Members' perspectives of good governance practice of Thailand's credit union cooperatives

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Abstract

Purpose – This study explores the awareness (AWN) levels of good governance amongst Thai credit union cooperatives' (CUCs) members and the factors hindering good governance practice in Thai CUCs.

Design/methodology/approach – This study used a survey questionnaire from 629 members of 36 selected CUCs in Thailand. This study analysed the determinants of governance AWN levels of Thai CUCs' members using the ordered probit model. The study also employs OLS estimation to investigate the factors hindering good governance practices.

Findings – The study shows that members of different CUC types and sizes have different levels of governance AWN. Members' characteristics, experiences, and perceptions significantly influence CUC members' AWN of governance issues. The findings also suggest that a lack of morality, transparency, participation, responsibility and accountability are key obstacles that hinder good governance practices of Thai CUCs.

Originality/value – This is the first study that attempts to assess the level of AWN amongst Thai CUCs' members in different CUC sizes and types. This is also the first research that identifies the factors that hinder good governance practice in Thai CUCs based on members' evaluations. The study's findings provide important reference and implications for Thai policy makers and CUCs' board of managers to enhance members' AWN and CUCs' governance performance, and thus increase income and living standard of CUCs' members in the long term.

Keywords Awareness, Credit union cooperatives, Governance, Thailand

Paper type Research paper

1. Introduction

Credit union cooperatives (CUCs) are self-help cooperative financial organisations that aim to improve the economic and social goals of their members and local communities (Mckillop and Wilson, 2015). In Thailand, CUCs are member-owned financial institutes where members make a deposit of a common bond and have equal voting rights. Thai CUCs have been operating since 1965 to improve the quality of life of those economically and socially

disadvantage and to provide their members with opportunities for self-improvement through education and practices (Credit Union League of Thailand – CULT, 2017).

Thailand has applied good governance practices in its CUCs (Kwanthong *et al.*, 2014). The members are the key group of stakeholders in a CUC, and it is important for them to be aware and understand good governance practices (Dayanandan, 2013). Awareness (AWN) of good CUC governance practices refers to understanding the roles and function of each position and members having a good understanding of their rights. If members have a good understanding of governance mechanism and principles, Thai CUCs will be more likely to succeed. In contrast, if members are apathetic or have no interest in their CUC, or are only concerned about their individual benefit, then the CUC is unlikely to succeed.

Since 2013, however, there has been an increasing number of collapsed Thai CUCs, such as Klongchan CUC, the biggest Thai CUC, due to corruption or poor investment decisions. The collapse of these institutions causes serious problems for CUC members and wider communities. For example, Thai CUCs' total assets from 2013 to 2017 were on a downwards trend, reduced by 6,944.96 million baht from 2013. Furthermore, the growth rate of Thai CUC members was -1.17% in 2016 and -1.00% in 2017, meaning that the number of new members was fewer than the number of resigning members, even though the number of CUCs increased each year (CULT, 2017). The scholars, CUC executives and related agencies have suggested that the failure of Thai CUCs is likely due to members' lack of CUC knowledge (Verhees *et al.*, 2015) and governance problems (CULT, 2017). Therefore, good governance is vital as one key instrument for the development and success of Thai CUCs (Kumkit *et al.*, 2022).

Although members' AWN and effective governance are essential for Thai CUCs' long-term success, to the best of our knowledge, none of the previous studies investigated CUC members' AWN levels and their assessment of good governance practice in Thailand. This study, therefore, collects survey questionnaires from 629 members of 36 selected CUCs across the country. Using the ordered probit model and ordinary least squares (OLS) estimation, this study reveals the determinants of governance AWN levels of Thai CUC members as well as the factors hindering good governance practices. Our study points out different levels of members' governance AWN amongst different CUC types and sizes. We find that members' characteristics, experiences and perceptions significantly affect CUC members' AWN of governance issues. The findings also reveal that a lack of morality, transparency, participation, responsibility and accountability are critical components that weaken the good governance practices of Thai CUCs.

Our study have several academic and practical contributions as follows: Firstly, this is the first study that attempts to assess the level of awareness amongst Thai CUCs' members in different CUC sizes and types. Secondly, this is also the first research that identifies the factors that hinder good governance practice in Thai CUCs based on members' evaluations. Further, the study's finding has important implications for Thai policymakers, such as Cooperative Promotion Department (CPD), to have appropriate policies and strategies to better the governance performance of Thai CUCs. The study also provides a reference for CUCs' board of directors to increase CUCs' members' AWN and involvement in CUCs' activities. With a higher level of member AWN and good governance in CUCs, the income and living standards of Thai CUCs' members will be enhanced in the long term.

The paper is organised as follows. Section 2 summarises the literature on governance AWN and determinants of good governance practices. Sections 3 and 4 present the data, conceptual frameworks and methodology adopted for the study. Section 5 reports the empirical results, followed by the conclusion and implications of the study in section 6.

2. Literature review

2.1 Theoretical background

In organisations, shareholders and stakeholders have different roles and responsibilities. The conflicts of interest may occur amongst them and lead to problems. Governance is one of the main mechanisms to control and balance problems that may occur within the CUC organisation. There are several theories help to explain the shareholder and stakeholder conflicts of CUC governance as below:

2.1.1 Agency theory. From a business perspective, the governance principle differs between owners and managers. Owners desire to keep the wealth of assets, whereas managers prefer to invest the assets to increase profit and enhance service qualities and/or customer satisfaction (Obaji *et al.*, 2015). This may lead to increased conflict, such as issues surrounding the budget or resource allocation between owners and managers (Spear, 2004). To minimise these issues, agency theory (Jensen and Meckling, 1976) is used as a core instrument to understand the nature of the issues and identify solutions.

