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First Draft: Attitudes Towards and Satisfaction with Credit Unions in Alberta. A Regression and Scale Analysis.

Draft Paper

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Abstract

Credit unions have played an important historical role in the Canadian economy. However, recent changes in the financial, agricultural and agri-food industry are posing great challenges to Credit unions in Western Canada. Much attention has been given to the impact of competitive rates and the environment offered by banks on credit union performance to the neglect of issues relating to member satisfaction and commitment which may be adding to other problems in the credit union sector.

Studies by Feinberg (2001), Sibbald, et al (1999), Loser et. al (1999) , Fried, et. al (1999), Karels and McClatchey (1999) and Tokle, and Tokle (2001) among others have identified key issues relating to the competitive financial roles of credit unions in small financial services, in comparative analysis studies as well as merger related issues. However many of these studies have focused on the financial aspects of credit unions, and have not dealt with broader issues of whether or not the public understands the nature of credit unions, why people stop or intend to continue being members of credit unions.

A mailed questionnaire, designed to elicit understanding of and attitudes towards credit unions was sent out to 1500 Alberta residents. In spite of the fact that the survey was complex with no reminder notice sent, the response rate was 12%. Analysis was conducted with a series of scale and logit regression analyses based on the Theory of Planned Behaviour (TpB) (Ajzen and Fishbein 1975, 1980 and Ajzen (2001) to elicit respondents´ beliefs, satisfaction and attitudes towards credit unions, and to measure the factors affecting their intention to patronize credit unions.

Results indicate 78% of respondents were familiar with and understood the concept of credit unions. The majority (58%) was male, and 71% were aged 45 or older. Respondents who are active members of a credit union generally held positive attitudes towards their credit unions, and 89% rated their credit unions as performing well under a set of six performance categories. Analysis from the logit models found credit unions involvement with the local community and customer service to be the major reasons for credit union patronage. Elicitation of respondents´ intentions to patronize a credit union from the TpB analysis show that among the three attributes (attitude, subjective norm, and perceived behavior control), respondents´ subjective norm (siblings influence) and perceived behavioral control significantly explained patronization intentions.

Results suggest that a 22 percentage of the public is unaware of credit unions, a further 30 percentage was once and is no longer a member of a credit union. For the 58% of the population that remain committed to credit union, there are still significant issues around member involvement in decision making, communication and provision of education/training to them.

Introduction.

Canada has a strong co-operative financial services sector that occupies a unique economic and social niche in the country's financial services sector. This has allowed credit unions to play an important historical role in the Canadian economy. The cooperative financial sector consists of credit unions and caisses populaires, the latter are located predominantly in Quebec. Like the rest of Canada's financial services industry, credit unions and caisses populaires are facing challenges of increasing competitive pressures, consolidation and mergers in the credit union movement, continued advances in technology and a general slowdown of the global economy. In particular, recent changes in the financial, agricultural and agri-food industry are posing great challenges to Credit unions in Western Canada

The literature on the cooperative financial sector in Canada has not matched the level of achievement by the sector, except for Pille 2002 study on the performance of Ontario credit unions, some comparative studies done elsewhere, and the annual reports and publications from the Credit Union Central of Canada. Unlike Canada, there is an extensive literature on credit unions in the U.K, Australia, and the US on various topics. Some of these have studied credit union merger issues, the impact of mergers (Fried et. al., 2000) competitive rates and the environment offered by banks on credit union performance (Feinberg 2001, Hannan, 2002) while others have studied the development process of credit unions (Sibbald et. al., 2002).

However many of these studies have focused on the financial comparison and performance of credit unions (Feinberg, 2001, and P Pille 2002) and issues of credit union development (Sibbald, et. al., 2002) and mergers have not dealt with broader issues

of whether or not the public understands the nature of credit unions, why people stop or intend to continue being members of credit unions. Additionally, issues relating to member satisfaction and commitment may be adding to other problems in the credit union sector in Western canada. The purpose of this study is to gain an understanding of the general attitudes of residents of Alberta towards and satisfaction with their credit unions. The specific objectives are:

1. Determine public awareness/familiarity with credit unions in the province;
2. evaluate the perceived performance of credit unions by Albertans;
3. determine attitudes toward credit unions; and
4. Explore which of these factors affect people's decision to patronize credit unions.

Responses from 178 usable questionnaires are analyzed (out of 1500) mailed questionnaires. Given that the survey was complex and there were no reminder notices sent, the resulting response rate of 12% can be considered low but adequate to draw inferences about the population. Understanding the causes of attitudes or desires to change will allow for the development of realistic research and policy programs that directly targets the problems and issues of direct relevance to residence of Alberta. The study will also provide a basis for similar surveys in the future which will allow for the tracking of changing social attitudes and issues to credit unions.

Literature Review and the Theoretical Framework

The role and purpose of credit unions have been examined by a number of studies in an attempt to determine their overall objective (Taylor, 1971), Overstreet and Rubin (1991), Fairbairn, (1994)). These studies suggest that many variant objective functions do

exist for credit unions. Overstreet and Rubin (1991) identified diverse principles which include the provision of low cost credit and high-yielding deposits, building financial stability, and serving an open membership with financial services. The unique ownership structures and differing co-operative principles have been identified as some of the difficulties in determining an overall objective function for credit unions. For example, if a member becomes a non-member, then only limited transactions are allowed to occur with that person.

Ward and McKillops have suggested that there are two schools of thought regarding the objective functions of credit unions. There are those who link credit union objective function to following some form of classical based economic model8. This group is thought to have been influenced by the earlier studies of Robotka (1947) and Phillips (1953), linking co-operative functioning, to economic relationships between the co-operative and its members. The second school of thought suggest that classic co-operative principles underlie the key objectives of credit unions, using some form of member benefit measurement to explain the behaviour of credit unions.

Ferguson and McKillop (1997) outline credit unions' main objective as being the promotion of thrift that is directed at fulfilling human and social needs, stating that credit unions are not formed to make profits, but rather to maximise the benefit to their members (self-help). Ward and McKillops concludes that the differing views on credit union objective functions should benefit from an analysis of how credit union principles fit within the overall co-operative movement principles throughout their emergence and development into the current internationally accepted principles adopted by the International Co-operative Alliance in 1995.

