

## **FACTORS AFFECTING THE ASSURANCE OF SAVINGS IN THE COOPERATIVES FROM THE PERSPECTIVE OF MEMBER: A CASE STUDY OF ASSUMPTION UNIVERSITY SAVINGS & CREDIT COOPERATIVE LIMITED (AUSCC)**

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### **Abstract**

*The purpose of this study was to examine factors affecting savings in AUSCC, focusing on factors affecting the confidence or assurance of savings, needs assessment for confidence, and guidelines to enhance the level of confidence of members. Factor analysis, priority need index, and analysis of variance for testing the differences of AUSCC members' qualifications towards the assurance of savings in AUSCC were utilized. The findings revealed that the difference in position and salary of AUSCC members has resulted in the different perception towards the competency and experience of management team that affected their confidence of savings at a significant level of 0.05. Furthermore, the need assessment analysis found that the factors for enhancing the confidence level of savings in AUSCC are: ability of management to communicate clearly at meetings; ability to investigate and audit cheating and fraud; knowledge of laws, regulations, and criteria of contract knowledge; strict, independent and fair decisions made by the board members; and good governance and internal control.*

**Keywords:** Assurance, Savings, Savings & Credit Cooperative, Assumption University

## 1. INTRODUCTION

### 1.1 Background and Rationale

In general, commercial banks play an important role as a common means of savings, especially for retail savers. However, commercial banks are not the only financial institutions that are a savings vehicle in Thailand. According to the Cooperatives Act B.E.2542 Amendment (No.2) B.E.2553, Cooperatives are legally allowed to sell shares and receive saving or fixed deposits from members or other cooperatives.

At present, there are several means of savings available for individual savers, Savings and Credit Cooperative is one of them. The advantages of savings with the Savings & Credit Cooperative over other means are as follows; 1) Savings with Savings & Credit Cooperative in the form of stock, i.e. purchasing stocks of the cooperative, requires long-term commitment. It is obligatory for members of the Savings & Credit Cooperative to purchase equal amount of cooperative stocks monthly; thus, this creates good discipline among savers. 2) Members of the Savings & Credit Cooperative are entitled to borrow money from the cooperative if and when necessary. Normally the cooperative has less financing requirements, such as guarantor or collateral, and charge lower interest rate than other financial institutions. In addition, the loan approval process is to some extent more rapidly than commercial banks. 3) Members of the Savings & Credit Cooperative must be personnel of the same organization. Furthermore, the board of directors who manage Savings & Credit Cooperative is elected from and by the members of the cooperative only. Thus, the cooperative maintains considerable reputation for reliability and trustworthiness of savings. Moreover, savings with the cooperative provide returns that are considerable to other financial institutions in the country, in spite of lower default and credit risk. This is because the Savings & Credit Cooperative has much lower operating cost than typical financial institutions such as commercial banks, finance companies, etc.

Assumption University Savings and Credit Cooperative (AUSCC) was first established on February 10<sup>th</sup>, 1993 as “*Assumption University Credit Union Cooperative*”. However, the membership of a credit union cooperative is not limited only to personnel of the same organization. On the contrary, membership of the savings & credit cooperative is the privilege available exclusively to personnel within the same organization. Consequently, Assumption University Credit Union Cooperative was restructured to “*Assumption University Savings & Credit Cooperative (AUSCC)*” on August 3<sup>rd</sup>, 1995 in order to align with its purpose to promote thrift savings and provide financing at competitive rates to Assumption University (AU) community.

The AUSCC has been undergoing a dominant control by the officials, i.e. Cooperative Promotion Department and Cooperative Auditing Department, following the exposure of severe fraudulent activities committed by the only two officers of AUSCC. The number of AUSCC members before the detection of the fraud in March 2015 was over 600 members as details shown in Table 1. A significant number of members panicked and surrendered the resignation to claim their contributed capital, i.e. outstanding shares. Nevertheless, approximately more than half of the members stayed calm and maintained membership with the AUSCC. Furthermore, certain members who quit have reapplied for a membership. Currently, the number of members has bounced back to over 400 members at the start of 2017. Therefore, it is academically appealing and beneficial to examine the factors affecting confidence of members regarding savings in the AUSCC.

**Table 1**  
Number of AUSCC members during 2009-2016

Number of AUSCC Members	2009	2010	2011	2012	2013	2014	2015	2016
Beginning of Year	753	803	809	749	734	657	603	562
New Members	129	85	64	80	54	43	67	41
Resigned Members	79	79	124	95	131	97	48	197
Illegal Members <sup>1</sup>							60	
<b>Balance/Valid Members</b>	<b>803</b>	<b>809</b>	<b>749</b>	<b>734</b>	<b>657</b>	<b>603</b>	<b>562</b>	<b>406</b>

Sources: AUSCC as of January 2, 2018

## 1.2 Research Objectives:

This research aimed to

- 1 Examine the factors affecting the confidence or assurance of savings in AUSCC.
- 2 Study AUSCC member's needs and expectations towards their confidence or assurance of savings.
- 3 Guidelines to develop and enhance the level of confidence in savings for members, and recommendations for preventing and detecting cheating and misconduct behavior of the AUSCC staff.