In most organisations, the main interest of shareholders is to maximise profits. However, in cooperatives and CUCs this is not necessarily the case. Firstly, CUCs are established to serve their members' interests; therefore, profitability is not the priority (Branch and Baker, 1998). Secondly, the share price of CUCs does not fluctuate as it would in the stock market (Cornforth, 2004). For the CUCs, the CUC board might have varied goals if members lack governance knowledge and practice to monitor their CUC. Thus, the agency cost increases in terms of management and operations because there are goal conflicts between members and the board. Agency cost also arises from the inability of members to set up adequate commitments and/or contracts for the manager. Managers cannot maximise the profit or performance of a CUC by acting in a self-interest way. For example, a manager may aim to increase the size of the CUC, rather than return dividends to members because the former rewards the manager (Reddy, 2010). Subsequently, good governance practices will minimise agency costs. Members of the board will use this mechanism to oversee and control the manager to achieve outcomes that are in the members' best interests.

2.1.2 Stakeholder theory. Stakeholder theory refers to the participation of stakeholders because they contribute to the decision making processes of cooperatives and CUCs. This theory advocates participatory governance, where stakeholders take part in institutional decision making. The stakeholder theory aims to consider the benefits for all CUC stakeholders (Abdullah and Valentine, 2009). This theory concerns not only the CUCs' business but also other factors such as the welfare of members and their families. In this theory, many social projects, such as reforestation projects, cremation projects and supporting educational issues, are seen to be important activities of CUCs (Nembhard, 2004). However, CUCs cannot guarantee that their activities will bring the desired benefit to their stakeholders. There is a possibility of error in judgement in spending a CUC's budgeted money on earmarked activities.

In summary, according to the agency theory and stakeholder theory, in terms of CUCs, the relationships amongst members, board of directors, management teams and communities are explained as internal and external relationships. However, these relationships are complicated due to conflicts of interest. Besides, corporate governance norms also depend upon the national business systems. In particular, emerging economies, including Thailand, have relatively poor corporate governance norms (Zaman *et al.*, 2022). Developed by Hill and Jones (1992), the stakeholder–agency theory stated that in the long-run, the market would process to phase out the inefficient institutional forms which have poor governance. Therefore, to keep an organisation to survive, governance mechanism and governance principles are employed as key tools to deal with the conflict of interest amongst stakeholders and enhance governance performance. Governance mechanism explains the process and

structure for cooperation of all stakeholders in CUCs to run the business. Meanwhile, governance principles are implemented in CUCs in order to control and monitor their operations. As governance principles depend on the conditions and prevailing environments of each country, this study uses the general governance principles applicable worldwide as the main principles directing CUCs' achievements. The key governance principles are: rule of law, morality, transparency, participation, responsibility and accountability and cost-effectiveness and economy (Trakulmututa and Chaijareonwattana, 2013; Babalola, 2014; Kyazze *et al.*, 2017).

2.2 Members' governance awareness and its determinants

Several studies have attempted to investigate the level of governance AWN amongst the members of many organisations and the determinants of AWN levels. For instance, Dayanandan (2013) investigated the level of good governance AWN of members from the eight primary cooperatives in the Halaba district of Ethiopia. The author used cross-sectional data to assess 125 responses of medium-sized cooperatives. The independent variables included the democratic and socio-economic characteristics of members and the principles of governance, accountability, transparency, the rule of law, prediction and participation as the dependent variables. The author showed that members lacked governance AWN and identified that participation and responsiveness have negative impacts on good governance of cooperatives.

Wee and Abas (2015) explored the level of AWN of good governance amongst the staff of the National Solid Waste Department in Malaysia. The authors employed random stratified sampling to select the study's sample. The authors used survey questionnaires with Likert scales to measure staff members' level of governance AWN. Their findings showed that staff with higher levels of good governance AWN had higher educational backgrounds and job positions.

Recently, Lipunga *et al.* (2021) investigated the factors that affect the governance AWN of actors in Malawi public hospitals. Lipunga *et al.* found that the education background is a decisive factor for the low governance AWN of actors in the public hospitals in Malawi.

2.3 Good governance practice barriers

Thai CUCs' financial result and social performance are significantly impacted by governance factors (Kumkit *et al.*, 2022). Prior studies have attempted to identify determinants of good governance practice. For example, Dayanandan (2013) explored the factors that hinder good governance of eight cooperatives in the Halaba district of Ethiopia using survey questionnaires. Dayanandan's study showed that cooperatives lacked member participation (14.4%), accountability (12.8%), transparency (10.40%) and were corrupted (9.6%).

Trakulmututa and Chaijareonwattana (2013) studied the factors that affect the success of good governance in HRM in the southern part of Thailand. The authors showed the level of AWN, characteristics and acceptance of implementing agencies affected good governance in HRM of the local governments in the south of Thailand. Likewise, Afolabi (2015) found that the rules of laws and authority of the regulatory agencies have a negative effect on corporate governance practices of listed companies in Ghana, Nigeria and South Africa. Wahyuni (2017) explored the factors that affect good governance of Zakat Institutions in Padang, Indonesia and found that the size and age of Zakat institutions were positively and significantly associated with the adoption of good governance principles.

Som (2020) identified the determinants of good governance for public management in Cambodia. Som found that infrastructure planning, organisational compliance and commitment, as well as stakeholder participation significantly affect good governance of

Cambodian public management. The author also revealed the moderating effects of stakeholders' characteristics (such as gender, job level, working experience and educational level) on the impact of infrastructure planning, organisational compliance and commitment, as well as stakeholder participation on good governance in the Cambodian public sector.

3. Research data

3.1 Data

This study aims to assess the Thai CUC members' level of AWN and their perceptions of good governance barrier. The data are collected through a survey questionnaire that was developed and administered to 629 members of Thai CUCs. The questionnaire focussed on the members' AWN and opinions of the governance of CUCs. The questionnaire used a five-point Likert scale (ranged from "strongly disagree" to "strongly agree") to measure opinions, perceptions and behaviours (Trakulmututa and Chaijareonwattana, 2013). Cronbach's alpha test was used to measure the reliability of the questions and to test the internal consistency of each component in each section of the questionnaire.

