



Drivers, inhibitors and the future of co-operative financial institutions: A Delphi study on South African perspective

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ABSTRACT

This study investigates the performance drivers and inhibitors in South Africa's Co-operative Financial Institutions (CFIs) by employing a hybrid Delphi-SWOT study. Issues generated by 36 experts over four rounds of questionnaires, suggest that the sector is suffering more from internal than external inhibitors. From the 22 future developments identified by these experts, six growth strategies within the control or influence of management were drawn in the areas of technology, people, marketing, culture shift, environmental and policy interventions. The study presents a CFI performance ecosystem based on identifying key drivers, inhibitors and strategies to achieve high-performance growth.

1. Introduction

Financial markets failure is one of the challenges facing many economies as large banks tend to engage in credit rationing of small to medium enterprises (SMEs) and marginal communities citing information asymmetry and transaction cost challenges. The situation has worsened in the past two decades due to mergers and acquisitions which reduced the number of banks (Berger et al., 2001; Leyshon and Thrift, 1993). Ryan et al. (2014) found that increased bank market power results in increased financing constraints for SMEs across 20 European countries. Similarly, in Spain Carbó-Valverde et al. (2016) found that credit-constrained SMEs depend on trade credit, but not bank loans, and that the intensity of this dependence increased during the financial crisis. In a recent banking market structure study in Poland, Hasan et al. (2017) found that cooperative banks facilitate access to bank financing, lower financial costs, boost investments, and favour growth for SMEs. They found that regions where cooperative banks hold a strong position are characterized by the rapid pace of new firm creation, whilst the opposite effects appear in the majority of cases for local banking markets dominated by foreign-owned banks. Unlike traditional banking institutions, Co-operative Financial Institutions (CFIs) are member-focused deposit taking and loan granting institutions, and

are efficient in generating borrower-specific information, which can address 'informational' distance. The role of CFIs in the provision of ethical and social finance is a loud call for research to understand their qualitative performance drivers and inhibitors by engaging co-operative finance experts to enhance their performance.

Recently, a number of studies have started looking at how CFIs, which are a grassroot innovation, have performed during and after the global financial crisis compared to investor-owned banks (Becchetti et al., 2016; Birchall, 2009; Birchall, 2013; Kuc and Teply, 2015). Globally, Crear (2009) observed that not a single financial co-operative has received government recapitalization following the recent global financial crisis. Statistics from the World Council of Credit Unions, a global trade association for credit unions and financial co-operatives, shows CFIs' total assets reached \$1.8 trillion and serving 236 million members in 2016, up from \$1.2 trillion and 177 million respectively in 2007 (WOCCU, 2016). The one member one vote system ensures CFIs serve common needs rather than the needs of a handful of individuals as in the case with traditional banks (Davis, 2001; Jones and Kalmi, 2015; McKillop and Wilson, 2015). However, effective governance depends more on the willingness of members to exercise their ownership rights to express their views to the board of directors and to hold them accountable for value creation. CFI performance should be targeted

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towards value maximization (Keating and Keating, 1975), cost minimization, service maximization – whether for savers or borrowers (Keating and Keating, 1975; McGregor, 2005), and profit maximization for sustainability (Davis, 2001; Goddard et al., 2014; Keating and Keating, 1975).

The CFI penetration rate in South Africa is the lowest in the world at 0.06% compared to Kenya (13.3%), Rwanda (13.8%), Togo (26.7%), Australia (17.6%), Canada (46.7%), United States (52.6%), Ireland (74.5%) and the worldwide average of 13.5% (WOCCU, 2016). Over recent years, there has been a decrease of South Africa's CFIs and membership from 121 and 59,394 in 2011 to 30 and 29,818 respectively in 2017 (CBDA, 2017). The decrease can be partly explained by the CBDA's prescribed minimum membership and share capital contribution at 200 and R100,000 respectively. In 2007, South Africa passed the Co-operative Banks Act and formed the Co-operative Banks Development Agency (CBDA) in 2009 with a mandate to formally regulate, supervise and develop the sector. The implementation of the regulation could have been harsh to small but growing CFIs, forcing them out of the regulatory environment.

The study employed the ranking-type Delphi technique to gather expert opinions from those working in or with financial co-operatives. The major objectives of the study were, first, to properly understand the qualitative performance drivers and inhibitors of CFIs, and through a SWOT analysis to identify internal and external factors determining performance. Second, to forecast future developments that must happen in the co-operative finance industry to drive high-performance in the next 10 years and help craft growth strategies. We chose a forecasting period of 10 years because multiple organizations align their goals closer to the South Africa's "National Development Plan 2030", a socio-economic policy, and the United Nations' Sustainable Development Goals 2030. These ambitious plans target to end poverty and reduce inequality by 2030 through inclusive growth, hence the need to bring our year 2027 forecast closer to the national and global visions. The need to build robust inclusive financial services is necessary, as access to finance (A2F) appears to be highly correlated with poverty reduction (Beck and Demirgüç-Kunt, 2008). The contribution of CFIs towards members' financial well-being cannot be overlooked, hence the need to understand their performance drivers. A contribution to a better understanding through rigorous research is of value not only to researchers, CFI practitioners and members, but also to policymakers and regulators.

To our knowledge, there are no studies that have examined the drivers and inhibitors to CFI performance or tried to develop alternative futures using hybrid Delphi-SWOT analysis. The Delphi method is suitable for exploratory research, theory building and forecasting involving complex and multi-disciplinary issues. The only previous attempt was by Marwa and Aziakpono (2015) who used a case study mixed approach to understand what drives the performance of savings and credit co-operatives (SACCOs) in Tanzania. Most studies using Delphi focus on energy, automotive, information technology, agriculture, health, manufacturing and big data analytics (see Campos-Climent and Apetrei, 2012; Förster, 2015; Obrecht and Denac, 2016; Tavana et al., 2012; Vidgen et al., 2017; Worrell et al., 2013).

The current study is structured as follows. Section 2 provides an overview of financial inclusion in South Africa, whilst Section 3 critiques the literature on CFI performance drivers and inhibitors. Section 4 provides the data analysis on the convergence of consensus, followed by findings based on the final rankings by experts in Section 5. Finally, we conclude with managerial implications of the findings and recommendations for future research.

2. Financial inclusion in South Africa and the role of CFIs

In South Africa nearly 8.5 million adults are excluded from the formal financial system (FinMark Trust, 2016). In total, 77% of all adults have a bank account. However, if the social grant beneficiaries

(nearly 5.1 million) are excluded, only 58% are banked. About 51% of adults are borrowing from various sources to supplement their limited resources, 46% from non-bank financial institutions (NBFIs), whilst only 14% are borrowing from banking institutions. On the 'quality' aspect, the narrative for developmental credit is becoming the norm as only 5% are using credit for developmental reasons. In 2016, 33% of adults were saving, with 15% saving through banks, 14% saving with NBFIs, 8% with informal institutions and 11% saving at home. Previous attempts to increase financial inclusion through the Mzansi account (an entry-level national bank account targeting the mass population in 2004) failed, due to lack of quality of access to finance. Kostov et al. (2015) confirmed that Mzansi accounts are perceived as not meeting the aspirations of those aiming to climb up the financial services ladder, making CFIs a suitable alternative.

CFIs help to bridge the financial exclusion gap by pooling members' financial resources together for on-lending to the same members (Frame et al., 2002; McKillop and Wilson, 2015; Périlleux and Szafarz, 2015). As member-driven organizations operating within a common bond, they are better placed to reduce informational opacity and high transaction costs which usually result in credit rationing in credit markets (Stiglitz and Weiss, 1981). This enables members to break the poverty trap caused by lack of economic opportunities and low productivity due to lack of access to financial services. Since CFIs are owned and operated by members, they have an objective of maximizing services provided to members. This immediately suggests that profit maximization is not an ultimate objective, since there are no non-member suppliers or customers to exploit (Fried et al., 1993).

3. Literature review: CFI performance drivers and inhibitors

There are seven streams of empirical papers dealing with the performance dynamics of CFIs: industry professionalization (governance), policies, technology diffusion, social capital, outreach, economic trends and sector perception. Several studies reveal that co-operatives established with the social purpose of serving poor communities have the real possibility of becoming sustainable and effective, *if and only if* they adopt a radical commercial approach to organizational development. Professionally managed CFIs are found to be attractive to middle-income earners (Crear, 2009; Goddard et al., 2009; Jones, 2008; Jones and Kalmi, 2015; McKillop and Wilson, 2015). Campos-Climent and Apetrei (2012) find human capital related factors as top priorities in overcoming challenges in Mediterranean co-operatives. McKillop and Wilson (2003) argued that if CFIs were to achieve social goals, they first had to achieve their economic ones. McKillop et al. (2007) found CFIs that concentrate solely on serving the needs of the financially excluded to be inherently weak and not sustainable in the long term. CFIs were advised to formulate policies and outreach strategies to draw members from a cross-section of the population to achieve a balanced mix of funding and membership (Jones and Kalmi, 2015; McKee and Kagan, 2016).

CFIs are driven by the social trust among people sharing a common bond much needed in building social capital and community relations. Putnam (1993) and Knack and Keefer (1997) posit that social capital supports growth and development through a number of channels, such as the reduction in uncertainty, transaction costs and contracts enforcement, thereby enhancing efficiency. A survey by Sabatini et al. (2014) in Italy found that unlike any other type of enterprise, co-operatives have a particular ability to foster the development of social trust. In a similar study using a 2003–2011 dataset to understand the relationship between the market share of Italian credit cooperative banks and some measures of trust, Catturani et al. (2016) found that cooperatives require high levels of social capital to be successful. Trust is one of the pillars of well-functioning markets as the more the trust, the less the transaction costs.

