

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Nepal represents a poor country in the international arena with a very low standard of living. People living in the country have GNI per capita of a merely US \$ 240 and 80% of its population living on less than \$2 per day, mostly in the rural areas.¹ People are based mainly on agriculture and land distribution is not sufficient. Since agriculture plays a central role in the lives of people in rural areas, low agricultural productivity in general and land ownership and quality, in particular, are the main principles of rural poverty. More than 35 percent of the population is below poverty level engaged in agriculture and allied sectors.² Much endeavors propelled to uproot the poverty level of people still stands inadequate so as to promise a platform for such people in the socio-economic dimension. Due to widespread unemployment and lacking the atmosphere of earning income, the situation of people stands still meager. As a result, poor people lack in savings significantly and cannot invest in small enterprises so as to generate self-employment and income earning opportunities.

Microfinance refers to a provision of relevant and affordable financial services-loans, savings, insurance, or transfer of services to low-income households falling in the lower bracket of society. Microfinance became a buzzword in the 1990. No other development topic attracted comparable attention from donors, and no other tool was regarded more effective in

¹Sebastian Ureta, "Variation on Expenditure on Communications in Developing Countries," *World Dialogue on Regulation for Network Economics 2005* (London: Media@lse, Department of Media and Communications, November 2005) 9, 3-14. February 22, 2006

²His Majesty's Government, Ministry of Finance, *Economic Survey: Fiscal Year 2003/04* (Kathmandu: Ministry of Finance, 2004) 107. March 11, 2006

fighting poverty.³ Through the 1980s and 1990s, micro credit programs throughout the world improved upon the original methodologies and bucked conventional wisdom about financing the poor. First, it showed that poor people, especially women, had excellent repayment rates among the better programs, rates that were better than the formal financial sectors of most developing countries. Second, the poor were willing and able to pay interest rates that allowed Microfinance Institutions (MFIs) covering their costs.

Having access to microfinance programme service means access to productive resources through loan and savings products. Providers of financial services to the poor include donor-supported, non government organizations (NGOs), Rural Development Banks (RDBs), Cooperatives, Community based Development Institutions like Self-help Groups and Credit Unions (CU). NGOs and other non-bank financial institutions have led the way in developing workable credit methodologies for the poor and reaching out to large numbers of the poor.

After the adoption of a liberal, open and market oriented economic policy by the government, it enabled MFI to develop with relatively little interference, and without a clearly articulated national strategy. Nevertheless, continued high inflation and high interest rates have limited the incentives for commercial financial institutions to reach out the smaller; poorer clients in the rural areas.⁴ The role of government and central banks is of necessary to come into close scrutiny in legal and regulatory framework, especially in providing a level-playing field and developing a competitive market for microfinance. It helps in achieving sustainable economic growth, poverty alleviation and maintains macro-economic stability at the same time.

³Birgit Schafer, "Guidelines for Impact Monitoring & Assessment in Microfinance Programmes," *Economic Development and Employment Promotion*, section 41 (September 2001) 9. March 28, 2006

⁴William F Steel and David O. Andah, "Rural and Microfinance Regulation in Ghana: Implication for Development and Performance of the Industry," (June 2003) February 12, 2006

1.2 Focus of the Study

The evolution of the microfinance industry has led to a greater focus on the financial viability of microfinance institutions (MFIs). A variety of measurements have been used to measure MFI performance, many of which have been recognized as standard indicators.⁵ But, most of the MFIs apply the traditional methodologies to seeking the appropriate measures for the deficiencies faced during the operation. In current decade, the failure of MFIs operation has forced to develop new vigorous methodologies to make MFI a most successful in its performance. By calculating performance indicators, project management determines the efficiency and viability of MFI operation. The more sustainability an MFI operates, the more resounding the impact of intervention will be at the client level and, vice versa. Performance indicators are usually calculated in the form of ratios and are compared over a period of time. Such trend analysis demonstrates whether financial and institutional performance is improving or deteriorating. This not only helps in monitoring and giving suitable solutions to deficiencies, but also in the planning, standardizing and supervisory control of the institutions. On the basis of a flexible systems and analytical framework, it is possible to monitor the complexity of and dynamics of MFIs that in turn, facilitates in the credit ranking of such institutions.

Learning different methodology and applying them in operation is of dire to check the financial health of institutions. Many countries are applying new monitoring tools like CAMEL, MCRIL, and GIRAFE, which provide a supervisory control in the MFI operation and help to find the critical deficiencies faced by the institutions. Such tool gives the manager a clear direction in operating smoothly and promptly. The PEARLS, at recent

⁵CGAP/The World Bank Group, "Definition of Selected Financial Terms, Ratios and Adjustments for Microfinance," *Microfinance Consensus Guidelines 2003* (Washington: The World Bank Group, September 2003) 1. March 23, 2006

times, have been developed by WOCCU as a new tool that performs both the management and supervisory tools by regulators specifically for Credit Unions (CUs). The tools under PEARLS are applied to diagnose for financial health of Paschimanchal Grameen Bikas Bank Ltd. (PasGBB).

This study basically focuses at finding the weak capital base and probable causes with the application of each of PEARLS tools. Using these tools helps the MFIs create universal language that every one can speak and understand. Further more, it brings MFIs in uniformity which helps to rank the MFIs

1.3 Statement of Problem

As evidenced in the micro finance affair, the varieties of instruments have been applied in order to know the financial viability that, in turn, determines the institution soundness. On closer examination, it is evident that these standard indicators are being calculated and applied in many different ways. This is a bit ambiguous among practitioners and analysts and gives considerable distortions when comparing MFIs. The industry recognizes these deficiencies and agrees that developing standard definitions of financial terms and some common indicators is an important next step in its development. It is anticipated that using the methodologies that give a clear objective assessment quantitatively and bring every MFI under the same roof in terms of their performance is a crucial need that ranks the MFIs towards a better performance. It sometimes, even permits MFIs to go far beyond in understanding the indicators that is to be clearly understood. However, the familiarity of the tool kits and its application might be helpful for the managers to identify the severe panacea faced by the MFIs prior the implementation.

The major fundamental objective is to diagnose the financial health of PasGBB Ltd. in the framework of PEARLS. Based on the fundamental problem, the following specific problems have been set.

- a. What is the level of protection of assets?

- b. What is the level of effective financial structure?
- c. What is the status of asset quality?
- d. What are the rates of returns on various investments and costs on savings deposits and external funds?
- e. What is the level of liquidity and non-earning liquid assets?
- f. What is the trend of growth in loan portfolio, liquid and financial investments, savings deposits, borrowed funds, institutional capital and total assets?

1.4 Objectives of the Study

The fundamental objective of this study is to diagnose the financial health of PasGBB Ltd. resulted out from its operation. For the sustainability the institution should be in a position of profit-driven strategy, which is determined by the PEARLS financial ratio methodologies.

The following specific objectives have been set based on its fundamental objective.

- a. To examine the level of protection of assets.
- b. To analyze the level of effective financial structure.
- c. To analyze the status of asset quality.
- d. To evaluate rates of returns on loan, financial and liquid investments and costs on savings deposits and external funds.
- e. To analyze the level of liquidity and non-earning liquid assets.
- f. To analyze the trend of growth in loan portfolio, liquid and financial investments, savings deposits, borrowed funds, institutional capital and total assets.

1.5 Significance of the Study

This study will be of immensely valuable in knowing the financial performance of institution using the complete new tools, PEARLS. PEARLS monitoring systems use a set of financial ratios to monitor the financial stability of MFIs. These ratios provide MFIs, project staffs,

national federations and regulators with essential tools for monitoring, planning, standardizing, ranking and facilitating supervisory control in the model MFI. The application of this technique will be of crucial and convenient to any MFIs and manifests the level of financial performance. It permits such institution to know their position in the market through its application. The MFI achieves a great uniformity in the quality and strength of each individual institution with the help of this tool and technique that everyone can understand.

Another important contribution in this parlance is it will provide a framework for the supervisory unit at the National Federation. Eventually, PEARLS will add in the production of standardization of financial information that eliminates the diversity and provides effective tool for comparing MFI performance on a national basis.

1.6 Limitation of the Study

The study has been undertaken within the jurisdiction of PasGBB Ltd. The analysis of the study is based on its annual reports and office report of the institution. The study has been made with reference to the periods of 2059/60 to 2063/64.

1.7 Organization of Study

This study is divided into five chapters. The first chapter deals the introduction including focus of study, statement of problem, objective of the study, importance of the study and delimitation of the study. The second chapter embodies the conceptual review and the research review undertaken by different authors. The third chapter deals on research methodology used for carrying out the study. The fourth chapter incorporates the data collection and analysis of the study with the major findings. Finally, the fifth chapter covers the summary, conclusion and recommendations.

CHAPTER II

REVIEW OF LITERATURE

This chapter presents the conceptual framework and research review and relevant theories for the analysis of the study. The former section presents the relevant aspects of the study and latter one deal with research article in the related topics published in different national and international journals and review of dissertations studies by different authors.

2.1 Conceptual Review

This section comprises of concept of MFI, historical background of MFI, government policy announcement on microfinance, outreach of microfinance, rationale of diagnosis, description of PasGBB Ltd. and theoretical prescription of PEARLS. Review of research article includes the application of PEARLS tools to check the performance by different institutions in international scenario and the review of dissertation includes the success of micro credit among women.

2.1.1 Introduction

Microfinance plays a significant role in uplifting the economic condition of economically backward people living in the country. It is primarily concerned with credit and savings although, in recent times, allied services such as insurance, leasing, payment transfers and remittances are being introduced to mix. Financial services for the poor have proved to be a powerful instrument for poverty reduction that enables the poor to build assets, increase income level, and reduce their vulnerability to economic stress. It is estimated that, as a region, South Asia has about 45 percent of all the people in the world who use microfinance services in order to raise their

living standards.⁶ However, with nearly one billion people are still lacking access to basic financial services, especially the very poor, the challenge of providing financial services to them remains. The goal of Micro Credit Summit Campaign (MCSC) is to reach 100 million of the world's poorest families with credit for self-employment and other financial and business services by 2005. According to MCSC authorized data in December 2003, the access of micro credit by 3,164 micro credit institutions has reached to 92,270,289 clients.⁷ Among these people, 66,614,871 were poorest people.

The HMG/Nepal has sought and initiated planned wise programs to reduce the poverty level. Nepal Household survey of Income/Consumption conducted by National Planning Commission in 1977 showed 36 percent people living in the poverty line.⁸ And 41.5 percent was found people living in the poverty when Multipurpose Household Budget Survey conducted by NRB in 1984/85. Prior to the implementation of the Eight Five Year Plan (1992/93-1996/97) estimate were made 49 percent people living in the poverty line. The Eight Plan set a target of attaining an average economic growth of 5.1 percent per annum but achieved 4.9 percent till the end of the plan period.⁹ The poverty remained 42 percent during the eight plan period with the initiation of attempts such as encouraging the private sector participation and investments, confining the role of the government more to developing socio-economic infrastructure, replacing the command economy by open market system and environment conducive to liberal and market oriented economic system.¹⁰ It was estimated that poverty in Nepal remained chronic and widespread with more than 9 million Nepali people

⁶Praful Patel, "Microfinance in South Asia: Today and Tomorrow," (New Delhi: The World Bank Group, 2005) March 11, 2006

⁷Sam Daley Harris, "State of Micro Credit Summit Campaign Report December 2005," *Micro Credit Summit Campaign*, (2005) 26. March 25, 2006

⁸Shalik Ram Sharma, "Microfinance against Poverty: The Nepalese Scenario," *Economic Review: Occasional Paper: Fiscal Year 2002/03*, no. 15 (Kathmandu: Nepal Rastra Bank, April 2003) 34, March 28, 2006

⁹His Majesty's Government of Nepal, National Planning Commission, Central Bureau of Statistics, *The Ninth Plan* (Kathmandu: HMG/Nepal, 1998) 106.

