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Navigating Financial Tide:

A Multi-Case Analysis on Payment Default Management of Davao Region's Microfinance Institutions

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Abstract

The study aimed to investigate the challenges and coping mechanism of the microfinance institutions in Davao Region brought by the proliferation of investment schemes. A multi-case study method was employed with the purposeful sampling used in selecting the four cases, i.e., microfinance institutions operating in the region. Participants include heads of the credit departments and general manager of operations. The in-depth interview protocol was used in gathering data and other relevant information from the participants. Results of content analysis revealed the main themes of risk identification and recognition, members' behavior, risk reduction, core business focus, organizational culture, organizational commitment, and enterprise resilience. Members herding behavior could intensify loan defaults. Moreover, resiliency relies significantly on strong organization culture and not just relying on strong implementation of credit policy. The cross-case analysis also revealed that all the four cases have similarities in terms of members' behavior, risk reduction, and core business focus. They differ on risk identification and recognition, organizational culture, organizational commitment, and enterprise resilience where the experiences and performance of the two cases were quite better over the others. The results of study will have implications on how microfinance institutions strategize in addressing challenges of investments schemes on institution's profitability.

Keywords

Default management, Herding behavior, Enterprise resilience, Organizational culture, Organizational commitment

INTRODUCTION

Loan default is a perennial problem and a main business challenge of financial institutions from banks down to microfinance institutions. It constantly hurts their financial performance. All countries either developed or developing have different levels of non-performing loans that brought negative economic impact. It is the utmost objective of financial institutions with lending units that all credits granted should be repaid as it is a primary determinant of financial institutions' financial health (Jalloh at al., 2019). In contrast, it is argued that there is a certain degree of contagious defaulting behavior of borrowers that contributes to the proliferating loan defaults and this is commonly intensified in events of economic shocks (Goedecke, 2018, p. 14). Moreover, business disruptive events can further intensify loan delinquency levels like the proliferation of investment schemes that have been continuously damaging borrowers' financial well-being across countries, both developing and the developed ones. This has posed extreme challenges particularly to microfinance institutions on how to survive in terms of profitability and the going concern of business until such time that investment schemes are stopped by the authorities; the kind of event that proliferated in the southern part of the Philippines back in 2018 and 2019.

How these financial institutions manage the rising defaults lies primarily on the tedious and costly processes as commonly provided by the existing laws. From the major economies of the world that posted the proportion of loans that are delinquent against the country's total loans, latest available data show that China has 1.84% in 2020 while U.S. has 0.86% in 2019. Japan posted 1.4% in 2020 and Germany is at 1.05% in 2019 (Trading Economics, 2022). The latest data

for the NPL of the Philippine banking system in August 2022 amounted to PhP496B, accounting for 4.19% of the total gross loan (Bangko Sentral ng Pilipinas [BSP], 2022a).

Default on loan occurs when there is a failure by the borrower in meeting the terms with the creditor and repayment is not made based on provisions of the loan contract when the loan matures (Ko¢ & Sevgili, 2020). Specifically, a loan is classified as "non-performing" if it satisfies any of the criteria of: (a) interest and principal payments have been past due over the 90-day period and above; (b) there has been the capitalization of interest payments; and (c) there are other evidences to support NPL classification even the criterion for the minimum number of days is not met; instances like filing of bankruptcy by the borrower. The amount to be recorded as NPL should be the gross amount of the loan as reflected in the accounting books (International Monetary Fund [IMF], 2019).

In the Philippine setting, there is the broader definition of past due loan which is characterized by the failure of payment of the principal and/or interest based on their due date as provided; then the remaining outstanding balance of the obligation shall be classified as past due. The Manual of Regulations for Banks contain these provisions (BSP, 2022b). On the other hand, microfinance institutions like credit cooperatives are also subject to the compliance of the rules set by Cooperative Development Authority (CDA) in relation to non-performing loans.

Further, after all loan defaults are identified or determined in a given reporting period, it will lead to the process of loan loss provisioning wherein allowance to loan loss will be charged against current period's income. Loan loss provisioning based on existing BSP regulations requires setting general loan loss provision at 1.0% of the total loans outstanding as reported in the Financial Position statement. This is required under Section 11 of the Manual of Regulations for banks. Specific loan loss provision for unsecured loans that is past due for over 181 days is at 100% provision; for the secured loans, 50% loss provision for more than one year being past due (BSP, 2022b). Moreover, credit cooperatives are required 100% loan loss provision for loans that are past due over 365 days (CDA, 2022).

The cost of mortgage foreclosure or judicial procedures for non-collateralized loans normally comes too costly for both the creditors and debtors. Banks normally resort to judicial foreclosure as last resort under Rule 68 of Rules of Court (Batas Natin, 2022); and on the bases of Batas Pambansa 22 common for unsecured personal loans (Law Phil, n.d.). It is a common practice in developed countries where individuals are assigned with credit scores in measuring related risk and their credit worthiness particularly on personal loans. That is why many studies had resorted to computer-aided calculations to predict the individuals' credit risk by evaluating their historical data and other loan-related information (Aslam et al., 2019).

There is limited literature or theories established on the payment default management by the financial institutions beyond those procedures provided by law to mitigate the negative impact of the accumulated NPLs on financial institution's profitability. Both the creditors and debtors know the legal aspect of loan default. There is the constant challenge between looking for worthy borrowers and how to manage credit defaults to minimize losses of financial institutions. In the contrary, there is wide array of literature on loan defaults focused on either perceptions or trends based on historical secondary data for attempts to predict behaviors influencing the tendency to default loan payments.

Recent related studies have established different factors or determinants of loan default. They are categorized into different dimensions such as borrower, creditor, economic, and social dimensions. Under the borrower dimension, it covers sex, education, occupation, household income, years in business or years in employment, and whether or not the borrower maintains bank account as common determinants of loan default (Kumar et al., 2018; Himali, 2020; and Sum et al., 2022). Other set of factors include borrower's credit history, employment status, area of residence, loan purpose, collateral offered, home ownership status, and borrower's unforeseen expenditures (Gan et al., 2012; Pereira & Mourao, 2012; Nanayakkara & Stewart, 2015; Abid et al., 2016; Hassan et al., 2018; Obare & Muraya, 2018; Obare et al., 2019; Fosu et al., 2019; Cyree, 2020; and Khedr et al., 2021); multiple borrowing, diversion of loan proceeds, nature of business, borrower's extra income, and repayment schedule (Murthy & Mariadas, 2017; Yeboah & Oduro, 2018; and Jalal-Eddeen et al., 2019).