In addition, CFIs need to appeal to a broader spectrum of people to correct the perception that they are just the poor people's banks rather

than community banks serving a wider cross-section of the society. McKillop et al. (2011) found that a CFI with mixed outreach to the poor, working poor, working class and middle class has the capacity to reach greater numbers of people living in poverty than an institution that exists to serve only the poor. Such CFIs have reduced exposure to concentration risk as loans and deposits of the relatively wealthier members drive growth, profitability and sustainability of the institutions, enabling them to provide affordable financial services to poor members whilst keeping costs low (Crear, 2009). McKillop et al. (2011) advocated for further legislative changes in the UK to promote CFIs to a broader population mix.

In the UK the legislative review in 1996 provided an opportunity for credit unions to grow and extend their scale and scope of services to members including the affluent society (McKillop and Wilson, 2003). The reforms allowed CFIs to drive membership by relaxing the common bond restrictions to multiple bonds (Frame et al., 2002; Hinson and Juras, 2002; Jones, 2008). Even though the regulation changes transformed the structure of the industry, credit unions that switched from single-bond institutions to broader field-of-membership types were believed to be operating with a greater risk of bankruptcy. This is due to high information asymmetries through the broadening of the common bond and the likelihood of breaching regulatory standards (Ely, 2014; Frame et al., 2002). The introduction of a deposit insurance, the emphasis on effective risk management, and the opportunity to offer diverse innovative financial services were applauded (McKillop and Wilson, 2003). However, there were warnings of the likelihood of a decline in players through mergers.

The overall consequence of deregulation brought changes in the patterns of growth across different types of credit unions (Goddard et al., 2016). Larger credit unions in the UK tended to grow faster than their smaller counterparts. Externally generated growth also took place via mergers and acquisitions, whereby larger, well-capitalized and technologically-advanced credit unions acquired smaller, less capitalized counterparts that failed to adopt interactive banking technologies. Between 2003 and 2013, the number of credit unions reduced by approximately 3% per year. In 1994, there were 7848 credit unions with over US\$10 million in assets; by the end of 2012 this number had declined to 2489, a 68% decline (McKee and Kagan, 2016). Consequently, there has been a rapid growth in credit union asset size. In 2013 the average credit union had US\$160.9 million assets compared to US\$65.6 million in 2003 (McKillop and Wilson, 2015). However, Goddard et al. (2014) found other growth sources via diversification into non-interest activities, although this did not lead to enhanced returns for members. In Finland, Jones and Kalmi (2015) found a positive relationship between membership growth and financial co-operative performance. In the US, Leggett and Strand (2002) observed that, as CFIs add unrelated groups and expand, the prospects for separation between ownership and control increases, creating potential agency control problems. Management is apparently able to channel residual earnings away from members (higher net interest margins) towards itself (higher salaries and operating expenses). Second, as membership expands, each member can feel disempowered as many members no longer exercise their ownership rights and responsibilities in overseeing management (Leggett and Strand, 2002). Eventually this creates strategic defaults as members no longer see themselves as owners, resulting in high delinquency which weakens CFI balance sheets as observed in Czech (Kuc and Teply, 2015).

Most CFIs are small and their capital stock in absolute value combined with risky assets puts pressure on their stability. Mathuva (2016) found size, capital base, loan to assets ratio, leverage and cost to income ratio were financial performance drivers in Kenya SACCOs. In similar study by McKee and Kagan (2016), of the US credit unions with assets below US\$10 million in 1994, only a third were still operational by 2011. de Carvalho et al. (2011) examined the causes of credit union failures in Brazil between 1995 and 2009, and their results suggest that the size of credit unions plays a key role in their survival and longevity.

Goddard et al. (2014) found that in the US, relatively low membership and assets limits the capacity to attract deposits, adopt product marketing, process loans, adopt new technology and distribute regulatory compliance costs effectively. Technological innovation is often cited as the main, if not the most, influential driver of change in the banking industry. Technology has become the major game-changer in disrupting business models in delivering value (Bradley and Stewart, 2002; Chandio et al., 2017). The decision to adopt technology is usually associated with asset size and the diversity of the credit union's product offerings (McKillop and Quinn, 2015).

McKillop and Wilson (2003) warned policymakers not to provide too many policy incentives to support the development of CFIs as this will hinder their self-help cornerstone and weaken the future development of the movement. In US CFIs are tax exempt, with this status justified by their role in providing financial services to those of modest means. Investigations carried by Hinson and Juras (2002) and Chang et al. (2016) to understand which stakeholders benefit from tax exemption found that members do not receive the benefit in terms of lower loan rates, higher deposit rates or lower service charges as tax exemption benefits are directed to support inefficient operations.

From the literature review, we summarize that each of the seven forces can be either a driver or inhibitor depending on its strength or weakness in influencing CFI performance as depicted in Fig. 1 below. CFIs thrive on community's social capital: if social ties are weak that will affect their performance. Social networks and technology enable financial innovation at grassroots and swift financial solutions delivery in a cost-effective manner, whilst its low adoption raises costs and restricts convenience. A wider membership outreach is important for meaningful capital and savings mobilization, whilst small CFIs have high chances of failure. In addition, professionally managed co-operatives attract membership as institutions with weak governance structures and incompetent staff perform poorly.

Government policies and regulations as enablers have an important role to promote the formation and performance of CFIs, whilst unfavorable regulations affect growth and performance and promote informality. Arun (2005) recommends appropriate country specificities for a regulatory framework to support sustainable delivery of inclusive financial services. On the other hand, perceptions on CFI value proposition is a major determinant of outreach. Lastly, the economic performance can either pull or push people to or from CFIs depending on the circumstances. We posit that each of these forces can be a driver or inhibitor depending on its strength or weakness.

4. Research methodology

4.1. The Delphi method: an overview

Quite a number of studies have compared traditional surveys and the Delphi method regarding their strengths and shortcomings (see Förster, 2015; Okoli and Pawlowski, 2004; Rowe and Wright, 1999). From these studies, we judge the Delphi method to be a stronger methodology to carry out a rigorous inquiry from co-operative finance experts on complex questions requiring collective judgement. Rather than attempting to assemble a statistically representative sample, the Delphi method utilizes a purposely selected panel of experts to comment on a problem or situation. The rationale for this design choice is that a non-representative sample of experts is more equipped to arrive at a correct decision than a representative sample of non-experts (Okoli and Pawlowski, 2004; Rowe and Wright, 1999; Worrell et al., 2013).

The effectiveness of Delphi method is enhanced in this study through a panel diversity as well as integrating Delphi with SWOT analysis for scenario development with a view to harmonising their potentialities and reducing their limitations (see Landeta et al., 2011). By building on the experts' opinions, appropriate strategies are proposed using SWOT analysis as a methodological examination of the environment in which the sector operates. SWOT analysis is based on

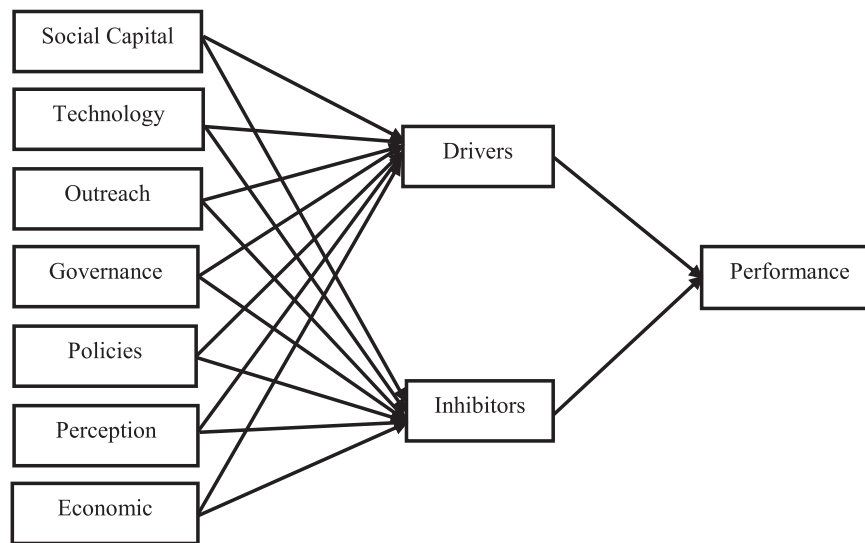


Fig. 1. Forces that drive and inhibit CFI performance.

the identification of (a) internal organization/sector characteristics (Strengths and Weaknesses) and (b) external environment characteristics (Opportunities and Threats) (see Kotler, 1988). It constitutes an important method for learning about a situation and designing future propositions that can be considered necessary to enable strategic thinking by engaging with knowledgeable field experts (Barney, 1995; Dyson, 2004; Li et al., 2016). However, empirical literature that combines the Delphi method with SWOT analysis (hybrid Delphi-SWOT) are very limited (see Dyson, 2004; Terrados et al., 2009; Li et al., 2016; Campos-Climent and Apetrei, 2012; Tavana et al., 2012). None of the studies applied hybrid Delphi-SWOT in financial co-operatives.