## 1.3 Definition of Co-Operative, and Savings and Credit Cooperative

**A Co-Operative** is “an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise.” (ICA, 1995).

**Savings and Credit Cooperatives (SACCOs)** are “cooperative financial organizations owned and operated by and for its members according to democratic principles for the purpose of encouraging savings and using pooled funds to extend loans to members at reasonable rates of interest and providing financial services to enable members improve their economic and social wellbeing”. (Frank, Mbabazize, and Shukla, 2015)

## 1.4 Research framework

The research framework of “Factors Affecting the Assurance of Savings in the Cooperatives from the Perspective of Member: A Case Study of Assumption University Savings & Credit Cooperative Limited (AUSCC)” is presented in Figure 1.

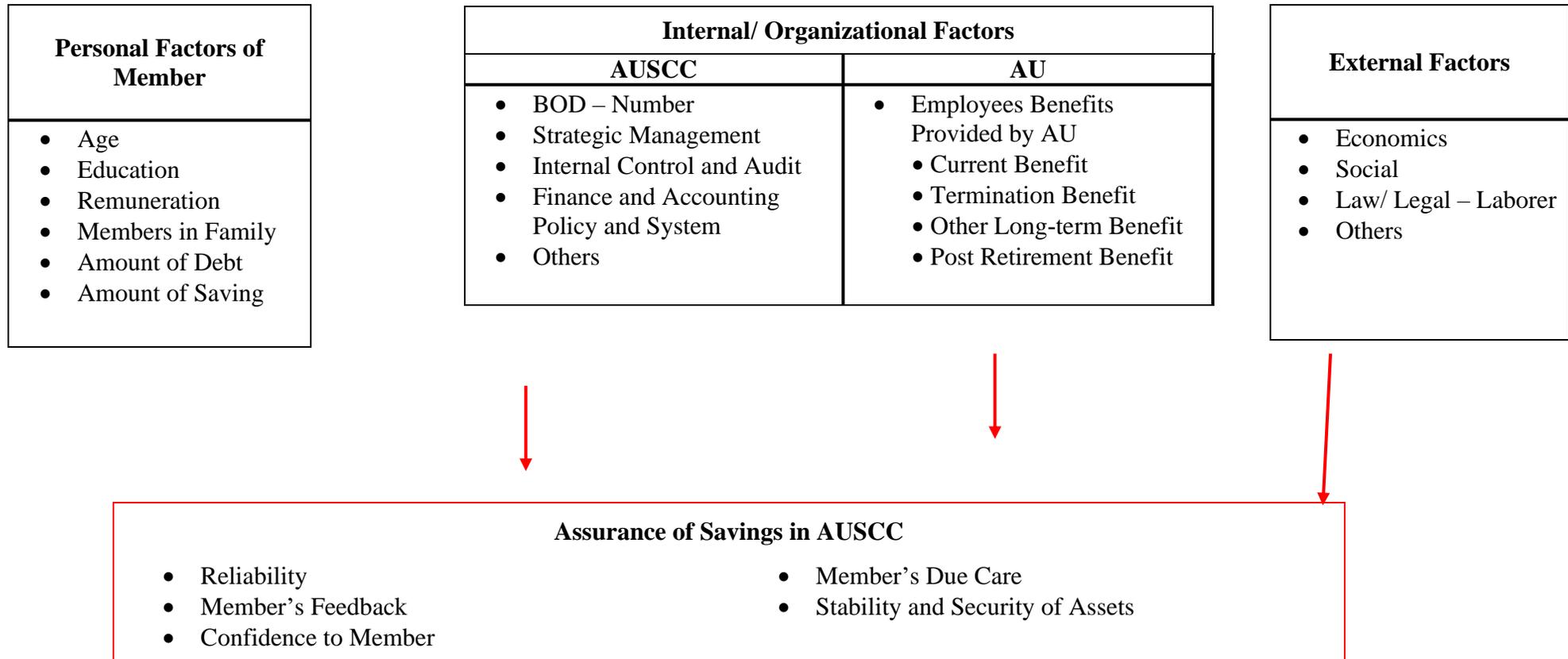
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<sup>1</sup> Illegal members were the members that were created by fraudulence and not legally in existence.