3.2 Sampling method

In Thailand, CUCs are categorised based on the location and type of CUCs, namely, rural, urban, educational and factory areas, and size, namely, very large, large, medium and small (CULT, 2017). This study used these two criteria to select the sample groups, CUCs and their members, respectively. To ensure a sufficient number of sample groups from each category, the purposive sampling method was adopted since this is the simplest technique to draw samples in such a way that limits sampling bias and is cost-effective and time-saving with a large population (Dayanandan, 2013; Babalola, 2014). Representatives of each location type were first selected. Next, a sample group consisting of three CUCs based on the selected sizes was chosen from each representative location. Thus, there were 36 sampled CUCs, all of which have been in operation and have produced financial statements since 2014. Finally, convenience sampling was used to select the 629 members from the sampled CUCs.

4. Empirical methods

4.1 Determinants of good governance awareness levels amongst Thai CUCs' members

Based on the association between the members and organisations' characteristics and members' good governance AWN in the prior literature (Dayanandan, 2013; Babalola, 2014; Wee and Abas, 2015; Birchall, 2017), this study develops the conceptual framework to investigate the factors that influence Thai CUC members' level of AWN of good governance (see Figure 1).

Equation (1) examines the factors influencing CUC members' AWN of good governance in Thailand:

$$AWN_{ij} = \beta_0 + \beta_1 GD_i + \beta_2 AGE_i + \beta_3 MRS_i + \beta_4 EDU_i + \beta_5 OCCU_i + \beta_6 INC_i$$
$$+ \beta_7 LENGTHMEM_i + \beta_8 KNOW_i + \beta_9 ATTI_i + \beta_{10} BELIEVE_i$$
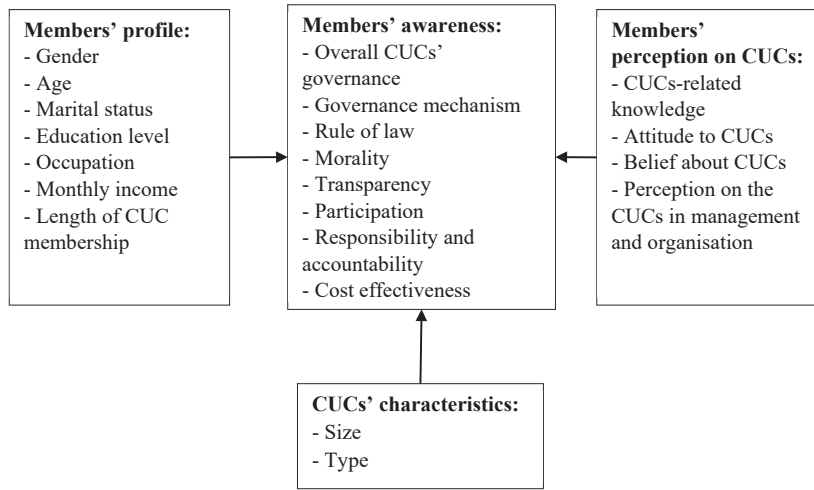$$+ \beta_{11} BPERCEP_i + \beta_{12} SIZECUC_i + \beta_{13} TYPECUC_i + \varepsilon_i$$

(1)

where i = 1, 2, . . ., 629 and j = the governance mechanism and principles, ε is the disturbance term. The indicators to measure the level of governance AWN include the level of the governance mechanism, the rule of law, morality, transparency, participation, responsibility and accountability and cost-effectiveness of Thai CUCs. Appendix Table A1 presents the measurement of the variables used in Equation (1). Following Greene and Hensher (2009), this study uses the ordered probit model to analyse the determinants of governance AWN levels of Thai CUC members in Equation (1).

4.2 Identifying the factors that hinder good governance practice of Thai CUCs
Following the previous studies that investigate the relationship between good governance practice principles and CUCs' levels of good governance practice (Dayanandan, 2013; Abas and Wee, 2015; Marcoux *et al.*, 2018), the conceptual framework in Appendix Figure A1 shows the factors that hinder good governance practice of Thai CUCs. Equation (2) investigates the factors that hinder good governance practices in Thai CUCs:

$$CG_i = \gamma_0 + \gamma_1 GM_i + \gamma_2 GRL_i + \gamma_3 GMR_i + \gamma_4 GT_i + \gamma_5 GP_i + \gamma_6 GRA_i$$
$$+ \gamma_7 GCE_i + \gamma_8 SIZE_i + \gamma_9 TYPE_i + \gamma_{10} LENGTHMEM_i$$
$$+ \gamma_{11} KNOW_i + \omega_i \tag{2}$$

where i is members: i = 1, 2, . . ., 629. ω_i is the disturbance term. The dependent variable (CG) measures how successful CUCs are in implementing good governance practices. The respondents were asked to assess the effectiveness of governance practice of their own CUCs, on a scale from 1 to 10. A score of 1 (10) means the least (most) effective governance practice (Hill *et al.*, 2007). The regressors are members' evaluations of the CUC's governance mechanisms and principles (GM, GRL, GMR, GT, GP, GRA and GCE). The respondents were asked to rate these on a five-point Likert scale, namely, "Strongly agree", "Agree", "Neutral", "Disagree" and "Strongly disagree". SIZE, TYPE, LENGTHMEM, KNOW are control variables. Appendix Table A2 presents the measurement of the variables used in Equation (2). This study follows Afolabi (2015) to employ the OLS estimation for Equation (2) to investigate the factors hindering good governance practices.

5. Results

5.1 Descriptive statistics of surveyed respondents

The survey result shows the majority of CUCs members are female (59.8%). More than 50% of the respondents are between 36 and 55 years old and married. Most of the respondents do not have a bachelor degree (61.5%). Regarding occupation, the highest proportion of respondents are self-employed, farmers and labourers (31.6%). The majority of the respondents earn a monthly income lower than 60,000 Thai baht (see Appendix Table A3).