The Delphi method was originated in the 1950s at the RAND Corporation, a California-based think-tank in the US to come up with group opinions and to develop consensus on future developments among a group of experts (Dalkey and Helmer, 1963). It was first applied in the US Air Force for systematically and asynchronously capturing expert input to understand accurately current and future development pertaining to national security via iterations of questionnaires (Landeta, 2006; Linstone and Turoff, 1975). The method became popular only after it was published in 1963 by Dalkey and Helmer for non-military purposes after being kept confidential for 12 years (Helmer and Quade, 1963; Landeta, 2006). As a result of the Delphi declassification by the American forces from its secrecy category, its use spread rapidly (Förster, 2015; Landeta, 2006; Rowe and Wright, 1999; Rowe and Wright, 2011). The seminal work by Linstone and Turoff (1975) characterized the further growth of interest in Delphi. An examination of recent literature reveals how widespread the use of Delphi is, with applications in areas as diverse as the automotive industry (see Förster, 2015), energy (see Obrecht and Denac, 2016), agriculture co-operatives

(see Campos-Climent and Apetrei, 2012), technology (see Worrell et al., 2013), internet banking (see Bradley and Stewart, 2002), financial markets (see Kauko and Palmroos, 2014), sharing economy (see Barnes and Mattsson, 2016) and business analytics (see Vidgen et al., 2017). The major strengths of Delphi are based on knowledgeable experts, anonymity of experts, controlled group feedback and iteration whereby the group of experts review and evaluate alternatives through several controlled phases. However, the method has also received criticism that is not due to itself but to deficient application by researchers, such as lack of selection of rigorous panelists, questions and problems badly formulated, and insufficiently analysed outcomes (Landeta, 2006; Winkler and Moser, 2016).

To address some of these concerns many types of the Delphi method have been proposed. The four main techniques extensively used are the classical Delphi, the policy Delphi, the decision Delphi and the ranking-type Delphi (Linstone and Turoff, 1975; Schmidt, 1993; von der Gracht, 2012). Although these techniques share some important features (such as feedback and an iterative process), they vary in terms of their specific objectives and approaches (see Table 1 below).

According to Paré et al. (2013), although the quality standards vary with the assumptions of each Delphi method, we feel that a comparison between the different techniques is not as meaningful or useful as exploring the extent to which the studies that adopt a particular technique demonstrate methodological rigor. To limit the scope of this review and to permit meaningful comparisons between similar studies, we decided to restrict our assessment to ranking-type Delphi, which is by far the most commonly used Delphi technique in the business field (see Worrell et al., 2013 for detailed studies applying this technique in information systems; Bradley and Stewart, 2002 in internet banking; Kauko and

Table 1
Comparison of Delphi types.

	Classical Delphi	Policy Delphi	Decision Delphi	Ranking-type Delphi
Focus	Facts	Ideas	Decisions that influence future directions	Rankings
Goal	Create consensus	Define and differentiate views	Prepare and support decisions	Identify and rank key issues
Panelists	Unbiased experts	Lobbyists	Decision makers	Experts
Participation	Need many panelists (in relation to the complexity of the questions being asked)	Consider all relevant groups with many participants	Cover a high percentage of the relevant decision makers	Number of panelists should not be too large (in order to facilitate consensus)
Common uses	In the natural sciences and engineering where underlying physical “laws of nature” guide experts’ answers	In social and political contexts to analyze policy issues	In contexts where a small, well-defined group have decision making power	In business to guide future management action or research agendas

Source: Paré et al. (2013)

Palmroos, 2014 in financial markets and Obrecht and Denac, 2016 in energy development). The ranking-type Delphi is used to try to reach a group consensus about the relative importance of a set of issues by utilizing three steps: brainstorming, narrowing-down, and ranking. However, Landeta (2006) reminded that Delphi is a research technique facilitating reliable group options not forcing consensus. More importantly, it is acknowledged that there is no one “right” future but alternative futures.

Although the Delphi method in general is relatively simple to administer, design choices made before administering the questionnaire directly impact the rigor and relevance of the results (Worrell et al., 2013). The study design consists of four phases: (1) assembling experts, (2) brainstorming alternatives, (3) narrowing alternatives, and (4) ranking alternatives.

4.2. The process of assembling expert panel

The selection of experts is the most critical requirement to improve the credibility and the validity of the process (Okoli and Pawlowski, 2004). However, the process is very challenging, making a Delphi survey rather complicated and very time-consuming (Grupp and Linstone, 1999; Obrecht and Denac, 2016). We divided experts into four panels: CFI management, regulators, CFI associations, and consultants or capacity builders. The advantage of multi-panel Delphi studies is that they account for multiple expert perspectives in complex and multi-dimensional problems (Worrell et al., 2013). Following literature recommendations there are two to 18 experts in each panel (see Barnes and Mattsson, 2016; Bradley and Stewart, 2002; Campos-Climent and Apetrei, 2012; Kauko and Palmroos, 2014). We ended up with 36 experts of which 50% were CFIs managers. Boje and Murnighan (1982) found no relationship between panel size and effectiveness in decision making.

The identification of experts was done with the assistance of the CBDA who provided the initial list of important organizations and key experts in the CFI sector. Following the guidelines suggested by Okoli and Pawlowski (2004) and Worrell et al. (2013), the present study used a multiple-step iterative approach to identify and select experts through a knowledge resource nomination worksheet (KRNW) detailed in Fig. 2 below, which took a month to compile.

Our experts are quite mature, averaging 44.7 years old with 10.8 years working experience in the CFI sector. Their self-rating averaged 8.3 out of 10 in terms of their knowledge of CFIs compared to 3.7 in agricultural co-operatives, which is the most dominate co-operative type in South Africa. Most experts had Masters degrees, Bachelor's degrees and diplomas, except for four with post-secondary school certificates, but on average they had 14.9 years CFI sector experience.

4.3. Data collection procedures

4.3.1. Questionnaire design

Besides questionnaire quality control checks among researchers and pilot testing, the data collection procedures were reviewed and guidance provided by the Senior Research Consultant of the University of Stellenbosch Business School and then by its Departmental Ethics Screening Committee. Following the advice of Okoli and Pawlowski (2004) and Delbecq et al. (1975), the first questionnaire was emailed to experts the very day they gave their consent to participate, feedback was also via email to aid communication records. Although explained to experts telephonically, experts were required to read and sign an informed consent declaration which explains the study and their rights. The questionnaires contained a maximum of six questions to avoid overburdening experts considering their time constraints but also to try to get the best use of their knowledge. In order to minimize expert fatigue, data collection ran for two and half months with panelists given seven days to respond with reminders towards last two days. It took on average two weeks per round. In the last round, fatigue was evident as it took three weeks to receive feedback. At the end of the study we shared our findings report with the experts as an acknowledgement of and in thanks for their participation.

4.3.2. Administration procedure

Following the recommendations of Okoli and Pawlowski (2004), the administration of the ranking-type Delphi involved three general steps: (1) brainstorming of factors; (2) narrowing down the original list to the most important ones; and (3) rounds of ranking important issues. However, other studies (see Worrell et al., 2013) modified the brainstorming to allow for a seed of factors generated from literature. Our

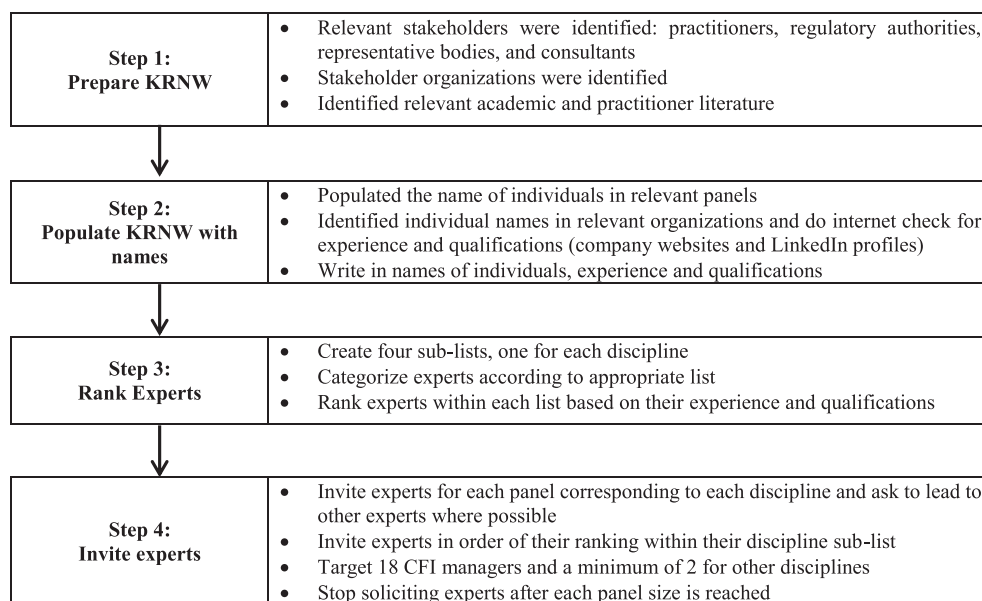


Fig. 2. Procedure for selecting experts.
(adapted from Okoli and Pawlowski, 2004).