Their links of credit unions to cooperative movement principles are evidenced within their regulatory framework, their trade association rules and from definitions that have been coined by the many researchers who have studied this unique financial institution. The strong link to cooperative ethos can be deduced from the definition coined by Barron in (1992). He defined credit unions as being: 'constituted as democratic organizations, controlled by their members based on the principle of one member, one vote,' which refers directly to one of the original cooperative principles of: the concept of one member, one vote.

Ferguson and McKillop (1997) contrasted credit unions to other similar types of financial institutions. They stand in stark contrast to the more dominant form of organisation found in industrial societies that is based on speculative gain of a private or corporate kind.' These dominant forms of organisation include banks, building societies and other mutual institutions. Credit unions are not only different from other financial/mutual institutions but are also quite different from the normal type of cooperative. They collect savings from members by issuing shares, and use these funds to make loans to the members. Therefore, the credit union not only acts as a 'purchasing' but also as a 'marketing' cooperative.

The main difference between credit unions and other cooperatives is that cooperatives either purchase from external entities for the members, or sell to external entities for the members, whereas the users, management and benefactors of credit unions can only be its members. All transactions are effected for members by members, no external party can transact with the credit union (unless members become non-qualifying then restrictions are placed on the transactions that can occur with that body). It is for this

reason that Croteau (1963) described credit unions as being *the purest form* of cooperative.

As cooperative entities, credit unions do not exist to make profits rather to maximise the benefit to their members. Croteau (1963) in line with Ferguson and McKillop (1997) described these main benefits as being the attainment of the economic and social goals of the members. The main vehicle used by credit unions to increase social goals is education/advice on members' financial affairs.

The only potentially conflicting principle is the 'open and voluntary membership'. Influences from the Rochdalian principles can be directly related to the objects of GB credit unions as defined by the Credit Union Act (1979), these are: 'the promotion of thrift among the members by the accumulation of savings; the creation of sources of credit for the benefit of the members at a fair and reasonable rate of interest; the use and control of the members' savings for their mutual benefit; and the training and education of the members in the wise use of money and in the management of their financial affairs.'

Studies by Tokle, and Tokle (2001), Sibbald, et al (1999), and Feinberg (2001, 2002) among others, have identified key issues relating to the competitive financial roles of credit unions in small financial services, in comparative analysis studies as well as merger related issues. Tokle and Tokle (2002) used a structure-performance model to test for the effect of credit union and S&L competition on bank performance in Idaho and Montana. Unlike previous studies, they found some evidence that thrift competition, especially from credit unions, affected bank performance (higher interest rates for bank CDs).

Feinberg (2001) investigated the relationship between banks and credit unions using the Granger-causality technique. He found a two-way granger causality between banks and credit unions, suggesting a competitive relationship between banks and credit unions. Whatever other motivations credit unions may have, they seem to take account of bank loan rates in their own rate-setting decisions, and so did the banks. In another study, Feinberg (2002) modeled the underlying nature of competition between credit unions and banks, concerning the most appropriate way to model their interactions. He suggested two possible approaches; the dominant-firm price-leadership model, and the generalized Cournot model. Using a pooled cross-section time series of 77 small local consumer lending markets throughout the U.S, he determined the results were more consistent with the "credit unions as fringe suppliers" view.

Silbbald et al (1999) analyzed credit union industries within a development framework in four countries – Great Britain, Ireland, New Zealand and the United States. The analysis considered the influence of factors such as situational leadership, the complexion of trade associations, professionalisation, regulatory and legislative initiatives and technology. The analysis concluded that while there was a substantial commonality of experience, there were also significant differences in the impact of these factors. This consequently encouraged the recognition of the existence of 'a variety of the species' in respect of credit union development.

Structure of Credit Unions in Canada.

The credit union industry in Canada is hierarchically structured into a three tier system of local, provincial and national organizations. At the base of the system are the local credit unions which operate autonomously and are province-oriented. They are the primary shareholder members of the provincial Centrals, the second tier in the system. The provincial centrals are responsible for ensuring liquidity at the provincial level and providing services as a trade association. They also provide wholesale lending and facilitate settlement of checks and electronic payments for local credit unions.

The provincial Centrals are in turn, the primary shareholder members of Credit Union Central of Canada, which functions as the system's national trade association and services provider. Credit Union Central of Canada (CUCC), is responsible for establishing liquidity policy and overseeing liquidity maintenance at the national level. It also works in partnership with the national credit union system to stimulate growth, improve cost-competitiveness and enhance the effectiveness of the democratic process. It also gives the credit unions a national voice on financial service issues.

Credit unions and caisses populaires are cooperative financial institutions owned and controlled by their members. Ownership and corporate governance are based on cooperative principles, and the primary commitment of credit unions is to serve their members' financial needs. Membership eligibility may include being part of a "common bond of association," such as an industry, trade union, club or community, religious or ethnic background, or being a resident of a defined geographic area. Credit unions and caisses populaires reinvest their deposits and profits in the community through personal and business loans, mortgages and dividends paid on members' shares.

The structure of the caisses populaires is somewhat more centralized than that of credit unions and is operated under a single brand name, the Mouvement des caisses Desjardins. In Quebec, Manitoba, New Brunswick and Ontario[1], they consist of a network of subsidiaries. Outside of Quebec, the vast majority of credit unions are shareholders in one of the nine provincial centrals as described above.

Each individual credit union maintains a separate identity and because of their autonomous local structure, credit unions and caisses populaires in Canada do not generally have subsidiaries or branches in foreign countries, except for the Mouvement des caisses Desjardins, which has since 1992 had a subsidiary in Florida, the Desjardins Federal Savings Bank. The Mouvement Desjardins has also been particularly active in developing the credit union sector internationally through Développement international Desjardins, which provides assistance to organizations in approximately 30 different countries in Africa, Latin America, the West Indies, Central and Eastern Europe and Asia.