¹⁰His Majesty's Government of Nepal, National Planning Commission, *The Ninth Plan* (Kathmandu: HMG/Nepal, 1998) 2. July 1998.

living below the poverty line during the period.¹¹ The Ninth Plan set the target of 6 percent economic growth rate but achieved only 3.6 percent.¹² The poverty stood 38 percent according to Nepal Living Standard Survey 1996, as planned to bring down to 32 percent from 42 percent as a result of focusing in high economic growth rate, generating employment opportunities, providing leading role to agriculture sector, uplifting the socio-economic status of those economically backward people and providing the launching various programs like skill development, credit flow, social mobilization etc to weaker section in the society.¹³ The Tenth Plan intends to achieve poverty reduction goal envisaging 6.2 percent annual average economic growth through encouraging in 4 pillars namely-high sustainable and broad economic growth, development of social and rural infrastructure, implementation of special programmes for deprived people or rural and remote regions, and good governance.¹⁴

2.1.2 Historical Background of Microfinance Institutions

There are three forms of micro finance industry-formal, semi-formal and informal institutions. The microfinance market in Nepal is divided into three sectors: formal, semi-formal and informal. Formal sector has 17 commercial banks, 10 development banks, 57 finance companies and 9 rural microfinance banks. Semi-formal sectors comprises Small Farmer Cooperatives Ltd, Savings and Credit Cooperative Societies (SACCOSs) and NGOs. Informal Sector comprises about 20,000 informal community based organizations (CBOs) such as Self-help Groups and informal Saving and Credit Organizations (SCOs). In addition, Rotating Savings and Credit

¹¹Suman Kumari Sharma, "Nepal: Poverty, Vulnerability and Social Protection," *Asian Development Bank and Nepal* 1(Kathmandu: Nepal Rastra Bank, 2004) 48, 48 and 74. March 29, 2006

¹²His Majesty's Government of Nepal National Planning Commission, Central Bureau of Statistics, *The Tenth Plan* (Kathmandu: HMG/Nepal, 2003) 7.

¹³His Majesty's Government of Nepal, National Planning Commission, *The Ninth Plan*, 77-78.

¹⁴His Majesty's Government of Nepal, National Planning Commission, *The Tenth Plan*, 41.

Association (ROSCA) known as “Dhukuti”, moneylenders, traders, friends also provide an informal source of finance used by a majority of the poor.

Microfinance is not a recent development, and neither is the development of regulation and supervision of MFIs. Now, every developed country has its own history of microfinance. Many of the microfinance communities who associate microfinance with credit NGOs believe that the microfinance was invented in Bangladesh some 20 years ago. The birth of microfinance in Europe dates back to tremendous increases in poverty since the 16th century.¹⁵

The earliest initiatives for establishing micro-finance in Nepal date back to the 1950s, when the first agricultural based credit cooperatives were established to provide the rural financial service only to the agriculture sector.¹⁶ But, the formal micro financial institution- Bakhan Saving and Credit Cooperatives Ltd. was established in Rapti Valley in 1956.¹⁷ The next milestone was Small Farmer Development Project (SFDP) in 1975 by ADB/N for poverty alleviation program on a pilot test basis. This program was covering the entire country and aiming to organize farmers into small groups to provide credit without collateral. The SFDP is now being transformed into several autonomous, self-help organizations called Small Farmers Cooperatives Limited (SFCLs), which are managed by farmers themselves. Other micro-finance development programs, such as Priority Sector Lending Program (PSLP), Intensive Banking Programme (IBP), Production Credit for Rural Woman (PCRW) and Rural Self-Reliant Fund (RSRF) have been implemented.

In 1981, NRB introduced the IBP and set its obligation to the commercial bank to finance at least 7 percent on the priority sector, which

¹⁵Hans D. Seibel, “History Matters in Microfinance,” *Small Enterprise Development-An International Journal of Microfinance and Business Development*, 14, no.2 (Cologne: University of Cologne Development Research Center, June 2003)2. March 18, 2006.

¹⁶The Centre for Micro-Finance, “An Overview of Micro-Finance Sector in Nepal,” (2003) 1. March 27, 2006

¹⁷Keshar J. Baral, “His Majesty Government Policy Announcement on Micro Finance Industry,” (Kathmandu: Centre for Microfinance Nepal, 2005)3. March 23, 2006

was further increased to 12 percent in 1990. Now, NRB is phasing phase out this compulsion gradually. In 1992, Grammen Bikash Banks (GBBs) were initiated by the government sector, crossing a milestone in rural micro-financing in Nepal and NGOs started Grameen Banking activities in certain areas.

Microfinance is a term that has become ingrained in the psyche of development professionals since the founding days of the Grameen Bank in Bangladesh in the early 1970s. Although the concept of microfinance predates the Grameen Bank, as seen in the Caribbean with the formation of institutions such as Penny Bank in Dominica in the early 1940s, the Grameen Bank did act somewhat of a catalyst in raising awareness of the concept as a developmental and poverty alleviation tool.¹⁸

Later, SFDP launched the Productive Credit for Rural Women (PCRW) in 1992, the MCPW in 1994, Bisheswor with the Poor, Third Livestock Development Program (TLDP) etc. The five RDBs in each development region came into existence when HMG/Nepal tried to replicate the GBB model of Bangladesh. HMG/Nepal took a crucial step in reducing the poverty and liberalizing the financial sector taking it up in a national agenda. By Mid-January 2005, 11 rural micro development banks, 20 SACCOS, 47 NGOs had received the license from NRB for micro finance industry.

In addition to the retail micro finance institutions, some of the wholesale microfinance institutions were reflected after the restoration of democracy in 1990. In 1990, HMG/Nepal set up the RSRF with a fund of Rs. 10 million to provide the wholesale fund for small cooperatives and rural based NGOs to lend micro entrepreneurs. In 1999, HMG/Nepal provided additional support of Rs. 10 million to the RSRF. Rural Micro Finance Development Centre (RMFDC) was incorporated in 1998 mainly to

¹⁸Jonathan G. Lashley, "Microfinance and Poverty Alleviation in the Caribbean: A Strategic Review," *Journal of Microfinance* 6, no. 1 (Utah: Marriott School of Management Brigham Young University, 2004) 83 and 94, March 28, 2006

lend the wholesale fund and build up the capacity of micro finance institutions. Small Farmer Development Bank (SFDB) was established in 2002 under the Development Bank Act, 1996 to lend wholesale funds to Small Farmer Co-operatives Ltd. After the enactment of the Financial Intermediary Act 1999 and its first amendment of 2001, some 44 microfinance NGOs have been transformed into Financial Non-Governmental Organizations (FNGOs) during 2000-2002 under the technical and financial support of the ADB-HMG MCPW.¹⁹

2.1.3 Government Policy Announcement on Microfinance Industry

Prior to the 1985, macro policies were governed by the state led protectionism. For stronger grip over the economy and to fetch the higher revenue to the government, policies and programs were changed frequently in an ad hoc basis with more and more policy distortion. To avoid such policy distortion the government was in a dire need to change the policy that give rise to a fair environment and foster the economic development process. HMG/Nepal, in this stance, adopted the concept of open, liberal and pro-market economy in 1984 but accelerated significantly in since 1991.²⁰ It enabled MFI to develop with relatively little interference, and without a clearly articulated national strategy and took MFI as major instrument of achieving the national agenda of reducing the poverty; especially to improving the capabilities of destitute people in communities, promote the interest of oppressed, deprived, helpless and disabled citizen and empower the status of women. The government in micro finance industry has announced the following policies.²¹

¹⁹International Network of Alternative Financial Institution Nepal and South Asia Partnership Nepal, "Microfinance Services in Insurgency and Conflict, Case Study of Nepal," (Kathmandu: INAFI-N and SAP-N, 2004) 25.

²⁰Meena Acharya, "Development of the Financial System and its Impact on Poverty Alleviation in Nepal," *Economic Review: Occasional Paper*, no. 15 (Kathmandu: Nepal Rastra Bank, 2003) 2, April 12, 2006.

²¹Baral, "His Majesty Government Policy Announcement on Micro Finance Industry," 5.

2.1.3.1 Tax Relief to Small Depositors

The Government should not impose tax on interest on depositors with small savings in the MFIs as it increases the overhead cost of these institutions and the government does not also gain much from such tax. Providing the some relief to the small depositors and facilitating the rural MFIs to raise their resources are crucial steps so as to foster the MFIs. To mitigate such problems, HMG/Nepal has made an arrangement to provide relief to small depositors who have deposited their money in the rural MFIs. In this instance, HMG/Nepal has exempted the tax on the interest income on the deposit up to Rs. 15,000 for the fiscal year 200/06. Though the depositors did not fall in the income tax bracket previously, the depositors used to pay tax to the government. This arrangement will set free the MFIs from official hassles of accounting the tax deduction at source and provide the fiscal justice to the small depositors from paying the tax.

2.1.3.2 Exemption on the Collateral Registration Fee

Cost is one of the factors that support the MFIs to the pricing of products and achieving a greater degree of sustainability. HMG/Nepal in this stance has announced the policy that made an arrangement to exempt the registration fees levied on the mortgage deeds up to a certain amount lent among their members by cooperatives. This will encourage Cooperatives to expand their services in the rural areas as this policy will minimize the costs of Micro Finance Project (MFP) in the areas. According to this policy announcement, Finance Ordinance 2062 has exempted the registration fees imposed on the registration of collateral or mortgage deeds amounting up to Rs. 100,000.

2.1.3.3 Micro Credit Policy

The MFIs are providing the micro finance service to the ultra poor even without the collateral, guarantees and requirement they need to fulfill for credit eligibility. Even at the aggravating situation in the country due to

present ongoing conflict, the MFIs are consistently providing such services to the ultra poor communities. NRB is gradually reducing the priority sector loan program within 5 years as this priority sector loan is assumed against the liberal and pro market economy policy. Due to the policy the MFIs are more active to delivering the micro credit to the poor and ultra poor. After the implementation of Financial Intermediation Institutions Act (First Amendment), 1999, the numbers of financial institutions are mushrooming in micro credit operation.

Various types of MFIs are implementing micro finance program to provide self employment opportunities and income generation through extending the micro credit to ultra poor in the community. However, the micro finance service is not adequate to fulfill the increasing demand of poor people. It is desirable to expand institutional micro finance services and to increase the access of poor and ultra poor to the institutional micro finance services, and unify their services. HMG/Nepal has announced to formulate the micro credit policy, 2052 and enact in the beginning of the current fiscal year, but no concrete policy has not been sought and implemented in order to flow the micro-credit to the poor. This year too, the budget speech announced by ministry of finance could not get a clear point and no new policy on the micro-credit was realized. Rather, it continued to stick on the old issues of formulating the micro credit policy.

2.1.3.4 Limit of the Single Investor

HMG/Nepal should encourage the investors to invest in MFI so as to expand their service in the rural areas. But, the policy should try to control through on site and off site supervision and monitoring mechanism to implement the policy on favor of poor and ultra poor. Nevertheless, rich will expropriate the money of the poor through MFIs. HMG/Nepal should deregulate the maximum limit of an individual investment or increase the ceiling of investment in a micro finance development bank. In this vein,

NRB has increased the maximum limit of an individual investor from 15 percent to 25 percent of paid up capital of the concerned MFI. This policy will definitely benefit to the rich people in the expropriation of money from the poor, but there is no remedial measure from stopping such people to invest in MFIs; especially in poverty reduction strategy.

2.1.3.5 Micro Credit Development Council

Microfinance is a major tool of income generation and self-employment generation by making the micro finance services accessible to pro poor people in the country. HMG/Nepal should establish a high level national micro credit development council (MCDC) to bring about the coordination in the development and expansion of micro finance services at policy level. In this stance, HMG/Nepal has sought in Public Statement on Income and Expenditure Statement of the Fiscal Year 2005/06 to establish a high level- national MCDC. Yet, the council has not been set up by HMG/Nepal.

2.1.3.6 National Micro Credit Fund

NRB is gradually reducing the priority sector credit policy by 2007 with decrease ratio of 6 percent in 2004, and 2 percent in 2006.²² However, the 3 percent deprived sector requirement will stay in place and include microfinance. Reducing the priority sector loan program is a crucial step in order to make available of rural credit but will decrease after its phase out. As of mid July 2003, Rs. 22, 605 million was injected in the priority sector, while Rs. 3, 563 million was allocated to deprive sector lending from which 132.6 million was in the form of equity. HMG Nepal has made a policy announcement that an arrangement will be made to convert the NRB managed RSRF to the national micro credit fund within fiscal year 2063/64. This fund will be self- governing wholesale MFI and it will fill up the dearth

²²Asia Resource Centre for Microfinance, "Banking with Poor-Nepal Country Profile," *Asia Resource Centre for Microfinance 2*, March 28, 2006

of wholesale funds to retail MFIs. But, this policy has not been yet implemented by HMG/Nepal.

2.1.3.7 Micro Finance Act

Currently, MFIs are running under different acts such as cooperative act, financial intermediations act, bank and financial institutions ordinance. MFIs have to face a hassle working into different acts and often find difficulty in its operation with respect to micro credit services. The government, at present, has felt the need to bring Micro Credit Organizations (MCOs) and Community Based Organizations (CBOs) within the scope of a single legal framework. The government has made its action to adopt the Prudential Regulation (PR) as a first country in the world. It announced to draft the Micro Finance Act in the current fiscal year. So, the government has announced to draft the Micro Finance Act in the current fiscal year.

