Financial Strategy to Mitigate the Impact of the COVID-19 Crisis

COVID-19 Global Response Committee
Technical Paper

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Content

Introduction

This technical paper aims to recommend strategies to manage the impact of the social and economic crisis generated by COVID-19. This paper is intended to be a practical tool to help Credit Unions (CUs) develop financial strategies to mitigate the impacts of the crisis and to overcome adverse market conditions.

At the beginning of 2021, the impacts of the COVID-19 pandemic were differentiated according to economic sector and financial entity. Although the crisis has affected society as a whole, some financial entities have managed to improve their businesses by serving the most dynamic economic sectors. Conversely, other financial entities have experienced a significant contraction in their financial activities since their customers have been overwhelmingly affected by the crisis. Therefore, we hope this technical paper is useful for all those CUs facing financial and operational difficulties as a result of the crisis we are experiencing.

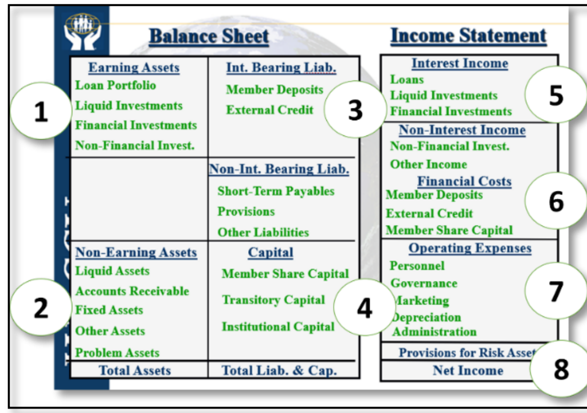
This paper provides a critical reflection on the financial disciplines promoted by the PEARLS Monitoring System of the World Council of Credit Unions, the impacts of the economic crisis, and the adjustments required in the financial planning of the unions in order to successfully mitigate and overcome the crisis.

Since its creation, the standards and indicators of the pearls monitoring system have been used by credit unions around the world even while markets, competition and trends in financial products and services have changed substantially over time. This document is not intended to modify the fundamentals od PEARLS. What we seek is to suggest strategies that help credit unions manage the crisis and develop plans for the post-pandemic era.

Part I of this paper presents a summary of the key components of the PEARLS System, as a technical reference framework for proposing strategies for financial strategies to face the current crisis.

Part II of this paper provides a brief summary of the main impacts of COVID-19 during 2020, and the particular situation of the CUs as part of the financial system. In some countries, CUs form part of the financial system regulated by local financial sector authorities, while in other countries, CUs are subject to other regulatory models that are not under the protection of the country's financial authorities. Often the CUs regulated by the financial authorities of the country would have access to liquidity and Government support mechanisms. While in other countries, the credit unions lack of access to such support mechanisms. In some countries credit union systems have their own liquidity support, business integration models or technical support models through federations or second tier integration organizations. This diversity affects the level of impact that credit unions experience in each country.

Part III of this paper recommends financial and operational strategies that CUs can implement to successfully address the crisis, which correspond to the sections of Financial Statements, in order to address the impact of each area and to procure the balance of the CU's financial structure over the long term. Following this approach, as can be seen in the diagram, this part has been divided into eight (8) sections, namely:



1. Management of productive or earning assets
2. Management of non-productive or non-earning assets
3. Mobilization of savings and other sources of financing
4. Member Share Capital and Institutional Capital
5. Interest income and costs linked to asset quality
6. Management of financial costs
7. Management of operating expenses
8. Projection of the net income

Each of these sections is presented in the form of a table with the following structure:

Financial Area affected by the crisis
Financial structure impact factors
Impact mitigation strategies
Key financial disciplines, standards and PEARLS indicators that are affected by the crisis.

The recommended financial and operational strategies may have a different degree of relevance for each CU given the different level of development of some with respect to others. For this reason, the recommended strategies should be considered technical processes that each CU affected by the crisis should adapt to its own reality, taking into account the context of its own financial sector and country.

Finally, part IV of this paper sets out the challenge of membership growth within a context of crisis, a critical aspect for the survival of the CU model over the long term.

We hope that this document will be useful for credit unions affected by the crisis, regardless of their level of development and geographic location. What is important is that credit unions take the time to reflect on strategies to mitigate the impacts of the crisis and to rethink their future development. In current conditions, nothing should be applied "automatically", even the PEARLS indicators. The business plan for future years should be critical and realistic without dogmatically following indicators, which is why a long-term vision should be developed that allows the actions undertaken in a particular year to be placed in context.

Abbreviations

WOCCU	World Council of Credit Unions
CUs	Credit Unions
MSMEs	Micro, Small and Medium Enterprises
IMF	International Monetary Fund
ILO	International Labor Organization
SMEs	Small and Medium-Sized Enterprises

Part I: The PEARLS System Principles

Since the 1990s, the WOCCU has developed the *PEARLS Monitoring System*[1] which serves to provide a financial evaluation model for CUs. PEARLS was designed as a management tool to strengthen the financial structure of CUs.

This financial evaluation system is inspired by several principles and comprises several financial indicators or ratios known as PEARLS, which evaluate the following key areas of CU operations: (P) Protection; (E) Effective financial structure; (A) Asset quality; (R) Rates of return and cost; (L) Liquidity; and (S) Signs of growth.

Thanks to its principles, standards and indicators, PEARLS helps solve the problems faced by CUs experiencing financial difficulties, identifying the causes of their problems by analyzing their financial statements over several periods. As a result, the system recommends action guidelines for improving financial results and overall organizational performance. PEARLS provides action guidelines in several fields such that the CUs are able to manage their growth and changes in capital over time.

Initially, PEARLS was created as a tool that served to guide CUs in the migration from a traditional development approach based solely on granting loans to a modern financial structure, as a financial intermediary, based on savings mobilization and the application of prudential disciplines to protect such savings, to improve the service for its members, and to create the capital reserves necessary for solid growth.

Thus, PEARLS is a set of financial indicators integrated with a tool in order to evaluate CU performance, which not only allows the individual evaluation of each union, but also its comparison with similar entities, both in a given country and as a group of several entities. This tool is used by Managers and Boards of Directors to evaluate the progress and performance of their CU.

In this era we are currently facing, in which our lives have been affected in a multitude of ways by the COVID-19 pandemic over an extended period of time, and our CUs are suffering the consequences of the social and economic crisis, the PEARLS system and its Business Plan methodology can be used to help the CUs outline a path for mitigating the impacts of the crisis within their organizations. Thus, this paper addresses problems related to asset quality, delinquent loans, profitability, provisioning requirements for doubtful assets, and the restoration of capital, among other factors.

In this part, we discuss the main financial disciplines and principles promoted by the PEARLS System.

1. The PEARLS System

The PEARLS System was originally created to improve the management of CUs by applying certain basic principles, such as:

[1] Refer to the WOCCU PEARLS Monograph.

- Control of delinquency
- Control of non-earning assets
- Capital creation and accumulation
- Allowances for delinquent loans
- Improvement of income and profit
- Liquidity management

These principles then became basic enforceable financial disciplines and measurable indicators, namely:

- Control of delinquency:
  - ➢ Control of delinquency greater than 31 calendar days, based on the outstanding balance of the loan or loan portfolio at risk. The indicator should not be greater than 5% of the total loan portfolio.
  - ➢ Update credit underwriting methodologies.
  - ➢ Charge-off loan losses against delinquency allowances.
  - ➢ Keep strict collection policies updated.
  - ➢ Use memorandum accounts to monitor adjusted loans and initiate legal action for the effective collection of the charged-off portfolio.

- Control of non-earning assets
  - ➢ Non-productive or non-earning assets, including buildings, should not exceed 5% of the Total Assets, thereby allowing productive assets to be maximized at 95% of the Total Assets.

- Capital creation and accumulation
  - ➢ Increase equity or non-redeemable capital, known as Institutional Capital, to a minimum level of 10% of the Total Assets.
  - ➢ Create equity reserves annually and maintain the standard level.
  - ➢ Capitalize equity reserve surplus or dividend for the year.
  - ➢ Institutional Capital, considered risk capital, has three fundamental purposes: to finance non-earning assets, to improve the intermediation margin, and to absorb losses as a last resort.

- Provisions for delinquent loans
  - ➢ Establish provisions for allowances to cover 100% of all loans delinquent for more than 12 months, and 35% of all loans delinquent for 1-12 months.
  - ➢ The correct creation of allowances for uncollectible accounts, which also includes allowances for financial investments or other doubtful assets, helps to reflect the real value of the assets, avoid fictitious earnings, and protect member deposits.

- Improvement of income and profit
  - ➢ CUs should adequately cover all costs, including allowances for uncollectible accounts and the creation of institutional capital.
  - ➢ Net income targets are linked to creation of institutional capital.
  - ➢ Strengthen management of asset and liability interest rates.

   - Improve collection effectiveness and processes.
   - Operating expenses should be capped at 5% of average Total Assets.

- Liquidity management
   - Greater emphasis is placed on member savings mobilization than on attracting Member Share Capital. Savings mobilization should represent 70-80% of the total asset.
   - Indicators are established to maintain liquidity reserves of savings deposits and other immediately liquid or withdrawable liabilities at 15 – 20% of average assets.
   - Management of the balance between assets and liabilities.

Further details of the PEARLS System components and all its indicators can be found in the *PEARLS Monitoring System* monograph. Part III of this paper will discuss the impact of these principles and indicators as a result of the COVID-19 crisis.

2. Business Plan Methodology

In addition to the PEARLS Monitoring System, the WOCCU developed a business plan methodology. The approach of this methodology is to provide a business planning tool based on the results of the PEARLS analysis, in an attempt to close gaps and correct weaknesses, as well as enhance institutional strengths, among other factors. For many years, this system demonstrated its effectiveness around the world.

Under current conditions, during and after the COVID-19 pandemic, CUs should deal with a deterioration in the quality of their assets, mainly the loan portfolio, and their associated costs due to creation of allowances. There are also significant impacts on their liability and equity structure. For these reasons, CUs should be equipped with suitable tools to measure their current risks and plan for the future, seeking to adjust their financial structures and the business model for long-term survival in the market. To achieve this, in this paper, we will discuss the areas of the crisis impact on key financial disciplines and PEARLS indicators.

The business plan of a CU is the backbone of the organization. Particularly during the COVID-19 crisis, CUs should update their strategic plans and refine their operational plans. In many cases, in the face of a major crisis, contingency plans previously designed to minimize the most significant risks should be implemented.

The plans benefit from the evaluation of reality in an objective and critical manner, allowing realistic goals to be established by minimizing risks and taking advantage of the opportunities offered by the environment in spite of the crisis.