**Figure 1**

Research Framework:

Factors Affecting the Assurance of Savings in the Cooperatives from the Perspective of Member: A Case Study of Assumption University Savings & Credit Cooperative Limited (AUSCC)



## **2. THEORIES, CONCEPTS, PRINCIPLES AND PREVIOUS RESEARCHES RELATED TO THE COOPERATIVES.**

### **2.1 The cooperative life cycle (Cook and Burrell, 2009)**

Cooperative is an organization with a life cycle framework consisting of five phases as follows:

- (1) **Economic Justification:** The first phase is a very slow and careful process where important decisions relating to pre-incorporation have to be taken. It is a joint effort made by patrons to recognize, understand, and transfer and to demonstrate the social and economic benefits with a view to improving the consequences of market contracting costs. The joint action aims at improving the socio-economic conditions in the absence of competition to give maximum benefit to the members.
- (2) **Organizational Design:** There is no definite format in structuring the organizational design of a cooperative. But it should be done very carefully and thoughtfully in order to avoid conflict and problems in the future. Members play an important role in contributing towards member qualifications and responsibilities, bylaws and decision-making powers of a cooperative.
- (3) **Growth-Glory-Heterogeneity:** Heterogeneity in members may arise due to variance in members' age, educational qualifications, and differences in ownership and business objectives. This could lead to an increase in collective decision-making costs which in turn could affect the viability and credibility of the organization. A cooperative must have unity and coordination amongst the members. Heterogeneity leads to higher coordination costs.
- (4) **Recognition and Introspection:** This phase is characterized by members falling into different categories. Some lose interest in what they are doing, some others are aggressive, and a few remain as loyalists. As a result, the main focus and objectives of the cooperative diminishes. Tensions and conflicts lead to poor investment decisions. Collective decision making slows down and members are reluctant to have an open discussion. The time taken to recognize and find solutions to these problems is very slow. This leads to resorting to remedial actions to face the challenges.
- (5) **Choice:** the member patron is being asked to inform a decision. By the end of phase four the member patrons have the important task of informing a decision regarding the organizational survival as written by Cook and Burrell. After making a thorough analysis from Phase one to three, the member will have to choose from tinker, reinvent, spawn or exit.

### **2.2 Cooperative thought and cooperative values (Prakash, 2003)**

The cooperative thoughts concerning the cooperative values are as follows:

- (1). **'Self-Help'** Every member should join and work together towards making a difference in the cooperative. All decisions and actions are taken with a view to benefiting the members directly. Individuals use their own skill and effort in cooperation with others to improve their lives and also the growth of the cooperative.
- (2). **'Self-Responsibility'** means that members assume responsibility for their cooperative. A cooperative is a democratic organization owned and controlled by members. Therefore, all members should be equally accountable for their actions and responsibilities. It is the duty of every member to ensure that the cooperative remains an independent organization from other private and public organizations.

- (3). 'Equality'. A member is the basic unit of a cooperative and therefore is equal whether he is an individual or group of individuals. Members have the right to take part in meetings, to be consulted in making important decisions, to be informed about all matters and the right to be heard.
- (4). 'Solidarity' Cooperatives are able to achieve more when members join together and act collectively, towards the betterment and improvement of the lives of others especially of the under privileged. A cooperative has the responsibility to work together in order to support others in their struggles and goals and expect others to do a similar effort. Solidarity is the very cause and consequence of self-help and mutual help.

### **2.3 Cooperatives theories**

1. Wave Theory: The waves of cooperative organization happen in depressed times, and usually followed by cooperative failures.
2. Wind-It -Up Theory:  
Cooperatives can be dissolved simply because "their initial objectives have been achieved" (LeVay, 1983) as competitors adjust their prices or improve their services. Once the member objectives have been achieved, they consider that it is obsolete and may wind up.
3. Pacemaker Theory: One of the challenges here is that members can become disappointed by the insignificant price difference, especially when a significant differential has occurred in the past. (LeVay, 1983)
4. Mop-Up Theory: In static or declining markets, create incentives for farmers to integrate forward via cooperatives in the markets.

### **2.4 Principles of cooperatives**

There are three principles of cooperative organization that are of particular significance to their performance (Fama and Jensen, 1983; Bonus, 1986; Rasmusen, 1988; Braverman and Guasch, 1989; Krahn and Schmidt, 1994):

1. The Identity Principle (Stiglitz, 1990) Members of the cooperative are identified as clients and members. This independent and autonomous structure is necessary for the application of a simple, cheap and effective credit technology. The identity of member clients also involves a limited transformation potential where amounts, maturity and risk are concerned.
2. The Nominal Capital Principle. In practical, there is no clear distinction between shareholdings and deposits makes it obliging for a credit cooperative to maintain a comparatively high volume of liquid reserves. Mostly, cooperative management prefers to reserve its earnings in the large amount, and the retained profits may be withdrawn or redeemed.
3. The Equality Principle. It refers to the right to vote in general meeting. It is in the proportionate of the amount of member's capital that they have invested.