The larger credit unions in the country are located in British Columbia of which the largest is Vancouver City Savings Credit Union with assets over $6 billion (Table 1). The table does not include the caisses populaires that are part of the Mouvement des caisses Desjardins. On a consolidated basis, the Mouvement des caisses Desjardins is the sixth largest Canadian deposit-taking institution with over $80 billion in assets as at December 31, 2001 (CUCC). In Alberta, there are a total of 38 registered credit unions, 25 of which have open membership while the remaining 12 has closed membership. Capital City Savings credit union is the largest in Alberta, with assets over $1 billion.

[1] Credit for this material goes to the Credit Union Central of Canada.

Table 1. Ten largest credit unions in Canada by assets, December 2001

Name	**Province**	**Total assets** ($ millions)
Vancouver City Savings Credit Union	British Columbia	$6,368
Coast Capital Savings	British Columbia	$3,359
Surrey Metro Savings	British Columbia	$2,697
Envision Financial	British Columbia	$1,675
Capital City Savings and Credit Union Limited	Alberta	$1,450
Community Credit Union	Alberta	$1,266
Niagara Credit Union Limited	Ontario	$1,235
Civil Service Co-operative Credit Society Ltd	Ontario	$1,109
Steinbach Credit Union	Manitoba	$1,060
HEPCOE Credit Union Limited	Ontario	$1,057

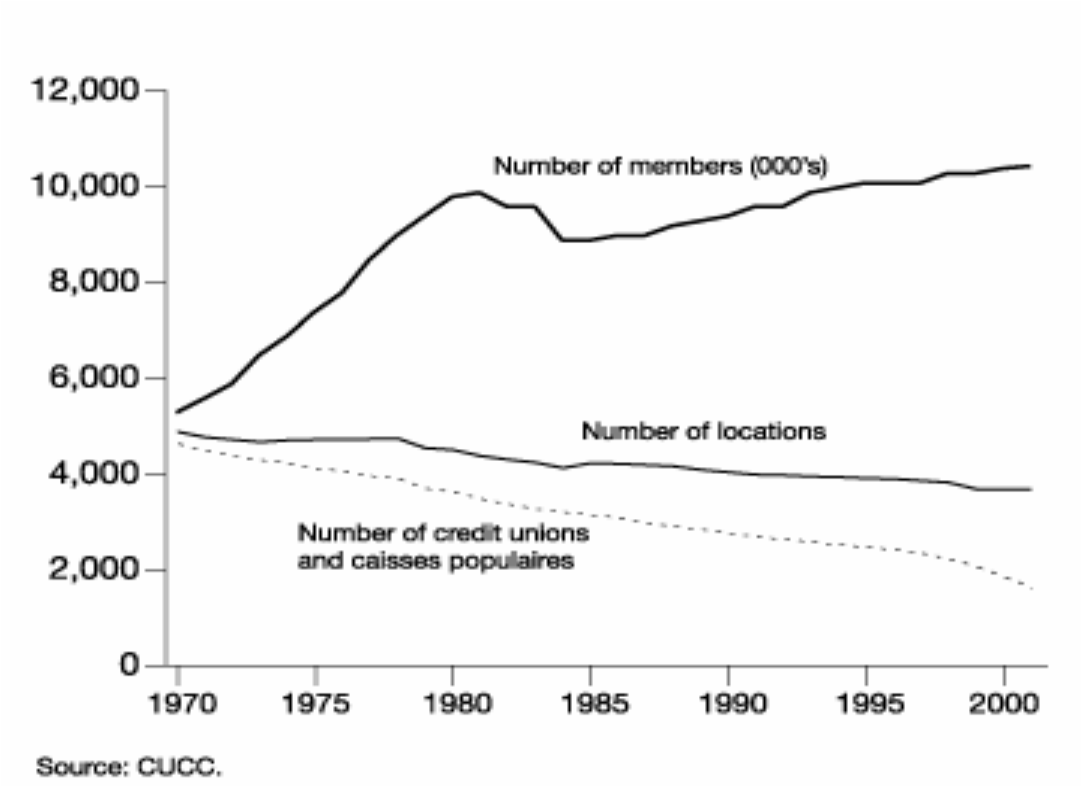
Source: CUCC.

Like the rest of the financial sector across Canada, consolidation in the credit union movement is a trend the movement is grappling with (see Chart 1). As at the end of 2001, Canada's credit union sector consisted of 681 credit unions and 914 caisses populaires. These numbers have decline significantly, from approximately 2,700 in 1990 to a currently combined total number of 1,595 (2001) country wide (Credit Union Central of Canada Website). However, Credit Union Central of Canada maintains that the total number of "points of service" has been maintained or even increased in many communities.

The amalgamation of credit unions has led to an increase in their average size, particularly in Ontario, British Columbia and the Prairie provinces. Credit unions and caisses populaires have also been active in purchasing bank branches, particularly in more isolated areas, helping to ensure that all Canadians have access to financial services. In 2000 and 2001 for example, credit unions in British Columbia, Alberta, Manitoba,

Saskatchewan, New Brunswick and Nova Scotia purchased 72 bank branches in communities where some of the six largest banks had discontinued their operations (CUCC Website).

Chart 1. Consolidation Trends, credit unions/caisses populaires



Across Canada, there are about 4.6 million credit union members, and including the membership statistics from Quebec brings it to about 1 in every 3 Canadians being a member of a credit union or a caisse populaire. Membership has grown steadily over the last half century, from 1 million members in 1950 to approximately 10.4 million by the

end of 2001, or a third of Canada's population. At the same time, employment in the sector has increased from almost 41,000 employees in 1991 to close to 61,000 by the end of 2001.

Credit unions and caisses populaires have maintained strong market shares in such key service areas as residential mortgage financing (13 per cent), consumer credit (10 per cent) and deposit services (15 per cent) (see Chart 2). The market share of the credit union sector varies considerably by region. It is highest in Quebec and Saskatchewan, at roughly 40 per cent of the assets of deposit-taking institutions. Credit unions are also strong in British Columbia, where market share is 20 per cent of the assets of deposit-taking institutions (CUCC).

Credit union and caisse populaires derive most of their assets from residential mortgages. A breakdown of credit union and caisse populaires assets show that residential mortgages form the largest (44.5%) portion of their assets followed by commercial loans (20.2%) and cash and deposits (18.8%) (Chart 3).