The factors attributed to creditors include inefficient orientation, lack of loan monitoring, inadequate loan appraisal, not good service provisions, and high costs of services (Vijayakumar, 2016; Ismail et al., 2018; Agada et al., 2018; and Enwereji & Uwizeyimana, 2020). In addition, a mixed of borrower, creditor, and social factors cover interest rate, years in business, loan size, and loan experience (Amwayi et al., 2014; Kwofie et al., 2015; Abdul Adzis et al., 2021, and Msomi & Olarewaju, 2022); loan size, improper management, business environment, and access to credit (Akpan et al., 2014, p.121; Kasango & Kung'u, 2018, p.62; Owusu-Manu et al., 2019; Barbaglia et al., 2023; and Twesige et al., 2021).

It appears to be evident that the research gap which opens opportunity for researchers to fill in is on which particular process on credit should the financial institutions focus or the alternatives that can create much influence on the process to optimize lending profitability, optimize institution's use of funds, and minimize incidence of loan default. This is supported with the factual data that the banking system in the Philippines had posted total deposits in 2021 amounted to PhP16.2 trillion covering the savings, demand, time, and FCDU deposits (Philippine Deposit Insurance Corporation [PDIC], 2022; Statistica, n.d.); while the total loans amounted to only PhP11.4 trillion (BSP 2022c). There is the difference of PhP2.86 trillion net of the 12% reserve requirement by the central bank (Chipongian, 2022). Such amount represented the under-utilized excess funds from the banking system brought mainly by lower credit utilization.

Looking at the phenomenal event, i.e., during the proliferation of investment schemes that reached its heights during the years 2018 and 2019, the factors causing loan defaults attributed to the borrower's capacity to pay, character, and economic attributes were influenced and significantly intensified directly or indirectly. It was the period when thousands

of victims lost their hard-earned money and had increased loan defaults in microfinance institutions particularly in Mindanao. During the same period in Davao and in SOCCSKSGEN regions, it was observed that from all walks of life, employed or unemployed, rich or poor, educated or not so educated had invested in KAPA, Rigen, ALMAMICO, Ever Arm Marketing, among others. Some of them offered 500% return of investment. It was argued that there were many government employees, policemen, lawyers, educators, students, entrepreneurs, call center agents, and farmers who had invested one or more of these investment schemes (Arado, 2019).

Taking into account such phenomenal event causing increased levels of loan defaults among microfinance institutions, this study aimed to investigate using the qualitative research approach on the coping strategies implemented by microfinance institutions on how they have overcome the business challenge of increased loan payment defaults during the proliferation of investment schemes. Specially, the research questions that this study sought to provide answers are the following: (a) what were the challenges of the microfinance institutions in managing loan payment defaults during the proliferation of investment schemes?; (b) how did the microfinance institutions coped with the challenges of managing loan payment defaults during the proliferation of investment schemes?; and (c) what were the similarities and differences of the challenges and the coping strategies of microfinance institutions in managing loan payment defaults during the proliferation of investment schemes?

MATERIALS AND METHODS

Multiple-case qualitative approach was employed and focused on gathering participants' perspective, their own meanings, and multiple views on the research problem; emerging and evolving design instead of utilizing a pre-defined research design (Creswell, 2013). It is emphasized by Yin (2018) for a multiple-case study that two or three cases would appropriately aim for literal replication of logic while four to six cases would fit in pursuing different patterns of theoretical replications. Moreover, Cresswell (2013) emphasized that as to the number of cases to be covered in a "multiple-case" study, there is no specific and stringent rules to follow; however, it is a conventional practice that researchers choose four or five cases. Ultimately, the researcher wished to increase confidence on the research results that was why the final number of cases was made into four.

The in-depth interview (IDI) data gathering approach was used with semi-structured questions. It was designed to gather intricate information or data from small number of target participants (Roller & Lavrakas, 2015). Such semi-structured IDI protocol was reviewed and validated by six (6) expert validators. The first round of comments from the validators was obtained and the IDI was revised accordingly. Then after, all the required approvals to conduct the study from the dean of the Professional School of the university as well as from the Top Management of the selected cases were obtained.

Study participants

The selected cases for this study were four (4) big credit cooperatives operating in the region that fall into the category of "billionaire cooperatives" in terms of assets. Obviously, with the billions of assets, such correlate to the number of members and borrowers in which the phenomenal event of massive patronage of Ponzi schemes in the years 2018 and 2019 had obviously involved considerable numbers from these microfinance institutions. Yet, they (credit cooperatives) all survived such event and still doing strong business performance in recent years. Credit cooperatives that do not fall under the "billionaire cooperative" category as well as those that have existed less than 25 years in business were excluded from the purposeful sampling.

Specifically, interview participants included heads of credit units, general manager, and loan officer of microfinance institutions. Only those who hold the position of at least five (5) years were included in the data gathering. For this purpose, the four selected microfinance institutions were as follows:

Case 01 has been existing as credit cooperative for more than six decades; with hundreds of thousand membership and with total asset level close to PhP20 billion. Its branches are located in Luzon, Visayas, and Mindanao. The interview participant of Case 01 started working in the institution in 2009 after the previous cooperative of employment was absorbed by the current employer. He has been assigned as Loan Account Officer since 2014 whose main functions include loan documentation, monitoring, and classification, i.e., including loan loss provisioning.

Case 02 has been existing for more than five decades; with membership of more than 40,000 and total asset level close to PhP2.0 billion. Its branches and satellite offices are scattered in Davao Region and in Region 12. The interview participant of Case 02 was a former general manager of another cooperative, a hospital. He had been part of a team in a cooperative bank which mainly tasked for its rehabilitation. The participant joined the microfinance institution in 2007 and has held the position of general manager until present.

Case 03 has also been existing for more than five decades with membership close to 200,000 and total asset level of more than PhP10 billion. The interview participant of Case 03 started working in the institution in 2006 from the collection officer assigned for hard accounts, i.e., those written-off accounts with the purpose of generating possible collection and additional income. Two years after, he was assigned as credit analyst and investigator then eventually designated as branch manager until 2020. Current position handled is Chief Operation Officer handling the savings and credit group; the major sources of income of the cooperative.