## 2.5 Previous research studies

From the previous research related to Savings and Credit Cooperatives are as follows:

<b>Researchers (Year)</b>	<b>Finding</b>
Ndiege, Haule and Kazungu (2013)	Sources of funding is an important factor of outreach in the cooperative. This component mostly has been used in measuring sustainability and researchers make links between outreach and sustainability of micro finance.
Sebhatu (2015)	The impact of savings and credit cooperatives in Ethiopia. There is significant positive correlation between seniority saving size of loan, number of times loan availed and post income of the respondents, while the variable savings had significant negative correlation with the profit.
Pakam (2012)	Factors Affecting the Implementation of Saving Welfare: A case study of Savings Cooperative of Security Airforce Command <ul style="list-style-type: none"> <li>• Communication is a factor affecting the success of the policy, most members have very clear perception about the policy due to the reason that the operation of the cooperative is not so complicated.</li> <li>• Resources of the cooperative are another factor for the success. In addition, tools and equipment of the unit needed to be improved in order to shorten the time for approval of lending to the members.</li> </ul>
Pimsuwan and Sriwiha (2009)	Satisfaction of Economized Member with Management of Savings and Credit Cooperative of Border Patrol Police 42 LTD <ul style="list-style-type: none"> <li>• The satisfaction of the members towards the management of the cooperative, personnel and services provided of the cooperative, and Welfare service and information given to members were at moderate level.</li> </ul>

## 3. BACKGROUND / HISTORY OF ASSUMPTION UNIVERSITY SAVINGS AND CREDIT COOPERATIVE LIMITED (AUSCC)

### 3.1 Relationship between AU and AUSCC

The Assumption University Savings and Credit Cooperative Limited (AUSCC) was initially established by the registrar of Assumption University as a credit union cooperative. However, a few years after the establishment, it was restructured to be a savings and credit cooperative. Subsequently, its executive board was chaired by the Vice President for Administrative Affairs of Assumption University for more than 10 years. The term of AUSCC executive board is only two years. Additionally, a few numbers of middle-level administrators of AU have also been elected to be executive board of the AUSCC. In spite of the aforementioned practice of the AUSCC executive board, AUSCC legally is a separate entity from Assumption University. AU administrators who are not executive board of AUSCC, and in turn AU, have no control over the AUSCC. However, it cannot be concluded that AUSCC executive board has complete freedom in managing AUSCC. AU could somewhat influence the operation of AUSCC through the AU administrators who are the members of the AUSCC executive board.

### **3.2 Organization chart of AUSCC**

The executive board of AUSCC consists of 15 members. In addition to chair, vice chair, secretary, and treasurer, the executive board is classified by role & duty into 3 sub-committees i.e. academic & public relations committee, credit analysis committee, and administrative committee. As its name indicates, the academic & public relations committee are in charge of all academic and public relations matters. Applications for emergency loan are analyzed and approved by the credit analysis committee. Additionally, applications for other types of loan will be preliminarily analyzed by the credit analysis committee then the decision for the final approval of each application will done in the monthly meeting of the executive board. Last but not least, the administrative committees oversee and supervise the operation of the managerial division, which is not part of the executive board but they are full-time employees of the AUSCC.

### **3.3 Role, duty and responsibility of AUSCC**

AUSCC is a micro financial institution that promotes thrift savings of members. AUSCC requires its members to make monthly payment for the shares each member committed to buy by deducting from the University's payroll. The AUSCC pays dividend to members annually based on its performance. In addition, AUSCC allows its member to have access to financial service i.e. different types of loans at a very competitive rate compared to typical commercial banks and other type of financial institutions. The only source of funds of AUSCC is the monthly payment for the shares from members. The main use of funds of AUSCC is emergency loan and ordinary loan to members. Therefore, the principal role of AUSCC is to help members, especially those who are normally not qualified for financial support from commercial banks and other types of financial institutions. Nevertheless, the AUSCC is responsible for all members. Hence, AUSCC executive board must be very prudent when granting loans to members.

## **4. RESEARCH METHODOLOGY**

### **4.1 Population and Sample**

This research paper intends to study AUSCC members' expectations towards the assurance or confidence in management of their savings and granting of loans. One hundred percent sampling method has been used from total 406 members in year 2016. Researcher distributed questionnaires to all members who are working in Au, researcher got permission from AUSCC Management to distribute the questionnaires to all members by putting the questionnaire in the mailbox of all members. Therefore, all members in academic year 2016 of 406 persons are samples of this study.

### **4.2 Data Collection Method**

In this research study, semi-structured and in-depth interview will be used to collect primary data. Other supporting data will be collected by workplace observation method in which research will only be observed and record participant's behavior, attitude or perception (Punch, 1998). Questionnaire will be used as the tool to collect data from all members. During fieldwork

research, researcher will use in-person drop off method for collecting data from the respondents by asking respondents to drop their answered questionnaire at the office of AUSCC at HuaMak.