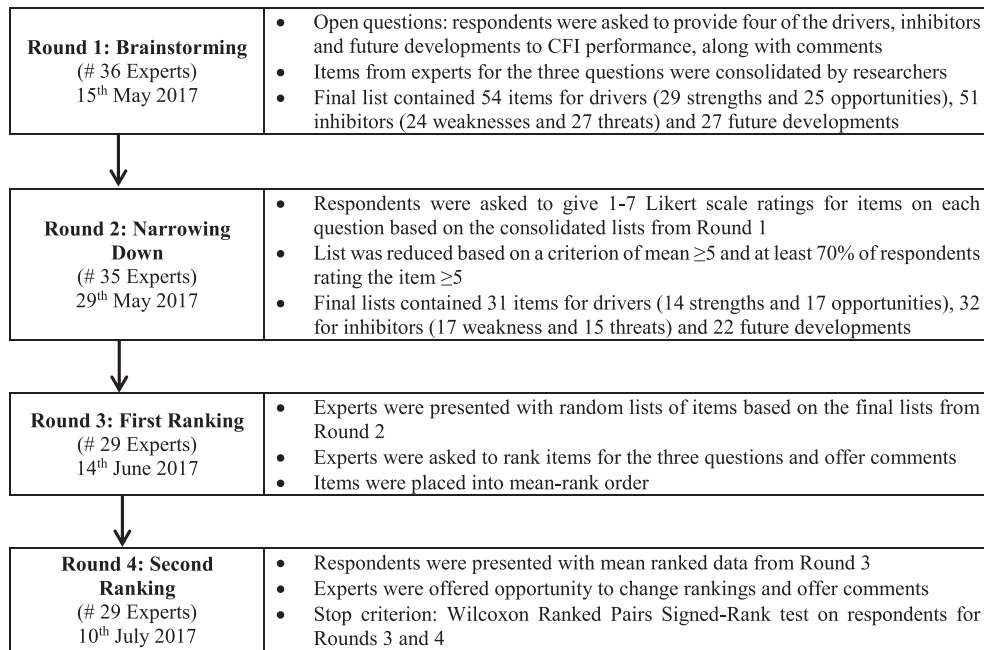


Fig. 3. Process flow of the Delphi study followed.

brainstorming comprised open-ended questions giving leeway to our knowledgeable experts to give their opinions freely. Our study followed the procedure outlined in Fig. 3 below.

Round I questionnaire was sent on the 15th May 2017 on the very day each expert agreed to participate. To make the study more inclusive, there was an Afrikaans translated version of the questionnaire throughout the rounds for non-English speaking participants.

All the issues generated by experts in Round I were put into a spreadsheet and coded independently by two researchers into core themes to reduce the number of similar responses from experts as per guidance from Miles and Huberman (1994). The questionnaire for Round II was sent to panelists on the 29th May 2017 for narrowing down through the use of 1 (strongly disagree) to 7 (strongly agree) (where 4 = neutral) Likert scale rating the issues according to their importance (drivers), their impact (inhibitors) or priority of implementation (future developments). The Likert scale assists in identifying issues that are regarded as important, thus reducing the long list. Following Barnes and Mattsson (2016), two criteria were used to measure the importance of the issue: firstly, the issue should have been rated as important (i.e. ≥ 5) by at least 70% of the panel, and secondly, should have a mean score of not < 5.00 . One expert opted out.

Experts were presented with random-order items in their categories that received consensus in Round II for their ranking in Rounds III and IV according to their importance (drivers), impact (inhibitors) and importance (future developments). Experts were also given an option to justify their rankings. The questionnaire for Round III was sent on the 14th June 2017, and six experts opted out due to fatigue. The mean scores were calculated for the remaining 29 experts, resulting in sending the questionnaire for Round IV on the 10th July 2017. Experts were presented with the group average scores and their initial individual rankings from Round III for each item and requested to reconsider their rankings considering the average ranking of others. All the 29 experts responded in Round IV. We then use the Wilcoxon Ranked Pairs Signed-Rank Test recommended for Delphi studies to assess convergence across two rounds (Kalaian and Kasim, 2012; von der Gracht, 2012).

5. Data analysis

The overall results are mixed but show strong evidence that experts were able to reconsider their rankings whilst some items did not change significantly. From Tables 2a to 2e below the Z statistic values indicate

Table 2a
Wilcoxon Ranked Pairs Signed-Rank test for rounds III and IV – Strengths.

Item	Z	Asymp. Sig. (2-tailed)	Result (at $p < 0.05$)
Pooling more savings together for on-lending to members	-2.375	0.018	IV < III
Able to strengthen the community bond for development	-2.492	0.013	IV < III
Improved savings culture through CFI formal mechanisms	-2.327	0.020	IV < III
CFIs are creating community businesses through A2F	-0.492	0.623	No change
Easy access to credit for CFI members compared to banks	-0.847	0.397	No change
CFIs are meeting community financial needs at low cost	-0.071	0.944	No change
CFIs are pooling capital together for on-lending profitably	-2.156	0.031	IV < III
Members enjoy ownership and control of CFIs effectively	-1.131	0.258	No change
Competitive pricing of loans compared to moneylenders	-1.992	0.046	IV < III
Improving financial literacy among CFI members	-2.530	0.011	IV < III
Positive economic impact as members' well-being improves	-2.071	0.038	IV < III
Growth in membership and savings from organized groups	-1.175	0.240	No change
Helping to fight the debt trap caused by moneylenders	-2.816	0.005	IV < III
Capacity building support from CBDA on CFI governance	-1.944	0.052	No change

that our experts' round IV rankings were statistically different from round III rankings, indicating that experts collectively revised their rankings in round IV. The asymptotic p-value (2-tailed test) of < 0.05 or 5% indicate a significant change in the rankings in round IV compared to round III, whilst an asymptotic p-value of > 0.05 or 5% indicates insignificant change (not significantly different from zero). This indicates that there is little change in the responses from the two consecutive rounds (Kalaian and Kasim, 2012). In summary, issues with a Z score close to or above -2.000 had their asymptotic p-value < 0.05 or 5%, indicating a significant change over the two rounds. There was no significant change on 34 out of 85 items (40%) considering the p-value of above 0.05, whilst the ranking of 51 items changed significantly across rounds (60%) with a p-value of < 0.05 . On 34 issues with insignificant change, experts had relatively similar views already and, in some cases, they decided to maintain their views regardless of differences in their views with some justifying their rankings. We decided to stop further rounds for two reasons: there was little evidence from experts that they would change their rankings further after a telephone

strengths in Table 2a below are mixed as six items did not change significantly: an indication that the experts had relatively similar views already, and in some cases, they decided to maintain their views regardless of differences in their views. The ranking of eight items changed significantly from the two consecutive rounds as some experts reviewed their rankings downwards considering the ranking of others.

Table 2b below indicates that there were no significant changes on all items in the top five opportunities: altogether seven items changed and 10 remain significantly unchanged. The only issue that did not change completely was "Help members out of moneylenders' debt trap" with a Z statistic of zero (0.000) and an asymptotic p-value of 100%. However, there was a strong realization that "Free capacity building from CBDA and the Banking Sector Education and Training Authority (BankSETA) can be further exploited to enhance performance, whilst the re-ranking of "Favorable legislation allowing registration as a co-operative bank (CB) or secondary cooperative bank (SCB)" did not change significantly among other issues.

Table 2b

Wilcoxon Ranked Pairs Signed-Rank test for rounds III and IV – Opportunities.

Item	Z	Asymp. Sig. (2-tailed)	Result (at $p < 0.05$)
Ability to diversify financial services to meet member needs	-0.946	0.344	No change
CFIs create opportunity for the community to own their bank	-1.334	0.182	No change
CFIs are expanding by incorporating informal savings clubs	-1.793	0.073	No change
Adopting financial technology to improve efficiencies	-1.753	0.080	No change
Able to reduce poverty, unemployment, and social inequality	-0.912	0.362	No change
Potential expansion market to the unbanked	-2.386	0.017	IV < III
Improving discipline in the community on financial matters	-1.969	0.049	IV < III
Potential to dominating in financial excluded areas	-1.026	0.305	No change
Improved governance of the CFI as member are owners	-2.555	0.011	IV < III
Avoid exploitative neoliberal bank charges	-2.003	0.045	IV < III
Opportunity to receive social grants on behalf of members	-1.904	0.057	No change
High interest rates on savings	-2.243	0.025	IV < III
Possibility of issuing transactional cards for convenience	-1.755	0.079	No change
Free capacity building from CBDA and BankSETA	-2.371	0.018	IV < III
Help members out of moneylenders' debt trap	0.000	1.000	No change
Ability to create a middle class through improved A2F	-3.077	0.002	IV < III
Favorable legislation allowing registration as a CB or SCB	-1.357	0.175	No change

discussion with some. Secondly, the long response times in the last round were seen as signals of fatigue which could compromise the quality of our findings in further rounds. The complete issues raised in Round I have been removed to keep this article at reasonable length, however they are available on request.

Given the overview interpretation of the results above, results on

In Table 2c below, only four weaknesses did not significantly change whilst experts significantly revised their ranking on 13 issues downwards giving their justifications. Experts reconsidered remarkably their ranking of "Unattractive premises appealing to middle and upper class" followed by "Weak membership and savings growth" and "Weak corporate governance structures".

Table 2c

Wilcoxon Ranked Pairs Signed-Rank test for rounds III and IV – Weaknesses.

Item	Z	Asymp. Sig. (2-tailed)	Result (at $p < 0.05$)
Low adoption of technological banking systems	-2.263	0.024	IV < III
CFIs have weak capital base which cannot absorb credit risk	-1.409	0.159	No change
Low managerial skills to lead CFIs profitably & sustainably	-2.077	0.038	IV < III
Poor marketing of the CFI concept to the greater public	-2.325	0.020	IV < III
Lack of strong cooperative movement, the sector is fragile	-2.392	0.017	IV < III
Poor savings culture among members	-2.405	0.016	IV < III
Lack of participation on the National Payment System (NPS)	-2.508	0.012	IV < III
Inability to retain talent through competitive market salaries	-1.122	0.262	No change
Weak membership and savings growth	-2.675	0.007	IV < III
CFIs are banking with banks so risk losing members	-0.271	0.786	No change
Weak corporate governance structures	-2.692	0.007	IV < III
Weak risk management systems	-2.257	0.024	IV < III
Tight cash flow positions	-2.616	0.009	IV < III
Low innovation to develop appropriate financial products	-2.043	0.041	IV < III
Poor activism by members in the governance system	-2.524	0.012	IV < III
No deposit insurance guarantee protection to members	-1.057	0.291	No change
Unattractive premises appealing to middle and upper class	-2.812	0.005	IV < III

Our experts did not significantly change their rankings as nine items remain significantly unchanged in [Table 2d](#) below whilst six threats significantly changed.