There is, undoubtedly, a plethora of business planning processes, formats, and methodologies available to and used by CUs, so we will not refer to any financial planning methodology in particular.

Part II: Main Impacts of COVID-19 on CUs

The onset of the coronavirus COVID-19 infection is estimated to have occurred in November 2019 in Wuhan, Hubei, China. After one year and six months, the estimated number of infections worldwide has exceeded 164 million people, and the estimated number of deaths exceeds 3.4 million (Johns Hopkins University, 2021).[2]

On June 8, 2020, the World Bank (World Bank Group, 2020) announced that COVID-19 sunk the world economy into the worst recession since World War II, during which the economy of Latin America and the Caribbean would be the most severely affected with an economic contraction of 7.2% in 2020, estimating a "much deeper recession than those caused by the global financial crisis of 2008-09 and the Latin American debt crisis of the 1980s (Regional Panorama of Latin America and the Caribbean, 2020).

The economic sectors that show the greatest impact are tourism, manufacturing and industrial activities, raw material exports and the consumption of non-essential goods. In all cases, the value chains associated with these industries have been severely affected by the pandemic.

Tourism, commerce, industrial activities, raw material exports and remittance flows are among the activities with the highest level of contraction, which causes a reduction in investment and a fall in prices and exports. The effect on unemployment and poverty will become more evident in the coming years. In many countries, the number of MSMEs that have disappeared is enormous, giving rise to an informal subsistence economy.

The impacts of the pandemic on the different sectors of the financial services industry are (Deloitte, 2020) differentiated. Each sector has its own particularities, such as, for example, the mortgage market and the housing sector, retail banking and financial services, automobile insurance, and the commercial real estate market. In the insurance industry, the pandemic has created significant operational and financial challenges, so the long-term effects of the crisis are expected to reshape the industry (EY, 2021).

The global crisis puts stress on the entire financial system, consequently, the CUs. One year after the COVID-19 health crisis began, those most affected by it have high loan portfolio concentrations in the economic sectors most affected by the crisis, such as hospitality, tourist carriers, commerce, micro-enterprises, food services, and housing construction. In general, consumer credit has contracted in all countries, creating serious difficulties for CUs with high concentrations of loan portfolios in one or few economic activities affected.

The lower the level of diversification in the portfolio of productive assets, the higher the risk of lack of alternatives to deal with the crisis, which can lead to an unprofitable business model and greater vulnerability for survival in the market.

The pandemic has affected regions of the world and countries in different ways; it has also affected industries in different ways. Some CUs are, therefore, more vulnerable than others, compromising their survival in the market. For this reason, it is not surprising that the supervisory authorities of the financial system, in the case of supervised CUs, show concern for the levels of liquidity and equity sufficiency of the CUs.

[2]Data as of April 26, 2021 https://coronavirus.jhu.edu/

The experience of 2020 shows that CUs should urgently deal with managing the crisis in their organizations, while supporting their members to maintain their productive activities, playing an active role in the economic reconstruction of their countries.

Some critical areas that have been identified and that should be addressed are:

- Loan management, which is the main earning asset of the financial entity. Delinquency has increased and will continue to increase to the extent that CU members are unable to reactivate their productive activities and cannot pay their loans.

  The strategies required to address the COVID-19 crisis and its economic effects involve a great effort in the implementation of loan management programs, which consider aspects such as: a) analyzing and identifying productive sectors and activities that are overcoming the crisis; b) supporting the reactivation of the economic activities of CU members with greater feasibility for success; c) updating loan collection policies and practices that include the adaptation of criteria or conditions for loans that can be restructured with a high probability of normalization.

- Customer service. CU members have faced restrictions on mobility and access to traditional teller services in branches, due to confinements and sanitary restrictions, thus pressure will increase for the development of digital channels for sales management and the provision of financial services, a trend towards digital transformation that has accelerated with the pandemic.

  The COVID-19 pandemic is transforming the finance industry, a process that will take several years. CUs should reconsider their future plans in the field of technology in order to diversify their service channels, orienting their strategic efforts towards digital transformation, the consolidation of the virtual branch model, and integrated services accessible via mobile devices, which is also a key factor in attracting the younger generation of people.

- Lower margin of financial intermediation. CU revenues will be reduced due to the contraction of demand for loans and the drop of other revenue from financial services. CUs should be prepared to absorb losses associated with loan management and should be redesigned at the operational and technological level in order to achieve better control of their costs and provide their members with greater access to services.

  What we see at the beginning of 2021 is that the demand for loans and other financial services will not return to pre-pandemic levels in the short term. For many CUs, this means that their business model becomes insufficient to generate a profitability similar to that achieved pre-pandemic. Their financial intermediation margin is increasingly narrower due to the dependence of the traditional financial intermediation model being based on solely savings and lending.

  The current conditions of economic contraction foster the growth of savings deposits, an excess of liquidity and a low credit growth, which forces CUs to adjust the passive interest rates so as not to sacrifice their intermediation margin.

  The reduction in the financial intermediation margin requires greater financial management skills and the generation of strategic activities for the generation of other revenues and innovation in the supply of credit. Specialization in the management of the financial investment portfolio and the timely adjustment of passive interest rates is a priority in the coming months or years.

- The current reality imposed upon us by the pandemic is complex, which requires operational adjustments to maintain innovation, control costs and make operations more flexible, even the closing of non-profitable branches or establishing alliances between CUs to serve member segments with similar socioeconomic characteristics. Given the effects that the pandemic has had on people, mainly the losses associated with its social and economic effects, CUs should expect negative effects on asset quality and their financial solvency, a situation that is aggravated in those cases in which CUs were already afflicted with unresolved problems in the management of the intermediation margin, operational efficiency and corporate governance from previous years, among other key aspects.

  CUs that have suffered a greater impact on their profitability should opt for urgent actions in order to reduce the operating management cost. In general, the crisis has led to an increase in delinquency and a reduction in income, which forces CUs to focus on a more effective and adequate use of the organization's resources to obtain more predictable and stable medium- and long-term results.

In summary, the main impacts of COVID-19 on the CUs and their members are varied and differentiated, according to both industry sector and economic activity, requiring the affected CUs to modify their operations such as adapting the PEARLS financial disciplines or their local regulatory systems in order to address the impacts of the pandemic.

These areas of attention and the adjustment of the PEARLS in times of crisis will be addressed in the next section of this paper, where we will discuss how CUs can meet the challenges presented by the COVID-19 pandemic and the processes of economic recovery.

Part III: CUs and COVID-19 Crisis Management

In part I of this paper, we summarized the principles of the PEARLS System, highlighting some of the most important financial disciplines proposed by the model. In part II, we then attempted to summarize the main impacts of COVID-19 on the global economy and on the CUs, identifying critical areas that should be addressed promptly.

In this part III, we recommend strategies to mitigate the effects of the crisis that CUs can implement according to their own conditions, and identifying the management indicators and financial discipline standards affected by the crisis, that each CU should analyze, and considered those that are more appropriate given the current reality.

In general, the social and economic effects of the COVID-19 pandemic are long-term. Although this paper seeks to offer suggestions for short-term actions, CUs should initiate long-term strategic planning processes, over a broad time frame specific to their own circumstances, an issue not covered in this paper.

Below, we present some strategies for crisis management and the changes that financial planning processes should undergo in order to address the impact of COVID-19.

1. Management of Productive or Earning Assets

The PEARLS System and its Business Plan methodology divide the total asset into two asset classes: productive or earning assets and non-productive or non-earning assets. In this part of the paper, we will discuss productive, earning assets, namely:

a) Loan portfolio;
b) Short-term liquid investments;
c) Medium- and long-term financial investments;
d) Non-financial, income-generating investments.

As part of the Asset Quality standards, the total delinquency on all loan balances should not exceed 5%.

As part of the Protection standards, the model suggests indicators for provisions for delinquent loan allowances. These may vary from country to country or from CU to CU, depending on the prudential supervision model to which they are subject. However, let us remember that the asset protection indicators show the member if the CU is a safe place to save their money. Therefore, asset quality and asset protection are key factors in the pandemic crisis.

In this area of productive asset management, CUs affected by the crisis may apply some of the following strategies:

Composition of the Productive Asset
<u>Impact factors:</u> • Credit unions that have a high credit concentration in one or few sectors of the economy have little financial flexibility when a market phenomenon such as the pandemic occurs. • CUs that have traditionally served a membership from within a given sector of society, such as public sector employees, for example, have conservative practices in the management of the earning asset. This situation deprives them of capacity for innovation. • If CUs assume that changes in the environment are slow or non-existent, they have rigid work systems that are difficult to change and slow when updating work policies and processes. A crisis like the current one generates greater uncertainty in these CUs if they do not have an appropriate contingency plan in place that favors rapid change. • CUs with a traditional vision and that are not subject to supervision systems imposed by the financial authorities of the country may have bureaucratic and slow Corporate Governance models for decision-making. • CUs without adequate policies for recording and appraising financial investments are exposed to a greater risk of recovery of their investments due to the impact of the pandemic on supervised financial entities and unsupervised organizations where they make their investments. CUs with inadequate management of their financial investments may be affected by the financial contagion initiated in other financial entities and non-financial organizations. • In the PEARLS model, non-financial investments are understood as investments of a non-financial nature, mainly capital contributions in other companies, economic activities or unions. The pandemic, in the medium-term, can generate losses in these entities and organizations. CUs should measure that risk.
<u>Impact mitigation strategies</u>: • The pandemic requires a cultural change, especially in corporate culture, where the CUs affected by the crisis accelerate the impact analysis and action plan development processes. All CUs affected by the pandemic should review and adjust their strategic plans and develop action plans according to three timeframes: a) short-term: normalization plan; b) medium-term: stabilization plan; c) long-term: post-pandemic development plan focused on innovation and technological development. • Credit unions need to establish the capacity to efficiently and quickly manage liquidity resources to move them to where they will earn higher returns safely. • Complete a detailed valuation of the quality of loans, investments, accounts receivable and segment loans by probability of recovery and diversity of actions such as collection, restructure, recover or write off. • In many countries credit unions have developed systems of liquidity management through their federation or a specialized organization, which allows them to generate additional income though a pooled management of their investments. • Depending on the degree of development of the CUs, and the impact suffered due to the pandemic, they should give priority to actions such as: ➢ a) objective analysis of the situation they face, identifying corrections in loan management, liquidity management and capital creation; For example credit unions can segment their

loan portfolio by probability of recovery and diversify collections actions and identification of losses.

- b) identification of market opportunities and threat containment plans;
- c) proposal for competitive and innovative products and services; including pilot tests and technological developments that generate added value to their members;
- d) innovation and development of new channels for the sale of financial services and loan recovery, reducing bureaucratic, tedious and slow processes that prevent growth in the market.

