*-0.089*	*-0.017*	*0.052*	*-0.051*	*-1.412*	*-1.068*	*-1.207*	*-0.164*	*-0.029*	*-0.196*
Loan/A	-0.703***	-0.844***	-0.707***	-0.315**	0.235	0.340*	0.449*	0.819***	0.174	-0.025	0.262	-.0135
	-3.035	*-3.551*	*-2.764*	*1.984*	*1.063*	*1.929*	*1.706*	*2.693*	*0.651*	*-0.088*	*0.755*	*-0.435*
Salary/A	-15.107**	-20.259***	-21.400***	-7.778*	-6.052	-9.143*	0.212	-5.613	-3.591	-4.568	-15.048*	-6.602
	-2.561	*-3.454*	*-2.891*	*-1.942*	*-1.157*	*-1.758*	*0.032*	*-0.784*	*-0.465*	*-0.657*	*-1.978*	*-0.729*
B_All	-0.318***			-0.136**			-0.386***			-0.299**		
	-3.029			*-2.029*			*-3.379*			*-2.541*		
ConvCU		-0.377***			-0.144			-0.297**			-0.333**	
		-3.244			*-1.421*			*-2.148*			*-2.363*	
B_NoConv			-0.303**			-0.113			-0.557***			-0.378***
			-2.330			*-1.436*			*-4.292*			*-2.632*

*** = significant at the 1% level; ** = significant at the 5% level; * = significant at the 10% level

Table 3

	5a	5b	5c	6a	6b	6c	7a	7b	7c
Indep. Vars	48m used	48m used	48m used	60m new	60m new	60m new	CreditCard	CreditCard	CreditCard
R2 (AdjR2)	.386 (.361)	.119 (.072)	.508 (.484)	.437 (.415)	.153 (.108)	.574 (.550)	.136 (.082)	.143 (.077)	.123 (.062)
F	15.309***	2.530**	21.663***	19.560***	3.374***	29.467***	2.500**	2.171*	1.994*
constant	4.656	8.475	6.680	3.467	5.995	4.457	19.709	20.572	19.264
lnHHI	-0.142	-0.255	0.012	-0.089	-0.097	0.077	-1.058*	-1.535**	-1.345*
(t stat)	*-0.526*	*-0.891*	*0.044*	*-0.414*	*-0.451*	*0.369*	*-1.738*	*-2.282*	*-1.944*
lnAssets	0.075	-0.077	-0.067	0.140**	-0.047	-0.011	-0.106	.049	0.005
	1.439	*-1.144*	*-1.161*	*2.547*	*-0.974*	*-0.260*	*-0.852*	*0.284*	*0.029*
Capital/A	4.821*	1.953	1.428	1.603	0.753	0.917	3.345	2.604	3.487
	1.722	*0.658*	*0.524*	*1.453*	*0.791*	*0.909*	*1.336*	*1.047*	*1.334*
Loan/A	-0.772	-0.282	-0.367	0.080	1.128**	0.490	0.659	0.729	0.563
	-1.303	*-0.471*	*-0.613*	*0.178*	*2.486*	*1.089*	*0.505*	*0.474*	*0.389*
Salary/A	16.852	5.991	-3.082	9.268	-2.506	-1.743	53.447	29.565	76.903
	1.144	*0.393*	*-0.177*	*0.779*	*-0.219*	*-0.128*	*1.340*	*0.682*	*1.612*
B_All	1.888***			1.473***			1.84***		
	7.294			*7.184*			*3.135*		
ConvCU		1.006***			0.543**			1.998**	
		3.289			*2.373*			*2.570*	
B_NoConv			2.697***			2.194***			1.482*
			9.095			*9.822*			*1.914*

*** = significant at the 1% level; ** = significant at the 5% level; * = significant at the 10% level