Table 2d

Wilcoxon Ranked Pairs Signed-Rank test for rounds III and IV – Threats.

Item	Z	Asymp. Sig. (2-tailed)	Result (at $p < 0.05$)
Stagnant membership growth due to poor public perception	-2.494	0.013	IV < III
Failure rate of CFIs is high affecting community confidence	-1.543	0.123	No change
Wrong perception that CFIs are for the poor only	-2.207	0.027	IV < III
Policymakers have interest in banks, not giving CFI attention	-0.282	0.778	No change
High unemployment affecting ability to save	-0.768	0.443	No change
Economic challenges affecting savings	-2.38	0.017	IV < III
Competition from loan sharks over-indebting members	-0.849	0.396	No change
Weak performance of the economy affect savings	-1.367	0.172	No change
High cost of banking system which CFI will not afford	-2.68	0.007	IV < III
Competition from informal schemes and pyramid schemes	-1.615	0.106	No change
Competition from commercial banks on member savings	-0.341	0.733	No change
Inability to attract qualified staff due to poor perception	-1.995	0.046	IV < III
No special tax rate for social enterprises such as CFIs	-2.814	0.005	IV < III
High insolvency of CFIs	-1.692	0.091	No change
Lack of deposit insurance to attract middle and upper-class	-1.219	0.223	No change

In [Table 2e](#) below, the ranking of 17 out of 22 future developments changed significantly, which suggests that our experts are more concerned with the sector's future therefore giving it much attention by reconsidering their previous rankings after learning from each other. “Strengthening of the National Association of CFIs in South Africa (NACFISA) to advocate for CFIs agenda” had its ranking significantly changed with the highest Z statistic of -3.066 and the lowest p-value, indicating that experts seriously reconsidered the importance of having an effective sector association.

In this section, we detail the study findings considering the final rankings of the mean score ($\bar{x}$) in Rounds III and IV as shown in [Tables 3a–3e](#). All issues are ranked based on Round IV mean scores, starting

with the lowest mean score, that is, ranked as the most important in descending order. Mean scores in Round IV are lower than Round III: an indication that collectively experts revised their rankings downwards considering the opinion of others as expected in a Delphi study ([Dalkey and Helmer, 1963](#); [Linstone and Turoff, 1975](#)). The standard deviation (SD) illustrates how divergent the experts' opinion are from the shared common view ($\bar{x}$). As shown across all the tables, in Round IV the SD was lower than in Round III: an indication that our experts were moving towards consensus. The same also applies to the standard error (SE),

Table 2e

Wilcoxon Ranked Pairs Signed-Rank test for rounds III and IV – Future developments.

Item	Z	Asymp. Sig. (2-tailed)	Result (at $p < 0.05$)
Adoption of technology to improve convenience, efficiencies	-2.371	0.018	IV < III
Effective publicity of CFIs real social impact in communities	-1.156	0.248	No change
CFI specific qualifications for the leadership and staff	-2.398	0.016	IV < III
Improve transparency through internal and external audits	-1.18	0.238	No change
Enabling CFIs to participate in the NPS to appeal to all	-2.803	0.005	IV < III
Improving corporate governance structure through training	-2.497	0.013	IV < III
Creating a common national CFI brand such as Volksbank	-2.028	0.043	IV < III
Diversification of financial services that appeal to all	-2.67	0.008	IV < III
Improving members' saving culture through financial literacy	-2.807	0.005	IV < III
National campaigns to encourage people to join local CFIs	-1.602	0.109	No change
CFIs financial sustainability to attract stakeholder interest	-2.668	0.008	IV < III
Improving CFI location appearance to appeal to all	-2.209	0.027	IV < III
National CFI sector strategy to guide players	-0.365	0.715	No change
Tax exemption status for CFIs as they are social enterprises	-2.214	0.027	IV < III
Rebranding CFI concept to appeal to all classes	-2.379	0.017	IV < III
Targeting organized groups to boost membership	-2.371	0.018	IV < III
Gvt entities to also save in CFIs as juristic members	-1.547	0.122	No change
Strengthening the NACFISA to advocate for CFIs agenda	-3.066	0.002	IV < III
The establishment of SCB to act as CFIs' bank of last resort	-2.032	0.042	IV < III
Strengthening capital base through member contributions	-2.057	0.040	IV < III
Performing economy and political stability are necessary	-2.081	0.037	IV < III
CFIs to contribute for the deposit insurance protection	-2.176	0.030	IV < III

6. Results and discussion

To understand the current forces driving or hindering performance we employed the ranking-type Delphi technique by engaging 36 CFI experts who identified alternative strategies using the SWOT analysis developed by [Kotler \(1988\)](#). The hybrid Delphi-SWOT method proved to be effective in properly understanding the current sector issues and suggesting alternative futures. We find the panel size to be appropriate in effectively identifying and discussing important issues.

which in Round IV reveals that the sample mean ($\bar{x}$) is moving closer to the population mean, and points towards attaining consensus.

Our discussion of the results is supported by qualitative comments from experts when validating propositions, whilst analyses are aligned to the factors identified from the literature review. Experts did revise some of their rankings in Round IV as revealed by the Wilcoxon Tests. Drivers, inhibitors and future developments are discussed separately below.

6.1. Drivers of CFI's performance

The identified drivers (strengths) to CFI formation and performance are quite diverse. However, from Table 3a below the major drivers seem to be leveraging on social capital to eradicate poverty. Members are motivated to “Pooling financial resources together” (1st) so that they can lend back to members profitably (7th), in a social way where “members enjoy ownership and control of the CFI effectively” (8th), and are thereby “able to strengthen the community common bond for social development” (2nd) through “improved savings culture” (3rd) to “help fight the debt trap caused by moneylenders” (13th). Social capital is regarded as the tie that binds in co-operative finance as members are comfortable working with people they know better (Frame et al., 2002; McKillop and Wilson, 2015). These findings are similar to what Catturani et al. (2016) found in Italy.

Table 3a
Mean rank of rounds III and IV final ranking – Strengths.

Rank	Item	III			IV		
		x	SE	SD	x	SE	SD
1	Pooling more savings together for on-lending to members	4.28	0.67	3.63	3.45	0.54	2.93
2	Able to strengthen the community bond for development	6.72	0.91	4.88	5.10	0.67	3.60
3	Improved savings culture through CFI formal mechanisms	6.17	0.67	3.63	5.31	0.54	2.89
4	CFIs are creating community businesses through A2F	5.86	0.69	3.69	5.62	0.51	2.73
5	Easy access to credit for CFI members compared to banks	6.21	0.74	3.98	5.86	0.67	3.60
6	CFIs are meeting community financial needs at low costs	5.86	0.60	3.23	6.07	0.57	3.08
7	CFIs are pooling capital together for on-lending profitably	7.10	0.68	3.64	6.14	0.55	2.95
8	Members enjoy ownership and control of CFIs effectively	6.55	0.71	3.82	6.34	0.65	3.48
9	Competitive pricing of loans than from moneylenders	7.28	0.73	3.92	6.66	0.70	3.76
10	Improving financial literacy among CFI members	8.72	0.70	3.76	7.52	0.58	3.14
11	Positive economic impact as members' well-being improves	8.28	0.71	3.84	7.52	0.63	3.42
12	Growth in membership and savings from organized groups	8.90	0.68	3.64	8.21	0.56	3.00
13	Helping to fight the debt trap caused by moneylenders	9.69	0.73	3.96	8.59	0.67	3.61
14	Capacity building support from CBDA on CFI governance	9.79	0.79	4.28	8.76	0.80	4.31

Economic factors also rank highly, as “CFIs are creating community businesses through improved access to finance” (4th) as there is “easy access to credit for members compared to commercial banks” (5th) for the economically marginalized. Moreover, there is more “competitive pricing of loans than from moneylenders” (9th) which have “positive economic impact as members' well-being improves” (11th). This means CFI lending is more ethical than exploitative. The economic factors support the dual objective of CFIs which is to achieve economic and social mission (Jones and Kalmi, 2015; Périlleux and Szafarz, 2015).

Table 3b
Mean rank of rounds III and IV final ranking – Opportunities.

Rank	Item	III			IV		
		x	SE	SD	x	SE	SD
1	Ability to diversify financial services to meet member needs	3.62	0.77	4.14	3.00	0.57	3.08
2	CFIs create opportunity for the community to own their bank	5.52	0.68	3.64	4.93	0.53	2.85
3	CFIs are expanding by incorporating informal savings clubs	6.41	0.90	4.87	5.41	0.64	3.44
4	Adopting financial technology to improve efficiencies	7.41	0.87	4.68	6.45	0.76	4.08
5	Able to reduce poverty, unemployment, and social inequality	7.03	0.96	5.16	6.66	0.81	4.34
6	Potential expansion market to the unbanked	8.10	0.87	4.71	6.86	0.75	4.04
7	Improving discipline in the community on financial matters	9.07	0.81	4.34	8.10	0.65	3.52
8	Potential to dominating in financial excluded areas	8.79	0.83	4.45	8.24	0.76	4.07
9	Improved governance of the CFI as members are owners	8.86	0.55	2.97	8.24	0.50	2.67
10	Avoid exploitative neoliberal bank charges	9.24	0.96	5.16	8.45	0.93	4.98
11	Opportunity to receive social grants on behalf of members	9.76	0.97	5.21	8.59	0.88	4.73
12	High interest rates on savings	9.69	0.85	4.57	8.66	0.71	3.81
13	Possibility of issuing transactional cards for convenience	9.45	0.86	4.65	8.66	0.76	4.08
14	Free capacity building from CBDA and BankSETA	10.31	0.97	5.22	8.76	0.85	4.57
15	Help members out of moneylenders' debt trap	9.10	0.88	4.72	8.86	0.82	4.42
16	Ability to create a middle class through improved A2F	10.97	0.98	5.25	9.14	0.80	4.30
17	Favorable legislation allowing registration as a CB or SCB	9.86	0.68	3.66	9.31	0.56	3.02

The “growth in membership and savings from organized groups” (12th) such as rotating savings and credit associations (ROSCAs) or Stokvels as they popularly known in South Africa, workers unions and associations seem to drive outreach due to strong social bonds. This is unsurprising for South Africa where there are an estimated 800,000 Stokvels, given the historical background where black people were denied access to formal banking facilities during the apartheid era (DTI, 2012). “Capacity building support from CBDA on CFI governance and trainings” (14th), although important, is lowly ranked as driving performance.