- In the event of an increase in savings deposits and contraction in loan placement, the CUs affected by the crisis should evaluate whether to review or create stricter standards for recording and appraising financial investments, specifically when required to apply IFRS 9 - Financial Instruments (International Financial Reporting Standards - IFRS), related to the classification and measurement of financial assets. (See https://www.ifrs.org/issued-standards/list-of-standards/ifrs-9-financial-instruments)

  Improving good practices in the management of investments and the measurement of indicators for their minimum required real profitability is essential for CUs to remain within the market indicators and to generate adequate profitability from that type of investment.
- The pandemic has affected family life, health and household economics. CUs affected by the crisis should adapt the development of products and services to new market conditions, primarily with the development of new types of credit adapted to the current reality of the socioeconomic profiles and productive activities of their member base. To the extent permitted by the circumstances, CUs should diversify their loan portfolios into different member segments in order to dilute the risk of high concentrations.
- Within the framework of a more agile Corporate Governance model, CUs should improve internal communication channels so that changes to internal operational processes are supported by the Board of Directors and decision-making is streamlined, especially for the speedy and timely update of internal policies and procedures.

  The pandemic, for an undetermined period of time, will continue to generate uncontrollable contingent events, which is why CUs should improve their decision-making processes.

  The Boards of Directors should have parameters that measure the time frame and due process for the completion of projects related to a) business processes; b) new investments and technological evolution; and c) offering products and services that allow them to maintain high levels of competitiveness in the market.

PEARLS Areas of Impact:

The PEARLS model suggests that the optimal structure of the productive asset should comprise:

- 70-80% of Net Loans (with no delinquent loan portfolio after more than 30 days) with respect to Total Assets
- Maximum of 20% of Liquid Investments with respect to Total Assets
- Maximum of 10% of Financial Investments with respect to Total Assets
- Zero non-financial investments.

The economic effects of the pandemic on people and economic activity produce an increase in delinquency, so the Net Loans/Total Assets ratio will be reduced. The contraction of aggregate demand in many countries has caused savings deposits to increase and, thus, has caused ratios related to liquid and financial investments to increase.

This produces a change in the composition of the Productive Assets, affecting profitability and thus the possibility of creating capital through the retention of net surpluses or income for the period. Hence, improvements in the management of interest rates on deposits and in management of financial investments are factors for the generation of profitability.

In addition to the contraction of growth in loan placement, another factor that affects the growth of the loan portfolio is the reduction of members and their activities with the CU. For this reason, the measures aimed at the diversification of the loan portfolio should also contribute to the growth of membership.

In the case of non-financial, non-earning investments that do not generate income but do incur operating expenses, CUs should consider the option of selling them, especially if, in the coming years, it is not possible to generate revenue with such investments.

Credit Risk

Impact factors:

- Due to the consequences of the pandemic, characterized by high levels of unemployment, the deterioration of specific sectors of the economy and the loss of individual purchasing power, many financial entities may experience solvency problems in the short and medium term. Depending on the reality of each country and the CUs, a generalized deterioration in the quality of financial assets could generate a systemic contagion effect in the financial system of a country, or within the CU sector.
- The pandemic entails an increase in credit risk by increasing the risk of delinquent debtors. CUs that grant loans -primarily secured loans or loans based on the analysis of the debtor's payment capacity- should now focus on analyzing other elements in addition to the classic 5 Cs of [3]credit. Without a doubt, the ability to pay has changed for people affected by the crisis.
  Under current conditions, CUs should improve the analysis of the loan portfolio by improving the analysis of the debtors, and improving the analysis of the financial investment portfolio, by performing the risk analysis on the counterpart financial entities.

Impact mitigation strategies:

- Depending on the prudential supervision system to which the CUs are subject, there are three critical factors that should be considered in the credit risk field:
  - The levels of delinquency and how it is calculated, as well as the policies and processes for collection or recovery of the loans.
  - The creation of allowances for delinquent loans and their calculation.
  - The policies and processes for charging off delinquent loans against established allowances, as well as the recovery process for charged-off loans.

[3] Capacity, Capital, Collateral, Character and Conditions.

- Segment the loan portfolio according to the probability of loss associated with the economic sector, the impact on the repayment capacity of the borrower and the probability that the loan will not be recoverable.

To minimize credit risk, CUs should manage these three processes with high levels of efficiency and quality. The CUs affected by the crisis and high levels of delinquency among their members should -initially- focus on these three areas; otherwise, if this process is out of control, the CUs may materialize losses, negatively affecting the capital of their members and the solvency of the CU.

Depending on the prudential supervision system to which credit unions are subject and the application of local accounting rules, in extreme cases where the impact of losses is substantial, credit unions should coordinate with their regulatory agencies and external auditors on the accounting and regulatory treatment of the losses and the possibility to resolve those over an extended but defined period.

- Under the current conditions of the pandemic, when countries make economic openings and then apply new restrictions on the mobility of people to reduce COVID-19 contagion levels, credit risk management becomes particularly relevant. CUs should improve their collection processes for the current loan portfolio and guarantee the security and quality of the new loan placements. To do this, CUs can implement a number of strategies, such as:
  - Diversification of loan portfolios that guarantees proportionality in the dispersion of risk and loan allocation in dynamic and sustainable economic activities in the post-pandemic context.
  - Evaluate the classic 5 Cs of the loan with emphasis on the analysis of the debtor's cash flows, the nature of payment and allowance tendency techniques based on IFRS 9.
  - Update the analysis and loan approval methodologies considering the specific character of each type or line of credit and each debtor profile, with emphasis on the quantification of the probability of payment (C for Character)

- The pandemic has reduced the income of millions of people and, therefore, it has affected their ability to honor loan payment obligations. In this context, it is likely that people affected by the crisis will not have a stable income for a considerable period of time. However, CUs cannot paralyze the recovery of the current loan portfolio.

  In some countries, Governments have launched support programs for debtors, have made prudential regulations more flexible, and have provided access to liquidity mechanisms or guarantee funds to help SMEs. Thus, the implementation of support and relief programs for debtors affected by the pandemic depends on access to long-term resources to consolidate and readjust the debts of debtors. Both access to long-term funds and their terms of use may be conditioned by the governments or funding entities. Supervised CUs may participate in these programs in some countries and may offer additional assistance to their members, while gaining a competitive advantage over other unsupervised financial entities.

- The development of debtor relief programs includes differentiated payment schemes for individual debtors or groups of debtors, such as temporary deferment options, in addition to the support of financial advisers and social workers who assess the conditions of the household as a whole.

  For these relief programs, there should be an analysis scoring model for readjusted or rescheduled loans, including elements such as:

- the debtor should have a good payment history and good payment status, both within the CU and in the rest of the financial system;
- the debtor should have been a member of the CU for a considerable period of time;
- the debtor should remain linked to other products and services of the CU, such as being a user of savings products or other services;
- the debtor's rating score in the analysis model should be stable, with little volatility;
- the debtor should maintain a responsible, stable and committed credit commitment to its economic activity;
- the debtor should operate in a prosperous, dynamic economic activity or sector, despite adverse market conditions;
- the debtor should demonstrate, with certainty, that there is feasibility and willingness to pay.

- Historically, successful CUs already apply mechanisms to mitigate credit risk, such as the development of personnel training programs to strengthen internal operational capacities; however, within the context of the COVID-19 pandemic and its effects on the economy and people, CUs should reinforce key areas such as:
    - Training treasury personnel in the management of the corporate treasury business (cash flow management) and the correct management of the financial investment portfolio (mitigation of market and liquidity risk).
    - The pandemic can generate volatility in deposit rates, depending on the context within which a CU is found. This means generating skills to identify financial instruments and the right moment to purchase or sell securities with a good return on capital.
    - Training of personnel in the use of tools for the daily management of the CU's cash flow.

- There is no doubt that addressing the effects of the pandemic, such as working from home and the inability to handle high volumes of transactions at tellers or in branches, has created a serious and complex problem from an operational perspective. However, these operational changes and the speed of market adaptation should not be justification for neglecting important regulatory and legal aspects. CUs should not overlook the requirement to update documentation where it concerns loan agreement amendments for making payment conditions more flexible and restructuring debts.

- The pandemic has affected economic activities and industries in a differentiated manner, so some activities can be expected to be more dynamic than others, with certain geographical areas hosting more economically dynamic activities. This reality favors CUs with presence in various geographical areas of a country or region.
  To mitigate credit risk, CUs should conduct a more thorough risk analysis according to geographical area, sectors or economic and market activities.

PEARLS Areas of Impact:

The risks related to loan management and to asset quality are considered in the PEARLS model, which suggests specific ratios for monitoring delinquency, the creation of allowances for delinquent loans and charging off delinquent loans against allowances. The effects of the pandemic affect these ratios and their targets.

PEARLS suggests that loan delinquency exceeding 31 days over the total loan portfolio should not exceed 5%, a level that has been exceeded in many CUs as a result of the effects of the pandemic, with direct consequences in:

- Increase in the amount of allowances for delinquent loans;
- Increase in the cost of provisions for allowances;
- Decrease in income for the period;
- Decrease in the growth capacity of the CU;
- Decrease in liquidity due to the impact on the payment of loan installments.

With respect to the policies and processes for charging off delinquent loans against established allowances, PEARLS suggests that all delinquent loans older than 12 months should be charged off against the allowances for delinquent loans, but the adjustment of this financial discipline depends on its regulatory treatment by the prudential supervision system to which the CU is subject.

Financial planning for CUs affected by the crisis should consider these effects and the prudential regulations to make the necessary adjustments. The financial plans should accurately estimate the effects of credit risk management.

Liquidity Management

Impact factors:

- The COVID-19 crisis has increased liquidity in financial markets due to an increase in savings deposits and the contraction of the lending market. Aggregate demand and consumption have been contracted.
- CUs maintain recommended levels of liquidity based on the PEARLS model, their own models or based on the requirements of the prudential regulation system of local authorities. During the pandemic, upon experiencing high levels of liquidity, the problem for many CUs is centered on the selection, management and control of financial investments, as well as the placement of new loans, with the ultimate purpose of generating financial income from the use of excessive liquidity.
- In many countries, CUs do not have access to the Central Bank's liquidity mechanisms because they are not part of regulated financial entities. In other cases, CUs use liquidity mechanisms inherent to the savings and loans sector, generally managed by the federations. The CUs that do not have access to those liquidity mechanisms should deal with an excess of short-term funds from members' savings deposits.
- CUs without an adequate management system for financial investments increase the risk of investment recovery, with the consequent financial losses and pressure on liquidity ratios.
- The application of measures to mitigate the crisis, such as the restructuring of loan and the change of repayment conditions for borrowers affects the cash flow of funds of the credit unions.