### 4.3 Survey Structure

In order to gain accurate information, researcher provides questionnaire in both Thai and English. The questionnaire composes of three parts as follows:

**Part I:** In this part the researcher intends to measure the personal data of AUSCC members and related issues of their savings, repayment of loan, ranking the reasons of savings with AUSCC.

**Part II:** Researcher intend to measure AUSCC members' expectations and actual perception towards factors affecting the confidence or assurance for security of savings in AUSCC which cover management of AUSCC: Competency and experience; Operating, Accounting, and Financial System; Factors affecting the confidence for security and stability of savings.

The level of attitude was measured by using five-point Likert scale. Each level represents the following meaning;

**Expectation questions:**

- Level 1 Least important
- Level 2 Low important
- Level 3 Moderate important
- Level 4 High important
- Level 5 Most important

**Actual perception questions:**

- Level 1 Worst
- Level 2 Poor
- Level 3 Neutral
- Level 4 Good
- Level 5 Best

**Part III:** This part comprises of recommendations for cultivating and enhancing the confidence towards savings in AUSCC, which are recommendations to the following stakeholders: AUSCC related to the regulation, management, and others; management team of AUSCC related to remuneration, welfare, and other benefits.and; recommendation in preventing and detecting fraud and misconduct behaviors of AUSCC stakeholders.

### 4.4 Data Analysis

Descriptive statistics, for example, frequency, means and standard deviation, are used to explain demographic data of the respondent. Inferential statistics is also used in order to test the relationship between each variable and test the difference between member expectation and actual attitude toward their competency, experience of management team, and operating, accounting, financial systems of AUSCC and arrange the priority by using Priority Needs Index (PNI). Priority Needs Index can be calculating by using the following formula:

$$PNI = (I - D)/D$$

PNI is Priority Needs Index.

I is Average of expectation score.

D is Average of actual perception score.

**4.5 Need Assessment for Decision-Making:**

A needs assessment is a systematic process for determining and addressing needs, or "gaps" between current conditions and desired conditions or "wants". The discrepancy between the current condition and wanted condition must be measured to appropriately identify the need. The need can be a desire to improve current performance or to correct a deficiency.

A needs assessment is a part of planning processes, often used for improvement in individuals, education/training, organizations, or communities. It can refine and improve a product such as training or service a client receives. It can be an effective tool to clarify problems and identify appropriate interventions or solutions. By clearly identifying the problem, finite resources can be directed towards developing and implementing a feasible and applicable solution. Gathering appropriate and sufficient data informs the process of developing an effective product that will address the groups’ needs and wants.

The concept of ‘needs ’is defined as the difference, or gap, between what is and what should be (or what is reasonably possible).

**5. RESEARCH FINDING**

**5.1 Descriptive analysis for respondent information**

The analyzes demographic information of 140 respondents out of 406 population and sample, represent 34.48% response rate. It found that majority of the respondents are as follows:

- female, age 41-50, and working as staff of Assumption University with more than 15 years of service.
- bachelor degree in education at Baht 20,000-40,000 monthly salary.
- amount of savings with AUSCC equals 5%-10% from their monthly earnings, and the respondents have less than 10% of their monthly earnings to repay AUSCC loan.

Information of respondent related to incremental of remuneration that affect the amount of savings in AUSCC as the details shown in Table 2 – 3:

**Table 2**

Impact to Incremental of Savings in the AUSCC if member get a higher remuneration from AU

Incremental of remuneration and/or fringe benefits	Impact to Incremental Savings (Number)				Impact to Incremental Savings (Percent)			
	Yes	No	Not Sure	Total	Yes	No	Not Sure	Total
Incremental Salary	72	18	50	140	51.43	12.86	35.71	100.00
Incremental Pension at termination	35	31	74	140	25.00	22.14	52.86	100.00
Incremental Living Allowance	60	24	56	140	42.86	17.14	40.00	100.00
Incremental Non-Financial fringe benefits	32	41	67	140	22.86	29.29	47.86	100.00

**Table 3**

Number and percentage of current confidence/assurance level for the security and stability of savings in AUSCC:

Current confidence/assurance level	Frequency	Percentage
Less than 50 %	26	18.57
50 – 60%	46	32.86
61 – 80%	33	23.57
More than 80%	32	22.86
Total	139	100.00

Result from Table 2 – 3, shows that the respondents will increase their savings in AUSCC if the university increases their salaries and living allowances, but they are not so sure whether to increase savings or not if there is an increase in pension and in financial fringe benefits. The current confidence / assurance level for the security and stability of savings in AUSCC is 50% – 60%.

## 5.2 The confidence/assurance level for the security and stability of savings in AUSCC

For ranking, the most important is 1 and the least important is 6. The mean of ranking score nearest to 1 will be the most important ranking. The details of the ranking concerning reasons for savings in AUSCC and the institutions for savings and investing by AUSCC member are shown in table 4 – 5.