Chart 2. Market shares, credit unions/caisses populaires and chartered banks (2001)

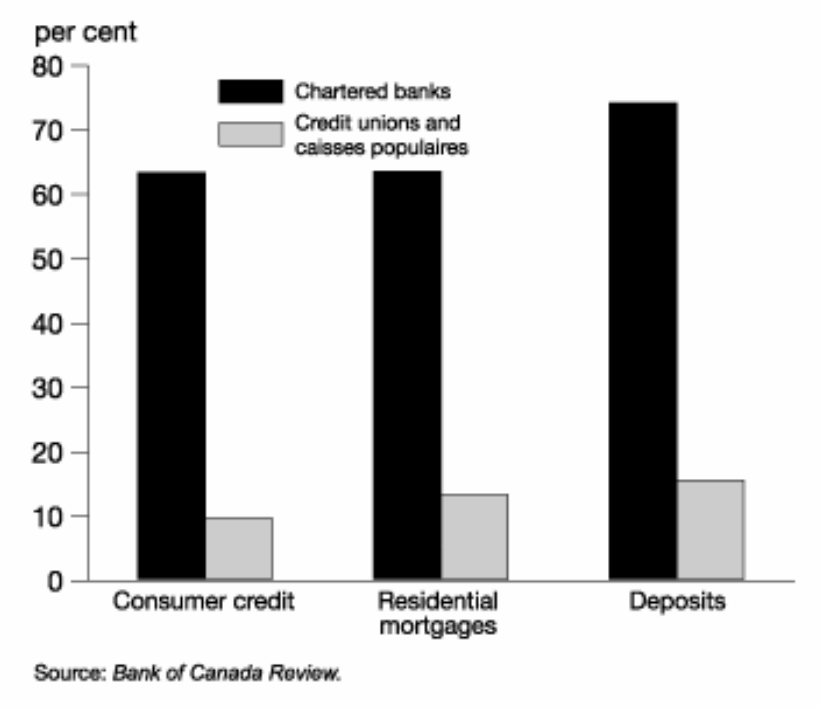
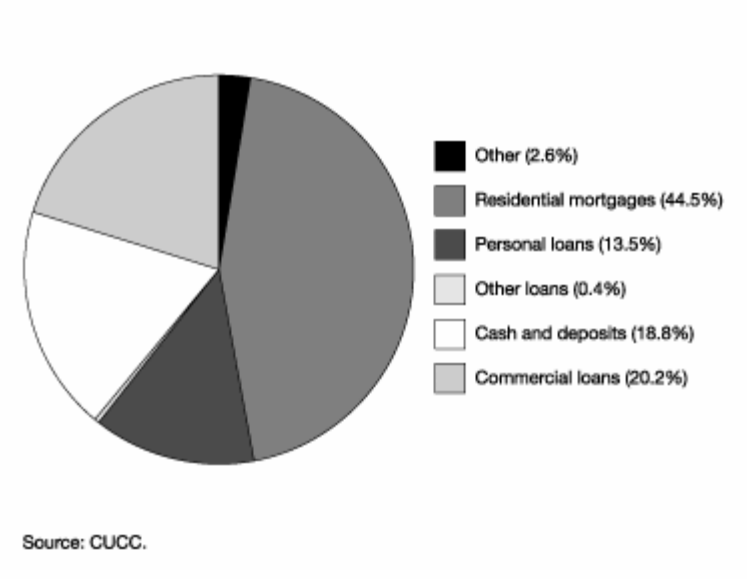


Chart 3. Assets breakdown, credit unions/caisses populaires, (2001)



Research Methodology: Survey Design

A mailed questionnaire, designed to elicit intent to patronize, familiarity and understanding of, and attitudes towards credit unions, was mailed out to 1500 Alberta residents. The sampling followed a random stratified but proportionate sampling procedure using censor maps and zip codes to ensure proportional representation of all residents in the province to have an equal chance of being selected. The sample frame included Alberta residents, and households both rural and urban, who were either members or non-members of credit unions.

One of the principal shortcomings of mailed questionnaires is the possibility of low response rates. Dillman (1978) however, argues that a systematic approach to a survey "will encourage a good response". Every attempt was therefore made to maximize the response rate in this study. Individual respondents received a covering letter explaining the rationale behind the study. In addition, each participant received an incentive in the form of a Tim Horton's gift certificate, and a pre-paid reply envelope. In spite of these efforts, and given the fact that the survey was complex with no reminder notices sent[2], the response rate was 12 %.

Method of Analysis.

The survey contained questions on attitudes, beliefs, outcome evaluation and intention items along with questions measuring the familiarity with, and understanding of the concept of credit unions. Several member characteristics were also included. For the analysis, a regression and Likert scale analyses were employed. These are tools used to

[2] Some survey recipients called and complained for being included in the sample. A decision was therefore taken not to send the reminder notices in order to respect the wishes of these people.

evaluate the degrees of beliefs in specific ideas, thoughts and/or attitudes (Rubin and Babbie, 1995). Attitude beliefs in credit unions, intentions to patronize credit unions, respondents' perceived credit union performance were assessed. A series of choices ranging from 'extremely important, or 'extremely agree to extremely unimportant or extremely disagree were presented to respondents. Percentages of members responding to individual choices are calculated, determining the average intensity for each effect and/or belief. Descriptive statistics of the survey are also presented. The data is analyzed using frequencies, cross tabulations, Likert analysis, factor analysis, correlations, multiple and logistic regressions.

The Results.

*The **Descriptive Statistics.***

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data. Descriptive Statistics are used to present quantitative descriptions in a manageable form. It is used here to describe respondents' characteristics such as demographics, credit union familiarity, as well as other features that are contained in the data.

Respondents' profiles are analyzed on the basis of age, gender, education and income levels (Tables 2 to 5). The analysis show that the mean age of respondents lie in the 45-54 age group, while the majority (71 %) are aged 45 or older, and are males (58%). Half of the respondents (51 %) earn incomes in the $49, 000 or less income group. However, the mean income group is in the $50,000-100,000 category. A greater

portion of the respondents are reasonable educated; 58% have either a college or university degree, 21 and 9% have high school and postgraduate degrees, respectively. The majority (83%) are urban dwellers, with 17% living in the rural areas according to the postal code submitted.