Impact mitigation strategies:

- CUs should invest the excess liquidity under appropriate conditions to maintain the financial intermediation margin, for which it is necessary to improve or implement the recording and appraisal of financial investments, respecting the technical criteria defined in IFRS 9 - Financial Instruments (International Financial Reporting Standards - IFRS) relating to the classification and measurement of financial assets.
  Specialization in the management of the financial investment portfolio is key during the pandemic until market volatility stabilizes.

- Excess liquidity also requires the redesign of the loan offering of CUs, as well as the penetration of new markets or market segments. The money should be placed in new loans with high feasibility of recovery.
  On the other hand, high levels of liquidity are derived from an excessive collection of savings deposits, part of which can be speculative, short-term placements. Credit unions can avoid speculative deposits by managing savings interest rates to be less attractive and reduce excessive liquidity.

- Actions aimed at monitoring and analyzing the risk of loan portfolio exposure, according to transaction and debtor, contribute to good liquidity management, since the monitoring of debtors affected by the crisis guarantees revenue from loan repayment flows.
  The implementation of automated debtor monitoring systems is key to ensuring efficiency and efficacy of the process.

- Update of Assets and Liabilities models using an automated control system for the liquidity coverage ratio, both in real time and permanently.
  The use of tools to calculate liquidity positions, coverage, reconciliations and liquid asset gaps allows for creating awareness and projection of short- and medium-term scenarios.

- Accounting practices may vary from country to country. In general, CUs should establish a prudential indicator for the accumulated products receivable of the loan portfolio so as not to project funds that are not going to enter the account. Deadlines may also be established for recording loan interest.

PEARLS Areas of Impact:

The PEARLS model recommends the creation of liquidity reserves, which should represent 10% of members' savings deposits. In addition, short-term investments and liquid assets should be controlled, guaranteeing a maximum level of non-earning liquid assets.

The PEARLS principle is to allow members to withdraw their savings whenever they need them and to pay on the agreed dates. If this principle is not maintained, it compromises the credibility of the CU and may trigger a funds run out of fear that the CU is unable to honor its commitments or is unable to recover the loans and investments.

The financial planning of CUs affected by the crisis should adequately regulate the capture of speculative deposits that seek high, short-term returns. Good liquidity management helps to obtain good results with financial investments, to control the financial intermediation margin, and to generate a positive income (dividends) at the end of the period.

2. Management of Non-Productive or Non-Earning Assets

According to the PEARLS model, a non-earning asset includes all assets that are not income-generating, such as cash funds, fixed assets (buildings, land, equipment) and any other asset not directly related to the financial intermediation activity, including assets given in lieu of loan payments and products receivable.

The purpose of this type of asset is for the CU to have affordable buildings and other fixed assets in the exact proportion necessary to ensure the efficiency and profitability of the organization. As part of the Asset Quality standards, the level of non-earning assets should not exceed 5% of the Total Assets.

In this area of non-earning asset management, CUs affected by the crisis can apply some of the following strategies:

<table>
<tr><th>Management of Non-Earning Assets</th></tr>
<tr><td><u>Impact factors:</u>

The pandemic has a direct effect on the management of fixed assets, due to the increase in home-based working and restrictive government policies on human mobility, considerably reducing the flow of people to the branches of the CUs. CUs affected by this reality have underused buildings and offices, which includes service infrastructure such as branches.
The false expectation that the pandemic will be overcome in a few months, and the lack of any assessment on the effectiveness and functionality of the service points, has caused an increase in idle space.
CUs with a high volume of fixed assets with respect to Total Assets, can face a rise in additional costs at times when the CU has reduced its profitability. CUs that lease offices and branches have greater flexibility to adapt their service points during times of crisis.
Where reduced payment restructures are not feasible, the deterioration of the debtors' payment capacity may lead CUs to seizing property and other assets in lieu of payment of the loans. In times of crisis such as the current one, with high levels of unemployment and contraction of the economy, the number of processes for the assignment and award of assets in lieu of payment rises, thereby increasing the non-earning assets of the CUs.
These awarded assets generate legal costs and additional maintenance costs, so their efficient management is key to reducing non-earning assets.
Products receivable related to loan transactions form part of the non-earning assets. Management of the loan portfolio should generate the least amount of products receivable, the regulatory treatment of which may vary from country to country.
</td></tr>
<tr><td><u>Impact mitigation strategies</u>:

CUs affected by the crisis, and that are experiencing the particular problem of idle infrastructure, combined with new market requirements, should redesign their fixed asset
</td></tr>
</table>

growth strategy. The incursion in new market segments and the urgency to diversify the loan portfolio will lead CUs to develop an infrastructure transformation plan, which includes the redesign of the current service points and the development of new service channels such as digital channels.

CUs subject to prudential supervision by the financial authorities of the country should comply with regulations related to the award and sale of goods received in lieu of payment; however, it is important for the CUs to define internal policies on the management of physical infrastructure and other non-earning assets.

- According to the circumstances of each country, and considering that physical branches will always exist in order to serve certain market segments, the important thing is to generate economies of scale and reduce the costs of branch maintenance and operation, which is why CUs with presence in the same geographical area can develop a shared branch model. The generation of economies of scale will be key to competing in the long term with other banking financial intermediaries.

- CUs that offer home loans and that have a significant mortgage portfolio should measure the risks of that loan portfolio according to the socioeconomic profile of the debtor or the geographical area of the property. The readjustment of current mortgage loans or the granting of new loans can lead to future payment-in-lieu processes and the allocation of assets due to inability to collect.

- CUs with a high volume of fixed assets and assets granted as loan transactions should have a clear strategy and plan for the sale of assets. It is not always easy to sell assets, less so during the pandemic, which is why CUs in this situation should use specialized real estate agent services. Under the current conditions of the pandemic, it is recommended that CUs don't distract their personnel from the process of selling property.

  Likewise, in some countries, there are facilities to transfer the assets for sale to a trust or specialized company, thereby cleaning the balance sheet of the CU, transactions that should comply with certain legal and tax processes that differ from country to country.

- In the current conditions of the pandemic, and according to the degree of impact of a country or region, some CUs may be pressured by their members to develop other non-financial services, moving the CU away from their core purpose of savings and lending. These diversification processes in non-financial businesses generally consume financial resources and time, in addition to becoming a significant distraction that compromises the specialization of personnel in financial services. The risk of this type of new investment is to consume the member savings, accelerating liquidity and solvency problems.

- As the accounts receivable related to credit operations are part of the unproductive assets, such as the rescheduling of interest payments from debtors, the credit unions should apply strict controls of the financial measures applied to readjust or change the credit conditions.

<u>PEARLS Areas of Impact</u>:

The PEARLS model suggests that non-earning assets should not exceed 5% of the Total Assets, a ratio that would be seriously compromised if the CU loses control of the quality of its assets, being affected by a high volume of assets given in lieu of payment, accounts receivable from delinquent loan transactions, and idle physical infrastructure.

The most common causes of the increase in non-earning assets are related to investments in non-financial assets, idle infrastructure, high levels of delinquency, accounts receivable and the siezure of assets in lieu of payment. A high level of non-earning assets limits the growth of the CU and reduces the financial performance at the end of the period.

The financial planning of CUs affected by the crisis should consider the systematic and orderly reduction of non-earning assets, which implies closing non-profitable branches and selling idle assets, especially if the CU is experiencing profitability problems and does not have sufficient capital reserves to absorb losses.

Investment in Technology

Impact factors:

- In general, financial entities that had initiated digital transformation processes before the pandemic have a better commercial positioning today. There is no doubt that the technological transformation processes require investments of significant amounts, so new investments in software, technological infrastructure and specialized equipment have a high impact on CUs that were not prepared for this type of investment before the pandemic. During the pandemic, CUs that experience a reduction in the financial intermediation margin and their profitability face greater difficulties in making this type of investment.
- CUs that show a significant lag in the implementation of the digital transformation process should understand that both banking entities and microfinance entities are evolving towards this path. In general, the finance industry evolves in the direction of digital transformation, which is combined with traditional service channels, depending on the socioeconomic profile and cultural factors of the different market segments. CUs with little technological development should accelerate their analysis of options in order to upgrade technologically.
- CUs with little technological development experience significant cultural barriers that obstruct the evolution towards new development models. The Board of Directors of these CUs should be prepared to address the effects of the pandemic with new technological tools.
- CUs supervised by the financial authorities of the country comply with rules and regulations applicable to technology; however, CUs are not always prepared to make the necessary investments in technology or face the requirements for security of these systems for many reasons, such as due to the lack of institutional capital to finance that type of investment. During the pandemic, the creation of institutional capital is more difficult, which is why, even if the CUs are supervised and have basic technological development, they should focus their efforts on creating strategic alliances that allow them to maintain their competitive capabilities for the coming years.

Impact mitigation strategies:

- The CUs seriously affected by the crisis, which experience problems of profitability and growth, will have serious limitations to generate institutional capital and invest in important technological developments. One way of procuring technology is through strategic alliances

with CUs or with the CU federations to which they belong. Technological integration with existing networks will be the fastest and most cost-effective path.
Offering members options such as payment networks, online services from a smartphone, online branches and other digital channels is a trend that is gaining momentum during the pandemic. CUs affected by the crisis should have a technological upgrade plan to start or continue evolving in the digital transformation process.

- Evolving to digital channels depends on the requirements of the market served by the CU and on the trends of technology use by its members, currently and in the future. An essential step is to document and approve an analysis program for the functionality and profitability of the service points, and a feasibility analysis on alternative mechanisms for attending to or contacting the member.
  As a result, this plan may include the definition of an orderly asset sale process, such as branches, and investment in technology. The technological development plan is strategic for the long-term survival of CUs.
- In general, all CUs affected by the crisis should develop a technology training and communication program for their members, in order to bring about gradual adaptation towards digital transition; however, this -in particular- is a task to be developed by those CUs that serve microfinance markets and non-banking populations in rural markets.

<u>PEARLS Areas of Impact</u>:

The PEARLS model suggests that non-earning assets should not exceed 5% of Total Assets, a ratio that is challenged when CUs make large technological investments. CUs should control the ratios of non-earning assets and maintain the balance with the rest of the financial structure.

During the pandemic, the non-earning asset can grow for multiple reasons, such as a high volume of assets given in lieu of payment, accounts receivable from delinquent loan transactions, and growth in idle physical infrastructure. Therefore, investments in technology can increase the non-earning asset beyond the capabilities of the CU.

In this case, an uncontrolled increase in investments in technology can limit the growth of the CU and produce financial losses at the end of the fiscal period.

The financial planning of CUs that implement technological upgrade plans should consider the impact on their level of non-earning assets and the sources of financing and financial costs.