HMG/Nepal has made a policy announcement that after issuing the micro credit policy and enacting the micro finance act, it will strengthen the monitoring and supervision of MFIs. For this purpose, HMG/Nepal is under the process of setting up Second Tier Institution (STI) to monitor, supervise and inspect the MFIs.

2.1.4 Outreach of Microfinance

Despite the rapid growth of MFIs in recent years, their outreach remains very small compared to the potential demand. CGAP (1995) estimated that fewer than 10 million of the few hundred million people who run micro and small enterprises in developing countries have access to financial services.²³ According to study undertaken by Asian Development Bank (ADB), annual Rs.13 billion has been a gap in the supply of rural loan

²³Paul B McGuire, John D Conroy and Ganesh B Thapa, "Getting the Framework Right: Policy and Regulation for Microfinance in Asia," (1998)10. March 30, 2006

demand in Nepal.²⁴ As per Micro Credit Global report, more than 3,100 micro-institutions worldwide have helped 82 million of the poorest people embodying 84 percent women.²⁵

Nepal is an enormous challenge to the development of country-microfinance in particular due to the rough physical terrain and scattered population. Despite thirty years of targeted credit program and the more recent liberalization of financial service sector, access to formal financial services among the poor people remains low. However, the efforts of various MFIs in the access of rural credit to economically backward people are significant. HMG/Nepal has played an active role in the reform and expansion of the micro finance sector, both through the policy reform work of the Development Finance Division of the NRB, as well as some direct interventions in the form of institutional development and funding.

A large number of savings and credit schemes are emerging in several hilly areas since early 1990's. Some of them are promoted by NGO/INGOs while some have emerged out of their own initiatives. The community or user groups manage most of these schemes and members saving are the sole capital with or without matching or revolving fund from outside. Although many of such schemes are running without much problem, they are not equipped with required capacities to scale up their operations so as to meet the needs of their clients.

The ADB/N, CBs, MFDBs and Financial Cooperatives and NGOs with 57 percent, 39 percent, 3 percent and 1 percent contribution respectively to rural credit are major suppliers of the funds in rural financial markets.²⁶ The total demand of rural credit for the 10th Plan (2002-07) is estimated to be Rs. 101 billion. RMDC has disbursed a loan amount of Rs.

²⁴Krishna Pradhan, "Needs of National Micro Credit Policy and Topics to be Included in the Policy," News, (Kathmandu: Nepal Rastra Bank, 2005) 10.

²⁵The Himalayan Times, Business, 9, November 2, 2006.

²⁶Shree Prasad Poudel, "Market-Based Reforms and Rural Financial Markets," (Kathmandu: Nepal Rastra Bank, 2006) 101.

12.6 billion since its operation in December 1999 and has collected Rs. 10.66 billion of the amount.²⁷

The 2,350 SACCOPs among 7,745 Cooperative Institutions (CI) (Ashadh 2061) in the country concern in micro credit and micro savings as of July 15, 2004.²⁸ The community based SACCOPs are a viable and potentially important players in the micro-finance sector in Nepal. Compared to other highly subsidized credit programs and institutions, SACCOPs are the cost effective approach to providing financial services to those sectors of the population that have little or no access to the formal banking institutions. The 47 Financial Intermediary Non-Governmental Organizations (FINGOs), authorized from NRB is also active in providing micro finance services. Besides, Thousands of different groups under the HMG/Nepal have been operating in the field of micro credit sector. The project especially working for women such as PCRW and MCPW have brought about 90 Thousands Women in the group in providing the micro credit services but, only 95 PCRW and MCPW are under the process of registration.²⁹

In Nepal, the access of institutional micro credit or micro finance service was estimated approximately to 630, 000 people at the end of Ashad 2060.³⁰ It has been increased slightly over the last year. The outreach of micro finance service is limited only to 43 districts. The main contribution came after the 5 Grameen Bikas Banks launched with the effort of Government and with a 68 percent ownership of NRB in 5 Development Regions. These banks have provided the micro finance service to 167,000

²⁷Global Microcredit Summit from Nov 12, Business, The Kathmandu Post, April 4, 2006.

²⁸Krishna Pradhan, "Needs of National Microfinance Policy and Inclusion of its issues," 103

²⁹HMG/Nepal and ADB-Manila, "Micro Credit Project for Women," *Progress Report*: February 2002

³⁰Ulrich Wehnert & Roshan Shakya, "Micro Finance and Arm Conflict in Nepal: The Adverse Effects on the Insurgency on the Small Farmer Cooperatives Limited," *Rural Finance Nepal*, no. 3 (Kathmandu: Nepal Agricultural Development Bank, January 2003) 7, April 10, 2006

poor women till the end of Ashad 2061.³¹ The private sector MFIs, adopted the Grameen methodology, have provided such services to 130,000 poor women during the period. These 9 Banks have covered 1,761 V.D.C. in 43 districts and have provided Rs.14.76 billion micro credit in the country. Among the credit outflow, Rs. 12.79 billion loan have been recovered and remaining Rs. 1.97 billion are remain outstanding. Another micro finance bank, Nirdhan Utthan Bank (NUB) which is regarded one of the high profitable organization, has played a significant effort in micro finance outreach.³² NUB has served over 75,874 households in a total of 424 village development committee (VDC) with 2.63 billion rupees by its 43 branches and four-regional offices.

2.1.5 Rationale of Diagnosis of Financial Health of MFIs

Despite decades of development efforts, poverty is growing in Nepal, both in absolute and relative terms. There are an increasing number of households living below the poverty line, and the disparities between these and other households are increasing. One of the few development strategies that have been shown to sustain impact upon the poor is that of micro-finance: the provision of financial services to the poor. MF interventions have been shown to be particularly effective when targeted at women. This is because women tend to be more “responsible” in terms of their management of money, and also because the benefits of women’s investments tend to accrue more often to the most marginalized and vulnerable members of the household.

Performance means the institutions operational activities towards recovering its cost by income generated through the mobilization of funds. Profit is regarded as a main indicator which is generated possibly from the successful management, cost control, credit extension, risk management and

³¹Krishna Pradhan, “Needs of National Microfinance Policy and Inclusion of its Issues,” 104.

³²Himalayan News Service, “Taking a Leaf out of Bangladesh’s Book,” *Business*, The Kathmandu Post, 18 October, 2006, 11.

general efficiency of operation. The institutions generate sufficient revenue even without the domestic subsidies and donor funding. The failure in financial viability will incur a high cost to and among the institution and eventually lose credibility of clients towards the institution. The self-sufficiency only leads to sustainability of the institutions; highly necessary for continuous services. Some writers argue performance in terms of saving and credit mobilization and would generate profit through its efficient management. In most of the cases, the loan disbursed to the clients may not repay their regular installments leaving large arrears in loan collection. For sustainability of microfinance program, the values of loan portfolio, policy, service, credit flow, and methodologies should be appropriate which depends on the financial, programmatic and economic viability, strategic human resource management policy, delinquency management policy and its social acceptability. And such aspects should be continuously monitored, supervised and evaluated in order to align with its objective.

Health of micro finance sectors depends on the health of individual MFI and it has, in return, a direct upshot in the micro finance service to the poorest. In addition, individual MFI's health reckons on the myriad macro and micro factors that ramify greatly. Among the macro factors, political stability and favorable economic growths are imperative. However, the intensity of contagious effect of these macro variables may vary from one individual MFI to another which should be regularly monitored and diagnosed to know such effect.

We use a multidisciplinary approach that includes aspects of scientific experimental models, qualitative models that merely gives us to quantitative results and often fails to give a meaningful and appropriate assessment over those deficiencies. More over the various risks associated with the institutions adversely affect the MFI which should be continuously monitored for necessary action. The micro-prudential indicators such as protection, effective financial structure, assets quality, rates of returns and

costs, liquidity and signs of growth are used as indicators of sound health of an individual MFI. These powerful diagnosis techniques help management stay abreast the financial performance of the MFI.

2.1.6 Brief Description of Paschimanchal Grameen Bikas Bank Ltd.

The Five Regional Development Banks (RRDBs), each one operating in a separate development region and using Grameen Bank methodology, has been established as a financial institution through the initiative of Nepal Rastra Bank (NRB) between 1992 and 1996. The NRB being the main shareholders in the RRDBs, it initiated a restructuring program to improve the performance of Regional RDBs, which has resulted ultimately in their privatization. Its objective is to providing the necessary financial services to the destitute women in different income generating activities by group formation in the rural areas. These banks have been providing services through 5,034 centers in 45 districts in the country as at mid July 2005.³³ The services have been from its outlets without any collateral so required for the income generating activities through the utilization of local skill, technologies and resources. RRRDs have disbursed loans amounting to Rs. 12.5 billion in aggregate to 163,987 members for the period. Of the total loans, Rs.11 billion has been repaid and Rs. 1.5 billion remained outstanding. Microfinance providers using the GB will typically offer general loans, seasonal loans, specific loans (sanitation and housing) and the loans issued from the group fund.

The Grameen system dominates the market in Bangladesh, where it has been widely imitated by a range of large and small Microfinance Organizations (MFOs). Professor Yunu in 1976 penetrated the system. The Grameen Bank, with 3 million members, two other major users of the system, BRAC and Proshikha, each have over a million clients. In 1998,

³³His Majesty's Government, Ministry of Finance, *Economic Report: Fiscal Year 2004/05*, (Kathmandu: Ministry of Finance, 2005) 59. April 2, 2006.

*there were some 30 other MFOs with over 10,000 members and many hundreds of smaller organizations using the system.*³⁴

Paschimanchal Grameen Bikas Bank (PasGGB) Ltd. was established as a Regional Rural Development Bank in 1995 through a joint collaboration of the government of Nepal, Nepal Rastra Bank and Commercial Banks, to serve poor and deprived people, especially to women, of the Western Development Region mostly in hilly areas. As apprehended in the model of the GB methodology, the mission of PasGGB Ltd. is to generate self-employment through micro-credit to the rural poor at their doorstep to reduce poverty level in the western region of Nepal.

PasGGB Ltd. has been operating 39 branches in 13 districts located in the Hill and Terai regions in the Western Development region with savings and loans services to low-income clients, using a Grameen Bank methodology.³⁵ It has altogether 1,154 centers and 40,821 members, comprising of 8,199 groups formed within 276 VDCs. The savings schemes include group savings, centre fund, emergency fund, personal saving and child education saving scheme. Group savings are compulsory savings of 5 % of each loan disbursement with additional contribution of one rupee each week. Group savings can only be accessed by members after five years. The centre fund is used to build centre meeting buildings. Personal savings are voluntarily savings that attract a 6% interest rate, while the child education saving scheme is a cumulative saving scheme over seven years, used for educational purposes.

In the hilly regions, 14 out of 19 branches have attained operational self-sufficiency (OSS) and 13 have attained financial self sufficiency (FSS). Whereas in the terai region, 5 branches out of 20 have reached to OSS and 3 have reached FSS. NRB which hold 61% share of PasGGB Ltd. is allowing

³⁴Malcolm Harper, "Self-help groups and Grameen Bank groups: What are the differences?," *Beyond Micro Credit Putting Development Back into Microfinance 2002* (New Delhi: Vistar Publication 2002)173. April 6, 2006.

³⁵Paschimanchal Grameen Bikas Bank Limited, Eleventh Annual Report: Fiscal Year 2004/05 (July 16, 2004-July 15, 2005) 3.

the bank to go into privatized through its relinquishment in 2004. In this process, NRB has allowed 53% of its shares to private hands, 33% to its clients and NRB will only hold 10% share.

PassGBB Ltd. has been using criteria to select the client so that it could maximum embody the most economically vulnerable people to achieve the objective of reducing poverty level. These criteria-limited assets, no sources of regular income, no active loan with another microfinance provider and ownership of less than 0.5 hectares of land, have been worth-manifesting and effective in the delivery of its services to the poor. The bank uses Participatory Rural Appraisal (PRA) techniques, employing various demographic measures to determine whether clients match the criteria or not.