Lastly, Case 04 is also more than five decades of existence with membership close to 40,000 and total asset level close to PhP2 billion. The interview participant of Case 04 has been working with the microfinance institution for 13 years. Positions held include accounting clerk, loan processor, payroll and ATM operations in-charge, credit analyst, and

currently as credit and collection supervisor at the credit department. The current position covers more on the monitoring on loan releases and account monitoring on the collection side that covers delays, status, and recommendations for delinquent accounts.

Data analysis

The analysis of the qualitative content started with transcribing the interview data and from the transcripts, extracted the theme or patterns that were interesting and with high relevance to the research questions and objectives (Graneheim et al., 2017). It was repeated several times to refine and establish logical flow on how the themes and categories were extracted, formed, and interpreted. The interview responses were reduced to themes by means of coding process that eventually resulted to refined codes, tables, and discussion (Creswell, 2013).

To ensure trustworthiness of this study, the translated text responses by the interview participants as well as those verbatim ones included in the results and discussion were accompanied with audit trail codes for easy verification and auditing. In addition, the original files of interview and the transcripts were kept with utmost care for Data Privacy compliance and be made only available once required for official verification by the panel of reviewers. Specifically, the data analysis had undergone the following steps: (a) recorded interview files both audio and video (zoom) were labelled and coded; (b) contents, i.e., the responses of the interviewee on IDI questions were transcribed verbatim for purely English responses while those of vernacular and mixed languages were translated into English to facilitate analysis; (c) essential themes and patterns were extracted and noted for the thematic analysis. This process was done several times with intervals in terms of days to weeks until arriving the improved and final themes; and (d) the finalized codes were compared and categorized based on their possible similarities and differences along with audit trail codes to the transcripts of interviews.

Considering that the study involved only few cases and after reviewing different approaches from literature in qualitative data analysis, the researcher decided to utilize the well-sought approach of Dr. John Shulz of Southhampton Educational School on content analysis (Edge.Sagepub.com, n.d.). Moreover, is argued that using a computer-aided software will only be appropriate in making data analysis of data that are considerably large; commonly suggested for more than 10 or more than 20 interview data. If the data is relatively small, it is suggested to only use manual methods of the analysis and such was employed by the researcher for this purpose (Welsh, 2002; Spencer et. al, 2003).

Lastly on cross-case analysis, Yin (2009) as mentioned by Creswell (2013) provided cross-case synthesis approach as an analysis technique when dealing with two or more cases. This was employed by the researcher, i.e., utilized a word table to display the data from each case that follow some uniform framework. This had enabled the researcher to look for the similarities and differences among cases in the study.

RESULTS

Presented on Table 1 is the summary of content analysis that showed the seven overarching themes from the responses of the interview participants.

Table 1 Results of the content analysis

Main Categories	Core Ideas	Sub-themes
Challenges on loan default management	Risk identification and recognition	 Business worries of possible negative impact Investments that were comparably quick and with extremely high returns Increased loan delinquency rate Decline on new loan applications
	Members' behavior	 Irrational and unguided decisions amidst desire for instant reward Herding behavior toward investments schemes Gambled hard-earned money in exchange of possible much higher returns
Coping mechanism on loan default management	Risk reduction	 Timely action and response to business threats Intensified loan evaluation Management interventions and directives as guides in addressing the problem.
	Core business focus	Adherence to existing credit policy
	Organizational culture	 Influence of strong positive culture Good mindset attracts abundance in business Spirituality and psychology in management
	Organizational commitment	 Management's directives requiring compliance Psychology complimenting strategy for better business outcomes Organizational cooperation
	Enterprise resilience	 Awareness and vigilance of business disrupting event Resiliency through positive mindset Intensified information drive and financial literacy Ability to survive the business problem

Challenges on loan default management

Risk identification and recognition

It is evident from the responses and elaborated experiences of the research participants on the imminent negative business impact of the investment schemes when such social phenomenon spread like wild fire. The investment products offered by the microfinance institutions were of no match to the extremely high returns offered by the investment schemes in a very short investment duration. There were observed increases on loan delinquency rates and decline of new loan applications and releases. These were emphasized from the following responses:

We were worried that there could be mass withdrawal as the offered returns of the investment schemes ranged from 30% to 35% as compared to the minimal returns in the cooperative. We were worried that people will no longer borrow; but in 2019 there was significant decline on loan delinquency while there was increase in collections. In 2020 with the investment scheme and the pandemic, the past due had increased of around PhP40Million. P04 CO1.3

There were really affected members though we cannot specifically identify if the withdrawals made by members were really placed on those investment schemes. But it was evident that the level of withdrawals was different from the levels or trends during the normal months of 2017 and 2018. It appeared that members went aggressive on their withdrawals. It was a good thing for the cooperative as there were several members who availed loans from their share capital that were not used for quite a time. They used it in back-to-back loans. In short, there were members who borrowed and there were members who withdraw. However, we were challenged by liquidity level. Liquidity was really affected. The availed loans and withdrawals were both cash outflows. It was really a challenge to the cooperative; even to other cooperatives and financial institutions like banks. P03 CQ1.3

Members' behavior

The primary driver that made the society massively patronized the investment schemes at the height of their popularity was that people saw concrete examples from their friends, relatives, or family members receiving actual pay-out after the laps of the required waiting period. Indeed, it provided much higher returns at a very short period of time. The enjoyment of those early takers had removed the logical questions on how it was made possible. They just relied on the desire to experience the same benefit and enjoyment.

It was during the third quarter of 2018 that I noticed the gradual increase of investment scheme activities. I also noticed that the prominent people were the ones who spearheaded investment scheme activities while the ordinary people were just doing "wait and see". Then, when the common people saw instances of "pay-out", i.e., receiving big returns by those early takers in investment schemes, they (ordinary people) were enticed to do the same. P03_CQ1.3

There was a member who really invited and guaranteed the investments of the cooperative employees. The employees had agreed to the offer of that member since that member was really a trusted member of the cooperative. Later on, he was killed as he was identified directly to the scam. P04_CQ1.3

Had those investment schemes sustained, it will make people lazy because people will not work anymore. During that period, people just kept looking at the calendar wishing if they can move the first day to the last day. P03 CQ1.4

Coping mechanism on loan default management

Risk reduction

It was pointed out by the participants that the actions taken by the top management were immediate upon recognizing the possible negative impact to the institutions' business if members and borrowers will fall victims of those investment schemes. The directives were immediately communicated down the line to all operating business units.