3. Mobilization of Savings and Other Sources of Financing

In 2003, the WOCCU published the book "Striking the Balance in Microfinance: a practical guide for mobilizing savings" which summarizes the lessons learned from the savings mobilization programs in the CUs of Latin America. Since then, thousands of CUs around the world have followed the best practices of the WOCCU regarding the mobilization of savings; however, in a crisis context such as the COVID-19 pandemic, some of the assumptions for the mobilization of savings in a market characterized by economic growth may change. Today, the pandemic places us in a context of economic recession and contraction of demand for loans, which requires a "rethinking" of traditional strategies for mobilizing savings.

The PEARLS System and its Business Plan methodology are based on a real growth objective of the financial structure of CUs, especially the real growth of the members' savings deposits. The PEARLS model seeks to accelerate the growth of CUs that have faced difficulties or low levels of development, and assumes that the market allows for an expansion of services and membership. The model suggests a total asset growth target higher than the country's annual inflation rate, which does not necessarily apply during the pandemic when countries are facing processes of economic contraction or recession.

The PEARLS model analyzes and projects not only the growth of the different accounts of the asset but also its sources of financing; for example, the members' savings, the use of external financing, the Member Share Capital, and the creation of institutional capital in capital reserves by retaining annual surpluses.

The adequate balance of the growth of Total Assets and the different components of the financial structure of CUs is altered in times of crisis or economic recession, such as the current pandemic we are experiencing, characterized by high levels of unemployment and contraction of lending markets. The mobilization of savings deposits in times of crisis is of great relevance, since success in the mobilization of savings represents the confidence that members have in their CU. Meanwhile, an excess of deposits with limited options for growth in loan placements generates operational and financial challenges to be considered.

In this section, we will discuss the mobilization of savings and the use of external debt as a source of financing. In section 4, we will talk about Member Share Capital and Institutional Capital.

The CUs affected by the crisis, in terms of the mobilization of savings and the use of external debt, should reconsider their growth strategies by applying some of the following strategies:

Mobilization of Savings
<u>Impact factors:</u> • In some countries or geographic regions, there is excess liquidity due to the contraction of consumption and the economic recession that the pandemic has caused. As with other financial entities, CUs experience high levels of savings deposits from certain segments among their members. However, to the extent that countries experience cyclical processes of opening and closing economies, attracting savings can be very volatile. The uncertainty generated by lockdowns

and the opening and closing of economic activities will cause many people to prefer holding their liquidity in cash or in demand deposit accounts.
It is also true that certain segments of the population have little or no savings. The pandemic has impoverished them, made them sick, and taken them out of the formal labor market, increasing extreme poverty in the world and expanding the informal market.

- CUs with high levels of members' savings should pay attention to the following key aspects:
  - The change in the savings objectives and habits of the members. Members may seek out savings terms that are differentiated from traditional options, as well as higher returns, in the hope that markets stabilize and they find better investment options. In other words, savings can be temporary in many cases.
  - The nature of investment instruments. Many Governments acquire funds from the public to finance their fiscal deficits, so some savers may be interested in diversifying their holdings in fixed income financial investment instruments, such as securities that are traded on the Stock Exchange. If CUs capture high interest rates in order to compete, for example, with the securities of the Governments, the pursual of profitability by CU members discourages entrepreneurship.
  - Saver loyalty. In conditions of economic volatility, cash flows are also volatile and savers seek better returns, stability and security of the financial entity. CUs with loan management risks or problems with profitability or solvency will be unable to maintain loyalty among their member savers.
  - Easy access. In conditions of economic crisis and market volatility, savers seek easy-to-access channels for opening savings accounts and transferring their funds. During the pandemic, the opportunity and ease of access to savings accounts becomes relevant.

<u>Impact mitigation strategies</u>:

- CUs that have members with high savings volumes should pay special attention to the asset-liability management, the reconciliation of terms and the management of financial investments.
  Credit unions should diversify the sources of their funding via analysis of concentration of savings deposits and establish policies to reduce speculative deposits.

- CUs that have members with moderate savings volumes should concern themselves with improving the management of savings growth, having "controlled growth" and maintaining the trust and loyalty of their members. These CUs can apply the following strategies:
  - Segment the savings deposits portfolio according to saver profiles and design-redesign products and services aligned with the reality and requirements of each profile, such as classifying savers according to their habitual amount and term in order to identify factors that guarantee their loyalty and permanence, as well as the stability of the savings at a reasonable cost.
  - Identify and classify savers into categories according to their savings goals and habits, namely:
    a) Cash Flow Manager: an investor who seeks the balance between liquidity and return;
    b) Subsistence Income: an investor who invests to obtain additional income and maintain a certain standard of living;

c) Moderate Expectations: an investor who is not concerned about liquidity, so it values a return that improves the capitalization of the principal amount invested;

d) High Expectations: an investor who seeks a return that allows them to increase their wealth.

- The development of new savings products should be characterized by offering variable and fixed interest rates, according to account balances and investment periods, such that the financial cost is automatically adjusted according to certain key variables. Agile management of interest rates can reduce the volatility of savings while also improving the financial margin. Moreover, savings products should offer added value for CU members, for example, life or health insurance with family coverage.
- The opportunity and ease of access to savings accounts should be specified in the development of new forms of service distribution, like digital channels for example, such that the opening and management of savings accounts can be done remotely, simply and securely.

- CUs that have members with low savings volumes -within the context of the pandemic-should understand the "new" socioeconomic conditions that their members are experiencing. The most vulnerable populations have been strongly affected by the pandemic. Many people should restart their lives from scratch.

  Starting from the principle that voluntary savings are those that are not a requirement for obtaining a loan, people with lower savings capacity should receive financial education for saving, managing their credit, budgets and family economy. To the extent they can increase their savings capacity, they can have access to the benefits designed for other member segments, including specialized and competitive savings products and services.

- At some point in the post-COVID era, CUs will see the savings levels adjusted to the new market conditions. CUs that seized the opportunity to capture significant savings volumes during the pandemic will be able to maintain the loyalty of their savers provided they have been able to find a solution to common competitiveness problems in the development of savings mobilization programs, for example:
  - It is time to innovate. The pandemic helped capture savings, but not forever.
  - The "amount/interest rate" ratio will probably not return. The saver wants added value and better service.
  - Know your saver. CUs should know the sociodemographic profiles of their savers, their savings habits and goals, as well as the savings requirements of the household.
  - "Speculative" investors will leave when the pandemic is over and economies begin to recover. CUs should maintain a sense of belonging among their members, strengthening the "member/saver" relationship. The saver is not just a client, they are the owner. The businessperson seeks a win-win relationship with the financial entity that supports their business.
  - Investment in new generations, development of savings and financial education programs for young populations.

PEARLS Areas of Impact:

The PEARLS model suggests that the members' savings deposits should represent between 70 and 80% of the Total Assets; funds that should be used for financing the loan portfolio, under

conditions of stability or economic expansion. However, during the pandemic, demand for loans has contracted and economies experience contraction or economic recession. An excess of savings deposits with low demand for loans compromises the stability of the financial structure of CUs by increasing financial costs, pressuring the increase of doubtful financial investments, reducing the financial intermediation margin and profitability. Under the conditions of the pandemic, the financial planning of the CUs should consider the efficient management of financial investments and the control of the costs of savings deposits. In severe cases of financial disintermediation, CUs should discourage the capture of savings or replace savings with debt at a lower cost and longer term.

Use of External Debt
Impact factors: • The COVID-19 pandemic caused Governments in many countries to activate support programs, both for the population and for companies affected by the crisis. These support programs include mechanisms to guarantee the liquidity of the financial system and access to credit by individuals and companies. • Government support programs for the financial sector vary from country to country. In some countries, some CUs had access to long-term funds under special conditions, especially those CUs supervised by the financial authorities and those that are part of the formal financial system.
Impact mitigation strategies: • Traditionally, CUs have used external debt to finance long-term projects, such as housing programs, and to use special funds with more favorable conditions and lower cost than the capture of savings for the financing of SMEs and other subsidized programs. In the context of the pandemic, the Government-authorized support funds to assist consumers and enterprises have special terms and interest rate conditions. In this case, CUs with access to this type of resources should use them to: ➢ Swap debt by paying short-term debt for long-term debt with similar cost. ➢ Reduce the dependence of speculating investors by replacing high-cost term deposits with lower-cost long-term debt. ➢ Finance loans under special conditions for individuals and companies affected by the crisis with viable and secure productive projects.
PEARLS Ares of Impact: The PEARLS model suggests that the use of external debt on Total Assets should not exceed 5%. However, the use of long-term debt funds or under lower cost conditions favors the financing of housing programs and special productive projects that cannot be financed with members' deposits.

Where permitted, the financial planning of CUs can consider the opportunity to obtain special funds from Governments or the Financial System in order to address the pandemic; particularly long-term and low-cost funds that allow them to alleviate pressure on the financial intermediation margin. Replacing debt and savings deposits with debt when it is lower cost and long-term offers an opportunity that favors the positioning of CUs in post-pandemic economic reactivation processes.

4. Member Share Capital and Institutional Capital

Two components of the financial structure of CUs are the Member Share Capital and Institutional Capital. The growth of assets and sustained profitability over time allow long-term development of cooperative organizations. Profitability sustained over time honors a basic principle of the system: to create and accumulate capital through retained earnings and not limited to Member Share Capital. Capital requirements in an increasingly complex and technology-based financial system require high amounts of investment, which is why the Member Share Capital loses relevance and is replaced by Institutional Capital.

Institutional Capital comprises all legal and non-distributable reserves, capital donations and the part of the surplus for the current year that is withheld as legal or non-distributable reserves. These non-distributable reserves are not spent and no member can individually file a claim over them.

The Institutional Capital of CUs allows: a) the financing of non-earning assets; b) the generation of more profits and profitability since they are funds without any explicit cost; and c) the absorption of losses at the end of the economic period.

During the COVID-19 pandemic, CUs affected by the crisis with low levels of Institutional Capital will have less maneuvering capacity to absorb the losses resulting from the crisis. Creating and increasing Institutional Capital is a determining factor for success in the post-pandemic era, since market demands for competitive products and services, new service channels, more investment in technology and strengthening CUs require stable, long-term resources where the Member Share Capital is insufficient and variable.

Member shares are considered common equity tier one capital only if they are permanent (cannot be withdrawn) and there are no other claims upon them (not leveraged as loan collateral).

On the other hand, the principle fostered by the WOCCU in regard to Member Share Capital is that these contributions receive a "return" or average interest rate, whereas the surpluses or net revenue for the period is capitalized in non-distributable reserves. Conceptually, Members Share Capital receives a return, although the accounting treatment of that "expense" has changed over the years and in many countries is treated as a dividend to the Member Share Capital.