2.1.7 Theoretical Prescription of PEARLS Framework

PEARLS is a financial performance monitoring system designed to offer management guidance to CU and other Saving Institutions. It's a set of financial indicators and management tool that help to standardize terminology between the institutions.³⁶ The PEARLS system was originally designed and implemented with Guatemalan CUs in the late 1980s.³⁷ WOCCU has been using it worldwide to monitor the performance of CUs. PEARLS provide a systematic approach to develop strong modern CUs that balance the needs of savers, borrowers, stakeholders and staff. It has proved a key tool in achieving CU growth and self sustainability. The purpose for including a myriad of indicators is to illustrate how a change in one ratio has upshot for numerous other indicators. Each indicator has a prudential norm or associated goal. The target goal, or standard of excellence for each indicator is put forth by the WOCCU based on its field experience working

³⁶Anna Cora Evans & Brian Branch, "A Performance Monitoring System," *A Technical Guide to PEARLS*, (Madison: World Council of Credit Unions, March 2002)2. February 11, 2006

³⁷Anna Cora Evans, "PEARLS-A Tool for Financial Stabilization, Monitoring and Evaluation," *Nexus Magazine*, no. 37, (June 1997) April 20, 2006

to strengthen and modernize credit unions and promote savings-based growth.

PEARLS methodology can be applied to MFIs in order to find key areas of its operations, both in terms of financial structure and growth. PEARLS provides MFI managers with concise, easy-to-read reports that reveal institutional weaknesses and trends. It also offers a strategic business planning tool to help managers implement change. PEARLS indicators show the adequacy of CUs delinquent loans provision, how close CUs were to international CU capital structure standards, the excess non-performing assets, the income and cost yields, the management's cash administration abilities and the growth in key operational areas.³⁸

So far the methodologies adopted by MFIs are based on the examiner's overall subjective judgment which does not provide the comparative rankings to its objectivity. The objective indicators are included in the assessment for the rankings that facilitates to rank the performance of MFIs by applying the PEARLS monitoring tools and techniques.³⁹ PEARLS avoids subjective assessment and present objective reports to the MFIs that are substantiated by financial information taken from their balance sheets. The objective ranking system permits open discussion of problems with Boards of Directors and management.

The important realization from the use of PEARLS is the provision of framework for a management and supervisory tools that goes beyond the simple identification of problem. It identifies the weak capital base of MFI and its probable causes thereby giving the meaningful solutions to serious institutional deficiencies by using the PEARLS monitoring system. Further, the use of standardized financial ratios under this system eliminates the

³⁸Brian Branch & David Richardson, "Ecuador Credit Unions Micro-Enterprise Innovation Project," *Research Monograph Series*, no. 14 (Washington: World Council of Credit Unions, October 1998)19. March 3, 2006

³⁹David C. Richardson, "PEARLS Monitoring System," no. 4, (Madison: World Council of Credit Unions," October 2002)2. February 3, 2006

diverse criteria used by the MFIs to evaluate their operation. National Associations can use the financial ratios generated by PEARLS to conduct quarterly or monthly analysis of all key areas of MFI operations that determines the performance of MFI. These evaluations are invaluable for spotting trends and detecting areas of concern among the affiliates.

Considering the assets growth of institutions is much dire and one of the key strategies to address the problems that accompany monetary devaluations and runaway inflation. Financial institution has to sustain the aggressive growth to preserve the value of the assets in the hostile macro-economic environment. As it has been already referred each of the letter of PEARLS, the first and foremost is the evaluation of asset indicators to ensure that the financial institution provides depositors a safe place to save their money with the standard of excellence.

2.1.7.1 Protection (P)

Protection means to protect the members from losing their amount of savings made at the institution. It is the provision of allowances to cover the loan losses resulted from the loan delinquency. Such loan delinquencies may put the institutions to an operating trauma and losses the credibility among the depositors. Delinquencies occur when the debtors become unable to repay the loan principal amount in prescribed time. When more delinquencies exist, then the performance gets slithered as a result of a greater loss. Since the institutions heavily depend upon providing the loan in different assets comprising a slightly higher interest rate. Provisions for loan losses are the first line of defense against unexpected losses to the institutions. Allowances for loan losses are essential, since delinquency signals that loans are at risk; thus, the institutions must set aside earnings to cover those possible losses to protect the member-client savings. MFIs should require adequate loan loss protection which avoids from resulting undesirable inflated asset values and fictitious earnings. In most of the

cases, MFIs charge off the loss against earnings which leads to widespread bend of the principles of safety and soundness. Such behaviors will not protect the member savings.

When financial intermediaries do not recognize loan losses, the asset values of institution become inflated, reported income is overstated, shows the scarce in provisions for loans losses, member-client savings may become insecure and dividend are erroneously paid out with overstate. The application of protection provides the measurement in a complete process of credit administration like delinquency control, loan-loss reserves, loan loss write-offs and loan recoveries. On the other part, it provides members with a safe place to deposit their money.⁴⁰

Provision of protection of assets is essential so as to provide a safe cushion to the member-clients from losing their money. Adequacy of the allowances for loan against the amount of delinquent loan determines the protection and plays a significant role and provide a crucial defense against unexpected losses to the institution. In most of the time, when the principle amount cannot be promptly collected then, it signals that the loans are at risk causing a poor to its soundness and safety. The first line of defense to protect the asset is to set aside earnings to cover those possible losses. The amount of the provision is determined by NRB directives. According to CU's model, provisions to cover 100% of all loans delinquent for more than 12 months are the mandatory to mitigate the risk of institutions.

The Protection considers loan write-offs, on a quarterly basis, for loans delinquent greater than 12 months. The practice of writing-off loans is important because after a loan is delinquent for one year, it is unlikely the institution will receive repayment of that loan. The institution, in most of the instances, may not be able to collect the loan taken by the borrowers. The promptness in the collection of loan is of skillful and needs a special rigor in

⁴⁰David C. Richardson and Barry L. Lennon, "Teaching Old Dogs New Tricks: The Commercialization of Credit Unions," *Micro-enterprise Best Practices* (Bethesda: Development Alternatives, Inc, 2001) 13, April 2, 2006

order to save the loan loss. The institution uses the provisions it has set aside of 100% of the value of that loan to write off the delinquent loan. As a result of the write-off, the balance sheet will state accurately the value of the institution's assets. Otherwise, the depositors or members may lose the credibility towards the institutions in the case of loan delinquencies. PEARLS measure the protection of assets by comparing the adequacy of the provisions for loan losses against the amount delinquent loans.

NRB Directives for Protection of Assets: The loan, which becomes delinquent from its due date, should be protected by provisioning allowances against its risk inherited as a result of non-repayment of it. NRB has allotted the amount to be provisioned for loan loss on the basis of its time period of delinquency.

Table 2.1: NRB directives for Protection of Assets

Classification of Loan	Fiscal Year 2060/61	Provision for Loss (%)
Pass	Loans & advances not past due and past due for maximum 3 months only	1
Sub-standard	Loans & advances past due 3 months to 9 months	25
Doubtful	Loans & advances past due 9 months to 1 year	50
Bad	Loans & advances past due more than 1 year	100

Source: Nepal Rastra Bank.

The provision of allowance issued by NRB is 1 percent, 25 percent, 50 percent and 100 percent for pass, sub-standard, doubtful and bad loan respectively.

CU Model for Protection of Assets: According to CU model, the loan delinquency has been classified into two parts on the basis of its time frame. The first one is the balance of loan delinquent greater than 12 months and the later one is the balance of loan delinquent from 1 month to 12 month. CU suggests that institution should maintain its standard by 100 percent

provision of allowances for the loan delinquency greater than 12 months and 35 percent provision of allowances for the loan delinquency from 1 month to 12 months.

Solvency

An adequate capital base acts as a safety net for the risks to which an institution is exposed, absorbing possible losses and providing a basis for maintaining confidence among investors, lending institutions and depositors. Capital is the ultimate determinant of the institutions' lending capacity because assets are funded by deposits, borrowings and capital.

It measures the degree of protection that the credit union does have for member savings and shares in the event of liquidation of the credit union's assets and liabilities. P6 measures solvency and checks that each member's one rupee is worth at least that amount, after other liabilities are covered.

Risk to Solvency: Situation or a problem, which is not serious enough to present an immediate threat to financial viability or solvency, it could deteriorate into serious problems if not addressed promptly. In the event of risk adherence, the value of assets is deteriorated or hindered in the profit making of the institution. It indicates the level of accessibility of liquidity becomes low or poor for liquidity management in the context of the institutions' situation. It, eventually, forges deficiencies in the management procedures or controls and deteriorates the management quality taking it into a severe catastrophe.

2.1.7.2 Effective Financial Structure (E)

Financial structure refers to the way the firm's assets are financed. It includes short-term debt, and long-term debt as well as shareholders' equity. The effective financial structure determines growth potential, earnings capacity and overall financial strength of MFIs. The evaluation of financial structure of the balance sheet is a critical area of concern in many countries

since the modernization implies a major restructuring of financial institutions' assets, liabilities and capital. Balance Sheet structure has a direct impact on efficiency and profitability and these areas are critically important for effective and sustainable MFI operations in a competitive environment. PEARLS monitoring system measures the MFI's financial structure of loans, investments, deposits, shares and institutional capital.

The effective financial structure of PEARLS focuses on an institution's sources of funds and its uses of funds. An institution has an effective financial structure when assets financed by savings deposits, generate sufficient income to pay market rates on savings, cover operating costs and maintain capital adequacy. Institutional capital, all legal reserves and surplus created either from the accumulation of net income or from capital donations, are the second line of defense to absorb unexpected losses. Institutional capital can be invested to expand products and services. The indicators in this section measure the composition of the most important accounts on the Balance Sheet. The effective financial structure is necessary in positioning the MFI for aggressive real growth.

The PEARLS monitoring system measures assets, liabilities and capital and thereby recommends an ideal structure for CUs. The indicators under effective financial structure help to optimize institutional solvency, profitability and liquidity. It encourages community loans to members, community savings from either rich or poor members and capital accumulation through earnings instead of member shares.

Assets

A commercial bank's assets comprise of mainly four major categories-cash and balances due from other depository institutions, investment securities, loans and leases and other assets.⁴¹ The assets of MFI

⁴¹Anthony Saunders and Marcia M. Cornet, *Financial Markets and Institutions: A Modern Perspective* (New York: McGraw-Hill Companies, Inc. /Irwin, 200).

represents heavily in the form of member deposits and borrowing funds. MFI assets are grouped into four major sub-categories namely; cash and balance due from other depository institutions, investment securities, loan portfolios, fixed assets and other assets. Investment securities and loans are institutions' earning assets. Cash and balance due from depository institutions consist of vault cash, deposits at the central bank, deposits at other financial institutions and cash in the process of collection. These items do not generate income but each is held because they perform specific functions. Deposits at the central bank are used primarily to meet legal reserve requirements, to assist in check clearing and the purchase or sale of Treasury securities.

Short-maturity investments or liquid investments include interest-bearing deposits at other FIs., T-bills, agency securities and repurchase agreements. Returns on these investments vary directly with changes in market interest rates. Although financial institutions with excess cash reserve invest some of its portion in interest-bearing liquid assets such as T-bills and short-term securities, they have the option to lend excess reserves for short-intervals to other financial institutions increased short-term funding. Long-maturity investments though have somewhat a high expected rate of returns than short maturity investments since they are subject to greater interest rate risk exposure. Loans are the major items on a financial institutions' balance sheet and generate the largest flow of revenue income. The portion of savings deposits in the institution affects loan portfolios. Such behavior in the institution helps to grow the total assets with mounting up institutional capital as a result of yielding adequate earnings. These assets are the least liquid in nature and consequently inherit major credit risk for most financial institutions. Interest rates charged on loans according to its purpose, amount, term and risk associated with it largely affects the institution from generating income. But, these loans fall in the category of delinquency if not properly managed in the collection program.

Investment securities or financial investments consist of items such as interest bearing deposits at other FIs, treasury securities, agency securities, mortgage-backed securities and other debt and equity securities, which have identifiable risks. These securities generate some income and can be used for liquidity risk management purposes. These securities are highly liquid and have low default risk.

According to PEARLS, institution asset is the largest portion and distributes among the productive assets. Productive assets refer in CU's model, which generates the earnings. These assets are net loan, liquid investments, financial investments and non-financial investments. In CUs, the loan portfolio is assumed the most profitable asset. The heavy reliance in savings deposits of institution affects the growth of assets as the institution is able to invest them in productive areas. Excess liquidity is discouraged because liquid investments earn less than the loan portfolio. This is also the strategy to sustain in the long run or, otherwise the institutions might invite a severe shock in its operation.

Liabilities

The liabilities represent the left hand side of balance sheet. A financial institution's liabilities consist of various types of deposit accounts and other borrowings used to fund the investments and loans on the asset side of balance sheet. Liabilities vary in terms of their maturity, interest payments, check-writing privileges and deposit insurance coverage. Institutions have two major sources of funds other than the shareholders or owners' equity. They are either from deposits or borrowed funds. The deposits are in the form of group deposits or personal deposits.