As per Table 3b below, unexploited potentials (opportunities) for CFIs performance are dominated by social, governance and economic drivers. On the social front is an “opportunity for communities to have ownership of the institution serving them if fully harnessed” (2nd). There are opportunities to reach out to more people sharing the common bond in “informal savings clubs” (3rd) and in unbanked or

unequal society with black people in extreme poverty. Rwanda made great progress in using cooperatives to contribute to conflict recovery, peace-building, re-building relationships, restoring trust and encouraging cooperation along ethnic groups after the 1994 genocide (Okem, 2016). Opportunity is also on “improving governance as members are owners” (9th) provided governance rights are exercised, similar to what Jones (2008) find in UK.

Great opportunities are technological factors through “Adopting financial technology to improve efficiencies” (4th) enabling the “possibility of issuing transactional cards for financial services convenience” (13th). Improved innovative financial access coupled with other interventions can “create a middle class through enhanced productivity” (16th). This is supported by the findings of Frame and White (2004) that technological change has impacted dramatically on the economics of financial services provision, design and delivery. Technology enhances the bottom-line, that is, profitability either through increased revenue from service charges or lower processing costs. Policy opportunities are “free capacity building from CBDA and BankSETA” (14th), and “favorable legislation environment allowing registration of CFIs from FSCs and SACCOs to Co-operative Banks and Secondary Co-operative Banks” (17th). Furthermore, technology will position CFIs as a channel of receiving monthly government social grants for 17-million people (11th).

6.2. Inhibitors of CFIs' performance

The inhibitors to CFI performance are split into internal (weaknesses) and external (threats). The major inhibitors are technological, economic, governance, social and perception factors. In Table 3c below, the major internal weakness is “low adoption of technological banking systems” (1st). Related is “lack of participation on the National Payment System” (7th) which limits the interaction between CFIs and other formal financial players. The low technology diffusion is resulting in “low innovation to develop appropriate financial products” (14th). Some said that “Lack of operations automation place wrong perceptions in people to think CFIs are for the poor only”, and “The adoption of IT in operations enables financial innovation to offer easily accessible financial services”. However, Frame and White (2004) find that high set-up costs, redundancy of existing legacy systems and lack of suitable information technology skills are inhibiting factors, particularly in CFIs.

The second ranked weakness is “weak capital base which cannot absorb more credit risk.” This puts CFIs on “tight cashflow positions” (13th). Governance factors are third due to “Low managerial skills to lead CFIs profitably and sustainably”, as some rely on untrained

voluntary labor. Similarly, is “Inability to retain talent through competitive market salaries” (8th) due to weak balance sheets. There are also “weak corporate governance structures” (11th), made worse due to “poor activism by members in the governance system” (15th). Lack of members' activism and board oversight “weakens risk management systems” (12th) which exposes CFIs to solvency risk. Some experts said that “members [most of the times] they do not exercise their voting powers when not happy with CFI governance, they just withdraw their investments and membership”, and “In addition to training directors, members training is essential to exercise their governance rights”.

Perception factors are fourth due to “Poor marketing of the CFI concept to the greater public” resulting in “weak membership and savings growth” (9th) as CFIs have “unattractive premises to appeal to the middle and upper classes” (17th). This is opposite to what McKillop et al. (2011) found in Great Britain in the period 2003–2009 where although the number of credit unions dropped, membership increased by 300,312 (59.6%) from 503,838 to 804,150 due partly to trained staff and refurbished premises, which increased their attractiveness to potential members. “No deposit insurance guarantee protection to members” was ranked second from last.

Apart from internal inhibitors, CFIs face external threats as detailed in Table 3d below. The sector is being affected by poor perception. “Stagnant membership growth due to poor public perception” (1st) “that CFIs are there to serve the poor only” (3rd). Perceptions result in the “inability to attract qualified staff” (12th) which affects performance. These sentiments are shared with McKillop et al. (2011) who found that credit unions' penetration in the UK was becoming difficult due to perceptions that they were poor people's banks; therefore, advocate for further deregulation to attract membership from a wider cross-section of the society. The fourth major threat is that “Policy-makers have interest in commercial banks, not giving CFIs attention.” More related to policy inhibitors is “Lack of special tax rate for social enterprises such as CFIs” (13th). One respondent said, “CFIs are being treated as for-profit business-like banks whose objective is profits maximizing, whereas CFIs' surpluses are ploughed back for communities' development.” However, a recent study by Chang et al. (2016) reveal that tax exemption status in the US seems not to benefit members but inefficiencies. Ranked fifth is economy-related being “high unemployment affecting ability to save” which is currently estimated at 27.7% (SARB, 2017: 24) due to “Economic challenges affecting savings” (6th and 8th).

Other economic factors are many competing financial services providers, mostly targeting the employed or government social grant recipients. Seventh is “Competition from loan sharks is over-indebting

Table 3c
Mean rank of rounds III and IV final ranking – Weaknesses.

Rank	Item	III			IV		
		x	SE	SD	x	SE	SD
1	Low adoption of technological banking systems	5.79	0.98	5.30	4.90	0.83	4.46
2	CFIs have weak capital base which cannot absorb credit risk	5.90	0.94	5.04	5.28	0.80	4.29
3	Low managerial skills to lead CFIs profitably & sustainably	6.86	0.85	4.56	5.76	0.69	3.73
4	Poor marketing of the CFI concept to the greater public	6.86	0.72	3.89	5.97	0.56	2.99
5	Lack of strong co-operative movement, the sector is fragile	7.79	1.03	5.54	6.17	0.91	4.91
6	Poor savings culture among members	7.90	0.98	5.27	6.28	0.77	4.15
7	Lack of participation on the National Payment System	8.00	1.00	5.37	6.31	0.70	3.79
8	Inability to retain talent through competitive market salaries	7.14	0.97	5.25	6.48	0.79	4.26
9	Weak membership and savings growth	9.10	0.96	5.16	7.21	0.78	4.20
10	CFIs are banking with banks so risk losing members	7.48	0.85	4.56	7.59	0.79	4.26
11	Weak corporate governance structures	9.21	0.87	4.70	7.72	0.77	4.17
12	Weak risk management systems	8.86	0.88	4.76	7.72	0.77	4.14
13	Tight cash flow positions	9.72	0.89	4.79	8.38	0.81	4.35
14	Low innovation to develop appropriate financial products	10.11	0.90	4.86	8.90	0.83	4.46
15	Poor activism by members in the governance system	10.14	0.86	4.63	8.93	0.78	4.19
16	No deposit insurance guarantee protection to members	9.48	1.00	5.38	9.00	0.88	4.72
17	Unattractive premises to appeal to the middle & upper class	10.83	0.95	5.13	9.00	0.84	4.50

Table 3d
Mean rank of rounds III and IV final ranking – Threats.

Rank	Item	III			IV		
		x	SE	SD	x	SE	SD
1	Stagnant membership growth due to poor public perception	6.03	0.70	3.77	4.83	0.50	2.67
2	Failure rate of CFIs is high affecting community confidence	5.41	0.84	4.52	4.93	0.74	3.97
3	Wrong perception that CFIs are for the poor only	6.38	0.81	4.34	5.72	0.73	3.92
4	Policymakers have interest in banks, not giving CFI attention	5.79	0.79	4.24	5.79	0.72	3.89
5	High unemployment affecting ability to save	6.34	0.84	4.53	5.83	0.72	3.86
6	Economic challenges affecting savings	7.18	0.85	4.60	5.89	0.67	3.63
7	Competition from loan sharks over-indebting members	6.79	0.74	4.00	6.48	0.68	3.66
8	Weak performance of the economy affect savings	7.17	0.83	4.45	6.62	0.74	3.97
9	High cost of banking system which CFI will not afford	8.03	0.81	4.37	6.72	0.64	3.42
10	Competition from informal schemes and pyramid schemes	7.28	0.90	4.87	6.86	0.79	4.26
11	Competition from commercial banks on member savings	7.24	0.78	4.22	7.07	0.70	3.77
12	Inability to attract qualified staff due to poor perception	8.07	0.88	4.73	7.17	0.84	4.50
13	No special tax rate for social enterprises such as CFIs	8.72	0.91	4.90	7.21	0.79	4.24
14	High insolvency of CFIs	8.79	0.80	4.29	7.86	0.66	3.53
15	Lack of deposit insurance to attract middle and upper-class	10.24	0.82	4.40	9.76	0.81	4.35

members” (7th). These are consistent with [Koku and Jagpal's \(2015\)](#) findings that payday lenders in US are pushing the working class into a debt-trap due to astronomically high interest rates. One expert said “due to low financial literacy [some] members borrow again from loan sharks at excessive rates, therefore, failing to make meaningful savings as they get stuck in a debt trap, making financial literacy training necessary especially in worker-based CFIs.” Ranked tenth is “Competition from informal and pyramid schemes”, as members are easily tempted to invest in get-rich-quick schemes that are sold as “can't lose” propositions which will inevitably collapse. Our experts ranked “Competition from commercial banks on member savings” eleventh: although people lack access to credit facilities they are attracted to traditional banks due by the good ambience compared to CFIs.