There was the instruction and alarm by the management that there was the latest trend on investment schemes. Personnel were alerted to be vigilant if excessive or massive withdrawals will be made by members. Withdrawing members were interviewed as to the purpose of withdrawal or where to use the withdrawn cash. P01_CQ2.2

The management really issued a memo giving warnings and instructions. They discouraged employees to join the investment schemes and for the credit department to really do the counseling of loan applicants. At the end, the members were the ones to decide. We were just reminded to minimize our exposures. P04_CQ2.2

Prior to crackdown by the government, there were loan applicants who did intend to use loan proceeds to place into the investment schemes given that the interest rates on the borrowed funds were far lower than the returns of 30% or more for just a month. As a remedy, new loan applicants were extensively scrutinized and investigated as to what were really the purposes of their new loan applications.

During loan application, we really investigated thoroughly; asking the members if they will just put the proceeds into the investment schemes. While those who availed loans against deposit, we cannot prevent them from doing so though we really did thorough counseling. P04 CQ2.2

Precautionary measures were done on loan releases; asking members of what was really the purpose of the loan other than the indicated purpose on the loan documents. And, if the members eventually reveal about the opportunity of investment with higher returns, then we did the thorough counseling as well as offering them other investment alternatives in the cooperative. P01_CQ2.2

Core business focus

As part of the management's directives prohibiting employees to take active participation on the investment schemes, it was emphasized by the management to carry out the credit policy as they should be. When the time called for enhanced scrutiny of new loan applicants, additional procedures and documentations were required to minimize the exposure on any loans that may turn delinquent.

The credit policy is strict by default. However, sometimes it will adjust to the situation and the need on the credit management. Sometimes it become more stringent or little loose based on the loan utilization, past due level, and other external factors. It would become little relaxed if the loan quality is relatively ascertained; then become more stringent by adding requirements such as additional documents or collateral for a loan type that have established higher past-due trend. P01_CQ2.1

"Policy is made. It is there as a guide but not necessarily to discipline people. Everything should start in something that they have to accept voluntarily and they are not forced. It is more effective." P02_CQ2.1

Organizational culture

It was pointed out by one participant that their strong business culture had played a big part as to why their institution was not significantly affected negatively by those investment schemes. There were related withdrawals and loan accounts that became delinquent after the crackdown of investment schemes, but they remained at the manageable level.

"Mindset creates a culture. A culture starts within the individual. To have a good culture in an organization, you have to start molding the mindset of individual employees. But you cannot do it alone. First, you have to train your leaders. Whatever they teach or influence their people, it is like cascading down the line. In fact, if you will ask now the coop employees, they do not worry of things going on in the economy. Because in the end, it is not about the economy. It is about how you respond to the economy." P02_CQ3.1

Further, a good mindset that is operating in business organization provides ease in doing business as well as addressing business challenges. It was mentioned by one participant that generally, the more successful entrepreneurs are those that coupled their hard work with a good mindset.

"Whatever you run in the cooperative in terms of mindset, everything starts with that mindset; and I think that differentiates our coop from other coops. Here, we really started teaching that to our employees; that we have to have that mindset of abundance. In the contrary, if you have the mindset of scarcity, you will attract more scarcity. But if you will always think about abundance, you will attract more abundance. Practically, it's about the law of attraction." P02_CQ3.1

Organizational commitment

Along with the management's early recognition of the risk that investment schemes may affect negatively the business of the microfinance institutions, the message was clear from the top management to establish better position on possible claims over the transactions of members and borrowers. The emphasis was on the protection of the resources for the overall welfare of the institution and their members.

"There was the management's directive to guard our resources; strict implementation of the credit policy and doing the appropriate actions to address the problem. After doing the counseling to members, it is their prerogative. It is just minimizing the exposure of the cooperative." P04_CQ3.3

We really had educated our officers and staff telling them that if possible, not to participate on those investment schemes that obviously were really scams. It was really avoided through the management's directive not to have the cooperative employees to be seen by members participating on those activities because the rest of the members may assume that the cooperative was really participating on those endeavors. As a result, there were few employees who really tendered their resignation as they really engaged on those investment schemes thinking that they will sustain. They had resigned as they cannot comply the mandate from the management. P03_CQ3.1

I believe it was the good management because had the management and officers directly participated, it will drag all the members into the investment schemes. $P03_CQ3.3$

Enterprise resilience

The kind of management and leadership style in the microfinance institutions had intensified the awareness and vigilance of the business disruption caused by the investment schemes. These institutions generally did not have control if members would want to withdraw their savings. However, the selected cases were able to manage withdrawals and did not result to real massive withdrawals that could have brought the institutions into bankruptcy.

"So far in the cooperative branches, we were not significantly affected though there were withdrawals but not necessarily big withdrawals. Maybe those members may have invested but the money they put into those investment schemes may not be sourced from the cooperative. Some members have also deposits in banks and other coops." P02 CQ1.3

There was really an increase of past-due rate during that time though one good thing for the cooperative because most of its members are in the government service; 70 to 80 percent of the members are in the government. P03_CQ2.2

"There was the leadership by the credit manager who was very cautious in addressing the problem; stuck to the credit policy and just followed it. We were able to tolerate some minor risks in relation to secured loans." P04_CQ3.1

Common actions done by the microfinance institutions to counter the negative impact of the investment schemes was by doing intensified information drive and financial literacy integration in orientations and pre-membership seminars.

After the crackdown, we really integrated discussing about the matter on membership seminars and later when they apply for loans. P04_CQ3.1

What was regularly done by the cooperative during that time was doing regular orientation to the members on financial literacy; encouraging them to regularly do savings. It is part of teaching them to take care of their hard-earned money and not to engage in those 'instant money" investment activities. P03_CQ3.3

The selected cases have successfully hurdled that challenge brought by the investment schemes. It was more attributed to the good management and long-established businesses that provided ample experiences to decide on how to address the very serious business problems when almost the entire society succumbed to the popularity and trap of investment schemes. It was made into a social phenomenon in a negative way.