Our survey also reports that the members of the rural CUCs exhibited the highest level of the CUC governance AWN for all types of governance, followed by the CUCs' members from factory workplaces and educational areas, respectively. In contrast, the members of the urban CUCs have the lowest score of the CUC governance AWN level. In terms of governance AWN about governance mechanisms and principles, members of all CUC types exhibited the highest level of governance AWN about morality. However, members of all CUC types have less governance AWN about the rule of law, as compared to other types of governance (see Appendix Table A4).

Regarding the level of CUC governance AWN of the surveyed members by sizes, the results show that members of very large CUCs have the highest level of CUC governance AWN on most types of governance (exception, transparency and participation), followed by medium and large sizes, respectively. When focussing on particular types of governance, the members of all sizes of CUCs have a higher level of governance AWN about morality than other types of CUC governance (such as governance of mechanism, the rule of law and transparency). In contrast, the members of all sizes of CUCs have the lowest governance AWN score on the rule of law (see Appendix Table A4).

5.2 Empirical results

5.2.1 Determinants of Thai CUC members' levels of awareness of good governance. Tables 1–3 present the ordered probit regression results of the factors that impact Thai CUC members' AWN of good governance. Table 1 discusses CUCs' governance (including mechanisms and principles), followed by Table 2 (CUCs' mechanism) and Table 3 (CUCs' principles).

5.2.1.1 Awareness levels of CUCs' governance. Table 1 shows that education, occupation and income variables have a significant impact on members' AWN of CUCs' governance at the 0.05 level. The marginal effect of the education variable is −0.137, indicating that if the members do not have a bachelor's degree, their AWN of CUC's governance will reduce by 13.7%, holding all other variables at their means. This finding corresponds with Nkechi and Charles's (2015) results. As Nkechi and Charles note, the level of education will impact members' attitudes and knowledge. Members who have lower levels of education (do not have bachelor's degree) have lower levels of CUC governance AWN than members who hold a bachelor's degree or higher.

The marginal effects of the occupation variable alter amongst different occupation categories. CUC staff and CUC stakeholders who fall under "other occupation" have better AWN of CUC governance than others. This is because CUC staff and CUC stakeholders are more familiar with, and have greater knowledge about, CUC objectives and principles than others.

In terms of experience and perception variables, Table 1 suggests that the CUC knowledge, attitude, management, member commitment, competitive environment, public interest and involvement and causal connection variables positively and significantly impact members' AWN of CUC governance. These findings correspond with Hakelius and Hansson (2016), who state that CUC knowledge, attitude and good perceptions influence members' loyalty to and trust in CUCs. Therefore, if CUCs members have good experiences and good perceptions of individual CUC, they will have high levels of CUC governance AWN.

Regressors		Marginal effects
Gender		0.037 (0.050)
Age	36–55	0.003 (0.076)
	>55	−0.033 (0.091)
Married		0.054 (0.053)
Edu.		−0.137** (0.062)
Occu.	Others (baseline)	
	Government Officer	−0.258 (0.126)
	Private Company	−0.198** (0.092)
	Self-Employed	−0.236** (0.095)
	Unemployed	−0.227** (0.114)
Income	>90,000 (baseline)	
	Under 30,000	−0.243** (0.101)
	30,001–60,000	−0.180** (0.101)
	60,001–90,000	−0.126 (0.111)
Experience	Membership	0.032 (0.029)
	Knowledge	1.210*** (0.244)
	Attitude	0.342* (0.179)
	Belief	−0.172 (0.179)
Perception	Mrk_bs	0.294 (0.214)
	Mgt	0.488* (0.252)
	Cus_Ser	0.378 (0.257)
	Mem_Commit	0.709*** (0.271)
	Envirm	0.545** (0.262)
	Public_interest	0.795*** (0.188)
	Connect	0.460*** (0.121)
Sizecuc	Medium (baseline)	
	Very Large	−0.120* (0.065)
	Large	−0.102* (0.060)
Typecuc	Factory (baseline)	
	Rural	0.012 (0.079)
	Urban	−0.132* (0.078)
	Education	−0.041 (0.074)
Wald χ^2		231.09***

Table 1.
Factors influencing
CUC members' overall
awareness of CUC
governance

Note(s): 1. *, **, *** indicate statistically significant levels at 0.1, 0.05 and 0.01, respectively
2. Numbers in parentheses are clustered standard errors

Table 1 also shows that CUCs' characteristic variables significantly affect members' AWN of CUC governance. That is, large and very-large CUCs, and urban-type variables are negative and significant at the 0.1 significance level. These findings support Grashuis and Su (2019) that the members of very large CUCs usually have less trust and governance AWN. There are also many free riders in their CUCs. According to Nilsson and Svendsen (2011), in a large membership cooperative, members are inclined not to involve in cooperative operation and exhibit free-rider behaviour. Likewise, members of CUCs in urban areas usually only consider the benefits and neglect CUC management duties since they have high levels of stress due to competitive living conditions and do not participate in CUC activities.

5.2.1.2 Awareness levels of governance mechanism. Table 2 presents the determinants of governance mechanism's AWN. In Table 2, the male gender variable is positive and significant at the 0.1 significance level. This finding corresponds with Ghaeli's (2019) statement that men usually have logical thinking and work with others in their organisations. This result is also in accordance with the context that Thai female are not equal to male as female have less access to power and influence (Le Mare et al., 2015).