PEARLS suggests that Member Share Capital might be between 10 and 20% of the Total Assets, whereas Institutional Capital should reach a goal of 10% of the Total Assets.

Member Share Capital
<u>Impact factors:</u> • The COVID-19 crisis has produced differentiated effects according to economic sectors among the population and in companies. In general, the change in the economic conditions of people affected by the crisis produces abrupt variations in the Members Share Capital. • A traditional practice in many CUs is to distribute the surpluses via dividends at the end of each year, which in many cases represents an excessive "return" on the capital higher than the average interest rates on savings deposits. The consequence of this practice is that the net

income for the year is not sufficient to increase non-distributable reserves and, over the years, the accumulation of capital does not allow strategic investments in technology, so some CUs resort to borrowing resources with cost to finance their technological developments and other strategic investments.

- CUs supervised by the country's financial authorities in recent years have been adapted to the requirements of the Basel III Base Capital, a process that is still in the implementation phase in some countries.
  In light of this process, CUs are required to generate a positive net income at the end of the year, in sufficient quantity to adjust their non-distributable reserves to the current and future capital requirements of the CUs.

- The pandemic has affected the liquidity of people most affected by unemployment and the closing of companies, a situation that has had an impact on the CUs and their share capital, namely:
  - CU members who require withdrawal of their share capital to meet urgent economic needs, withdraw from some CUs.
  - Members without a regular income and limited purchasing power have suspended their regular share capital contributions to the CUs.

- Microfinance institutions and banking entities that serve the same population segments as the CUs do not require share capital, neither initial nor monthly, to have access to financial services. Within the CUs, the mandatory requirement for Member Share Capital becomes an entry barrier. This traditional model is unsustainable in an increasingly competitive financial market.

Impact mitigation strategies:

- In some countries, members may leave the CU and withdraw their share capital, so the treatment of member withdrawals, with the consequent withdrawal of share capital, is regulated in each country, both by specific legislation and by the regulations of the supervisory bodies of the cooperative sector and of the specific CUs.
  The specific strategies that allow the Member Share Capital to be increased or decreased should consider the legal framework of each country.

- CUs affected by the crisis and that experience high volatility in Member Share Capital should seek the application of temporary legal and administrative measures, by the regulatory authorities, in order to provide stability to the capital and regulate critical aspects of member withdrawals, such as the amount of members that leave or the maximum amounts of capital allowed per year.

CUs affected by the crisis, whether they are subject to Basel III framework or specific local rules related to the capital sufficiency of the CUs, should seek alternative measures to ensure the stability of the Members Share Capital.

- In addition to local regulatory aspects on the treatment of their Member Share Capital, CUs can implement the following strategies:

➢ During the pandemic, consumption has contracted, the lending market has declined, so it is expected that competition between financial intermediaries will increase substantially. The increase in competition favors easy and fast access to financial services. Consumers are looking for institutions that require fewer income requirements. The CUs, based on the minimum legal requirement of contributions per member, may promote differentiated capitalization schemes to promote loyalty, according to the socioeconomic profile of members. ➢ If the legal framework so allows, and the CUs can develop immediate-access products and services without any approval or income requirements.
PEARLS Areas of Impact: The PEARLS model suggests that the Member Share Capital be between 10 and 20% of the Total Assets. This capital is constituted by the individual contributions of the members, and may yield a return, but should be stable in accordance with the Basel III principles. In accordance with the Basel III principles, which apply in several countries to credit unions that are supervised by the country's financial authorities, if the members' capital contributions are used as collateral or credit guarantee, or if they are withdrawable, they are not considered base capital. This makes the creation and accumulation of Institutional Capital a strategic aspect for the future survival of the cooperative savings and credit sector. To overcome the pandemic successfully and survive during the post-pandemic era, the financial planning of CUs should redesign their equity structures, integrating the best international practices and the basic principles of the international financial system. The creation and accumulation of permanent capital should be oriented to the strengthening of Institutional Capital as permanent capital.

Institutional Capital
Impact factors: ➢ The COVID-19 pandemic generates stress on the financial intermediation margin and the economic performance of the CUs; in addition, Where the Member Share Capital is variable and volatile and where Institutional capital is low, the result is an equity that is sensitive to the effects of the crisis. Some of the causes of Institutional Capital weakness are: ➢ Lack of commitment on the part of CU managers and Boards regarding the concept and the importance of Institutional Capital. ➢ Absence of solid legal and statutory regulations governing the creation of Institutional Capital as the main source of equity growth for the CU.
Impact mitigation strategies: • Implementation of technical training programs for the directors of the Boards of Directors of the CUs.

- Creation of a statutory regulations in the CUs that requires the implementation of a replacement or succession program for directors.
- The operational plans (short-term) and strategic plans (long-term) of the CUs should incorporate performance indicators, actions, and goals on equity solvency, allocating the largest possible portion of the surpluses (dividends) to the creation of Institutional Capital. In the long term, CUs should promote the creation and accumulation of Institutional Capital as the only way for the sustainable and lasting development of the organization.
- The CUs statute, within the legal framework in force in each country, should contain rules on the creation and accumulation of Institutional Capital.
- The CUs regulated by the financial authorities of the country should encourage the regulatory body to promote the creation of Institutional Capital as a standard of the CU sector.
- In the context of the pandemic and its social and economic impacts, in order to guarantee the sustainability of the CUs in the post-pandemic era, CUs should retain and capitalize the surpluses (dividends) for the prudent period of time necessary until the Government of the country lifts the state of emergency due to COVID-19.

PEARLS Areas of Impact:

In accordance with PEARLS standards, the Institutional Capital target should be 10% of the Total Assets. This is not to be a regulatory minimum but a standard of excellence and has stood the test of time. Those credit unions which have adopted this standard have withstood the shocks of the pandemic with greater resilience than those which had lower levels of institutional capital.

The creation and accumulation of institutional capital is very sensitive to the COVID-19 pandemic. Financial and operating losses related to loan management and the creation of allowances for delinquent loans, as well as low return of financial investments, translate into few or no dividends in order to create non-distributable reserves.

CUs that wish to improve their competitive capacities should not only focus on human talent and technological developments, for example, but they should also make the necessary decisions for Institutional Capital to reach minimum levels of 10% of the Total Assets.

5. Interest Income and Costs Linked to Asset Quality

In accordance with the PEARLS standards, Protection standards establish that the provisions for allowance for delinquent loans corresponds to 35% of delinquent loans between 1 and 12 months and 100% of delinquent loans over 12 months. Historically, these began as a simple beginning in a context where there were no regulatory standards for loan loss provisions. Today most countries have their own tiers for provision requirements according to their own local regulations.

The provisions for allowances models for uncollectible accounts defined by the prudential regulation systems of the regulatory entities of national financial systems are more complex, since they incorporate variables and criteria differentiated according to type of credit and risk levels. For this reason and while it is important to transparently recognize real or potential losses with proper provisions, in this paper, we are not going to refer to the provisions calculation methods for delinquent loans, nor to their accounting recording, since they vary from country to country.

The largest portion of the CUs' financial income is generated from the loan portfolio and financial investments, a model that is affected by the pandemic, due to the contraction of demand for credit.

In modern models, CUs serve a broad and diversified member base, their loan products are duly segmented and generate a significant portion of income from financial services, such as commissions for credit card transactions. These CUs have greater maneuvering margin in order to offset losses generated by the pandemic.

The PEARLS model does not include specific indicators for allowances on financial investments, such as liquid investments, financial investments and non-financial investments. In an economic context of recession, such as the pandemic, CUs should establish allowances for investments, since the entities where they invest may be affected by the crisis.

CUs affected by the crisis may apply some of the following strategies:

Income and Costs of Risk Assets
Impact factors: • The impact factors of the earning asset structure and credit risk were discussed in section 1 concerning the management of productive assets. In addition to the critical factors of the financial structure, in this part of the paper we suggest the treatment of income and costs related to the loan portfolio. • For those credit unions for whom the interest income of the CU comes from a high concentration of loans in one or few sectors of the economy and for whom revenue from commissions or fees on loans is scarce, the COVID-19 crisis generates greater uncertainty. The CUs should have a contingency plan that favors rapid change, if their members can be massively affected by the crisis, because they are concentrated in one or few segments.
Impact mitigation strategies: • During a state of emergency, characterized by an abrupt drop in the income of CUs due to high levels of delinquency and contraction of new loan placements, CUs should redouble

efforts to face the crisis in two ways simultaneously: a) contingency plan (short-term); and b) development/strategic plan (long-term).
If the CUs only focus on addressing the short-term urgency, they do not undertake additional efforts to address the medium- and long-term consequences, thereby sacrificing financial stability for the coming years.
CUs should divide their directors, managers and personnel into two work teams: those assigned to address the immediate effects of the crisis and those assigned to focus on redesigning the business model for the future. The former should focus on "losing less", while the latter should focus on "earning more."
Each work team, in the contingency plan (short-term) and development plan (long-term), can clearly identify corrective and preventive actions for the deterioration of the assets, as well as different action scenarios.

- To the extent permitted by local regulations, and while maintaining transparency of probability of losses, the CUs affected by the crisis should reduce the costs of provisions for allowances for risk assets, for losses of financial investments and for any other doubtful asset. The following strategies help achieve that goal:
  - ➢ Establish payment arrangements or extensions on the loans for debtors affected by the crisis who are able to demonstrate the degree of impact and reduction of their income. Those who work in the lending area should have the capacity to propose and undertake strategic actions focused on forecasting the quality of the loan portfolio.
    This effort to contain the costs of provisions for allowances for delinquent loans also implies that the lending area has the ability to develop new loan products and refinancing options that contribute to a comprehensive solution of the member's credit status.
  - ➢ In a pandemic, loan recovery depends on the feasibility of productive activities. CUs can focus the collection techniques on solving the credit problems of their members. The collection function can be integrated with the feasibility analysis for the productive activities of members, and have the technical capacity to solve problems that help improve cash flows for the business.
  - ➢ The CUs should update the policies and procedures for the registration and valuation of financial investments, with greater control and monitoring of the financial health of the entities where they invest their funds. In cases where it is so warranted, the CUs can reinforce the technical capacity of the asset-liability management or persons entrusted with investment management, not only to avoid losses and more allowances, but to achieve adequate return on that type of investment.
  - ➢ Some of the technical issues that the CUs should update are the scopes of IFRS 9, in the loan and investment portfolio, for the calculation of the expected and unexpected loss.
  - ➢ Any asset evaluation process and its reclassification as a doubtful or problematic asset, in order to defer the requirement of creating provisions or recording losses, should be carried out in accordance with the regulatory and accounting standards in force in the country.