**Table 4**

Ranking concerning Reasons for Savings in AUSCC

Reasons for Savings in AUSCC	Mean	Rank
Higher interest on savings when compare with outside institutions.	3.12	1
Savings for contingency and emergency in the future	3.31	2
Security of principal reimbursement in the future	3.34	3
The right of taking out a loan from AUSCC with favorable benefits of lower interest rate and less restrictions	3.38	4
Convenience for savings and good services provided by AU	3.61	5
Confidence in honesty & transparent operation of AUSCC staffs	3.86	6

**Table 5**

Ranking concerning Institutions of AUSCC member's Savings/Investment

Institutions of members' Savings /Investment	Mean	Rank
Savings in Commercial Bank	1.10	1
Savings in Government Savings Bank / State-Owned Bank	1.50	2
Savings in AUSCC	1.62	3
Investing in Government Bond	2.58	4
Investing in Security in Stock Exchange of Thailand (SET)	3.96	5

Results from Table 4 shows that the top three rankings are the most important reasons for savings in AUSCC: 1) Higher interest on savings when compared to outside institutions, 2)

Savings for contingency and emergency in the future, and 3) Security of principal reimbursement in the future. Table 5 shows that the respondents put their savings in the following top three institutions: 1) Commercial Bank, 2) Government Savings Bank (GSB), and 3) AUSCC

### 5.3 Analysis of expectation and actual perception from members toward current competency, experience of management team and Operating, Accounting, Financial Systems of AUSCC by using PNI (Priority Needs Index)

Needs assessment will determine and address needs or "gaps" between actual of current conditions and expected conditions. The gap between the actual condition and expected condition must be measured to appropriately identify the needs desire to improve current performance or to correct a deficiency.

Analysis for Needs assessment for Competency and experience of AUSCC Management team, and Needs assessment for Operating, Accounting, and Financial Systems of AUSCC is shown in table 6 – 7

**Table 6**  
Needs Assessment for Competency and Experience of AUSCC Management Team

<b>Competency and experience of Management team</b>	Actual Mean score (D)	Expected Mean score (I)	PNI Modified $= (I-D)/D$	Ranking
Ability to communicate clearly in a meeting and in a report	3.11 (Moderate)	4.10	0.3183	1
Ability to investigate and audit cheating and fraud	3.23 (Moderate)	4.24	0.3127	2
Law, regulation, and criteria of contract knowledge	3.19 (Moderate)	4.12	0.2915	3
Strict, independent, and fair decisions made by the board members	3.20 (Moderate)	4.10	0.2813	4
Good governance and internal control	3.27 (Moderate)	4.18	0.2783	5
Moral and Ethics of the management board	3.42 (Moderate)	4.36	0.2749	6
Experience in Investment and Financial management	3.17 (Moderate)	4.04	0.2744	7
Ability to analyze Investment and Financial Statements	3.25 (Moderate)	4.12	0.2677	8
Frequency of the member meeting	2.96 (Moderate)	3.74	0.2635	9
Honesty, and transparency in financial management	3.42 (Moderate)	4.3	0.2573	10
Frequency of the board meeting	3.14 (Moderate)	3.86	0.2420	11
Accounting, finance and investment knowledge	3.31 (Moderate)	4.11	0.2417	12

From Table 6, it can be determined that the highest priority with a PNI of 0.3183 is for the ability to communicate clearly in a meeting and in presenting reports, keeping in view the principles, values and norms. The second ranking with a PNI of 0.3127 is the ability of the management team to investigate and audit cheating and fraudulent activities. The third ranking with a PNI of 0.2915 is to have a thorough knowledge of laws, regulations and criteria of contract knowledge. This helps to actively participate in setting up policies and taking decisions. The fourth ranking with a PNI of 0.2813 is for taking strict, independent and fair decisions by the board members, keeping in view the ethical values of honesty, openness and social responsibility. The fifth ranking with a PNI of 0.2783 is for good governance and internal control keeping in view the interests of the shareholders and the members.

**Table 7**  
Needs Assessment for Operating, Accounting and Financial Systems of AUSCC

<b>Operating, Accounting, and Financial Systems</b>	Actual Mean score (D)	Expected Mean score (I)	PNI Modified $= (I-D)/D$	Ranking
Accounting & financial information are fully & accurately disclosed in a timely manner	2.99 (Moderate)	4.22	0.4114	1
Preparation and presentation of financial statements are complete & accurate	3.20 (Moderate)	4.23	0.3219	2
Financial Controlling System is accurate and transparent	3.25 (Moderate)	4.28	0.3169	3
Internal control and internal audit of financial system are implemented regularly	3.23 (Moderate)	4.25	0.3158	4
Fully disclosure of investments and loans	3.17 (Moderate)	4.11	0.2965	5
Declaration and payment of dividend are clear, accurate & fair to all parties	3.23 (Moderate)	4.18	0.2941	6
Staff duty and responsibility are clearly segregated and decentralized	3.23 (Moderate)	4.16	0.2879	7
Comprehensive & clear regulations on savings, membership application, resignation	3.22 (Moderate)	4.14	0.2857	8
External financial audit by the Cooperative auditor is done annually	3.35 (Moderate)	4.29	0.2806	9
Regulations for making loan to members are strictly and clearly defined	3.38 (Moderate)	4.16	0.2308	10