Table 2. Age Categories of Respondents

Age category	Percent
21-34	13.7
35-44	16.5
45-54	27.5
Over 55	42.3

Table 3. Gender as indicated by respondents

Gender	Percent
Female	42.0
Male	58.0

Table 4 Level of education achieved by Respondents

Education Level	Percent
No education	12.2
Grade School	21.5
Some high school	30.9
High school	27.1
College/ Tech	8.3

Table 5. Income level indicated by respondent

Income level	Percent
less $49 000	51.7
$50 000- 99 000	33.3
$100 000 - $149 000	10.9
$150 000 - $199 000	2.3
Over $250 000	1.7

Source: Derived from Survey data

Only 8% of the respondents are agricultural producers, of which 54% have individual ownership of their operations. Various crop and livestock enterprises are undertaken by these producers. Of these enterprises, 35% are beef cattle, 23% grow wheat as their first crop while various percentages grow other crop and/or livestock combinations. Barley ranked highest (25%) as a second crop grown, and 73% of the agricultural producers have been in business for over ten years. For 52% of this group of respondents, agricultural income constituted 1-24 % of total income. Alternative income sources are thus a major (63 %) source of income.

Respondents' Familiarity with Credit Unions

A major objective of the survey was to assess the familiarity of residents of Alberta with their credit unions and credit union concepts, and to determine the proportion of those familiar with credit union that are involved with credit unions. To assess this, respondents were asked if they had ever heard, seen or read anything about credit unions before this survey. Using a series of frequency and cross-tabulations, a number of relationships were established using credit union familiarity and a number of variables.

Of the 178 completed and returned survey questionnaires, 78% of the respondents were familiar with credit unions, 23% were not. The 78% familiar with credit unions were asked to judge, using a set of five issues (favourable pricing, service quality, customer service provided, availability of the service, and other), and from their experiences, which of the issues they considered the most important when purchasing a service. Forty five percent of the respondents who answered this question considered favourable pricing as the most important issue when purchasing a service. This was

followed by service quality, the choice of 42% of the respondents. Customer service provided by the company was the choice of 35% as their most important issue, while availability of service was the most important issue for 41% of the respondents. The choice of 'other' as an issue was selected by 30% of the respondents (Table 6).

The relationship between respondents' credit union familiarity and some demographic characteristics were also investigated. Our analyses reveal that younger respondents (21-34 years) were the least familiar with credit unions (Table 7). The level of education did not seem to have an impact on respondents' credit union familiarity. However, respondents with a college or university degree reported being more familiar with credit unions. These results are similar to studies done elsewhere on credit union familiarity. For example, a number of studies[3] of Irish credit unions (McCarthy et. al., (2000), Quinn 1999) also found that the youth knew less about credit unions in that country.

Respondents earning incomes $49,000 or less reported more familiar (67%) with credit unions compared to the other income groups (Table 7). The level of education attained by respondents did not seem to have an impact on respondents' familiarity with credit unions. However, results show that respondents with high school, college and university degrees were more familiar with credit unions. A possible reason why older respondents tend to be more familiar with credit unions than younger respondents could be that the former tend to have stable employment and incomes. They are therefore more likely to patronize financial services (mortgages, car loans etc) offered by credit unions.

[3] Youth Policy Task Force, Final Report, Irish League of Credit Unions, Dublin, 1999

Table 6 Most Important Issue Considered before Purchasing a Service

Issue	First Most Important	Second Most Important	Third Most Important	Fourth Most Important
Favourable Pricing	45	38	11	6
Service quality	42	35	18	5
Availability of service	32	31	21	16
Customer Service	35	22	18	25
Other	30	15	30	24

Table 7. Credit Union familiarity and Demographic Characteristics

	AGE			
FAMILIAR	21-34	35-44	45-54	Over 55
No	7	6	13	13
Yes	18	24	36	62

	Education				
FAMILIAR	less than high school	High school	College	University	Graduate school
No	8	7	11	8	5
Yes	13	32	42	41	11

	INCOME				
FAMILIAR	Less than $49 000	$50 000-99 000	$100 000 - $149 000	$150 000 - $199 000	Over $250 000
No	21	10	2	2	0
Yes	67	46	17	2	4

Source: calculated from survey data

They are also more likely to be concerned with their community development. As a result, they are more likely than younger respondents to be involved with credit unions in their communities that participate in these activities. Younger respondents are either schooling or do not have stable incomes, and might not be interested at this time of their lives, in such financial and community activities provided by the credit unions.

In assessing the potential value of credit unions to Alberta residents, it is important to consider members' access to and use of other financial services. Respondents were asked to name the financial institution they often use for most of their financial needs. Most respondents (73%) used a bank, 14% used credit unions, and 3% used trust companies while the remainder used a combination of financial institutions for these needs. The evidence suggests a small majority (14%) of Alberta residents do rely on credit unions for their financial needs.

Credit Union Patronization, Membership Status*, and Commitment.*

One unique feature that separates credit unions from other financial entities is member participation in the affairs of the organization. A number of questions were designed in the questionnaire to assess this important aspect of credit unions' cooperative identity. These include membership status, number of years of membership. Respondents were also asked hypothetical questions regarding their intent to patronize a cooperative. They were also asked questions regarding knowledge of cooperative objectives and functions.

Analyses show that the 44% of the respondents familiar with credit union have used the services of credit unions in the last twelve month alone, a majority 55% has not used these services at all (Table 8). Most respondents (72%) would patronize a credit union if they knew it offered favourable pricing, service quality, provided good customer service, availability of the service, and other.

Respondents membership status in a credit union was also assessed by asking them the question, 'are you a current member or ever been a member of a credit union'. Analysis show 54% are current or have ever been credit union members and 34% said

they have never been credit union members. Of the 54% who said they were or have ever been credit union members, 66% of them are current members and the remaining 34% are former members.