<u>PEARLS Areas of Impact</u>:

According to PEARLS, costs for provisions for risk asset allowances affect operating income after financial costs and operating expenses. In this regard, if CUs are unable to generate other service income, a high concentration of provisions will lead to a loss situation.

The financial planning of the CUs, in the current context of the pandemic, should control the costs of risk asset provisions; but, above all, ensure that the CU operates with the interest rates on loans and investments that allow all costs to be recovered. In this crisis, the short-term goal is to optimize processes, control costs and generate net income that allows the creation or consolidation of institutional capital.

Operating in the context of the COVID-19 pandemic, the financial planning of CUs should consider: a) reducing the delinquent loan portfolio; b) developing a collection program accompanied by technical support for the member offering them added value and practical solutions for productive activities; c) making monthly provisions for allowances for risk assets in order to maintain their present value; and d) performing a critical analysis of other income and the financial intermediation margin to make timely and effective decisions.

6. Management of Financial Costs

According to PEARLS, the financial costs correspond to the return paid on the mobilization of savings and the interest rates paid on external loans. In principle, the average interest rate of savings deposits should be higher than the country's inflation rate, but above all a market rate. Likewise, interest rates on debt should be market rates.

The management of lending rates is a topic that becomes relevant in times of crisis where the options of financial institutions regarding where to invest can be reduced or their risk increased, while the structure between mobilization of savings and the use of external loans changes.

For the purposes of this section, the Member Share Capital is not considered. Conceptually, WOCCU has considered the "return" on Member Share Capital as a financial cost; however, the accounting practices and regulations of supervising entities consider it a payment of surpluses or dividends.

Section 3 of this paper sets out the issue of the mobilization of savings and other sources of financing as part of the financial structure of the CUs. In this part of the paper, we analyze the costs related to the mobilization of savings and debt use. With respect to the management of financial costs, the CUs affected by the crisis may apply some of the following strategies:

<table>
<tr><th>Costs of Savings and Debt</th></tr>
<tr><td><u>Impact factors:</u>

• In PEARLS, financial costs are recorded just before obtaining the intermediation margin, but the pandemic produces a reduction in interest income, so the impact on the intermediation margin cannot be controlled if financial costs are not controlled. Financial management is key to the survival of CUs during this pandemic.
• The increase in liquidity and volatility in savings caused by the pandemic, in many cases, depending on the reality of each CU, produces a high concentration of short-term savings deposits, that is, at a term of less than six months. In these cases, CUs should reduce interest rates on savings deposits, even below the market.
• When CUs compete with each other in the same market or geographical area, history shows that they can establish commercial "wars" between each other by artificially raising interest rates of savings deposits to attract a greater number of investors. Even more serious, CUs compete for their own members and not for attracting customers from other types of financial institutions.
• Access to government credit programs to help people and companies affected by the pandemic offers opportunities for the CUs. Of course, this depends on many factors, which vary from country to country.</td></tr>
<tr><td><u>Impact mitigation strategies</u>:

• The crisis generated by COVID-19 is social and economic, potentially a financial crisis if the entities are unable to support a prolonged period of credit contraction, delinquency and low interest income, among other possible impacts. Therefore, part of the success for long-term survival lies in financial management, which CUs should reinforce. In addition to the drop in</td></tr>
</table>

revenue from lending activity, CUs could barely support financial disintermediation processes or losses due to bad investments.

- To reduce the pressure from rising financial costs, CUs should lower interest rates on savings deposits of a speculative nature, and even stop receiving them. An investor who wishes to place high short-term amounts in the CU should be considered with caution. The priority of the CU is not to increase the financial cost unnecessarily beyond certain parameters that should be previously defined by the financial administration, rather, on the contrary, the priority of the CU is to maintain or reduce the financial cost.

- CUs that share the same market or geographical area should understand that competition are other financial entities rather than other credit unions. The CUs and their federations should make efforts to unify operating criteria and maintain interest rates within certain ranges to face off their common competition.

- In terms of debt cost management, the CUs -to the extent possible- should take advantage of the opportunity to have access to funds under conditions of special terms and interest rate in order to grant loans to members affected by the economic crisis. Clearly, the use of debt during the crisis should favor the granting of loans to members of the CU, but should also serve to swap short-term, high-cost debt for long-term, lower-cost debt.

PEARLS Adjustments:

The PEARLS model promotes the use of market interest rates, both for term deposits and for debt. By taking advantage of any possibility of funds under better conditions than the market average, CUs favor the reduction of financial costs.

The financial planning of CUs should consider the numerous possibilities of reducing financial costs in order to offset the drop in interest income, and thus create Institutional Capital.

7. Management of Operating Expenses

The PEARLS System and its Business Plan methodology puts a lot of emphasis on the practical application of financial disciplines that allow the development of CUs that are experiencing difficulties or have low levels of development, an approach where cost control is relevant.

The performance indicators, known as Rates of Return and Costs, establish several indicators, including the main indicator of the system: the *Entrepreneurial Rate*, which represents the net loan portfolio income over the average net loan portfolio. The Entrepreneurial Rate should cover all financial, operating, allowance and Institutional Capital creation costs. That is, the calculation of all system variables should result in a weighted average rate that covers all the costs of the credit union, and that is the weighted average interest rate of the loan portfolio with which the CU should operate.

This means that the management of the different CU operating expenses is directly related to the degree of success of the model, since the management of the costs has a direct impact on the definition of the Entrepreneurial Rate. And here, the control of operating expenses takes on greater relevance.

The costs that are part of the operating expenses are: staffing costs, corporate governance costs, marketing costs, administrative costs and costs for asset depreciation. The PEARLS suggest that the Total Operating Expenses over the average Total Assets should not exceed 5%.

The term Governance (Governance) of the CUs is used in PEARLS to refer to the set of governing bodies that govern the organization, namely: the General Assembly, the Board of Directors, the Oversight Committee and other Committees in which democratically elected directors participate. In this paper, we call this set of governing bodies Corporate Governance.

In this area of the management of operating expenses, the CUs affected by the crisis may apply some of the following strategies:

Operating Expenses
<u>Impact factors:</u> • Since before the COVID-19 pandemic, the traditional financial intermediation business showed signs of limitations as a sole generator of income. With the pandemic, this business model is endangered. The CUs that only concentrate on savings and lending activities have greater growth limitations than the CUs that have managed to diversify and develop other services such as payment method networks, debit and credit cards, insurance, and leasing services. The CUs that maintain a supply of traditional products and services generate low intermediation margins and have high operating expenses, which limits their capacity to produce surpluses and, consequently, to create non-distributable reserves. • In accordance with the principles of the PEARLS model, in the area of human resources management, CUs promote the hiring of technically qualified human resources, with competitive salaries according to the market where they operate. When the Boards of Directors depart from this philosophy, CUs do not hire people with the appropriate

professional profiles and management skills. During the pandemic, human resources capacities of the CUs are put to the test.

- In Part I of this paper, we discussed some critical aspects related to Corporate Governance. During the pandemic, the decision-making capacity of the governing bodies of the CUs has been put to the test.

- The pandemic tests the effective communication capacity of the CUs. The uncertainty and socioeconomic crisis caused by the pandemic requires effective communication and agile sales mechanisms that solve people's immediate problems.

<u>Impact mitigation strategies</u>:

- If a CU is experiencing high operating expenses and a limited capacity to generate surpluses (dividends), it should analyze whether this is a long-term structural problem due to the absence of information systems and economies of scale. If there are no viable options to find a short-term solution and in order to preserve the value of the savings and the capital of its members, a CU with obvious viability problems can seek a merger with one or several CUs in similar or better conditions.
  The social and economic consequences of the pandemic will last several years. CUs should be honest with their members where it concerns their actual capacity to overcome the crisis.

- As mentioned in Section 5 of this paper, the CUs can face the crisis in two ways at the same time: a) contingency plan (short-term) and b) strategic development plan (long-term). To achieve this, the CUs affected by the crisis, in order to control personnel costs and implement more efficient processes, can focus human resources training processes on the development and updating of skills, that is, acquiring knowledge and skills to complete the daily activities required of the work. This may include:
  - Data analysis and interpretation;
  - Business intelligence;
  - Service and attention to members;
  - Credit intelligence;
  - Re-engineering of solution teams and processes;
  - Practical plans for persuasion and training of coordinators for the delegation of tasks;
  - Consolidation of remote work models;
  - Transition of the concentration of human resources from non-automated tasks to the front desk with sales and service management skills;
  - Development of the concept of quality based on bottom-up models.

- The human resource management approach, also known as human talent management, can vary from country to country and according to the organizational culture of each company. However, CUs affected by the crisis do not have much time to generate high impact changes in the organization, they should accelerate processes and act quickly.
  During the pandemic, the focus of the human resources function on the development and updating of human resources skills can be accelerated with differentiated plans for three levels of the organization: a) the management level; b) middle management; and c) the operational personnel.

In general, all personnel should be evaluated in terms of their accomplishments through a formal performance evaluation process, with remuneration and incentive policies are based on achievements, compliance with metrics and work plans.

- CUs that show weaknesses in Corporate Governance and their decision-making capacity, in order to address the state of emergency of the pandemic and to design future plans, should focus on a change in their corporate culture, renew their leadership teams and add value to the organization by improving decision-making capacity.
  The improvement of Corporate Governance contributes to improving the management of operating expenses by having greater clarity and technical foundation in decision-making.

  In the context of the pandemic crisis, the governing bodies of the credit unions should develop a culture of austerity, reducing expenses directly related to the governance of the credit unión including payment of allowances for their participation in meetings, travel and conferences as well as the such benefits for management positions.

- CUs that suffer from a reduction in income due to market contraction and delinquency, could look for realistic alternatives to reduce operating expenses to acceptable levels, which could mean reducing costs for Corporate Governance and personnel.

  According to the conditions of the local market and the services offered by the federations, the CACs could consider the possibility of reduce costs by hiring external services via outsourcing for back office functions. With the support of external consulting companies, CUs can add knowledge and quality to their processes of redesigning products and services, mainly complementary products and services in addition to the traditional savings and loan offerings.

- CUs with undeveloped marketing and communication systems should focus on solving the immediate problems of their members and improving the capacity for effective communication. The uncertainty and socioeconomic crisis caused by the pandemic requires effective communication and agile sales mechanisms that solve people's immediate problems. The current crisis is a difficult time to reduce marketing costs; on the contrary, it is necessary to invest in the redesign of the commercial strategy of CUs, in research and development, in the improvement of databases, and other key factors to improve competitive and business capabilities, despite market adversities.

- The post-pandemic marketing approach should be oriented towards digital marketing, as part of the digital transformation of CUs. For many CUs affected by the crisis, this implies a large transformation of the financial culture, a mandatory task to survive the pandemic.