From Table 7, we can ascertain that the highest priority with a PNI of 0.4114 is for disclosing accounting and financial information fully and accurately in a timely manner. All important information such as interest rates, terms of credit etc. should be disclosed properly. The

second ranking with a PNI of 0.3219 is for preparing and presenting financial statements in a complete and accurate manner. The third ranking with a PNI of 0.3169 is that financial controlling system must be accurate and transparent. There should be accountability and laws should be implemented in an efficient and effective way. The fourth ranking with PNI of 0.3158 is for internal control and audit of financial systems which are to be implemented regularly in order to avoid corruption and fraudulent activities and the fifth ranking with a PNI of 0.2965 is for full disclosure of investments and loans.

#### 5.4 Analysis of factors affecting the confidence/assurance concerning security and stability of savings in AUSCC

**Table 8**

Factors affecting the confidence/assurance concerning security and stability of Savings

	Mean	SD	Interpret
<b>Remuneration and fringe benefits provided by AU that affect the confidence/assurance of Member savings</b>			
1. Incremental rate of salary, bonus and fringe benefits are clearly defined and regularly adjusted	3.72	0.77	High
2. Contingency/ uncertainty resulting from the penalty and deferral of compensation	3.46	0.91	Moderate
3. Contingency/ uncertainty of long-term benefits	3.43	0.88	Moderate
4. Contingency/ uncertainty of welfare to kids and family in the future	3.40	0.82	Moderate
5. Contingency/ uncertainty of the retirement benefits	3.37	0.93	Moderate
<b>AU Management</b>			
6. Confidence towards the sustainability of AU	3.78	0.90	High
7. Confidence in Au Financial policy	3.70	0.88	High
8. Confidence towards the stability of Au internal organization management	3.63	0.94	High
<b>External Factors related to Economics, Legal, and Social</b>			
9. Savings from the Social Security / Medicare welfare from the government	3.49	0.86	Moderate
10. AU Incremental remuneration rate is not aligned with inflation rate	3.47	0.85	Moderate
11. Social situation/trend is dominated by materialism and extravagance	3.46	0.83	Moderate
12. Welfare and government grant for the senior citizen upon retirement	3.39	0.90	Moderate
<b>Overall point of view for the confidence in AUSCC</b>			
13. Suitability & fairness of regulations & permissible amount of savings, loan, principal repayment, and interest	3.56	0.82	High
14. Trustworthiness in management of AUSCC	3.54	0.85	High
15. Operational accountability of AUSCC staff	3.47	0.90	Moderate
16. Objective & fair financial services for members in terms of investment, dividend, & interest charge	3.45	0.83	Moderate
17. Stability and Security of AUSCC assets	3.44	0.87	Moderate

	Mean	SD	Interpret
18. Problem recognition & solving for members are appropriate, timely, & direct to the point	3.38	0.86	Moderate
19. Risk of fraud, misconduct behavior of the current staff	3.33	1.00	Moderate

Results from Table 8, Internal factors: the factors which have the highest effect on the confidence/assurance for security and stability of savings: 1) Incremental rate of salary, bonus and fringe benefits are clearly defined and regularly adjusted, 2) Confidence towards the sustainability of AU, 3) Confidence in AU Financial policy, and 4) Confidence towards the stability of AU internal organization management.

External factors: External Factors related to Economics, Legal, and Social. They all have the same level of effect (moderate effect) on the confidence/assurance for security and stability of savings.

To create a good overall point of view for the confidence in AUSCC, the unit should possess two important factors: 1) Suitability & fairness of regulations & permissible amount of savings, loan, principal repayment, and interest, and 2) Trustworthiness in management of AUSCC.

### 5.5 Statistical Analysis

Analysis of Variance is employed to analyze whether the AUSCC members' personal qualifications: gender, years of service in AU, years of membership in AUSCC, working position/status, monthly income are related to the 4 factors that affect their confidence/assurance concerning security and stability of Savings in AUSCC.

Based on the results of ANOVA, the difference in gender of AUSCC members, difference in number of working years in AU, difference in number of years of membership in AUSCC, and difference in position in AU have not resulted in the different perception towards 4 factors, i.e. Competency of Management, AU Internal factor, external factor, and confidence factor, that affect their assurance concerning security and stability of Savings in AUSCC ( $p > 0.05$ ).