Table 8. Used the Service of a Credit Union in Last twelve months

Service Use	Percent
Yes, I Have	44
No, I have not	56
Yes, not aware	0.7

Table 9. Participation Level in a Credit Union

Participation Level	Percent
Member	44
Customer/patron	17
Member Customer/Patron	39

Of the current and former credit union members, 44 % participate as members, 17% as member/patrons, and 39% as customer/patron (Table 9). Fifty six percent would seek another credit union if their current credit union would cease operation (Table 11). However, the greater majority (67%) regularly does business with their credit union competitors (Table 11), emphasizing the point that credit unions provide less variety of product and services than the regular financial institutions. Asked if they would seek another credit union to meet their financial needs if their current credit union would cease its operation, 56% said they would likely seek another.

The majority (89%) of current credit union members regard the operation of their credit unions as successful. Clearly credit unions have done much to build a reputation as a valuable community based resource. Despite this fact, most if not all credit union members continue to do business with other financial institutions because the range of

services available in credit unions is limited. In the last five years, a great minority (48%) of current credit union members have not switched their financial dealings with their current financial institutions to another. Of those that made the switch, the reasons for doing so were mainly for better services (16%) and other (18%).

Table 10. Do you expect to seek another credit Union if your current one ceases operation?

Response	Percent
yes	56
No	36
Not Sure	8

Source. Compiled from Survey Data.

Table 11. Do you do business with your credit union competitors?

	Percent
Yes, regularly	66.7
No, sometimes	16.7
No, never	16.7

Source. Compiled from Survey Data.

Asked how likely it was to use a one-stop financial shopping for their financial activities, 34% said they would likely use a bank, 30% would likely us a Trust company and a majority (70%)[4] would likely use a credit union.

Former credit union members were asked to mark off in a set of responses, the reason(s) why they are no longer members of a credit union. The responses to this all important question were very disappointing. Only 8% chose the response 'none close to where I live', another 8% chose 'cannot see any benefits, 6% chose 'bad past experience

[4] Respondents responded to these questions separately, hence the totals can be more than a 100%

and 7% chose ‘no particular reason.’ Judging from these results, it is not clear what motivated the 27% of credit union members to leave the organization.

Knowing why people choose to leave their credit unions was an important objective of the survey. Given that a great minority (34%) of credit union members has become former members, such knowledge would have helped address some of the causes why people are leaving their credit unions. Further investigations of why people choose to leave their credit unions would be a useful undertaking in a future study

The Likert Scale Analysis.

A popular technique for obtaining information on human knowledge, attitudes, behavioral preferences, and similarities or the lack of them is the inclusion of Likert-type scales in survey questionnaires (for example, 1 = strongly disagree, 7 = strongly agree) or dichotomous (such as, yes/no). Several of the respondents’ characteristics were measured using the Likert scales. Seven choices, ranging from ‘extremely agree or extremely important to extremely disagree or extremely unimportant are scored “1” (extremely disagree or extremely unimportant) to “7” (extremely agree or extremely important). The higher the number, the stronger the agreement or importance of an attribute or belief is. Frequency tallies are scored for each attribute or belief to give some indication of its intensity.

Results using the Likert scale measure are presented in this section. This includes several of respondents’ characteristics, familiarity and beliefs in credit unions principles, credit union objectives, values and perceived credit union performance indicators. The Likert scale measures the average intensity of beliefs and attitudes and represents the average degree of belief members hold.

Understanding Credit Union Beliefs and Principles.

This section is designed to investigate respondents' beliefs about credit unions, investor own firms, banks and trust companies. Respondents' beliefs are assessed using a set of 17 statements offering them the opportunity to either agree or disagree with the statement on a 7-point Likert scale (Table 12). The responses about credit union beliefs gathered from respondents suggest that respondents (at least 50%) agreed or strongly agreed with most of the credit union principles. Majority (87%) of survey respondents disagreed or strongly disagreed when asked 'I do not know that credit unions exist', an indication that residents of Alberta are well informed about the existence of credit unions.

Table 12. Beliefs about Co-operatives, Credit Unions Investor Own Firms, Banks and Trust Funds.

Credit Union beliefs	Strongly disagree	Disagree	Slightly disagree	Indifferent	Slightly agree	Agree	Strongly agree
Credit unions are very similar to banks	2	6	8	10	24	40	10
IOFs provide a greater number of products and services than credit unions	5	13	10	32	23	13	4
Credit unions are more involved in community services than IOFs	5	13	10	32	23	13	4
Credit unions are less efficient than banks because they cannot operate nationwide	11	20	16	21	19	10	2
In order for credit unions to compete with banks, they will have to become more like banks, thus destroying their original distinction	8	25	15	20	18	10	2
Banks offer better financial services and financial products than credit unions	11	24	9	26	13	13	4

Source. Compiled from Survey Data.

The majority (74%) slightly agree to strongly agree that credit unions are similar to banks, while a greater minority (40%) belief investor owned firms (IOFs) provide a

greater number of products and services than credit unions. Forty-seven percent of the respondents disagreed with the view that because credit unions can not operate nationwide, they were less efficient than banks. A similar percentage disagrees with the view that in order for credit unions to compete with banks, they will have to become more like banks, thus destroying their original distinction. Alberta residents thus hold the belief that credit unions can compete with the banks with their current structure.

Respondents' Performance Perception of their Credit Unions.

Current credit union members were asked to provide a perception of the performance of their credit unions on a set of six categorical factors. These performance categories are, marketing and business; management; customer service; member commitment; and public interest and involvement. Specific performance criteria were assessed using the Likert scale measure (1 = not performing to 7= performing very well).under each of these six categories.

Analyses show that in general, the majority of respondents gave good evaluative performance to their credit unions (Table 13). However, this did not cut across all the six performance criteria. Good evaluative performances were assessed for marketing and business performance criteria, where the majority (over 60%) assessed their credit unions as performing well to very well. Under this performance criterion, a third of the respondents were not so sure if their credit unions offered enough opportunity for customers/members to influence the way things are done in the company.

On the management performance category, most respondents gave good assessment to their credit unions, except that half of the respondents were not so sure

Table 13. Respondents' Performance Perception of their Credit unions.