Savings deposits are the cornerstones of CU growth. Savings deposit growth largely governs the change in total assets. If MFI is to have robustness, a healthy percentage of deposit savings is necessary. For the healthy percentage of deposit savings, the institution should develop an

effective marketing program and is well on its way to achieving financial independence. The non-deposit liabilities comprise borrowing and other liabilities. These categories include a broad array of instruments such as purchases of federal funds on the inter-bank market and repurchase agreements at the short end of the maturity spectrum, to the issuance of notes and bonds at the longer end. External funds are utilized for any emergency credit. The institution utilizes the external lines of credit to finance the long-term projects for its financial stabilization. The liability structure of institutions' balance sheet tends to reflect a shorter maturity structure than that of their asset portfolio. Relatively more liquid instruments such as deposits and inter-bank borrowings are used to fund relatively less liquid assets.

Institutional Capital

Institutional Capital is defined as all legal and non-distributable reserves, capital donations and the portion of the current year's surplus that will be retained as legal or non-distributable reserves. These reserves are not expended and no member may present an individual claim.⁴² The stronger the overall capital position, the easier it is for the institution to deal with future uncertainties such as loan losses and adverse economic cycles. The institutional capital should be apportioned so as to provide a base for future growth, enable the institutions to meet competitive pressures as they arise, provide protection against operating losses and ensure the institution remains an on-going concern.

Members' shares are de-emphasized under the new capitalization system. The institution should replace such shares with institutional capital. Since such institutional capitals bear no explicit interest cost, they are to finance in all non-income generating assets of the institutions like land,

⁴²David C. Richardson, "PEARLS Monitoring System," no. 4, (Wisconsin: World Council of Credit Unions 2002)2. February 3, 2006

buildings and equipments. In case the sufficient capital is unavailable, the institution should, often, force to use more expensive deposit savings to finance the differences.

Since the institutional capital has no explicit cost, they generate 100 percent earnings by lending out at market interest rates. The capacity to generate sufficient capital is linked to the capacity to retain capital. The use of institutional capital to finance productive assets like loan or investments is very profitable for the institutions. Further, the institutional capital is used to protect the loan losses due to the loan delinquencies. But, this practice, often, becomes a fatal experience for the institution management. They should, in the emergent cases, be approved by the General Assembly created thereto due to the delinquencies.

An institution institutional capital largely depends upon the earnings from the productive assets. The large portion of non earning assets and idle liquid assets puts a heavy burden from bolstering the institution. Problem in such areas, if not seriously observed, results an adverse effect to its financial structure. Institution need to minimize non-productive assets and idle liquid funds and reduce delinquency so as to give a safe cushion in future. The net institutional capital gives the real level of institutional capital, after adjusting the allowances for risk assets to meet the standards of P1 and P2 and covering any other potential losses.

2.1.7.3 Asset Quality (A)

Asset Quality is the main variable that affects institutional profitability. The asset quality means the capacity of assets that generate income as well as the recoverability of the principal amount as per their prescribed terms and condition. The quality of assets would depend largely on the risk management system of institution. An excess of defaulted or delayed repayment of loans and high percentages of other non-earning assets have negative effects on institution's earnings because these assets are not

earning income. Loan and advances dominate the asset side of the balance sheet of any financial institution. Moreover, the earnings made from such loans and advances take up a major span in income statement of the institutions. Asset quality measures how effective an institution is at lending money to people who are willing and able to repay promptly from the income generating as a result of investing in the productive sectors. To have a success of such institutions, it is of crucial need to know the value of loan and advances which have a direct impact in the earnings of the institutions.

A sound performance is of necessary to any institution for the sustainability. The formulation and implementation of sound lending policies are among the most important responsibilities of the institutions' directors and management. In microfinance practice, the investment is done to the people who represents in the group that gives maximum safety to depositors and the institution. In most of the times, the institutions face the trauma when they become unable to collect the significant amount of loan due to mismanagement. Investing in different types of assets with good profitability minimizes the risk factor of the institutions. But, the investment policy should be eased at reaching the needy people to achieve the microfinance goal.

Generally, at the time of approving the loan amount it should be considered in the proper analysis of the debtors' economic condition. The three Cs namely; character, capital and capacity are of utmost dire to analyze at the time of loan approval. The loan should be sanctioned only after the analysis of debtors' character, capital and capacity. The mitigation of risk factor that might be arisen during the collection of loan repayment with interest should be avoided prior to the sanction of loan. But, in doing so the debt service may not reach to the micro entrepreneurs who do not have much access to the commercial banks or other financial institutions. Further the institutions need to analyze knowledge and skill of the debtors who can properly utilize the loan in productive sectors and yield earnings. In

microfinance service, the quality of asset means the debtors can repay its loan amount investing in the productive sectors that raises their standard of living.

Nepal Rastra Bank has classified the loan into four parts namely; pass, sub-standard, doubtful and bad loan on the basis of time period that fall on delinquent category. Pass loan is not delinquent by principal and past due for maximum three months. Institutions will have a high probability to collect such loan from loanee. The loan, which becomes past due more than three months but less than nine month, is categorized under the sub-standard loan. Such loan can be recovered with effective management. The loan which is delinquent more than nine months but less than one year, is termed as a doubtful loan. The chances of recollection of loan remain doubtful. The loan falling delinquent for more than one year is categorized under the bad loan. Institution will be debated from the recollection of principal amount and interest; the loan fallen on this category.

PEARLS system classifies the institutions assets as either productive or non-productive. Loans, Security investments, financial investments and other non financial investments are regarded the productive assets whereas the investments made on fixed assets of institutions or cash on hand are termed as non-earning assets which do not generate income. Further, the loan which becomes past due for more than 1 year is regarded the non-productive assets. The institutions cannot recover its principal loan amount with interest rate from such delinquent loan and the debtor shows inability to repay of it.

The asset quality indicators permit an institution for optimization of profitability by minimizing non-earning assets, and seeking the appropriate financing of those assets with resource of funds that have no explicit cost. Delinquency ratio, non-earning assets, percentage of non-earning assets and financing of non-earning assets are used to identify the impact of non-earning assets.

Delinquency Ratio

Delinquency, commonly referred to as portfolio-at-risk, is the total outstanding balance of loans delinquent greater than 30 days. This ratio is a measurement institutional weakness because if delinquency is high, then the other key areas of institutions operation may be weak. Institution depends upon investing the savings deposits in the quality of assets which inherently possess risk though it generates a higher income compared with other investments. These assets have a higher chance of becoming delinquent in the failure to establish an aggressive collection program that would eventually lower the delinquency.

Delinquency ratio provides institution a useful insight into the quality of its loan portfolio and bad debt coverage, and the adequacy of loan loss allocation. Institution, generally pays its heed in the minimizing the delinquency ratio through heavily reliance on its controlling mechanism. The most of the commercial banks and MFIs has experienced entrapping in a higher level of delinquency due to poorly administrative activities, which have resulted in negative earnings of institution. Such ratio affects in the income statement of institution as it has to allocate adequate amount of loan loss to remain protect the member savings. This leads to less zero earnings, which, in turn, affects the institutional capital of institution.

Causes of Delinquency: Delinquencies arise due to the business failure for which loan is used. Changes in the perceived norms of the market may subject to fail the undertaking. Appraising the stream of income at the time of preparing the project should comply with perceived manner. Defect in appraising projects breed mismatch not only in investment planning but also in receivables due to defective projection of returns. Management of the enterprise is no less significant than financial management to ensure the cash flow as per projection. By constant monitoring of financed projects and rectifying the deviation that has occurred in terms of operation also ensure

prompt repayment of financial obligations. In microfinance service, the constant monitoring is of necessary for the financed projects to ensure the purpose of loan taken by the loanee is appropriately utilized.

Delinquency can also occur when there will be corrupt and willful act at the time of approving loan and transaction between the both parties i.e. the loanee and the institution that provides debt services. On the other hand, the institutions, sometimes, cannot analyze the needs of the loanee properly when they provide the loan services. Another reason is that the lack of constant monitoring of financed projects by the creditors of loanee may result the delinquency as the institution should know whether the loan taken by the loanees has been utilized in the appropriate sector or not. Normally, the loanee takes the loan for domestic purposes and to repay the loan of other institutions. Sometimes, the loanee takes the loan on the basis of his or her old business at a minimum interest rate and provides at higher interest rate in other areas. When the period of repaying the loan amount comes, the loanee repays from other income source; not from the income generated from the loan taken for special purpose. Further, the loanee takes a transitional loan from other financial institutions and repays the loan to get more loans from the institution.

Delinquency occurs on behalf of the institutions that provides the micro credit. Because the selection of projects is not appropriate and there may become a political influence or other rent seeking attitude from either the parties. The inappropriate formation of group can also inherit the delinquency because we find more than two members from and within the same family in the group getting a bulk of micro credit. When income to be earned becomes a single source, then the problem is that repaying the loan service comes even further meager. Most of the micro credit service is in the hand of people who shows enough collateral. We do not find the credit flowing to the extremely poor who can venture in income earning activities on the basis of their knowledge and skill. The delinquency can occur when

the institutions focus on only to attain the objective of investment and repayment. This hinders the objective of micro credit service.

Implication of Delinquency: At the event of failure in the prompt repayment of principal amount and interest the institution is debarred from further investments of funds out of its income. Since the assets of the institution emanates from the savings as made by the depositors, the delinquency seriously affects the savings as it has to owe the interest on it. Delinquency is directly linked to the growth of institutional capital and total assets. The higher the ratio of delinquencies, the more the institution has to experience the non-earnings. Such upshot seriously affects the depositors and may change their attitude towards the institutions. When an institution becomes unable to earn significantly, the institutional capital will be even meager, as adequate allocation of allowance has to be made for delinquency.

Control of Delinquency: The selection of working sectors should not be a political influence and the easiness of working staffs of institutions. Rather it should be based on the priority sectors of district development projects as allotted by the district development committee. The formation of group should be appropriate and there should be a mechanism of periodic monitoring activities. The lending of micro credit service should be at the hand of poor people who are technically sound. Such micro credit service should be well encouraging to the members with mitigating unnecessary hassle through a simplified repayment procedure. The micro credit institutions, in most of the instances, focus on the attainment of goal of investment and repayment. It may hinder the effectiveness of micro credit because the credit may not be properly utilized as taken for.

In addition to controlling delinquency, institutions also must monitor the ratio of non-earning assets to total assets and ensure that these non-earning assets are not financed by savings deposits, external credit or member shares. Sources of funds that have a financial cost such as savings

deposits need to be invested in productive assets that will earn a return greater than the cost of funds. The only way to have non-earning assets, such as fixed assets, without negatively affecting earnings is to finance those assets with no-cost capital such as institutional capital or reserves.

Non-earning Assets (NEAs)

The non-earning assets are those assets, which do not generate income. These non-earning assets are cash at hand, non-interest bearing monetary checking accounts, accounts receivable, assets in liquidation, fixed assets (Land, Building, Equipment etc.) and prepaid expenses and other deferrals. Institution needs to reduce the percentage of NEA through considerable level of retaining the fixed assets. Institutions may face another acute problem when they finance in the purchases of fixed assets with member shares. Such investments in the purchase of fixed assets should be made from the institutional capital or other liabilities that have no explicit financial cost. By using no-cost capital to finance those assets, institutions earnings are not unduly affected.

Financing of Non-earning Assets according to CU model

Traditionally, CU uses member share capital to finance the purchase of fixed assets. Under the WOCCU model, the objective is to finance 100 percent of all non-earning assets with CUs institutional capital. It can also finance with other liabilities that bears no explicit financial cost. The institution earnings are less affected by using such capital to finance the purchase of fixed assets.

The institutions may face a severe shock when, sometimes, they invest to purchase of fixed assets with member deposits or other borrowings. Because such assets are known to be the earning asset that raises income significantly high when invested in diversified loan segments. The practice is to invest in such assets with the institutional capital the institutions have generated from a sound operation.

Fixed assets also become problems when they exceed the institution's financial ability to carry out the burden of these non-earning assets. The loss of income and the overhead costs associated with a disproportion of investment in fixed assets can cause an institution into a substantial problem.

2.1.7.4 Rates of Returns and Costs (R)

Yield is computed in four main areas: loan portfolio, liquid investments, financial investments and other non-financial investments. The cost is broken down into three main areas: financial intermediation costs, administrative costs and unrecoverable loan costs. By segregating income and expenses, PEARLS ratios can accurately pinpoint the reasons why MFIs are not producing sufficient net income.