Regressors		Marginal effects
Gender		0.082* (0.043)
Age	36–55	0.110* (0.062)
	>55	0.187** (0.075)
Married		0.027 (0.046)
Edu.		−0.250*** (0.055)
Occu.	Others (baseline)	
	Government Officer	−0.147 (0.116)
	Private Company	−0.086 (0.084)
	Self-Employed	−0.107 (0.086)
	Unemployed	−0.123 (0.099)
Income	>90,000 (baseline)	
	Under 30,000	0.002 (0.084)
	30,001–60,000	−0.011 (0.083)
	60,001–90,000	−0.041 (0.091)
Experience	Mrk_bs	−0.025 (0.025)
	Mgt	0.483** (0.202)
	Cus_Ser	0.046 (0.146)
	Mem_Commit	−0.020 (0.157)
Perception	Envirm	0.144 (0.179)
	Public_interest	0.406* (0.229)
	Connect	−0.247 (0.224)
	Mrk_bs	0.611** (0.252)
	Mgt	0.420* (0.246)
	Cus_Ser	0.825*** (0.190)
	Mem_Commit	0.441*** (0.124)
Sizecuc	Medium (baseline)	
	Very Large	0.010 (0.053)
	Large	−0.013 (0.052)
Typecuc	Factory (baseline)	
	Rural	0.047 (0.070)
	Urban	0.005 (0.068)
	Education	−0.090 (0.064)
Wald-χ^2		238.54***

Note(s): 1. *, **, *** indicate statistically significant levels at 0.1, 0.05 and 0.01, respectively
2. Numbers in parentheses are clustered standard errors

Table 2.
Factors influencing
CUC members'
awareness of
governance
mechanism

The age variable is positive and significant at the 0.1 and 0.05 significance levels for 36–55 and more than 55 years old members, respectively. According to Barraud-Didier *et al.* (2012), older members tend to have a better attitude and previous experience of working in organisations or businesses than younger members.

The low education variable is negative and significant at the 0.01 significance level. This result supports Nilsson and Svendsen's (2011) conclusion that if people have high levels of education, they tend to be more interested in organisational management and operations. They also have a better understanding of the structure and management system of organisations than people who have lower levels of education.

In terms of CUC members' experience, only members having CUC knowledge are positive and significant at the 0.05 significance level. This finding supports Bhuyan's (2007) result that if members have CUC knowledge, these members will understand CUC objectives and know how to run business organisations based on the structure and function systems of CUCs.

Table 2 indicates that variables related to perceptions (management, competitive environment, member commitment, public interest and involvement and causal connection) positively and significantly affect members' AWN of governance mechanisms.

Table 3.
Factors influencing CUC members' awareness of governance principles

Regressors		Rule of law	Morality	Transparency	Participation	Responsibility and accountability	Cost-effectiveness
					Marginal effects		
Gender		0.057**(0.023)	0.005(0.045)	0.053(0.042)	0.027(0.045)	0.052(0.041)	0.047(0.049)
Age	36–55	0.007(0.036)	0.024(0.068)	-0.102(0.071)	0.034(0.064)	0.116**(0.058)	-0.036(0.075)
	>55	0.025(0.044)	-0.003(0.085)	-0.157*(0.085)	0.031(0.078)	0.162*(0.072)	-0.002(0.089)
Married		0.026(0.024)	0.089*(0.051)	0.011(0.047)	-0.001(0.048)	-0.040(0.043)	0.004(0.055)
Edu.		-0.065**(0.027)	-0.090(0.057)	0.000(0.054)	-0.065(0.050)	-0.100*(0.051)	-0.168***(0.058)
Occu.	Others (baseline)						
	Government Officer	0.003(0.056)	-0.290***(0.125)	-0.426***(0.119)	-0.247**(0.125)	-0.271**(0.115)	-0.347***(0.128)
	Private Company	-0.034(0.039)	-0.151*(0.090)	-0.278***(0.076)	-0.158***(0.078)	-0.125(0.078)	-0.176**(0.085)
	Self-Employed	-0.030(0.038)	-0.157*(0.092)	-0.260***(0.074)	-0.185*(0.079)	-0.133*(0.076)	-0.116(0.086)
	Unemployed	-0.044(0.049)	-0.073(0.110)	-0.256***(0.097)	-0.185*(0.094)	-0.183*(0.090)	-0.197*(0.108)
Income	>90,000 (baseline)						
	Under 30,000	-0.053(0.040)	-0.043(0.094)	-0.143*(0.072)	-0.093(0.080)	-0.012(0.072)	-0.108(0.089)
	30,001–60,000	-0.048(0.038)	-0.029(0.094)	-0.109(0.068)	-0.078(0.080)	0.016(0.069)	-0.049(0.087)
	60,001–90,000	-0.039(0.046)	-0.080(0.102)	-0.066(0.085)	-0.051(0.091)	0.023(0.080)	0.038(0.097)
Experience	Mrk_bs	0.020(0.014)	0.031(0.027)	0.024(0.027)	0.071***(0.027)	-0.022(0.024)	0.027(0.031)
	Mgt	0.203**(0.102)	0.178***(0.224)	0.275(0.212)	0.971***(0.198)	0.888***(0.185)	0.804***(0.238)
	Cus_Ser	-0.116(0.086)	0.435***(0.157)	-0.095(0.158)	0.252(0.170)	0.350**(0.143)	0.062(0.166)
	Mem_Commit	0.104(0.076)	0.003(0.160)	-0.269(0.168)	-0.071(0.160)	-0.017(0.126)	0.144(0.182)
Perception	Envirm	0.118(0.091)	0.127(0.184)	0.191(0.193)	0.078(0.186)	0.288**(0.169)	0.567***(0.200)
	Public_interest	0.143(0.115)	0.285(0.244)	0.205(0.242)	0.079(0.217)	0.390*(0.209)	0.050(0.243)
	Connect	0.247**(0.112)	-0.188(0.235)	0.231(0.222)	0.258(0.228)	-0.195(0.196)	0.267(0.273)
	Mrk_bs	0.221(0.146)	0.600**(0.298)	0.641***(0.279)	0.742***(0.265)	0.172(0.234)	0.639***(0.302)
	Mgt	-0.165(0.137)	0.892***(0.277)	0.680***(0.245)	0.298**(0.252)	0.609***(0.245)	1.301***(0.293)
	Cus_Ser	0.205**(0.102)	0.965***(0.201)	0.366*(0.190)	0.512**(0.201)	0.555***(0.160)	0.651***(0.196)
	Mem_Commit	0.074(0.059)	0.326***(0.117)	0.400***(0.128)	0.316***(0.122)	0.215**(0.108)	0.351***(0.122)
Sizecuc	Medium (baseline)						
	Very Large	0.030(0.028)	-0.100*(0.057)	-0.173***(0.054)	-0.196***(0.055)	0.088*(0.050)	-0.042(0.063)
	Large	0.027(0.028)	-0.072(0.055)	-0.135***(0.057)	-0.154***(0.053)	0.075(0.048)	-0.038(0.058)
Typecuc	Factory (baseline)						
	Rural	-0.046(0.036)	-0.030(0.074)	0.049(0.070)	-0.069(0.068)	-0.012(0.062)	-0.119(0.084)
	Urban	-0.038(0.036)	-0.093(0.071)	-0.102(0.066)	-0.126*(0.072)	-0.235**(0.064)	-0.134*(0.074)
	Education	-0.083**(0.034)	-0.031(0.072)	0.024(0.067)	-0.112*(0.063)	-0.061(0.060)	-0.004(0.071)
Wald-χ^2		119.44***	254.16***	187.35***	208.90***	191.45***	268.95***