In 2020, though there was the increase in delinquency, we were still able to give dividends to members. Generally, we were able to recover in 2021 though it was more affected again by the pandemic. In 2021 we were able to give 10% dividends and 12% for 2022. P04_CQ3.2

Few months after the crackdown by the government, the level of deposits gradually increased. Based on that experience, the cooperative can still survive in the event that it will happen again in the future. P03_CQ3.2

Similarities and differences of challenges and coping strategies

The data on specific similarities and differences of the microfinance institutions' experiences on the challenges and coping mechanism to address the business disruption brought by the investment schemes are summarized in Table 2 below.

Table 2 Cross-case analysis of challenges and coping strategies by the microfinance institutions amidst investment schemes proliferation

Themes on Challenges	Cas	se Units	
and Coping Mechanism	Similar	Different	Remarks
Challenges			
Risk identification and recognition	01, 03, & 04		Common experience by the three cases the degree of threat for possible negative impact of the investment schemes. The increase on loan defaults and decline on new loan applications were experienced by the three cases.
		02	Case 02 was in the lighter situation in recognizing the threat as there was a strong reliance on the system that was operating to address the threat.
Customer behavior	01,02, 03, & 04		All cases experienced having members and personnel doing the herding behavior and engaged in investment schemes activities.
Coping mechanism			
Risk reduction	01,02, 03, & 04		All the cases performed timely response to the disruptive event and did intensified loan evaluation for new applications. Management directives were cascaded down the line requiring compliance.
Core business focus	01,02, 03, & 04		Adherence to existing credit policy were performed by all the cases. Additional procedures were done to secure the position of the cooperatives in the event of default.
Organizational culture	01, 03, & 04		The positive organizational culture enabled the three cases not to be hardly hit by the number of members withdrawing and participated in the investment schemes. The majority of their membership were kept intact.
		02	Case 02 had observed lesser number of members and employees who engaged in investment schemes. They had the strong belief on the psychology in management that is operating in the organization.

Organizational commitment	01 & 04		Case 01 and 04 had experienced the typical organizational commitment by personnel and members when their majority of membership were kept intact though a fraction of their members fell victim of the investment schemes.
		02	Case 02 had a strong conviction that their people doing the management's mandate along with the presence of psychology in management had spared them from the negative impact of the investment schemes.
		03	Case 03 emphasized that not only the majority of their employees were committed to the vision and mission of the institution but also the members that took active participation on maintaining the good public image of the cooperative.
Enterprise resilience	01, 03, & 04		All the cases performed awareness and vigilance of the disrupting investment schemes. They all do intensified information drive and integrate financial literacy. All of them had survived the business challenge.
		02	Case 02 had put emphasis on their culture of positive mindset operating in the whole organization which emanates from the wisdom of the key people in the management.

It was observed that all four cases have similarities on experiences and coping mechanism employed in terms of members' behavior, risk reduction, and core business focus. However, when it comes to risk identification and recognition, organizational culture, organizational commitment, and enterprise resilience, the experiences and performance of one or two were quite better over the others. Specifically, Case 02 had better experience in recognizing the threat of investments schemes to their business operation. When it comes to organizational commitment, Case 02 was confident that their personnel had shown strong commitment to the vision and mission of the institution. Such commitment along with strong business culture was perceived to have spared them from the negative impact of investment schemes. On the other hand, Case 03 experienced the strong commitment not only by the majority of their employees but also by the majority of members who also exerted efforts to protect the image of their institution.

Lastly, in terms of enterprise resilience, Case 02 had been confident that their positive business mindset, which is a big component of their organizational culture, had provided them the ease of surviving the business disruption brought by the investment schemes.

DISCUSSION

Risk awareness along with efficient communication within an organization would enable the business to mitigate the impact of identified risk in the process of enterprise management (Pang et al., 2022). When the imminent threat of the investment schemes caught the attention of the microfinance institutions' management at the early stage, the risk recognition was also immediate and perceived to disrupt business operations. They had identified the same as a business risk which is generally characterized by situations or events that can cause unfavorable impact to operations and profitability. It is argued that risk in business operation should be perceived as circumstances that could bring threats in terms of possible loss of resources, reduce profitability, and disruptions to business operations (Igor, 2023).

In the process or risk reduction amidst the challenges posted by the investment schemes, the risk management quality of the microfinance institutions had played a significant role. A good enterprise risk management in an organization enabled management to explore opportunities and evaluate the potential risk that will eventually maintain business efficiency and competitive advantage (Ushmani, 2021). In developing countries, financial institutions invest more resources toward risk management endeavors (Silwimba & Fadun, 2023). It was evident that there were direct mandates from the top management to keep the situation under control and somehow mitigated the negative impact of the investment schemes to the microfinance institutions' business and profitability.

Equally important with the other components in managing risk in relation to credit default management is the culture operating within the organization. Organization culture, established risk management objectives, and building risk awareness by the management team play a vital role in business operations consistent to its enterprise goals (Ding et al., 2023). Organizational culture normally increases the level of resilience in an organization (Arfiansyah, 2021). This had strengthened the management's decisions that were translated into specific directives requiring compliance and in turn, the people down the line found ease of execution as they have understood and embraced the culture.

Further, personnel's good experience in organizational culture had led to better commitment to organization. It is characterized by the employees' high performance in achieving business goals (Nahak & Ellitan, 2022; Lee & Kim, 2023; and Perdana et al., 2023). Lastly, considered as major components of enterprise resilience include addressing the uncertain and disruptive events and employing the preventive and recovery procedures to bring back normal level of operations. It is an enabling capability of a business organization to achieve long-term business continuity. Specifically, it interrelates the capabilities of the leaders and best practices in risk management to resilience (Sanchis & Poler, 2019; Sanchis et al., 2020; and Lisdiono et al., 2022). It is evident to these billionaire microfinance institutions with their size in terms of assets coupled with the length of business existence and experience. These had enabled them to survive the disruptive challenge of the investment schemes.

CONCLUSION

Resiliency relies significantly on strong organization culture and not just relying on strong implementation of credit policy. The culture enables to majority of the people involved in the operation, if not all, to embrace the top management's directives on how to address the business disrupting event. Risk management on credit is a major area of significance as credit is the main source of revenue and profitability for microfinance institutions. Maintaining a low level of loan defaults and well-utilized funds could translate into profit maximization and increasing the value to its members. It was evident from the information obtained from the participants that the longer the business existence of the microfinance institution, the more they become learned and experienced in surviving business disrupting events.

Microfinance institutions should continue intensifying financial literacy and information drive to educate members on the negative outcomes that investment schemes may cause negatively on financial well-being of individuals.