Surveillance on returns and costs provides the growth rates of an institution. It assists in identifying the most profitable investment using PEARLS techniques. The PEARLS system also disaggregates the essential components of net earnings to help management calculate investment yields and evaluate operating expenses.

Unlike other systems, which calculate yields on the basis of average assets, PEARLS calculates yields on the basis of actual investments outstanding. The PEARLS system also disaggregates the essential components of net earnings, distinguishing return on the loan portfolio, liquid investments, financial and non-financial investments, to help management calculate investment yields and evaluate operating expenses. The results more clearly indicate whether the credit union is earning and paying market rates on its assets, liabilities, and capital.

The "R" category also measures operational costs including financial costs paid on deposit savings, share-savings, and external loans. The target recommended by the PEARLS system is to maintain operating expenses between 3 to 10 percent of average total assets.

The income ratios identify income from Loan Portfolio, liquid investments, financial investments and non-financial investments. These indicators which generate income are to be considered under the rate of return. These indicators helps to optimize the balance between portfolio yields, savings deposits yields, dividend on shares, operating efficiency and the capitalization of net earnings.

Loan Portfolio

Lending is the principal business activity for most commercial institutions. The loan portfolio is typically the largest asset and the predominate source of revenue having the greatest source of risk to an institution's safety and soundness. Portfolio quality is a crucial area of analysis, sine the largest source of risk for any financial institution resides in its loan portfolio. The loan portfolio is by far an MFI's largest asset and, in addition, the quality of that asset and therefore, the risk it poses for the institution can be quite difficult to measure. For MFIs, whose loans are typically backed by bankable collateral, the quality of portfolio is absolutely crucial. Many MFIs have learned how to maintain loan portfolios of very high quality.

Diversification in the loan portfolio is an important step to generate sufficient income for institution. If institutions do not see various investment opportunities, the loan thus invested could pose considerable risk to earnings and capital. The institution should be aware of credit risk management while delivering such loans in different sectors. Further, the loan concentration particularly in a specific economic sector often invites adverse effect to institution. Loan analysis for different economic activities is a crucial need for any institution to have sufficient earnings.

Managing the loan portfolio includes managing any concentration of risk. By segmenting the portfolio into pools of loans with similar characteristics, management can evaluate them in the light of the

institutions' portfolio objectives and risk tolerances, and, when necessary, develop strategies for reducing, diversifying, or otherwise mitigating the associated risks. Institutions' earnings largely vary with the setting of different interest rates on loans. The purpose of loan delivered, amount of the loan and its terms and condition affects in pooling the large portion of income. The deviation of loan from the specific purpose may pose a serious trauma to institution. The important point is to strongly observe the terms and condition of loan specified during the loan transaction. In the event of loan falls in the delinquency bracket, writing off the delinquent loans with heavy surcharges for delinquency largely affects the level of earnings.

Liquid Investments

Liquid investments are the deposit made on bank savings accounts and liquidity reserves in either the National Association or regulatory body. These investments yield income as a result of the market rate offered therein. All income from such investments is divided by the amounts invested in those areas.

Financial Investments

Financial Investments are the liquidity investments made on the government securities. Such type of investments results higher yields than the bank saving accounts and liquidity reserves. Many CUs focus such financial investment to be made so as to yield a higher percentage otherwise, in bank saving accounts, which gives only satisfactory yields. The income generated from such investments is divided by the outstanding capital invested in those instruments.

Financial Intermediation Costs

These are the costs paid on deposit savings, member shares and external loans. The commercial banks are, in most of the times, in a position to minimize such costs. But, contrary to this, the CUs or MFIs should be aware regarding costs and try to pay as much high rate as it can which will

not jeopardize the stability of the institution. The inflation of the market greatly affects the market rate set on the savings deposits. The rise in inflation causes interest rate to be high above the inflation. The inflation should always be below the market rate to augment the member savings. Such market rate only protects the nominal value of the savings.

The institutions should provide competitive interest rates in order to attract the deposit savings. In many instances, a poor growth rate for deposit savings is linked to non-competitive interest rates. Similarly, paying a sound dividend on member share capital is of crucial which most of the institutions should closely monitor and ensure that they have not taken advantage of their members by paying substandard dividend yields on their share capital.

According to CU model, the market rate should always be higher than inflation to retain the standard that could be obtained by calculating the financial cost i.e. savings deposits to average savings deposits. CU suggests the interest paid on savings deposits should be considerably high in order to attract the depositors. If the market rates fall below the inflation then, the depositors encounter a problem of augmenting the savings, to which the institution heavily relies on. The institutions, in most of the instances, should differentiate savings interest rates at he different ranges to attract deposits in the most economical way. Such institutions should undertake the survey of other financial institutions and competitors to ensure that the interest rate offered is competitive in the financial market.

Administrative Costs

A careful analysis is to be made in administrative costs and should be tallied with the interest rates provided on deposits and loans. The MFIs should be able to compete with commercial banks on their interest rates. In many instances, the administrative costs are higher on a per unit basis when becomes competitive with commercial banks on interest rates for deposits and loans. The administrative costs become higher in the smaller loan size.

And fixed administrative expenses could not be spread over a larger loan amount. To minimize the administrative cost, institutions heavily rely on the managerial acumen who can better observe the overall cost leadership. Efficiency in operating activities can reduce the cost of administration. Efficient personnel can review administrative structure to determine the need for each position.

The delinquency also consequently affects the administrative costs. In general, the delinquent loans need to be controlled with vigorous measures. When apply such measures, a significant portion of expenditure has to be borne by the institutions which, in turn, affects in the level of earnings.

Provision for Loan Losses

These costs are other than the administrative costs and non-cash tax-deductible expense. It is regarded the current period's allocation to the allowance for loan losses. The institution management predicts the loan that may become delinquent due to default. In traditional accounting standards such loan loss provision are treated as a part of the overall administrative costs. These costs are created when the managers in the institutions becomes failure in credit analysis and effective loan collection techniques. So, it is a complete and a new type of expenses resulted from such failure. The isolation of such expense from other administrative costs is of necessary to the institutions to get a much clearer picture of weak credit administration practices.

Institution must have a program to establish and regularly review the adequacy of their allowances for loan losses. Allowance for loan losses exists to cover any losses in the loan portfolio of all institutions. The profitability of an institution is determined to its quality of loan portfolio, which is directly linked to effective delinquency control. If a loan falls delinquent, adequate provisions have to be created. Such provision negatively impact profitability as it effectively reduces income. Adequate

management of the allowance is an integral part of managing credit risk. A careful analysis should be made to ensure that the allowance is adequate to absorb inherent losses

PEARLS separates the costs of creating provisions for loan losses from other administrative costs. By isolating this expense from the other administrative costs, one gets a clearer picture of the effect of weak credit administration on a CU.

Non-recurring Income

Non-recurring income is the earning made by the institutions other than the income from liquid investments, financial investments and non-financial investments. These incomes are generally brought in as a result of transaction of loans and shares. It includes the non-interest income as well which includes all other income received by the institutions as a result of its on-and off-balance sheet activities and is becoming increasingly important as the ability to attract core-deposits and high-quality loan applicants become more difficult. These incomes, in general, are the income from fiduciary activities, service charges on deposit accounts, other gains and fees from trading assets and liabilities. The sum of interest income and non-interest income is referred to as the institutions' total operating income or total revenue. These incomes are very minimal as compared to other income generated by institutions.

2.1.7.5 Liquidity (L)

Liquidity is traditionally viewed in terms of cash available to lend - a variable exclusively controlled by the credit union. With the introduction of withdraw-able savings deposits, the concept of liquidity radically changes. Liquidity now refers to cash needed for withdrawals - a variable the credit union can no longer control. The maintenance of adequate liquidity reserves is essential to sound, financial management of the new credit union model.

Liquidity is essential for administering saving institutions. It is necessary to respond to member-client withdrawal and disbursement demands. The institutions should manage the availability of liquidity reserves as the member shares are illiquid and most external loans have a longer payback period. Liquidity reserves refer the savings deposits invested as liquid assets in either a National Association or a commercial bank. The institutions should not keep excess liquidity reserves, though they are important, as these reserves imply a lost opportunity cost. Further, these reserves yield less compared with other investments alternatives. Therefore, it is important to keep idle liquidity reserves to a minimum. Its indicators reveal whether the MFI is effectively managing its cash so that it can meet deposit withdrawal requests and liquidity reserve requirements while, at the same time, minimize the amount of idle funds.

NRB Liquidity Reserve Directives to MFI

NRB has issued to maintain the 7 % liquidity reserve of total deposit liabilities.⁴³

2.1.7.6 Sign of Growth (S)

Signs of growth reflect member-client satisfaction, appropriateness of product offerings, and financial strength. Growth affects an institution's financial structure, which should be continuously monitored to trade off between shares, savings/deposits and loans. Growth in savings drives growth in total assets but if loans are not growing as quickly as savings, then the institution will have high liquidity and low earnings. Similarly, as savings are growing, it is important to watch that institutional capital is increasing at a similar pace so that there will be a buffer to protect those savings against unexpected losses. The 11 indicators in this section measure the percentage of growth in each of the most important accounts on the

⁴³His Majesty's Government, Ministry of Finance, *Economic Survey: Fiscal Year 2004/05* (Kathmandu: Ministry of Finance, 2005) 69. May 21, 2006

financial statements as well as growth in membership. Growth is measured in five areas namely, total assets, loans, savings deposits, shares and institutional capital.

2.2 Review of Previous Studies

This section deals with the review of articles by different authors in international scenario and review of dissertation by different authors. The articles and case study in PEARLS are extracted from the official websites of WOCCU Inc., ABCUL Credit Unions, Banking with the Poor (BWTP), the Micro Banking Bulletin (MBB) and The BASIS Collaborative Research Support Program (CRSP). The review of dissertations is made with respect to dissertation made by various authors for their master degree course visiting in Western Library of Pokhara.

2.2.1 Review of Articles

Almeyada and Branch carried out a case study on Measuring Sustainability: Financial and Operational Performance of two CUs namely; Union Popular (UP) and Union Progresista Amatitaneca (UPA) based on PEARLS monitoring system for the periods 1994, 1995 and 1996.⁴⁴ They applied 25 indicators as a monitoring tool under PEARLS to monitor the comparison of these two CUs. The study focused in building the institutional base and growth of total assets with reliance in savings and deposits. In addition to it, the provisioning of allowance against the loss assets was also the attention they had paid for. The study exhibited that the UPA was able to generate more institutional capital than UP, a part of strategy to build a more solid capital base. But, contrary to the PEARLS standard, UPA heavily relied on member shares rather on savings deposits which UP was strictly

⁴⁴Gloria Almeyada and Brian A. Branch, "Microfinance in Guatemala : The Case of Credit Unions," *Research Monograph Series*, no. 13 (Madison: World Council of Credit Unions, 1998) 31 and 36, May 15, 2006

adhering. In conclusion, the study revealed that the application of tools helped the both institution to build a stronger base for their performance.

Branch and Richardson undertook a monograph work in Ecuador credit union micro-enterprise innovation project.⁴⁵ The ongoing project was designed to be a technical assistance and training program. The WOCCU worked with 19 CUs and this monograph evaluated the project's impact in four areas-CU's membership, CU financial supervision and governance policies, CU's savings deposits and lending services and CU's financial performance. The project's goal was to expand the CUs' micro-enterprise financial services and in turn to increase their assets and income. In terms of CU's financial performance, they applied the PEARLS tools to determine the performance of CU's. These PEARLS indicators revealed the adequacy of CU's delinquent loans provisions, how close CUs were to international capital structure standards, the excess CU non-performing assets, the CUs' income and cost yields, the CUs' management's cash administration abilities and the growth in key CU operational areas.

Evans undertook a case study on strengthening WOCCU's partners in a time of crisis using PEARLS financial monitoring in Ecuador.⁴⁶ This monitoring system was applied as a tool to monitor and improve their performance. In this case, 12 indicators of PEARLS were applied to monitor the performance. However, the growth in membership and institutional capital with a prime focus in savings deposits was a goal of the institution which it has, to some extent, attained.

Sasuman undertook the case study on Rural Financial Institutions: Restructuring and Post Restructure Results while working in Credit Union

⁴⁵Brian Branch & David Richardson, "Ecuador Credit Unions Micro-enterprise Innovation Project," *Research Monograph Series*, no. 14 (Madison: World Council of Credit Unions, October 1998) 1 to 26. June 14, 2006.