6.3. Future developments to drive CFIs' performance over the next 10 years

From [Table 3e](#) below, our experts provided the largest and most diverse set of factors of the most important strategic propositions over the next decade. The propositions highly suggested are those that are technological, marketing, human, policy, environmental and economic

in nature. Technology as an enabler was ranked first: “Technology adoption to improve convenience and efficiencies.” Ranked fifth was “Enabling CFIs to participate on the national payment system to appeal to all”, which would enable “Diversification of financial services that appeal to all” (8th). An expert said “use of banking system will enable CFIs to effectively monitor member savings behavior, easy loan portfolio monitoring and reduce operating costs.”

This is followed by CFI brand awareness campaigns through “Effective publicity of CFIs real social impact in communities” (2nd). Another way to position CFIs is “Creating a common national CFI brand” (7th). Ranked tenth is “National campaigns to encourage people to join local CFIs”. Similarly, the need for “Improving CFI location appearance to appeal to all” (12th) and “Rebranding CFI concept to appeal to all classes” (15th) are seen as areas to enhance growth. This is consistent with [Attuel-Mendès et al. \(2014\)](#) recommendations in the Austrian case that credit unions have to pay attention to the identity they create and disseminate through their communication. One participant suggested that: “There is need for the establishment of a common CFI brand such as Volksbank in Germany, recognized as a single identity, yet owned mutually and co-operatively by their members in each

Table 3e
Mean rank of rounds III and IV final ranking – Future developments.

Rank	Item	III			IV		
		x	SE	SD	x	SE	SD
1	Technology adoption to improve convenience & efficiencies	6.21	0.98	5.30	4.38	0.53	2.83
2	Effective publicity of CFIs' social impact in communities	5.79	1.25	6.70	5.14	1.05	5.68
3	CFI specific qualifications for the leadership and staff	7.48	1.13	6.07	5.76	0.89	4.82
4	Improve transparency through internal and external audits	7.31	1.18	6.38	6.07	0.89	4.80
5	Enabling CFIs to participate in the NPS to appeal to all	9.55	1.17	6.28	6.76	0.73	3.92
6	Improving corporate governance structure through training	9.38	1.21	6.51	6.93	0.70	3.79
7	Creating a common national CFI brand such as Volksbank	8.38	1.24	6.66	7.07	1.02	5.50
8	Diversification of financial services that appeal to all	9.72	1.16	6.23	8.03	0.94	5.04
9	Improving members' saving culture through financial literacy	10.59	1.04	5.58	8.93	0.96	5.18
10	National campaigns to encourage people to join local CFIs	10.31	1.21	6.50	9.07	0.98	5.28
11	CFIs financial sustainability to attract stakeholder interest	10.93	1.13	6.08	9.17	1.00	5.39
12	Improving CFI location appearance to appeal to all	11.28	1.23	6.63	9.48	0.94	5.05
13	National CFI sector strategy to guide players	11.55	1.18	6.34	9.55	1.01	5.42
14	Tax exemption status for CFIs as they are social enterprises	11.34	1.33	7.17	9.66	1.20	6.47
15	Rebranding CFI concept to appeal to all classes	11.38	1.10	5.94	9.76	0.90	4.85
16	Targeting organized groups to boost membership	10.86	0.97	5.21	10.00	0.94	5.06
17	Gvt entities to also save in CFIs as juristic members	11.38	1.21	6.49	10.48	1.08	5.81
18	Strengthening the NACFISA to advocate for CFIs agenda	12.97	1.31	7.05	10.69	1.06	5.71
19	The establishment of SCB to act as CFIs' bank of last resort	12.41	1.12	6.06	11.59	1.07	5.74
20	Strengthening capital base through member contributions	13.41	1.34	7.23	12.03	1.16	6.26
21	Performing economy and political stability are necessary	13.52	1.24	6.69	12.10	1.08	5.83
22	CFIs to contribute for the deposit insurance protection	14.69	1.14	6.15	13.79	1.12	6.02

village or town.” Thereafter, “Target organized groups to boost membership” (16th).

The third most ranked in the top ten are people factors given that strategy implementation requires competent people. Ranked third is the need for “CFI specific qualifications for the leadership and staff” and “Improving corporate governance structure through training” (6th). Ranked fourth is the need to “Improve transparency through internal and external audits” which is crucial to improve members' confidence on savings safety. One expert said “There is need to enforce minimum university qualifications on co-operative banking for CFI leadership similar to those from a university in Kenya [The Co-operative University of Kenya].” A survey by Fullbrook (2015) on a sample of 145 US credit unions reveal that although in principle directors are volunteers, in larger credit unions they are compensated. Credit unions that compensate their boards perform, on average, better than those that do not. That does not mean compensation causes better performance, but at least it does not seem to have large adverse effects. He recommends that boards maintain skills diversity and conduct board evaluations to identify areas of improvement. In nascent countries like South Africa, CFI volunteerism is still strong making board compensation debatable compared to mature countries where there is high commercialization. The need for “Improving members' savings culture through financial literacy training” was ranked in the top ten.

Ranked below the top 10 are the need to achieve “Financial sustainability to attract stakeholder interests” (11th). This is vital given the high failure rate of CFIs: to win confidence there is need to ensure the institutions have permanency. In the context of microfinance programs, Schreiner (2000) mentioned that unsustainable programs might help the poor now, but they will not help the poor in the future because the program will be long gone. This suggest that even if CFIs are non-profit maximizers they need to preserve and grow their capital by making surpluses. The suggested “National CFI sector strategy to guide players” (13th) is crucial to provide guidance to players in addition to regulatory oversight from CBDA to ensure their permanency. Although “Tax exemption status for CFIs as social enterprises” is ranked 14th it has an average mean-ranking of 9.66 making it a necessary priority. To show government's commitment to the CFI agenda as a matter of policy “Government and its entities should become CFIs juristic members” (17th). One expert mentioned that “this will become necessary if CFIs themselves have proven to be sustainable and their local communities restore confidence in them.” Most of the environment factors were ranked low though important. One such is the need for “Strengthening

the NACFISA to advocate for CFIs agenda.” One panelist said: “A more vibrant and effective [national] association of CFIs is needed to push for certain agendas, currently we have a weak, fragile CFI sector as the national association is inactive.” Ireland and New Zealand are examples of countries with well-functioning trade associations contributing to the developing higher standards of credit unions and spearheading technology adoption (see Sabbald et al., 2002).

Other future developments include “The establishment of a Secondary Co-operative Bank (SCB) to act as CFIs bank of last resort” (19th). This is to ensure CFIs do business with co-operative businesses to strengthen the co-operative movement. “Strengthening capital base through member contributions” (20th) as capital contributions and savings are currently low for meaningful lending. The need to have “Performing economy and political stability” (21st) are seen as vital to maintain the social fabric essential for CFIs existence. Whilst the need for “CFIs to contribute for the deposit insurance protection” was ranked last, it is nevertheless vital to safeguard the hard-earned savings of the poor. In the US, Ireland and New Zealand, deposit insurance mechanisms are improving members' confidence and stability of credit unions (see Sabbald et al., 2002).

6.4. Strategy development for CFIs' high-performance by 2030

Following Vidgen et al. (2017) the analysis shown in Table 4 below indicates that, based on an average rank per category, ‘technology’, ‘people’ and ‘marketing’ are the most important future developments to move the sector to high performance. Although most of the items fit comfortably in one area, some may be in more than one such as “Diversification of financial services that appeal to all” under technology also fits in marketing, but from experts' comments diversification is possible with the adoption of technology as an enabler.

Whilst the absolute number of technology issues is low, all three items are ranked highly in importance (an average value of 4.7), with “Adoption of technology to improve convenience and efficiencies” ranked first as the most important future development. People issues are ranked highly in importance (an average value of 6.0), indicating the need for quality human capital to lead organizations with excellence. Although the marketing category has six issues, which is more than any category, on average the items are ranked high slightly above 10, making perception transformation and brand visibility important priorities, whilst the culture category contains only two items averaging 14.5 followed by three policy issues averaging 14.7. Environment and

Table 4
Strategic focus for the next 10 years.