<u>PEARLS Areas of Impact</u>:

The PEARLS model suggests that the Total Operating Expenses over the average Total Assets should not exceed 5%. In a crisis context characterized by a decrease in income and contraction of asset growth, this indicator has most likely increased considerably. CUs that focus their operations on traditional savings and lending activities should initiate a plan for the transformation, diversification and modernization of their services, not only to favor the increase in income, but also to increase economies of scale and achieve efficient management of operating expenses.

The financial planning of the CUs should consider as an urgent activity the control and reduction of operating expenses, mainly the costs of Corporate Governance and personnel. However, the digital and commercial transformation of the CUs affected by the crisis requires additional resources.

The increase in loan portfolio delinquency and the management of non-earning assets generates additional provisions, collections and asset disposal costs, affecting net income at the end of the period, and consequently the creation of Institutional Capital.
In times of crisis, it is crucial to control operating expenses in order to preserve the financial stability of the CUs and lay the foundations for development in the post-pandemic era.

8. Projection of the Net Income

Due to the effects of the economic crisis, many CUs around the world have experienced a considerable reduction in their income, which poses serious challenges to mitigate the impact of the crisis on their performance.

As mentioned above, the main indicator of the PEARLS system is the Entrepreneurial Rate, an indicator that represents net income over the average net loan portfolio, that is, the Entrepreneurial Rate is the weighted average interest rate of the loan portfolio, which should generate sufficient income to cover all the costs of the credit union and the creation of Institutional Capital.

In times of crisis, the Entrepreneurial Rate of the CUs becomes relevant, since the only way to cover the costs related to the crisis is to achieve the adequate balance between the control of expenditure and the generation of new income, which may imply an increase in the effective lending rate, that is, an increase in the Entrepreneurial Rate.

In addition to the topics set out in the previous sections, with respect to the managing admission, CUs affected by the crisis may apply some of the following strategies:

Building the Future
Impact factors: Sections 1 and 5 of this Part III of this paper suggest strategies on how to mitigate the impact of the crisis on the management of productive assets, especially loan management and financial investments. The risks related to loan management and to asset quality reduce the net income of the CUs. In Sections 3 and 6 of this Part III of this paper, we refer to the funding structure of CUs and the strategies to manage the costs related to the mobilization of savings and the use of external debt. Control of financial costs is critical to achieve positive net income at the end of the period. In Section 7 of this Part III of this paper, we refer to the management of operating expenses, a key factor in ensuring the stability and solvency of the organization. The construction of the future of credit unions depends on many local factors and the evolution of the pandemic, but a key factor in the hands of the credit union is to apply financial disciplines that help to achieve higher levels of financial strength, where the creation and accumulation of non-distributable reserves is one of them.
Impact mitigation strategies: • The management of income and expenditure has been addressed in previous sections of this paper. However, it is important to emphasize a key factor for future success in the post-pandemic era, which is the ability of the CUs to reinvent themselves to face the future. CUs with difficulties in reducing their costs and offsetting the drop in income experience losses. If losses persist for a prolonged period of time, their solvency will be compromised. In this case,

CUs assess the possibility of establishing strategic alliances with other CUs to acquire or share technology, improve efficiency and redesign the commercial offer.

- The streamlining processes of the savings and lending sector will be necessary for those CUs that are losing market and volume of business during the pandemic. That is, identifying and executing downsizing processes and mergers between CUs is urgent. The rationalization or restructuring processes should be implemented before it is too late, with serious consequences for members.

- The positive net income for the period is indispensable for the creation and accumulation of Institutional Capital, that is, for the solvency and sustainability of CUs in the long term. In some countries, CUs have the tradition of distributing surpluses or dividends for the period among their members. The pandemic serves as an opportunity to eliminate that practice. The only way to finance, at low cost, the future development of the CUs affected by the crisis is through the capitalization of surpluses in non-distributable reserves.

PEARLS Areas of Impact:

The PEARLS model is based on financial disciplines that help CUs achieve better levels of development. The final result of the financial year contributes to the future growth and development of CUs by allowing the creation and accumulation of non-distributable reserves.

In this paper, we have attempted to recall some key factors for the success of the CUs, namely:

- Operational efficiency and financial structure optimization reduces non-earning assets and optimizes profitability.
- In times of crisis, it is key to control delinquency and reduce allowances for risk assets.
- In times of crisis, CUs should control and reduce unnecessary operating expenses.
- Not to distribute dividends to members without first creating the non-distributable capital reserves necessary to protect long term sustainability.

Part IV: The Membership Growth Challenge

As soon as the financial statements and the PEARLS indicators are projected, the PEARLS System and its Business Plan methodology allow the membership of CUs to be projected under the philosophy that anyone can enter, anyone can save, and anyone can apply for a loan if they are eligible. The correct projection of membership growth allows, in turn, the projection of growth in Member Share Capital, savings deposits and loan placement.

In the past, some of the principles that the WOCCU has promoted for membership growth are related to facilitating the entry process for new members, studying the market to perform demographic segmentation, and thus directing investment efforts in the new member affiliation process, while developing programs for children and young people.

The model assumes that CUs have room to grow, that there are segments and markets in which to grow, and that CUs have the capabilities to offer a wide range of products and services to the member base. However, the COVID-19 crisis has caused a contraction in markets and has generated high levels of unemployment. Millions of people around the world have crossed the border into extreme poverty. How, then, do we grow membership in times of crisis and recession?

CUs affected by the crisis may apply some of the following strategies:

CU Market Profile
Impact factors: • CUs that experience greater difficulties in developing specialized marketing based on business intelligence will probably have greater difficulties in mitigating the impacts of the crisis. Financial entities are more accurately identifying the most profitable market segments and niches. The pandemic not only leads us to a "war" of intermediation margins, but also to a market war, which means that CUs that will overcome the crisis are those that protect their intermediation margins and those that remain in profitable markets. • In many countries, bank financial intermediaries compete directly with CUs, such that CUs experiencing higher levels of competition should redesign their market segmentation processes based on modern marketing and market intelligence tools. • In some cases, CUs with lower levels of development do not clearly distinguish the market intelligence functions from basic marketing activities and the promotion of products and services. This lack of specialization of the commercial function will further negatively affect those CUs subject to pressure from the competition, seriously compromising their viability in the near future. • Generational change within the CUs is urgent. In many countries, the average age of CU members is greater than 50 years, likewise for the average age of members of the governing bodies and the management team. The current crisis not only tests the current business model of the CUs affected by the crisis, but also puts the risk of survival at 10 or 20 years. The attraction of young populations to CUs is urgent.

Impact mitigation strategies:

- CUs with Customer Relations Management (CRM) systems should strengthen their membership data study in order to identify market requirements and mitigate or face off the competition's offer.

- The development of new products and services adapted to the current needs of CU members is an urgent priority, abandoning models from the past with standardized and generic products for all members.

- The innovation and development of a new commercial offering is accompanied by a specialized offering of financial services for young populations through digital channels.

- Due to the contraction of the economy, financial entities are "stealing" good customers away from other financial entities. In preparation for the post-pandemic era, CUs can create profiles of the most clearly-defined members, for example:
  - Members who are commercially viable
  - Members who are experiencing difficulties, but who are rescuable
  - Members who are experiencing difficulties, but are not viable for the future
  - Members who are not commercially viable

  Commercial offers should then be developed for each of these segments, in order to identify growth expectations according to profile and the processes of retaining and reactivating members.
  In a crisis period, CUs should focus on attending to and serving good members, members who contribute to the business, and members with the greatest activity potential with the CU. A strategy for diversification of membership by economic sector, age and income levels provides a more sustainable and risk resistant model for future growth.

- Member classification according to profiles or segments may consider some criteria such as:
  - Seniority of members
  - Recurrent service use
  - Loan usage and payment history
  - Financial behavior in the rest of the financial system
  - Characterization of the risk of the activity or the sector in which it is undertaken
  - Number of dependents and characterization of the household
  - Identification of revenue level according to ranges and key demographic characteristics

- As well as profiling members, it is also necessary to profile the winning industries or productive activities, which have acquired greater dynamism during the pandemic. The CUs should acquire the technologies and develop the capabilities and knowledge to strengthen operations in productive markets that remain dynamic despite the pandemic, such as certain industries, agriculture, export products and others.

PEARLS Areas of Impact:

The PEARLS model advocates for positive growth each year, assuming that credit unions have ample space to grow in the market.

The social and economic crisis that COVID-19 has generated has challenged that assumption. As markets remain in contraction and countries have high levels of unemployment, competition in the financial sector is going to focus on attracting the more profitable customers that are already in the market.

Still in many countries, there are large percentages of the population which do not use financial services but are located in sectors for which strategies for attention to new segments of the market do offer potential growth.

The financial planning of the CUs affected by the crisis should consider that the growth of membership has a direct impact on the growth of the business. The CUs should make double the effort to maintain their current membership, strengthen business with them, and attract new members, especially young populations. Hence, during the pandemic, the study and characterization of members is essential to estimate the growth of products and services, especially to project growth in Member Share Capital, savings deposits and loan placements.

Conclusion

This paper provides a critical reflection on the financial disciplines fostered by the PEARLS Monitoring System of the World Council of Credit Unions and the impacts of the economic crisis on the financial planning of credit unions in order to successfully mitigate and overcome the crisis. This technical paper has aimed to recommend strategies to manage the impact of the social and economic crisis generated by COVID-19.

The PEARLS System is an integrated and interrelated system, where each of its components contributes to maintaining an efficient, profitable financial structure with high-quality assets, and where each indicator contributes to the equilibrium of the entire system. In times of crisis, rather than maintaining indicators, the important thing is to adapt the operations of the credit union while maintaining the fundamental principles of financial disciplines.

When the PEARLS System was developed, it was an important to guide the CUs in the correct application of each financial discipline and quality standard, particularly in the case of helping to solve the problems of CUs in difficulties or with low levels of development. Credit unions around the world learned how to use PEARLS; the Managers and Boards of Directors understood that business planning helped them successfully achieve the development of their union.

In a crisis environment, such as the current crisis caused by COVID-19, the achievement of PEARLS standards is affected by the uncertainty and economic contraction experienced by many countries. If the financial structure of the CUs, prior to the crisis, is not flexible for the rapid adjustments required by a new business model based on digital transformation the credit unions will suffer a greater impact during this crisis.

Part III of this paper attempted to meet the objective by recommending strategies that help the CUs face the pandemic and reinvent themselves to face the future. The key point of this paper has been to suggest ideas on how to minimize risks, losses, and how to maintain a profitability that allows the creation and accumulation of Institutional Capital as a basis for future development. Finally, in Part IV, we reflected on the challenge of membership growth.

This paper aims for CUs to find practical advice that may help them solve specific problems during 2021 and lay the foundations for their development in years to come.

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