⁴⁶Anna Cora Evans, "Strengthening WOCCU's Partners in a Time of Crisis using PEARLS Financial Monitoring: The Case of Ecuador," *The Micro Banking Bulletin*, no. 7 (November 2001) 15 and 17. April 22, 2006 ss

Empowerment and Strengthening (CUES) Philippines.⁴⁷ CUES Philippines actively utilized the PEARLS Monitoring System's 46 financial ratios to enable Batch 1 partner cooperatives and monitor their overall financial position. His case study was based in reference to two years break i.e.1998, 2000 and 2002 using PEARLS ratios. The goal of the project is to improve the performance of credit cooperatives and provide financial services to the segment of the population that do not have access to credit or any other financial services. It partnered and worked on the transformation of eleven credit cooperatives known as Batch 1 from Mindanao. The case study describes the CUES Philippines project, a combination of two methodologies: Model Credit Union Building and Savings and Credits with Education. The project's success in strengthening and empowering credit cooperatives shows that the two methodologies, when provided together, can increase member income and savings and empower women.

Winkworth applied the PEARLS technique in Portsmouth Savers Credit Union when it joined first ABCUL/Barclays PEARLS Project.⁴⁸ With initial start up grant funding and a city-wide common bond, the CU had one office with two members of staff and had gained nearly 1000 members. At that time the level of expenditure was seven times larger than the income in a year. Working with PEARLS led the staff and board of credit union to see that it was not competitive in the market place. They realized that they needed to make major changes to their policy to enable them to earn enough money to make the business viable when they start up funding came to an end. The CU introduced capacity based lending with focusing the members who apply for loans were now judged purely on their ability to repay the loan and not on their previous saving record with the CU. PEARLS revealed

⁴⁷Luis Sasuman, "Rural Financial Institutions: Restructuring and Post Restructure Results," *Paving the Way Forward for Rural Finance-An International Conference on Best Practices*, (Madison: World Council of Credit Unions, Inc., 2003) 3 and 6 June 16, 2006 .

⁴⁸Amanda Winkworth, Portsmouth Savers Credit Union, ABCUL/Barclays PEARLS Project, (Portsmouth: Portsmouth Savers Credit Union, 2004)1. June 12, 2006

the CU that the satisfaction of savers was equally important. In the three years since PSCU started working with PEARLS, membership has more than tripled to over 2,800 and savings were also trebling of the previous PEARLS figure. The CU has a loan portfolio more than four times the amount before the CU introduced the capacity based lending.

2.2.2 Review of Dissertations

Poudel conducted the research on Production Credit for women with a view of improving the socio-economic status of women through social preparation, skill training, credit and institutional support.⁴⁹ The method used to examine the required information was primary with questionnaires and interview and secondary sources. He found various ethnic groups has benefited from the program, women literate by adult literacy for acquiring the skills relevant to bank and credit activities and prompt repayment of loan. He recommended the project admission to be high priority to the uncertainty in the tenure of good staffs, coordination with support services and facilities to be strengthened, loan to be distributed to low income rural women with payment clarification, loan size to be increased, provision of training for income generation, group formation to be proceeded with identifying the targeted beneficiaries to further improving the socio-economic status of women.

Ojha conducted research with the objective of examining the performance of micro-credit financed projects targeted to women with the help of both primary and secondary information.⁵⁰ The major finding from his study was the success of program by lending to group members than individual member, training at different level exerted impact on the execution of professional activities and majority of participating women

⁴⁹Tek Raj Poudel, "Microfinance: Production Credit for Women at Rajahar Village Development Committee in Nawalparasi District" (Master diss., Tribhuvan University, 1997).

⁵⁰Nirajan Raj Ojha, "Microfinance in Practice: Loan Recovery Approach to the Performance Assessment of Micro credit Project for Women in Pokhara" (Master diss., Tribhuvan University, 2002).

have well physical facilities, literate. He recommended NGOs are not able to include all the targeted women and outreach and failed to meet the required criterion of loan repayment and the amount of overdue remained high to the required criterion.

Shrestha conducted research on impact study of Micro Credit project for women aiming to assess economic condition of Micro Credit Project for Women (MCPW) through the measurement of its outreach and ratio of loan disbursement to repayment rate.⁵¹ He used both primary-well structured questionnaire and interpersonal interview and secondary source of information to get intended study. He found the program intervention has improved the livelihood of targeted women significantly with enhancement of their confidence and solidarity. Most of the women have been successful to generate income with the loan they received and invested in income generating activities. He recommended the conduct of workshop on skill development training and awareness campaign to get clarity about the concept and benefits of the cooperatives and transfer of group savings into cooperative account is necessary and practicality in livestock insurance product.

With respect to study in the field of Microfinance, most of the study has been carried out in micro-credit and microfinance program targeting to the pro poor people. These studies are more concerned in the socio-economic empowerment of women or economically backward people. Very few of the study are also focused in the performance of microfinance program and ultimately it is in the rural micro-credit provision and making their working procedures more viable to reach the targeted people and sustainability of microfinance program. Some of the study has been undertaken in the loan disbursement and recovery management for the sustainability of MFI. These studies have not embodied a complete picture

⁵¹Yubraj Shrestha, "An Impact Study of Micro Credit Project for Women in Rural Areas: A Case Study of Kaski District" (Master diss., Tribhuvan University, 2002).

in the performance of such institutions. The overall study is based on the qualitative assessment, which is not sufficient to provide an effective solution to the critical deficiencies faced by the institutions. The effective measures to be provided in such situation have not been manifested by the previous authors.

However, some of the MFIs are in the cost reduction strategies to remain sustainable. Their performance is viewed on reducing the cost, as its big endeavor, in delivering the loan services and its prompt collection. The steps could lead to a better performance and achieve the objective of serving the rural people. But, no such techniques and tools have been applied to identify the possible deficiencies that might likely emerge in its operation and apply those methodologies to mitigate the severe trauma faced by the institutions.

PEARLS, at recent times, will be quite new phenomena to find the solution to those serious deficiencies faced by the MFIs. With the application of traditional methodologies at finding the financial health, the methodologies do not provide appropriate tool kit to find the probable cause and going beyond the identification of problems. The managers in most of the time will be in the state of indecision to apply the suitable technique as those methodologies fail to give the proper solution to problem causes faced by the institutions.

CHAPTER III

RESEARCH METHODOLOGY

This chapter deals with the research design, justification for the selection of study unit, nature and sources of data, data collection method, data mining and analysis and PEARLS financial tools.

3.1 Research Design

The research design of this study is a case study research design. It is of descriptive-cum-analytical approaches to achieve the desired end. This study is an examination and evaluation of performance of PasGGB Ltd. in the framework of PEARLS and traces out the basic practices of the institution. The quantitative method on this study will give rise to objective assessment based on the information and data.

3.2 Population and Sample of Study

In the micro finance industry especially among those 11 MCDBs, 47 NGOs and 19 Saving and Cooperatives, which are formally registered industries, PasGGB Ltd. is playing a key role in terms of its service through an effective operation.⁵² Despite, the role in its sound performance, the actual performance played therein is of necessary to find out the gap with the application of PEARLS framework. In addition to it, the data availability comes as a significant part which other MFIs may not have according to PEARLS indicators. This study is an attempt to find out the critical deficiencies faced by the PasGGB Ltd. and taking this institution as a study unit through numerous indicators under PEARLS.

⁵²Nepal Rastra Bank, *Banking and Financial Statistics*, no 47, (Kathmandu: Nepal Rastra Bank, July 2006) December 28, 2006

3.3 Natures and Source of Data

The nature of data in this study is based on the secondary data. The data is collected from annual reports, official reports and other relevant information of PasGGB Ltd. Moreover, the information is available from the journals, articles, books and websites written by the various authors. Supplementary information regarding the performance of the institution is collected by raising questions with the senior level of employees of the institution.

3.4 Data Collection Method

As stated earlier, the study is entirely based on the historical data disclosed by annual reports and official reports of PasGGB Ltd. The annual reports, official reports and relevant information of PasGGB Ltd. are collected from its Head Office, Butwol and regional office, Pokhara.

3.5 Data Mining and Analysis

The data is processed with both manually and computerized after extracting the necessary data from annual and other relevant statements. These data is entered into the spreadsheet to work out the PEARLS financial ratios and prepare the necessary figures. Finally, the different financial tools under PEARLS are worked out with the help of computer programmes.

3.6 PEARLS Financial Tools

3.6.1 Protection

The protection section considers provision of allowances for loan losses and solvency. Making provision of adequacy of allowances is a crucial role that safeguards the member savings. The indicators in this section measure the adequacy of the provisions for loan losses. Under Protection, WOCCU Inc. has developed six indicators: allowance for loan losses to allowances required for loans delinquent > 12 months (P_1), net

allowance for loan losses to allowances required for loans delinquent less than 12 months (P_2), total charge-off delinquent loans > 12 months (P_3), quarterly loan charges-offs to total loan portfolio (P_4), accumulated recovered charge-offs to accumulated charge-offs (P_5) and solvency (P_6). Only P_1 and P_6 are calculated in this study (see Appendix 2.1). Remaining indicators have not been calculated due to the data un-availability.

3.6.2 Effective Financial Structure (E)

An effective financial structure is necessary to achieve safety, soundness and profitability, while at the same time, positioning the MFI for aggressive real growth. The composition of debt and equity should be appropriate to ensure that the institution has sound proportion of financial structure. The indicators in this section measure the composition of the most important account on the Balance Sheet.

PEARLS system measures MFI's assets, liabilities and capital, and then recommends the ideal structure. MFIs are to heed seriously in productive assets to have a sound and stream of earnings that gives sustainability to the institution. Under effective financial structure (E), WOCCU Inc. has developed nine indicators i.e. net loans to total assets (E_1), liquid investments to total assets (E_2), financial investments to total assets (E_3), non-financial investments to total assets (E_4), savings deposits to total assets (E_5), borrowed funds to total assets (E_6), member shares to total assets (E_7), institutional capital to total assets (E_8) and net institutional capital to total assets (E_9) in which E_1 , E_2 , E_3 , E_5 , E_6 , E_8 and E_9 are calculated in this study (see Appendix 2.2). Remaining indicators are not calculated due to the data un-availability. Non-financial investments are the assets invested in supermarkets, pharmacies, residential housing development etc.

3.6.3 Asset Quality (A)

The indicators in this section measure the percentage of non-earning assets that negatively affect profitability and solvency. The indicators are

loan delinquency, non-earning assets and financing of non-earning assets. PEARLS indicators are used to identify the impact of non-earning assets by analyzing delinquency ratios, percentage of non-earning assets and financing of non-earning assets.

Under assets quality (A), WOCCU Inc. has developed three indicators i.e. total loan delinquency to total loan portfolio (A_1), non-earning assets to total assets (A_2) and net institutional capital+ transitory capital +non interest bearing liabilities to non-earning assets in which A_1 and A_2 are calculated in this study (see Appendix 2.3). A_3 has not been calculated due to the data un-availability. Some of the data in transitory capital were not available to calculate A_3 . Transitory capital is the monetary, educational and social reserves, revalued assets and undistributed income. Non-interest bearing liabilities are referred to as zero cost funds in which interest should not be borne by the institution.

3.6.4 Rate of Returns and Costs (R)

These indicators measure the average income yield for each of the most productive assets of the Balance Sheet. In addition, they measure the average yield (cost) for each of the most important liability and capital accounts. The yields are actual investment returns and not the typical “spread analysis” yields that are figured on the basis of average assets. The corresponding yields indicate whether the MFIs are earning and paying market rates on its assets, liabilities and capital.

PEARLS calculate yields on the basis of average outstanding investments, unlike other systems that calculate yields on the basis of average assets. Under rate of returns and costs (R), WOCCU Inc. has developed twelve indicators i.e. total loan income to average net loan portfolio (R_1), liquid investment income to average liquid investments (R_2), financial investment income to average financial investments (R_3), non-financial investment income to average non-financial investments (R_4),

financial cost: savings deposits to average savings deposits (R_5), financial cost: borrowed funds to average borrowed funds (R_6), financial cost: member shares to average member shares (R_7), gross margin to average total assets (R_8), operating expenses to average total assets (R_9), provision for loan losses to average total assets (R_{10}), non-recurring income or expenses to average total assets (R_{11}) and net income to average total assets (R_{12}). R_1 , R_3 , R_5 , R_6 , R_8 , R_9 , R_{10} , R_{11} and R_{12} are calculated in this study (see Appendix 2.4). Remaining indicators have not been calculated due to the data unavailability.