My Credit Union Provides:	**Performance Measure (%)**						
a. Marketing and Business.	Not at all	Poorly	Slightly poorly	Not Sure	Slightly well	Well	Very well
Offer members everything that a bank does.	-	2	6	18	2	43	29
Provide beneficial rates and good services	-	4	-	4	12	49	31
Provide easy access to financing for members	-	6	4	13	6	42	29
Offer opportunity for customers/members to influence the way things are done	-	-	2	35	8	44	10
b. Management							
Have staff and managers with superior professional skills	-	4	-	10	8	60	18
Members are adequately informed about the management's plans, decisions, etc		6	2	24	16	42	10
Members have opportunity to voice concerns or speak up about problems in the credit union	-	2	6	30	10	44	8
Uses its members or board as much as it should in making decision or setting policies	-	-	2	**50**	6	34	8
C. Customer Service							
Facilitate access to new technology for members	2	2	6	29	8	42	10
Establish friendly relations with members	-	-	2	4	10	51	33
Have programs that best meet members' financial needs	-	2	4	16	10	47	20
Provide communication services such as on-line research, timely news coverage,	-	2	6	**55**	2	27	8
D. Member Commitment							
Timely response to members' complaints	-	2	2	29	16	43	8
Offer member education/training	-	2	4	**63**	15	13	4
Welcome new members	-	-	2	35	10	31	22
Provide fair and equitable voting rights and procedures			6	33	10	35	15
Include members in the decision-making processes	-	2	4	**46**	10	29	8
Encourage member attendance at meeting	-	2	8	23	19	33	15
Offer greater opportunity for members to influence the way things are done	2	6	2	31	12	29	16
E. Competitive Environment							
Presence creates a more competitive environment	-	-	2	20	14	47	16
Provides a greater voice in decision making	-	-	4	35	13	35	13
Represents client interest		4	2	19	19	42	15
Products and service are well advertised	-	-	4	25	6	52	13
F Public Interest and Involvement							
Conduct ethical business practices	-	-	2	12	2	47	37
Make products/services available to the community	-	-	2	14	10	45	29
Enhance image of the community it operates	-	-	2	20	12	37	29
Credit union foster economic development	-	-	-	40	6	44	10
Co-operatives and credit unions are environmentally friendly entities	-	-	-	29	13	44	15

Source. Compiled from Survey Data.

whether management uses its members or board as much as it should in making decision or setting policies.

Respondents' performance perception under customer service criteria was generally high except that more than half were not so sure if their credit unions provide enough communication services (on-line research, timely news coverage, conference materials, e-mail service) for their members.

Under the member commitment performance criteria, respondents were not so sure of the performance of their credit union on two important issues under member commitment; the offering of education and training to members, and the inclusion of members in the decision-making processes.

High performance evaluations were given to credit unions under competitive environment category. The presence of credit unions in the community creates a competitive environment, products and services are well advertised were particularly singled out under this category as issues credit unions were performing well.

Respondents also provided very good performance evaluation of their credit unions under public interest and involvement. This include issues as conducting ethical business practices, making product and services available to the community, enhancing the image of the community it operates and fostering economic development. These issues are the very core values upon which the credit union system operates, and being accorded high performance evaluation goes well to reinforce the confidence, beliefs and trusts residents of Alberta have in their credit unions.

Factor Analysis.

One approach to analyzing subjective perceptions, and to gain insights from survey responses is through factor analysis (Kim and Mueller, 1978), a statistical variable reduction procedure, which extracts a small number of latent variables or "constructs" from among a larger set of observed variables. It is also a test to the internal reliability and involves looking at the patterns of correlation between scale items.

Applying principal component analysis to the performance criteria about credit unions yielded eight factors, which together explained 77.8% of the total variance. The Bartlett's test of sphericity rejects the hypothesis that the correlation matrix is an identity matrix. Accepting the test would indicate that the variables are unrelated and therefore unsuitable for structure detection (SPSS User Manual). Small values, less than 0.05 of significance level indicate that a factor analysis may be useful with a given set of data.

The approximate chi-square statistic for our data equals 1166.84 with 496 degrees of freedom, which is significant at less than the 0.05 level. We also found that the value of the Kaiser-Meyer-Olkin (KMO) statistic (0.60) is large (>0.500). High values (close to 1.0) generally indicate that a factor analysis may be useful with your data. If the value is less than 0.50, the results of the factor analysis probably won't be very useful. The eight factors identified are used in further regression analysis to determine respondents' attitudes towards credit union. With the exception of one instance where the correlation was high (0.6), the correlation matrix showed no correlations among the variables (Cronbach's alpha 0.946).

Respondents Attitude towards Credit Unions.

A major objective of the survey was to determine the attitudes of resident of Alberta towards their credit unions. To obtain a psychometric instrument to measure the attitude of Albertans towards credit unions, we chose a Likert-type scale because the construction and use of such scale is relatively easy, and the interpretation of the results is straightforward. The scale was presented as a list of six items (marketing and business, management, customer service, member commitment, competitive environment, and public interest and involvement) along a 7-point Likert scale (coded "l," "2," "3," "4," 5," 6," and "7," meaning "strongly disagree," "disagree," "slightly disagree," "neutral," "slightly agree," "agree," and "strongly agree," respectively). A correlation matrix showed low correlations among the salient beliefs ranging from 0.03 to 0.36.

The attributes beliefs are measured on a scale 7-point Likert scale, while their importance was converted to a bipolar scale of -3 to +3. Multiplying the attributes beliefs by their importance produced scores in the range of -21 to +21 (Table 14). The analysis show that residents of Alberta generally hold positive attitudes towards their credit unions as shown by the positive mean scores in all the categories estimated.

Of the six attributes, public interest and involvement is by far the largest weighted attribute (mean score 15) followed by customer service (13). The specific attributes of public interest and involvement, 'my credit union conducts ethical business practices' scored highest. This is followed by an attribute in the customer service performance criteria, 'Facilitates networking among members'.

Table 14. Multi-attribute attitudes towards Credit Union in Alberta.