IMPLICATIONS FOR PRACTICE

The inferences from the results of study will have implications on how the microfinance institutions choose strategic actions to address the challenges of investments schemes if they will re-emerge in the future and will pose threats to microfinance institutions' profitability. The results have also emphasized the government's role in putting investment schemes to a full stop through legal proceedings. Historical evidences had proven how the Ponzi scheme had devastated societies and affected the financial well-being of individuals. The timing of enforcing applicable laws is critical to cease further spreading of the economic damages. This could be an avenue for strengthening the rules and regulations by the governing agencies as well as for the legislators to enact or refine existing laws about investment schemes for a more stringent law implementation.

STRENGTHS AND LIMITATIONS

This study presents data and information that are systematically collected to provide answers to the research question particularly on the coping mechanism of microfinance institutions on the challenges of investment schemes' proliferation. Its strengths would include the planning and design of the study which had undergone scrutiny and review by six (6) expert validators of the research questions; the inclusion and exclusion criteria for participant selection that brought the interview participants who are exposed and experts in their fields; achieved authenticity by using direct quotations from participants' responses that made them vividly part of the research output; the first round of review and critiquing by a panel of reviewer/reactor during the public forum presentation of the research output; and lastly the final review and evaluation by the dissertation panel as requirement of the degree.

The limitation of the study is that results have highlighted the coping mechanism of the big size microfinance institutions but may have not brought in the insights and situations of those small microfinance institutions under the same circumstances of business challenges.

AUTHOR CONTRIBUTIONS

Angelo Jadraque: Research design, participant selection, data gathering, drafting of manuscript, and data analysis. Dr. Christian Paul Moyon: As research adviser, critical review and revision of the manuscript.

DATA AVAILABILITY STATEMENT

Data and related information of this study will be made available upon request subject to compliance of the existing Data Privacy law.

DECLARATION OF CONFLICTING INTERESTS

The author declared that there is no potential conflict of interest in any form in relation to this study, authorship, and publication of the same.

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ETHICAL APPROVAL

Evidenced by the Ethics Review Committee of the University of Mindanao with certification number UMERC-2023-131, this study had satisfied the requirements of all applicable ethical standards in the conduct of research. Such certification covers the manner of gathering data from participants which had extended to voluntary participation, compliance to the data privacy law, obtaining written informed-consent from the participants, and allowing participants who would have wished to withdraw involvement in the study anytime with proper communication executed.

REFERENCES

- 1. Abdul Adzis, A., Lim, H. E., Yeok, S. G., & Saha, A. (2021). Malaysian residential mortgage loan default: A micro-level analysis. Review of Behavioral Finance, 13(5), 663–681. https://doi.org/10.1108/rbf-03-2020-0047
- 2. Abid, L., Masmoudi, A., & Zouari-Ghorbel, S. (2016). The Consumer Loan's Payment Default Predictive Model: an Application of the Logistic Regression and the Discriminant Analysis in a Tunisian Commercial Bank. Journal of the Knowledge Economy, 9(3), 948–962. https://doi.org/10.1007/s13132-016-0382-8