Note(s): 1. *, **, *** indicate statistically significant levels at 0.1, 0.05 and 0.01, respectively. 2. Numbers in parentheses are clustered standard errors

These findings correspond with conclusions of Osterberg and Nilsson (2009) that when members have good perceptions of their CUCs, they will display high levels of participation. Moreover, the good perception of the public interest and involvement and causal connection of members means that they are concern about the CUC objective and image of CUC, which improves the confidence of society in CUCs. These can cause an increase in members' governance mechanism AWN (Osterberg and Nilsson, 2009; Barraud-Didier et al., 2012; Hakelius and Hansson, 2016).

5.2.1.3 Awareness level of governance principles. Table 3 shows the ordered probit estimates indicate that the male gender significantly influences CUC members' AWN of the rule of law at the 0.05 level. The age variable significantly affects CUC members' AWN of responsibility and accountability at the 0.05 level. The results show that older members are more likely to understand CUC operations and pay attention to CUC governance and management (Barraud-Didier et al., 2012).

The education variable is negative and statistically significant for CUC members' AWN of the rule of law and cost-effectiveness. Nilsson and Svendsen (2011) and Nkechi and Charles (2015) argued that if people have high levels of education, they are more likely to be interested in an organisation's management and operations. They also have a better understanding of the structure and management systems of organisations than people with lower levels of education.

In terms of CUC members' experience and perceptions, the more knowledge and experience the members get, the higher their levels of CUC AWN on CUC principles in general. According to Verhees et al. (2015), CUC knowledge and attitude is very important for CUC success. If members understand the ideology behind CUC's and their objectives, these members will have high levels of morality. They will elect good representative members to be on the board of directors. These findings also correspond with Augustine's (2012) conclusion that when members have good perceptions of their CUC, participation levels and governance AWN of the CUCs will increase.

CUC size significantly, negatively affects AWN of transparency, participation, responsibility and accountability. As discussed previously, members of very large or large CUCs usually have less trust and AWN of governance mechanisms and practices. They typically only focus on the benefits and neglect of CUC management duties. Thus, members lack CUC transparency, participation and responsibility AWN and do not participate in CUC activities (Grashuis and Su, 2019).

5.2.2 Factors hindering good governance practices: members' perspectives. Table 4 presents the regression results for the factors hindering good governance practices of Thai CUCs. In order to ensure the robustness of estimations results, the study ran two models. Model 1 contains only variables related to the lack of governance mechanisms and principles. In Model 2, the study adds control variables (CUC size, CUC type, length of membership and CUCs knowledge of members) into Model 1.

Model 1 demonstrates that the lack of morality, transparency, participation and responsibility and accountability variables have significant, negative impacts on good governance practices. That is, the lack of morality variable is negative and statistically significant for good governance practices at the 0.01 level. Prior literature indicates that morality is one of the main governance principles. CUCs and cooperatives need to ensure that morality is a key part of their operations and values (Dayanandan, 2013; Trakumututa and Chaijareonwattana, 2013). If CUCs lack morality, their operations and management are likely to collapse (Chisi and Gondwe, 2017).

The lack of transparency and participation variables is negative and statistically significant for good governance practices at the 0.05 level. This result supports the previous finding in Thailand that transparency is essential for the long-term survival of Thai CUCs (Trakulmututa and Chaijareonwattana, 2013). If CUCs are transparent, members are able to gain sufficient business information, services and financial results.

Regressors	Model 1	Model 2
GM	0.002 (0.021)	0.005 (0.022)
GRL	−0.021 (0.023)	−0.013 (0.026)
GMR	−0.110*** (0.025)	−0.106*** (0.024)
GT	−0.086** (0.038)	−0.117** (0.040)
GP	−0.049** (0.020)	−0.046** (0.020)
GRA	−0.049* (0.020)	−0.073* (0.037)
GCE	−0.021 (0.022)	−0.034 (0.021)
Very Large		0.022 (0.016)
Large		−0.006 (0.019)
Rural		0.022 (0.019)
Urban		0.013 (0.023)
Education		0.018 (0.018)
Length of Membership		0.012* (0.007)
Knowledge		−0.309** (0.098)
Constant	2.344*** (0.031)	3.565*** (0.398)
F-Stat	16.82***	9.20***
R^2	0.206	0.245

Note(s): 1. *, **, *** indicate statistically significant levels at 0.1, 0.05 and 0.01, respectively

2. Numbers in parentheses are clustered standard errors

3. There is no multicollinearity problem amongst the regressors (the correlation matrix table and VIF results are available upon request)

Table 4.
Factors hindering good governance practices in Thai CUCs

Moreover, there will be no conflict of interests or corruption (Hasan and Onyx, 2008). Birchall and Simmons (2004) and Dayanandan (2013) argued that participatory processes are central to CUC success. It is important that members participate in the annual general meeting, as voters elect administrative representatives. Moreover, the lack of responsibility and accountability variable is negative and statistically affect the good governance practices at the 0.1 level. As discussed by Dayanandan (2013), if members actively control and monitor their own cooperatives, then accountability is effective in cooperatives' power and decision making.