Function	N	Minimum	Maximum	Mean Score
1. Offer members all a bank offers	52	-21	21	9
Provides beneficial rates	50	-21	21	12
Easy access to finance	50	-21	21	10
Offer opportunity for members to influence how things a re done	51	-21	21	8
2. Professional Staff and managers	53	-21	21	11
Members informed of management plans	52	-15	21	7
Members able to voice concerns	52	-18	21	8
Members used in decision making	54	-18	21	7
3. facilitates members' access to technology	54	-12	21	8
Establishes friendly relation with members	50	-21	21	12
Establish programs that meet members financial needs	49	-21	21	13
Facilitates networking	59	-18	21	3
Information newsletter	59	-12	21	5
Provides communication services	55	-21	21	3
Encourage membership	53	-15	21	8
Provide useful websites	56	-12	21	5
Timely response to complaints	50	-12	21	11
Offer members education/training	58	-21	21	3
Welcome new members	55	-21	21	9
Provide fair and equitable voting rights	53	-12	21	8
Include members in decision making	52	-12	21	6
Encourage member meeting attendance	55	-18	21	6
Provide greater opportunity for members to influence how things are done	53	-18	44	8
Presence creates competition	51	-21	21	8
Provides greater voice in decision making	57	-21	18	7
Represents clients interests	49	-12	21	11
Products and services are well advertised	52	-12	21	8
Conduct ethical business practice	50	-21	21	15
Makes products/service available to community	51	-21	21	11
Enhances image of community it operates	42	-21	21	9
Fosters economic development	53	-21	14	7
Environmental friendly	54	-21	21	8

Source: Derived from Survey data.

1= marketing and business function; 2=management function; 3=Customer service function; 4=member commitment function; 5=Competitive environment function and 6=public interest and involvement function.

The Regression Analysis.

This section provides an empirical analysis of some of the relationships that were established in the previous sections. To achieve this, a number of relations are formalized and estimated using Limdep statistical software package. The specific relations estimated are a) respondents credit union patronization intentions; and b) attitudes to wards credit unions. Regression analysis, are used to show how credit union participation intentions are related to member characteristics, credit union principles, credit unions beliefs, performance of credit unions as well as status of credit union membership, (current or former).

Results of the regression analysis are presented in tables 9. Factors which respondents reported as being important to their credit union patronization behaviour are modeled in this binary logistic model. The dependent variable is intent to or not patronize

Table 15. Regression results of Respondent Credit union Intention to Patronize a Credit Union

Variable	Coefficient	S.E.	p-values
Gender	.353	0.68	0.606
Age	-0.12	0.30	0.555
Education	-0.04	0.32	0.904
Income	0.84	0.43	0.051*
Favourable price	-0.40	0.36	0.261
Service quality	0.37	0.35	0.293
Intent to purchase X	2.50	0.70	0.000**
Benefit Rates	2.40	0.95	0.011*
Easy access to finance	-2.05	0.97	0.035*
Community benefits	1.73	0.91	0.058*
Support Local economy	-.34	0.74	0.645
Constant	-6.38	2.84	0.025*
Chi-squared	21.72	0.00	

Dependent variable is Intent to patronize a credit union-Intnpatr.
**Significant at the 0.01 level , *significant at the 0.05 level (both2-tail)

a credit union The independent variables include demographic characteristics, benefits credit unions give, and the factors that motivate respondents to patronize credit unions. The chi-squared test is significant at less than the 0.5 level of significance.

Among the demographic factors, respondents' income is the only significant factor that affects their intent to patronize a credit union. Although age did not appear significant, (negative sign), it shows that the older a respondent is, the more likely it is that he/she would patronize a credit union, consistent with the Likert scale analysis. Respondents who had expressed their intent to purchase product X if they knew it came from a credit were also very likely to patronize a credit union. The types of benefits provided by credit unions were also significant and influential on respondents' intent to patronize a credit union. In particular, beneficial rates, easy access to finance, community benefits and support of the local economy significantly affected respondents' intent to patronize credit unions.

Other variables that respondents identified as motivating credit union patronization where also included in the model but either had the wrong sign or were not significant in predicting respondents' credit union patronization intentions. For example, area of residence, rural or urban and whether the respondent was an agricultural producer or not.

Summary and Conclusions.

The study set out to identify the familiarity, attitudes towards, and the intent to patronize credit unions by residents of Alberta, as well as their perceived assessment of the performance of these institutions in the province. Analysis of the survey indicates residents of Alberta are familiar with, and understand the concept of credit unions. The

results also indicate that Alberta youth are less familiar with credit unions and the credit union movement needs to involve the youth in a meaningful way. Most residents of Alberta hold a positive attitude towards their credit unions. It also shows a population that has a general assesses their credit unions as performing well.

Demographic characteristics, age, gender education did not impact respondents intent to patronize credit unions. However, respondents' income is significant in explaining credit union patronization intentions. The types of benefits provided by credit unions were also found to be significant contributors in affecting people's intent to patronize a credit union.

Members commitment to their credit unions in the province remain high, 62% of the respondents indicated are current credit union members. At the same time more than a third (34%) of respondents indicated they have become former members. The majority have also indicated they intend to maintain their credit union membership two years from now, and would look for another credit union if their current credit union would cease to function. The majority still do business with business competitors, because the competitors offer a wider range of services than credit unions. The majority of respondents have also indicated their intentions to patronize a credit union or purchase items from organizations they think operate as such.

Although the majority rated their credit unions performance as doing well, hold positive attitudes toward them, and are familiar with credit unions, there are still issues of concern to the 62% committed members. These include the lack of their inclusion in decision the decision making process, member training and education, and the provision of a forum for the discussion of their problems with management, and the lack of

opportunity to influence the way things are done in their credit unions. Lack of communication services for members and whether management uses its members or board as much as it should in decision making or setting policies were also issues of concern to respondents.

There are also serious issues to be addressed for the 34% former members who left because they found the experience not rewarding. A concerted effort at addressing these issues will go a long way to giving resident of Alberta, the trust and satisfaction they seek in their credit unions. Efforts must also be made to actively involve the youth, with programs that directly meet their needs. This, plus the issue of why people are leaving the credit union sector warrant further studies.

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