Furthermore, based on the results of ANOVA shown in Table 9, difference in level of monthly salary has not resulted in the different perception towards 3 factors, i.e. AU Internal factor, external factor, and confidence factor, that affect their confidence/assurance concerning security and stability of Savings in AUSCC ( $p > 0.05$ ). However, the difference in level of monthly salary has resulted in different perception towards the Competency of Management ( $p$  value is 0.004 which is lower than 0.05), which affect the assurance concerning security and stability of Savings in AUSCC.

**Table 9**

Analysis of Variance in confidence/assurance concerning security and stability of Savings in AUSCC by different in level of monthly salary

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Competency of Management	Between Groups	6.247	3	2.082	4.712	.004
	Within Groups	60.095	136	.442		
	Total	66.342	139			
AU Internal Factors	Between Groups	2.780	3	.927	2.031	.113
	Within Groups	62.069	136	.456		
	Total	64.849	139			
External Factors	Between Groups	1.836	3	.612	1.036	.379
	Within Groups	80.362	136	.591		
	Total	82.198	139			
Confidence	Between Groups	2.244	3	.748	1.519	.212
	Within Groups	66.939	136	.492		
	Total	69.183	139			

## 6. CONCLUSION AND RECOMMENDATION

### 6.1 Conclusion

Based on the findings and discussions, it has been found that the current confidence/assurance level for the security and stability of savings in AUSCC is only about 50 - 60%. The highest reason for savings in AUSCC is due to the higher rate of interest when compared to other institutions; followed by savings for contingency and emergency in the future and thirdly, due to security of principal reimbursement in the future.

The study also found that the highest priority needs assessment for competency and experience of AUSCC Management team is the ability to communicate clearly and presenting accurate reports, followed by the ability to investigate fraudulent activities and thirdly to have a thorough knowledge of the laws and regulations and contract knowledge. The highest priority needs assessment for Operating, Accounting and Financial Systems of AUSCC is accurate and timely disclosure of financial information, complete and accurate financial reports and a transparent and accountable financial controlling system. It was found that in order to improve the overall confidence amongst members, AUSCC must implement suitable and fair regulations and permissible amount of savings, loan, principal repayment and interest and improve the trustworthiness in the management of AUSCC.

To enhance the confidence in AUSCC, the organization should possess and maintain:  
1) Suitability, fairness of regulations, permissible amount of savings, loan, principal repayment, and interest, and 2) Trustworthiness in management of AUSCC.

Analysis of perception from AUSCC members for their confidence concerning security and stability of savings in AUSCC depend on the competency of management of both AUSCC and also AU, focusing on the good governance, good internal control and auditing. In addition, the feedback for modification of rules and regulations for grating loan to be less restrictive and more flexible in order to support and help the members who have low income with high burden of debt or obligation and the emergency case of financial problems. The stability and sustainability of AU also affect AUSCC members for their confidence for security and stability of savings due to interrelate with their remuneration, pension and other fringe benefits

## **6.2 Recommendations**

### **6.2.1 Recommendation for Future Research**

The analysis of needs assessment for the factors affecting the confidence/assurance of security and stability in savings/ or investment of employees in savings and cooperative of both private and government universities. The research findings will be compared and analyzed for making conclusions in the macro point of view. Furthermore, comparative study of savings and investment in cooperatives with financial institutions in order to compare and contrast the differences between the risk and benefits which will help ineffective and intelligent decision making of savings and investments.

### **6.2.2 Recommendations from the researcher to AUSCC management team:**

The management needs to consider the following factors in order to prevent corruption and fraudulence in the working of AUSCC.

- The management should take utmost care while recruiting staff and human resources like manager, personals in accounting and finance divisions, etc. to ensure good reputation.
- A proper review and screening of the applicant's integrity and honesty like qualification, previous experience, letter of recommendation from previous company before appointment must be done.
- To ensure that employees are given a reasonably good remuneration so as to avoid the temptation of fraud and corruption.

### **6.2.3 Internal Operating and Controlling system**

The management should set good governance for efficient internal operation and control. There should be proper practices and guidelines to identify problems and improve decision making taking into account the interests of all parties concerned including the voice of the stakeholders. Information should be distributed fairly and all parties should commit themselves to work towards a common goal. The board of directors should monitor the interests of managers along with the interest of the shareholders. Good governance leads to separation of roles and responsibilities, effective communication channels and a sense of understanding between shareholders, board of directors and members.

- The members in the top management are reluctant to be elected to top positions which lead to insufficient number of members to handle vital positions.
- To motivate the qualified people to be members and to encourage them to be elected to the top management team.
- To seek the expertise of experienced nonmembers from within the organization in giving valuable advice and guidelines to the top management team.

- To provide efficient training to personals working in accounts, finance and related online financial transactions in order to improve their working efficiency.
- To implement effective financial controlling systems in order to prevent corruption and fraudulent activities and to improve accountability, legitimacy and effectiveness in the overall system.
- To increase the number of members and make them more efficient in order to meet the required qualifications required for crucial positions such as Manager.

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