- 3. Agada, S.G., Iheanacho, A.C., and Ogbanje, E.C.(2018). Causes and Measures for Controlling Loan Default among Agricultural Cooperatives in Bune State, Nigeria. International Journal of Environment, Agriculture and Biotechnology, 3(5), 1668–1672. https://doi.org/10.22161/ijeab/3.5.12
- 4. Akpan, U., Udoh, E., and Akpan, S. (2014). Analysis of loan default among agricultural credit guarantee scheme (ACGS) loan beneficiaries in Akwa Ibom State, Nigeria. African Journal of Agricultural Economics and Rural Development ISSN: 2141-5091, 2(2), pp. 121-128.
- 5. Amwayi, E. A., Omete, F. I., & Asakania, F. M. (2014). Analysis of Group Based Loan Default in Kenya: The Case of Agricultural Finance Corporation of Kenya. IOSR Journal of Economics and Finance, 4(2), 19–26. https://doi.org/10.9790/5933-0421926
- 6. Arado, J.P. (2019, June 23). Investment schemes: Economic sabotage? Retrieved 10 October 2023, from SunStar Publishing Inc. website: https://www.sunstar.com.ph/davao/feature/investment-schemes-economic-sabotage
- Arfiansyah, Z. (2021). The effect of enterprise risk management, knowledge management, and organizational culture on organizational resilience. International Journal of Contemporary Accounting, 3(2), 93-114. https://doi.org/10.25105/ijca.v3i2.9227
- 8. Aslam, U., Tariq Aziz, H. I., Sohail, A., & Batcha, N. K. (2019). An Empirical Study on Loan Default Prediction Models. Journal of Computational and Theoretical Nanoscience, 16(8), 3483–3488. https://doi.org/10.1166/jctn.2019.8312
- 9. Barbaglia, L., Manzan, S., and Tossetti, E. (2023). Forecasting Loan Default in Europe with Machine Learning. Journal Of Financial Econometrics, 21(2), 569–596. doi:https://doi.org/10.1093/jjfinec/nbab010
- 10. Batasnatin.com. (2022). FORECLOSURE of Mortgage Redemption. Retrieved 11 June 2023 from https://batasnatin.com/law-library/civil-law/obligations-and-contracts/823-foreclosure-of-mortgage-redemption.html
- 11. BSP.gov.ph. (2022a). 304 PAST DUE ACCOUNTS AND NON-PERFORMING LOANS Manual of Regulations for Banks. Retrieved 06 January 2023 from https://morb.bsp.gov.ph/304-past-due-accounts-and-non-performing-loans/
- 12. BSP.gov.ph. (2022b). Appendix 15 Manual of Regulations for Banks. Retrieved 06 January 2023 from https://morb.bsp.gov.ph/appendix-15/
- 13. BSP.gov.ph. (2022c). Recent Trends in the Philippine Financial System. Retrieved 04 January 2023 from https://www.bsp.gov.ph/Media_And_Research/Publications/ReportonRecentTrends2021-12.pdf
- 14. CDA (2022). MC 2020-18 | Regulatory Relief Measures for Cooperatives with Credit Operations in View of the COVID-19 Pandemic | CDA. Retrieved 11 October 2022 from https://cda.gov.ph/memorandum-circulars/mc-2020-18-regulatory-relief-measures-for-cooperatives-with-credit-operations-in-view-of-the-covid-19-pandemic/
- 15. Chipongian, L. (21 Aug 2022). BSP to cut reserves ratio in Dec. Manila Bulletin. Retrieved 08 October 2022, from Manila Bulletin website: https://mb.com.ph/2022/08/01/bsp-to-cut-reserves-ratio-in-dec/
- 16. Creswell, J. (2013). Qualitative Inquiry and Research Design, 3e. SAGE Publications, Inc.
- 17. Cyree, K. B. (2020). The impact and evolution of consumer delinquencies on bank loan delinquencies. Managerial Finance, 47(3), 413–438. https://doi.org/10.1108/mf-04-2020-0206
- 18. Ding, Y., Hu, H., and Zhang, H. (2023). Research on Risk Chain Identification of Business Management in Chinese SMEs Based on ISM-MICMAC Model. BCP Business & Management. 36 (1), pp. 250-251.
- 19. Edge.Sagepub.Com. (n.d.). Instructor Access | Online Resources. Retrieved 24 June 2023 from https://edge.sagepub.com/node/25608/student-resources/chapter-8/video-and-multimedia
- 20. Enwereji, P. C., & Uwizeyimana, D. (2020). Municipal Consumer Debt in South African Municipalities: Contexts, Causes, and Realities. Research in World Economy, 11(3), 333. https://doi.org/10.5430/rwe.v11n3p333
- 21. Fosu, S., Danso, A., Agyei-Boapeah, H., Ntim, C.G., and Adegbite, E. (2019). 'Credit Information Sharing and Loan Default in Developing Countries: The Moderating Effect of Banking Market Concentration and National Governance Quality', Review of Quantitative Finance and Accounting.
- 22. Gan, C., Li, Z., Wang, W., & Kao, B. (2012). Credit scoring in mortgage lending: evidence from China. International Journal of Housing Markets and Analysis, 5(4), 334–350. https://doi.org/10.1108/17538271211268457
- 23. Goedecke, J. (2018). Contagious loan default. Economics Letters, 170, 14–18. https://doi.org/10.1016/j.econlet.2018.05.028
- 24. Graneheim, U. H., Lindgren, B.-M., & Lundman, B. (2017). Methodological challenges in qualitative content analysis: A discussion paper. Nurse Education Today, 56(1), 29–34. https://doi.org/10.1016/j.nedt.2017.06.002
- 25. Hassan, M. K., Brodmann, J., Rayfield, B., & Huda, M. (2018). Modeling credit risk in credit unions using survival analysis. International Journal of Bank Marketing, 36(3), 482–495. https://doi.org/10.1108/ijbm-05-2017-0091
- 26. Himali, L. (2020). Determinants of Personal Loan Default and Performance of the Proportional Hazards Model with that ofaRandom Survival Forests Models. International Journal of Applied Science and Research, 84. https://www.ijasr.org/paper/IJASR0042244.pdf
- 27. Igor, K. (2023). BUSINESS RISKS MANAGEMENT OF WHOLESALE TRADE ENTERPRISES. 1(2), pp. 81–90. doi:https://doi.org/10.36910/6775-2308-8559-2023-2-12
- 28. International Monetary Fund (IMF), (2019). Financial Soundness Indicators Compilation Guide, Prepublication Draft. Retrieved 11 October 2022 from https://www.imf.org > Files > Data > fsicg2019-prepublication-final-042519
- 29. Ismail, S., Ezaili Alias, N., Koe, W-L., Othman, R., & Halim Mahphoth, M. (2018). Empirical Investigation on Attitude towards Personal Loans Borrowing. KnE Social Sciences, 3(10), 114. https://doi.org/10.18502/kss.v3i10.3123
- 30. Jalal-Eddeen, S., Saleh, M., & Jalal-Eddeen, F. (2019). A Common Database for Clients and Its Effect on Loan Default in Microfinance Bank Operations: An Outlook of Microfinance Banks in Yola, Adamawa State, Nigeria. OALib, 06(12), 1–12. https://doi.org/10.4236/oalib.1105913
- 31. Jalloh, B.M.Y., Appiah, K.O., and Gyimah, P. (2019) 'Does gender affect loan default?', EuroMed J. Management, 3(1), pp.42–49.
- 32. Kasango, J. and Kung'u, J. (2018). An Evaluation of Factors influencing Loan Default among Group Borrowers of Deposit Taking Microfinance Banks in Kenya. IOSR Journal of Economics and Finance, 9(6), pp. 62-70.