In Model 2, the study finds that the significant variables hindering the good governance practices of CUCs are similar as in Model 1 results. That is, the lack of morality, transparency, participation and responsibility and accountability variables are negative and statistically significant.

6. Conclusions and implications
6.1 Conclusions
Thai CUC members' AWN contributes to the long-term success of the organisations. This study assesses Thai CUC members' levels of governance AWN and identifies factors influencing the level of governance AWN of CUC members. The study shows Thai CUC members exhibit high levels of AWN necessary for monitoring and controlling their CUC. Members have the lowest level of AWN of the rule of law and the greatest level of AWN of morality. Evaluating members' AWN of overall governance by CUC types and sizes, members of rural (urban) CUCs have the highest (lowest) level of governance AWN. In terms of CUC size, members of very large CUCs have the highest level of governance AWN, followed by the medium and large CUCs. The results for morality and the rule of law apply to all the criteria.

For member characteristics, this study found that male members usually have a higher level of governance AWN than women. Likewise, the results are different for age, marital status, income, occupation and education level. For example, members who fall into the

36–55 years age bracket are married, and have higher levels of income and education, have a much higher level of governance AWN than other individuals. In other words, the dominant demographic characteristics of our sample correspond to the determinants of lower levels of governance AWN (i.e. women gender, less educated, etc.)

Members' experience and perceptions of CUCs also impacted their level of governance AWN. CUC knowledge gained the highest rating of all governance mechanisms and principles except for transparency. The study found that length of membership, knowledge, attitude and members' perceptions of CUCs were significant in terms of governance AWN, but belief in CUC was insignificant. This implies that the governance mechanisms and principles have different causes related to individual members' characteristics, experiences and perceptions.

This study also identified factors that hinder good governance practices by Thai CUCs. The results show that four governance principles need improvement: morality, transparency, participation and responsibility and accountability. Thus, educating stakeholders of Thai CUCs about the governance mechanisms and principles is a way forward.

6.2 Research implications
The study's findings have some practical implications for Thai CUCs' members, management board, and policymakers. Regarding Thai CUC members, the results show some principles which members need to increase their AWN of, such as the rule of law, responsibility and accountability. Hence, members should participate in CUC activities frequently, so that they gain knowledge about how CUCs are run. They should pay particular attention to regulations relating to transactions and membership roles. Members of Thai CUCs can also increase their governance AWN by learning from their CUCs. For example, members should utilise the governance programmes provided by their CUCs or associated agencies. Each Thai CUC needs to empower its members to play an active role in providing appropriate programmes and continuous CUC education. Also, CUC members need to understand members' rights and participate in activities that CUCs have organised for them. In particular, participation in the annual general meetings is important because, in the meetings, members can use their rights to make decisions for CUCs.

The study also provides implications for CUCs' board of directors. Since most members have very little AWN about the rule of law, CUCs must educate their members on CUC regulations, bylaws and cooperative laws. These findings recommend establishing an on-going education programme, where members are given information about specific issues, monthly or quarterly. Also, they need to encourage and motivate the members to participate in the annual general meetings and design attractive activities in the meetings which are related to the requirement of their members. Furthermore, the board of directors should communicate and provide sufficient information to the members. This will help build members' confidence and enable them to understand CUC policies. Besides, the board of directors should provide training or seminars for their members on how to elect the professional boards.

This study's findings suggest that members' governance AWN levels differ depending on CUC type and size. This finding has important implications for Thai policymakers, especially the CPD. The government can use information about members' levels of governance AWN to identify structural differences between the CUCs and design appropriate education programmes for Thai CUCs. The CPD should also update their website or develop an app that could educate people about cooperatives and CUCs, thus boost the Thai CUCs' member AWN and cooperative development for long-term success.

Finally, our study shows the link between youth, female gender, less-educated or lower income members and low level of CUCs governance AWN. Therefore, the training programme should focus more on those members who need to understand how the CUCs work and how they can benefit from the CUCs. With increased AWN, the less advantaged groups can enhance their living standard as well as their family.

Even though the study contributes to current literature and practice in terms of CUCs AWN and governance in Thailand, there are some limitations related to the data and methodology used in this study. Firstly, the time and budget constraint are the main reason for the small sample size. Therefore, our findings may not represent for all CUCs in Thailand. Moreover, the study used the convenience sampling method to collect information from CUC members. This may cause bias in the data because our questionnaire interviews were carried out in selected Thai CUCs' places. The respondents are members who use the services of Thai CUCs. They may have higher levels of governance AWN than other members. As a result, a different sampling method and/or different CUC members may provide different results, especially in terms of the level of governance AWN. The other limitations of our study are cross-sectional setting with the use of basic econometrics methods, which fail to identify the change of governance AWN of Thai CUCs members over time. Therefore, this study suggests future research to extend the study sample size to better represent the CUC population in Thailand. The future research also can expand the years of investigation for time-series data and use alternative methods to reflect the CUCs' members' AWN and governance performance.