Category	Rank/average	Item	Rank
Technology (3)	1 (4.7)	Technology adoption to improve convenience and efficiencies	1
		Enabling CFIs to participate in the NPS to appeal to all	5
		Diversification of financial services that appeal to all	8
People (4)	2 (6.0)	CFI specific qualifications for the leadership and staff	3
		Improve transparency through internal and external audits	4
		Improving corporate governance structure through training	6
		CFIs financial sustainability to attract stakeholder interest	11
Marketing (6)	3 (10.3)	Effective publicity of CFIs real social impact in communities	2
		Creating a common national CFI brand such as Volksbank	7
		National campaigns to encourage people to join local CFIs	10
		Improving CFI location appearance to appeal to all	12
		Rebranding CFI concept to appeal to all classes	15
		Targeting organized groups to boost membership	16
Culture (2)	4 (14.5)	Improving members saving culture through financial literacy	9
		Strengthening capital base through member contributions	20
Policy (3)	5 (14.7)	National CFI sector strategy to guide players	13
		Tax exemption status for CFIs as they are social enterprises	14
		Government entities to also save in CFIs as juristic members	17
Environment (3)	6 (19.7)	Strengthening the NACFISA to advocate for CFIs agenda	18
		The establishment of SCB to act as CFIs' bank of last resort	19
		CFIs to contribute for the deposit insurance protection	22
Economic (1)	7 (21.0)	Performing economy and political stability are necessary	21

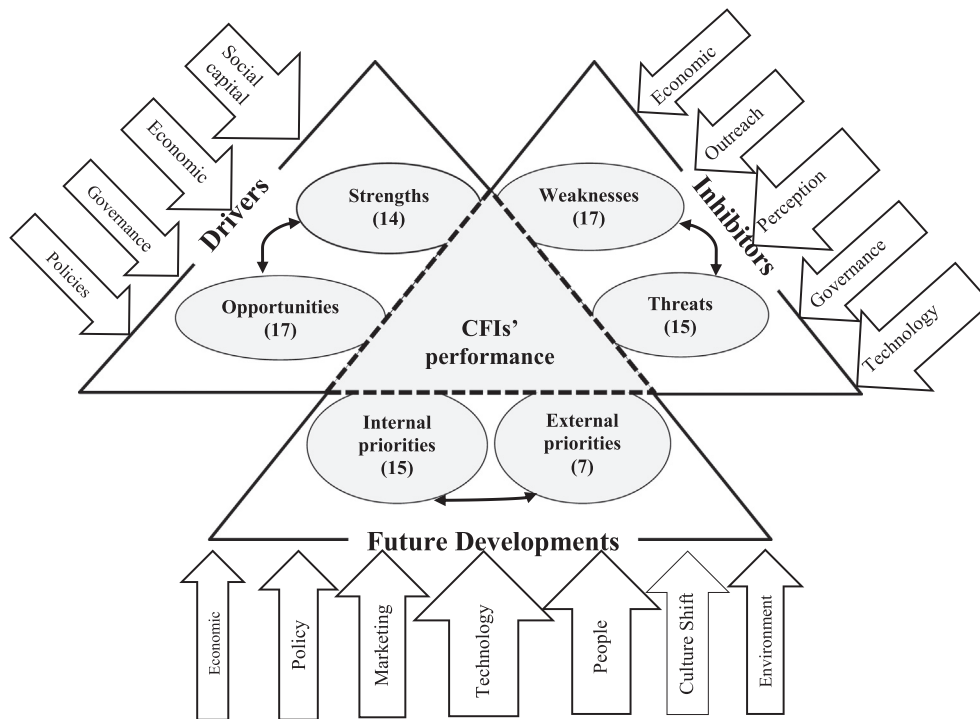


Fig. 4. CFI performance ecosystem with arrow width indicating level of importance.

economic issues were ranked low, averaging 19.7 and 21.0 respectively, as CFIs lack much control on them, especially economic and political developments. To move the sector forward there is need to have strategies on technology, people, marketing, culture shift, policy engagement, environment and economic which can be consolidated into a grand strategy. These strategies can be further grouped into internal and external strategies (priorities). The internal priorities are issues within the control of CFIs (technology, people, marketing and culture issues), whilst CFIs can influence external priorities (policies, environment and economic issues).

From our study, CFI performance is being driven by social capital, economic empowerment, enabling policies, members' self-governance and some outreach from organized groups, whilst inhibitors are forcefully impacting the growth and performance through poor sector perception, low technology adoption, low outreach, poor governance, low economic performance and some unfavorable policies. However, there is still a future for the sector given 22 future developments that can be explored to unlock value: of these, 15 strategic options are within the control of CFIs whilst seven can be influenced collectively to improve performance. The sector's future is to be driven by technology innovation, having competent people, CFI marketing, members' culture transformation, enabling policies, conducive operating environment and a performing economy.

Our study results can be summarized in Fig. 4 below showing performance of CFIs being a coevolution of different forces affecting each other at the same time. The width of the arrows reflects the response weights, with the largest being the most important.

7. Summary and conclusions

This paper explores the CFI performance drivers and inhibitors as well as future alternatives to achieve high performance growth of the sector. The major contribution of this study has been the identification of drivers and inhibitors of CFI performance. From the identified issues, it becomes clear that the sector is at a crossroads facing diverse issues which require collective stakeholder efforts to move the sector forward. As can be seen in Fig. 4, the major drivers for CFI formation and

performance are social ties and the need for economic empowerment followed by outreach from organized groups and the members' need for organization self-governance. Given the social networks in stokvels, the common bond is strong, making it easier for the formation and growth of CFIs. Given the history of South Africa characterized by exclusion, CFIs are seen as one of the instruments for economic empowerment through improved access to financial services. Members feel equally empowered to govern their CFI without the dominance of certain individuals. Although policies do not appear to be more important in driving performance, they do provide an enabling regulatory environment for the formation and performance of CFIs.

On the other hand, negative perceptions of the sector and low technology adoption has been identified as the biggest inhibitors to CFI performance. CFIs are not currently viewed as an alternative banking solution for a cross-section of the society but for the poor. Negative perceptions hinder them from penetrating affluent market segments, a situation worsened by low technology adoption which would enable them to offer members cost-effective diversified financial solutions. Further outreach is also affected by the poor appreciation of the CFI concept and its value proposition. Whilst poor governance structures and practices and restrictive policies seem to have moderate impact on performance, however when left unattended they will have a huge effect. The sector needs to address deficiencies in corporate governance, technology and negative perceptions as a matter of urgency to attract a mixture of membership from the broader population.

The second objective was to identify strategies that can be implemented to position CFIs in *where to play and how to play* going into the future as it is the future that remains uncertain and important. Our experts managed to clearly identify and agree on seven strategic alternatives to focus on in the next decade in the following order: technology, people, marketing, culture shift, policy, environmental and economic. These strategies should be implemented in their order of importance as ranked by experts. Since technology was identified as the second most inhibitor to performance, it is ranked as the most urgent priority for implementation followed by having competent human capital from the board of directors to floor staff. Perception transformation can be achieved through effective marketing and brand awareness

campaigns to the entire country. Economic fortunes are unlikely to improve quickly given the current drought in its third year in South Africa, high unemployment, weakening exchange rates and rising food prices. However, the resignation of president Jacob Zuma on the on the Valentine's Day in 2018 might restore some confidence in the economy given the loss of confidence by the investing community in his leadership. Early signals are that, the day after he resigned, the South African rand rallied to R11.66/US\$, levels last seen in more than two and half years, with a similar trend also witnessed on the stock market. Recently, a team of four respected financial heavyweights was appointed to head an ambitious investment drive and reforms aimed at attracting at least US\$100 billion in new foreign direct investments over the next five years. Environmental issues such as having a vibrant NACFISA and setting up a deposit insurance scheme are unlikely to be achieved soon. The implications might be that the sector will remain unattractive to the middle-class, and policies advocacy is difficult given an ill-funded association body. There is need to pay attention to these issues including having a lender-of-last resort for liquidity support. However, culture transformation is likely to require more effort to build better capitalized and more responsive CFIs which are member-centric through targeted financial literacy programs. Beyond 10 years culture transformation and environmental issues are likely to be more important given their role in building a resilient sector.

The Delphi method and SWOT analysis can separately lead to limitations. However, the hybrid Delphi-SWOT method leads to a more efficient approach for integrating subjective judgments with complex multi-criteria problems. Having mentioned that, as in any Delphi study, the outcomes are a reflection of the experts involved. That is why a panel selection is key in a Delphi study and the current study paid much attention to that through the rigorous selection of experts. In addition, the outcomes also strongly reflect the important position of the Delphi process managers to make the right questions and the right interpretations between the rounds and present the final results. The researchers are knowledgeable in using the Delphi techniques, managing complex surveys and in operational research, making them well equipped to effectively carry out the study. Although our final results were mixed, they did have a significant component of CFI management participants, as they are the most engaged and knowledgeable group available on the subject matter. Nevertheless, this does appear to be offset by the other sub-panels of experts in the study, and overall the issues raised appear to be quite broad and representative.

In the aftermath of the global financial crisis, CFIs provide a fundamental perspective on how proper financial intermediation should be conducted in a non-speculative way after most bank customers were disappointed by investor-owned banks. The recent call for more ethical and socially responsible banking takes into account the balanced needs of society, the environment and the economy, and positions CFIs to play an important role going into the future. To play this increasing role, CFIs will need to understand their performance drivers and inhibitors and develop alternative strategic options to achieve sustainable growth. However, technology, quality human capital, effective marketing and culture shift are of paramount importance in this competitive environment characterized by rapid financial innovation. In addition, sustainable CFI development requires an appropriate and adaptive regulatory framework that ensures members' funds are safeguarded to promote confidence in the CFIs movement. In contrast, too strict policies may stifle CFI performance, whilst too lax an environment is also detrimental as it may lead to CFI failures and place the movement as a whole in jeopardy.

The study findings have relevance to CFI practitioners, governments, development agencies, researchers, regulators and policy-makers, who have interests in promoting access to financial services to enhance inclusive economic participation. The identification of performance drivers and inhibitors provide insights for stakeholders' attention to weaken the inhibitors and maximize drivers for better performance. We recommend three areas for further study leveraging on

what we now understand. Firstly, consider doing a case study on the best and worst performing CFIs to understand what differentiates performance. Secondly, would be to split CFIs into different types such as professional association or worker-based, rural-based and community-based CFIs, and study them separately as performance drivers and inhibitors might not be homogenous. This will enable accurate identification of specific issues and strategies rather than general recommendations which might not apply to different common bonds. Lastly, in-depth member interviews to understand CFI value proposition for better informed outreach strategies.

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