- 33. Khedr, M. H., Azim, N. A., & Ammar, A. M. (2021). A New Prediction Approach for Preventing Default Customers from Applying Personal Loans Using Machine Learning. International Journal of Computer Science and Mobile Computing, 10(12), 71–82. https://doi.org/10.47760/ijcsmc.2021.v10i12.009
- 34. Koć, U. and Sevgili, T. (2020). Consumer loans' first payment default detection: a predictive model. TURKISH JOURNAL of ELECTRICAL ENGINEERING & COMPUTER SCIENCES, 28(1), 167–181. https://doi.org/10.3906/elk-1809-190
- 35. Kumar, M., Goel, V., Jain, T., Singhal, S., and Goel, L. (2018). Neural network approach to loan default prediction. International Research Journal of Engineering and Technology (IRJET), 5(4), pp.4231–4234.
- 36. Kwofie, C., Owusu-Ansah, C., & Boadi, C. (2015). Predicting the Probability of Loan-Default: An Application of Binary Logistic Regression. Research Journal of Mathematics and Statistics, 7(4), 46–52. https://doi.org/10.19026/rjms.7.2206
- 37. Lawphil.net. (n.d.). B.P. 22. Retrieved 10 October 2022 from: https://lawphil.net/statutes/bataspam/bp1979/bp_22_1979.html
- 38. Lee, M., & Kim, B. (2023). Effect of Employee Experience on Organizational Commitment: Case of South Korea. Effect of Employee Experience on Organizational Commitment: Case of South Korea, 13(7), 521–521. https://doi.org/10.3390/bs13070521
- 39. Lisdiono, P., Said, J., Yusoff, H., & Hermawan, A. A. (2022). Examining Leadership Capabilities, Risk Management Practices, and Organizational Resilience: The Case of State-Owned Enterprises in Indonesia. Sustainability, 14(10), 6268. https://doi.org/10.3390/su14106268
- 40. Msomi, T., & Olarewaju, O. (2022). Nexus of Loan Re-payment Plans, Interest on Loans and the Sustainability of Small and Medium Enterprises in South Africa. African Journal of Inter/Multidisciplinary Studies, 4(1), 205–216. https://doi.org/10.51415/ajims.v4i1.976
- 41. Murthy, U., & Anthony Mariadas, P. (2017). An Exploratory Study on the Factors Contributing Loan Repayment Default among the Loan Borrowers in Micro Finance Institutions in Shah Alam, Selangor. International Journal of Business and Management, 12(12), 242. https://doi.org/10.5539/ijbm.v12n12p242
- 42. Nahak, M., & Ellitan, L. (2022). Organizational Commitment and Organizational Sustainability of the Creative Commons Attribution License (CC BY 4.0). International Journal of Trend in Scientific Research and Development. IJTSRD. https://www.ijtsrd.com/papers/ijtsrd50052.pdf
- 43. Nanayakkara, G., & Stewart, J. (2015). Gender and other repayment determinants of microfinancing in Indonesia and Sri Lanka. International Journal of Social Economics, 42(4), 322–339. https://doi.org/10.1108/ijse-10-2013-0216
- 44. Obare, D. M., Njoroge, G. G., & Muraya, M. M. (2019). Analysis of Individual Loan Defaults Using Logit under Supervised Machine Learning Approach. Asian Journal of Probability and Statistics, 1–12. https://doi.org/10.9734/ajpas/2019/v3i430100
- 45. Obare, O. & Muraya, M. (2018). Comparison of Accuracy of Support Vector Machine Model and Logistic Regression Model in Predicting Individual Loan Defaults. American Journal of Applied Mathematics and Statistics, 6(6), 266–271. https://doi.org/10.12691/ajams-6-6-8
- 46. Owusu-Manu, D.-G., Asiedu, R. O., Edwards, D. J., Donkor-Hyiaman, K., Abuntori, P. A., &
- 47. El-Gohary, H. (2019). An assessment of mortgage loan default propensity in Ghana. Journal of Engineering, Design and Technology. https://doi.org/10.1108/jedt-01-2019-0016
- 48. Pang, Y., Wang, J., and Zhang, J. (2022). Identification of Business Management Risk Chain Based on ISM MICMAC Model. BCP Business & Management, 33 (1) pp.338-339.
- 49. PDIC.gov.ph. (2022). Retrieved 11 October 2022 from https://www.pdic.gov.ph/files/BSDStats/DDD_PBS_ProvinceMunicipality.html
- 50. Perdana, A., Ika, H., Setiawan, P., & Rohman, A. (2023). The Influence of Organizational Culture and Leadership on Employee Innovative Behaviour Mediated by Organizational Commitment. International Journal of Business and Applied Social Science, 18–28. https://doi.org/10.33642/ijbass.v9n6p3
- 51. Pereira, S., & Mourao, P. (2012). Why does the microcredit borrowing rate differ across countries? A cross-country study. International Journal of Social Economics, 39(8), 536–550. https://doi.org/10.1108/03068291211238428
- 52. Roller, M. and Lavrakas, P. (2015). Applied Qualitative Research Design (A Total Quality Framework Approach). The Quilford Press.
- 53. Sanchis, R., & Poler, R. (2019). Enterprise Resilience Assessment—A Quantitative Approach. Sustainability, 11(16), 4327. https://doi.org/10.3390/su11164327
- 54. Sanchis, R., Canetta, L., & Poler, R. (2020). A Conceptual Reference Framework for Enterprise Resilience Enhancement. Sustainability, 12(4), 1464. https://doi.org/10.3390/su12041464
- 55. Silwimba, P., & Fadun, O. S. (2023). Allocation of resources for risk management activities by business organisations in developing countries: Evidence from Zambia. Bussecon Review of Social Sciences (2687-2285), 4(2), 15–24. https://doi.org/10.36096/brss.v4i2.381
- 56. Spencer, L., Ritchie, J., Lewis, J., & Dillon, L. (n.d.). Quality in Qualitative Evaluation: A framework for assessing research evidence A Quality Framework. Retrieved December 11, 2023, from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/498322/a_quality_framework_tcm6-38740.pdf
- 57. Statistica. (n.d.). Philippines: deposits in the banking system by region 2021. Retrieved 10 August 2022, from Statista website: https://www.statista.com/statistics/1063017/philippines-deposits-banking-system-by-region/
- 58. Sum, MD., Ismael, W., Abdullah, Z.H., Mohd Noor Shah, N.F., & Hendradi, R. (2022). A New Efficient Credit Scoring Model for Personal Loan Using Data Mining Technique for Sustainable Development. Journal of Sustainability Science And Management, 17(5), pp.60–76.
- Tradingeconomics.com. (2022). Germany Bank Nonperforming Loans To Gross Loans 2022 Data 2023 Forecast 1998-2019 Historical. Retrieved 10 October 2022, from https://tradingeconomics.com/germany/bank-nonperforming-loans-togross-loans-percent-wb-data.html

- 60. Twesige, D., Uwamahoro, A., Ndikubwimana, P., Gasheja, F., Misago, I. K., & Hategikimana, U. (2021). Causes of loan defaults within Microfinance institutions: Learning from micro and small business owners in Rwanda: A case of MSEs in Kigali. Rwanda Journal of Social Sciences, Humanities and Business, 2(1), 27–49. https://doi.org/10.4314/rjsshb.v2i1.3
- 61. Ushmani, A. (2021). Enterprise Risk Management in the Business Operations. International Journal of Computer Science Trends and Technology, 9 (4) pp.52-53.
- 62. Vijayakumar, M. (2016). A Study on the Factors Affecting the Consumers to Default the Housing Loan. SUMEDHA Journal of Management, 5 (4), pp. 82-91.
- 63. Welsh, E. (2002). Dealing with Data: Using NVivo in the Qualitative Data Analysis Process. Forum Qualitative Sozialforschung / Forum: Qualitative Sozial Research, 3(2). https://doi.org/10.17169/fqs-3.2.865
- 64. Yeboah, E., & Oduro, I. M. (2018). Determinants of Loan Defaults in Some Selected Credit Unions in Kumasi Metropolis of Ghana. Open Journal of Business and Management, 06(03), 778–795. https://doi.org/10.4236/ojbm.2018.63059
- 65. Yin, R. (2018). Case Study Research Applications Design and Methods, 6e. Sage Publishing Inc.