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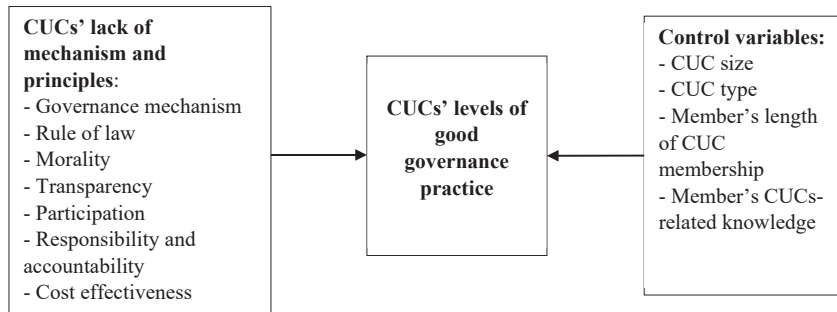
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Appendix

Variables	Description	Measurement
AWN_j	The CUC member's awareness of governance mechanism and principles, whereas AWN_1 is overall of CUC governance AWN_2 is governance mechanism AWN_3 is the rule of law AWN_4 is morality AWN_5 is transparency AWN_6 is participation AWN_7 is responsibility and accountability AWN_8 is cost-effectiveness	An ordinal scale from 1–5 (low to high level of awareness)
GD	Members' gender	1 = Male, 0 = Female
AGE	Members' age	1 = Age $\leq$ 25–35 years old 2 = Age 36–45 years old 3 = Age 46–55 years old 4 = Age 56–65 years old 5 = Over 65 years old
MRS	Marital status	1 = Marriage, 0 = otherwise
EDU	Members' education level	1 = No bachelor degree; 0 = otherwise
OCCU	Members' occupation	1 = Government officer 2 = Private company officer 3 = Self-employed, farmer and labourer 4 = Retired and unemployed 5 = Others
INC	Members' monthly income	1 = Below 10,000–30,000 Baht 2 = 30,001–60,000 Baht 3 = 60,001–90,000 Baht 4 = More than 90,000 Baht
LENGTHMEM	Length of membership	Years
KNOW	Member's knowledge in cooperative philosophy, mission, principle, regulation and the CUC practices	5-point Likert scale
ATTI	Member's attitude toward Thai CUCs	
BELIEVE	Member's beliefs about CUCs	
PERCEP	Member's perception on managing and organising CUCs, including - Marketing and Business (MRK_BS) - Management (MGT) - Customer Services (CUS_SER) - Member Commitment (MEM_COMMIT) - Competitive Environment (ENVIRM) - Public Interest and Involvement (PUBL) - Causal Connections (CONNECT)	
SIZECUC	CUC Size	1 = Very large, 2 = Large, 3 = Medium
TYPECUC	CUC type	1 = Rural type, 2 = Urban type, 3 = Educational type, 4 = Factory workplace

Table A1.
Definition and
measurement of
variables used in
Equation (1)

Figure A1.
Factors that hinder
good governance
practice of Thai CUCs

	CUCs' lack of mechanism and principles:		CUCs' levels of good governance practice		Control variables:

Variables	Description	Measurement
Dependent variable		
CG	Member's evaluation of CUC governance practice	Values range from 1 to 10 (low to high level of efficient CG practice)
Regressors		
GM	Governance mechanism	Five-point Likert scale
GRL	Rule of law	
GMR	Morality	
GT	Transparency	
GP	Participation	
GRA	Responsibility and accountability	
GCE	Cost-effectiveness	
Control variables		
SIZE	Size of Thai CUC	1 = Very large, 2 = Large, and 3 = Medium
TYPE	Type of Thai CUC	1 = Rural type, 2 = Urban type 3 = Educational type, and 4 = Factory workplace type
LENGTHMEM	Length of CUC membership	Years
KNOW	Member's knowledge in cooperative philosophy, mission, principle, regulation and CUC practices	Five-point Likert scale

Table A2.
Definition and
measurement of
variables used in
Equation (2)

Socio-demographic data		CUC members ($N = 629$) Count ($N1$)	% Of $N1$
Gender	Male	253	40.2
	Female	376	59.8
Age (years old)	≤ 25–35	93	14.8
	36–45	157	25
	46–55	157	25
	56–65	134	21.3
	>65	88	14
Marital status	Married	437	69.5
	Others	192	30.5
Education	No bachelor degree	387	61.5
	Others	242	38.5
Occupation	Government officer	28	4.5
	Private company officer	175	27.8
	Self-employed, farmer and labourer	199	31.6
	Retired and unemployed	85	13.5
	Other (CUC staff)	142	22.6
Monthly income (Baht)	<10,000–30,000	232	36.9
	30,001–60,000	251	39.9
	60,001–90,000	83	13.2
	>90,000	63	10

Table A3.
Profile the surveyed
respondents

CUC governance		AWN_1	AWN_2	AWN_3	AWN_4	AWN_5	AWN_6	AWN_7	AWN_8
CUC type	Rural	4.69	4.51	3.97	4.71	4.48	4.51	4.45	4.52
	Urban	4.49	4.37	3.89	4.52	4.27	4.34	4.11	4.32
	Educational	4.57	4.33	3.79	4.61	4.42	4.40	4.33	4.52
	Factory	4.58	4.30	3.97	4.57	4.40	4.46	4.34	4.43
	Tests of equality of means								
	F-statistic	3.696	2.344	2.344	3.96	3.281	1.621	8.411	3.574
	Sig	0.012	0.073	0.073	0.009	0.021	0.184	0.000	0.014
CUC size	Very Large	4.60	4.42	3.98	4.62	4.40	4.41	4.38	4.50
	Large	4.57	4.35	3.93	4.60	4.33	4.40	4.33	4.42
	Medium	4.58	4.36	3.81	4.59	4.45	4.49	4.21	4.41
	Tests of equality of means								
	F-statistic	0.634	3.266	3.266	0.176	1.65	1.04	4.524	1.558
	Sig	0.531	0.039	0.039	0.838	0.193	0.354	0.011	0.212

Table A4.
Members' awareness
levels of CUC
governance (by CUC
Types and Sizes)

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