3.6.5 Liquidity (L)

It is necessary that institution should manage effectively to meet deposit withdrawal requests and liquidity reserve requirements. But, excess idle cash also hinders profitability of institution. The institution should ensure that such provision of cash will not affect the profitability. Its indicators measure to ensure that the institution has appropriate cash to manage the deposit withdrawal and liquidity reserve requirements. In addition, the idle cash is also measured to ensure that this non-earning asset does not unduly affect profitability.

PEARLS analyze liquidity from three perspectives: obligatory liquidity reserves and idle liquidity reserves. Under liquidity (L), WOCCU Inc. has developed three indicators i.e. liquid investments + liquid assets – short-term payables to savings deposits (L_1), liquidity reserves to savings deposits (L_2) and non-earning liquid assets to total assets (L_3). L_2 and L_3 are calculated in this study (see in Appendix 2.5 for tools). L_1 has not been calculated due to the data unavailability.

3.6.6 Sign of Growth (S)

Accelerated growth of assets is necessary for any institutions for the sustainability. Despite, the growth of assets, profitability is of vital which determines the soundness of institutions. The diversification of loan, savings

deposits and institutional capital greatly affect in the profitability of institutions. The management of such income generating activities should be appropriate in the long term for the sustainability of institutions. The indicators of this section measure the percentage of growth in each of the most important accounts on the financial statement, as well as growth in membership. In inflationary economics, real growth (after subtracting inflation) is a key to the long run viability of the CU.

Under signs of growth (S), WOCCU Inc. has developed eleven indicators i.e. growth in loans (S₁), growth in liquid investments (S₂), growth in financial investments (S₃), growth in non-financial investments (S₄), growth in savings deposits (S₅), growth in borrowed funds (S₆), growth in member shares (S₇), growth in institutional capital (S₈), growth in net institutional capital (S₉), growth in membership (S₁₀) and growth in total assets (S₁₁). S₁, S₂, S₃, S₅, S₆, S₈ and S₁₁ are calculated in this study (see in Appendix 2.6 for tools). Remaining indicators have not been calculated due to the data un-availability.

3.7 Limitation of the Methodology

As this study is carried out within the framework of case study research design, it is bounded by its own methodology. So, it cannot be said it is free from any limitation. The PEARLS tools have been applied as developed for CUs which is slightly, though developed for microfinance institution, different in its working pattern. In addition to it, the different tools and working methodologies in different countries differ as they have their own norms and standard. So, the tools under PEARLS may not be appropriate in every aspect of this case study. The financial tools, which have been applied to analyze the collected data, are based on the CU's standards through its past experiences, which might have adhered with several assumptions. So, the reliability of the analysis depends upon the circumstances on which the tools are based.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

This chapter deals with the presentation and analysis of data collected from the different sources. As stated in the theoretical prescription, the diagnosis of financial health of PasGGB Ltd. is concentrated in the six components, PEARLS: protection, effective financial structure, assets quality, rates of returns and costs, liquidity and sign of growth. The data collected from different annual reports and office reports of PasGGB Ltd. have been analyzed with the application of PEARLS. The major findings thereby have been emanated as derived from analysis of data.

4.1 Data Presentation and Analysis

4.1.1 Protection (P)

Protection is measured by comparing the provisions for loan losses against the amount of delinquent loans. Protection is deemed adequate if an institution has sufficient provisions to cover 100% of all loans delinquent for more than 12 months. Institution should adequately provide for their loan losses as they frequently request the authority to charge off loans prior to the expiry of the time period.

Generally, Protection should be made against the loan loss that occurs due to un-repayment of principal amount by the loanee in prescribed time schedule. The provision for loan losses is a non-cash tax deductible expense that is used to defend to any credit risk that falls due to failure in the repayment of loan and interest. The provision for loan losses is the current period's allocation to the allowance for loan losses listed on the balance sheet. This item represents the institutions' prediction of loan at risk of default for the period.

As stated in research methods, only P₁ and P₆ have been calculated and analyzed under protection. Other tools are not calculated and analyzed as the data related to charge offs of delinquent loans, quarterly charge-offs and accumulated recovered charge-offs were not available for the indicators. The calculation and analysis of P₁ and P₆ are done under protection.

4.1.1.1 Allowances for Loan Losses to Allowances Required for Loans Delinquent>12 Months (P₁)

This ratio measures the adequacy of the allowances for loan losses when compared to the allowances required for covering all loans delinquent more than 12 months.

Table 4.1: Allowances for Loan Losses to Allowances Required for Loans Delinquent>12 Months

P ₁	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Allowance for Loan Losses	5,765	17,865	25,818	30,254	40,273
b. Loan Balances of all loans delinquent more than 12 months	0.00	9,559	16,947	20,158	28,716
Allowances for Loan Losses/Allowances Required for Loans Delinquent>12 months (%)	0.00	187	152	150	140
PEARLS Standard of Excellence (%)	100	100	100	100	100

Source: Annual Reports, PasGGB. Ltd.

The data given in Table 4.1 exhibits that allowance for loan losses to allowances required for loans delinquent greater than 12 months is 187 percent, 152 percent, 150 percent and 140 percent in FY 2060/61, 2061/62, 2062/63 and 2063/64. Since the allowances for loan losses is for both the delinquent loans greater than 12 months and between 1 to 12 months, the ratios calculated in the given Table 4.1 is for both balances of loans

delinquent greater than 12 month and between 1 to 12 months. These ratios can cover the balances of loans delinquent from 1 to 12 month with allocating the 35 percent after the allocation of 100 percent provision of allowances for the loans delinquent greater than 12 months. So, PasGGB Ltd. has fully provisioned to cover 100 percent of the loans that are delinquent more than 12 months in each consecutive year. The provisions of allowances are maintained as per the standard of PEARLS, upholding 100 percent against the loan delinquency that is more than 12 months. In FY 2058/59, the institution has not classified the loan delinquency in accordance with time periods.

4.1.1.2 Solvency (P₆)

This indicator measures the relative worth of one rupee in member-client savings after adjusting for known and probable loan losses. It is also the net value of assets to total shares and deposits. The net value of assets is calculated by deducting the total delinquency loans, liabilities and problem assets from the sum of total assets and allowances for loan loss provision and savings deposits with the adjustments of problem assets to be liquidated in the respective periods. The practice of PasGGB Ltd. in writing off the delinquent loan is at the five years interval.

Table 4.2: Solvency or Net Value of Assets to Total Shares & Deposits

P ₆	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
Solvency (%)	63.47	66.96	64.71	66.32	67.64
PEARLS Standard of Excellence	>=100%	>=100%	>=100%	>=100	>=100

Source: Annual Reports, PasGGB. Ltd.

The data given in the Table 4.2 exhibits that solvency or net Value of assets to total shares and deposits ratio is 63.47 percent, 66.96 percent, 66.71 percent, 66.32 percent and 67.64 percent in FY 2059/60, 2060/61, 2061/62,

2062/63 and 2063/64 respectively. It reveals that the ratio is fluctuating over the years in the first-four study periods and increased to 67.64 percent in FY 2063/64 from 63.47 percent in FY 2059/60. All the ratios are below the PEARLS standard. PasGGB Ltd. has not allotted the problem assets to be liquidated during the study periods.

4.1.2 Effective Financial Structure (E)

Financial Structure determines growth potential, earnings capacity, and overall strength. It is the single most important in determining growth potential, earning capacity and overall financial strength. MFIs are encouraged to maximize earning assets as the means to achieve sufficient earnings.

As stated in research methods, the tools E_1 , E_2 , E_3 , E_5 , E_6 , E_8 and E_9 have been calculated and analyzed under Effective Financial Structure (E). The data related to non-financial investments and member shares were not available to calculate and analyze the E_4 and E_7 .

4.1.2.1 Net Loans to Total Assets (E_1)

The net loan is loan after the deduction of total allowance for loan losses from the gross loan portfolio of the institution. The allowance is the portion of amount provisioned against the delinquency. This ratio measures the percentage of total assets invested in the loan portfolio. According to CU model, setting different interest rates on loans with respect to its purpose, amounts and terms and condition is of crucial need that institutions should strongly stand for. The risk associated with the loans should be meticulously analyzed so as to prevent the loan from falling in the delinquency. The income to institution is largely dependent upon the level of loans transaction and its quality. In case of the loan delinquency, an aggressive collection programs, in the event of initiation, helps to minimize the level of delinquency. In a high level of delinquency, an institution has to allocate the adequate allowances for it which, in turn, reduces the income stream of

institution. Productive assets should be encouraged to lead to achieve sufficient earnings.

Table 4.3: Net Loans to Total Assets

E ₁	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Gross Loan Portfolio Outstanding	330,971	347,851	345,581	385,433	430,753
b. Total Allowance for Loan Losses	5,765	17,865	25,818	30,254	40,273
c. Total Assets	599,331	685,558	701,998	708,960	691,455
Net Loans/Total Assets (%)	54.26	48.13	45.55	50.10	56.47
PEARLS Standard of Excellence (%)	70-80	70-80	70-80	70-80	70-80

Source: Annual Reports, PasGGB. Ltd.

The data given in the Table 4.3 shows that the ratios of net loans to total assets are 54.26 percent, 48.13 percent, 45.55 percent, 50.10 percent and 56.47 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The ratio is in fluctuating but increasing trend. In 2061/62, it fell down to 45.55 percent but rose up to 50.10 percent and 56.47 percent in FY 2062/63 and 2063/64 respectively. The ratios are below the PEARLS standard.

4.1.2.2 Liquid Investments to Total Assets (E₂)

It measures the percentage of total assets invested in short-term investments. Excess liquidity is discouraged because the margins on liquid investments are significantly lower than those earned on the loan portfolio. In the event of high investments in this category, it invariably affects the gross spread and indirectly affects the loan portfolio and the institutional capital. Institution should have an effective analysis on member-client withdrawal. The level of investments in short-term assets should be in relation to the member's withdrawal.

Table 4.4: Liquid Investments to Total Assets

E ₂	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Liquid Investments	45,873	82,821	56,410	53,201	40,689
b. Total Assets	59,9331	685,558	701,998	708,960	691,455
Liquid Investments/Total Assets (%)	7.65	12.08	8.04	7.50	5.88
PEARLS Standard of Excellence (%)	Max 20	Max 20	Max 20	Max 20	Max 20

Source: Annual Reports, PasGBB. Ltd.

The data in Table 4.4 reveals that the liquid investments to total assets are 7.65 percent, 12.08 percent, 8.04 percent, 7.50 percent and 5.88 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The institution has maintained a static rate of 7.73 percent in average in all study years except in FY 2060/61 and 2063/64. It has increased to 12.08 percent in FY 2060/61 from FY 2059/60 and it showed decreasing trend in later consecutive years. All the ratios are within the PEARLS standard with maximum 12.08 percent in FY 2060/61. The trend of liquid investments paced reversely with total assets except in the FY 2060/61 and 2063/64.

4.1.2.3 Total Financial Investments to Total Assets (E₃)

It measures the percentage of total assets invested in long-term investments. Financial investments yield some income but have an identifiable risk. These incomes are used for liquidity risk management. This ratio affects the gross spread and net earnings the institution yield. It has an indirect relationship with loan portfolios. At the situation when an institution do not find investment opportunities in a productive sectors or the interest earned from such areas is significantly low, the institution seems investing in financial segments.

Table 4.5: Total Financial Investments to Total Assets

(in Thousands Rupees)

E ₃	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Financial Investments	191,115	222,815	272,815	239,189	183,224
b. Total Assets	599,331	685,558	701,998	708,960	691,455
Total Financial Investments/ Total Assets (%)	32	32.50	38.86	33.74	26.50
PEARLS Standard of Excellence (%)	Max 10	Max 10	Max 10	Max 10	Max 10

Source: Annual Reports, PasGGB. Ltd.

The data in Table 4.5 exhibits that the total financial investments to total assets are 32 percent, 32.50 percent, 38.86 percent, 33.74 percent and 26.50 percent in FYs 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The ratio initially increased in the first- three years and later it decreased consecutively. The ratio highly increased to 38.86% in FY 2061/62 and gradually decreased to 33.74 percent and 26.50 percent in the FYs 2062/63 and 2063/64 respectively. It is declining in later years; the ratios are, however, still tremendously high over the PEARLS standard. In terms of micro finance drive, the institution may be hindered in grasping the objective of reaching at poor and ultra-poor through micro credit service as envisioned by the institution thus investing in financial segments.

4.1.2.4 Saving Deposits to Total Assets (E₅)

It measures the percentage of total assets financed by savings deposits. The heavy deposit savings indicate that institutions have developed effective marketing programs and achieved financial independence. Saving deposit is affected by the interest rates the institution offers to the depositors.

According to CU model, setting savings rates within the market average is a mandatory. But, attempting to pay more than the market rate may hinder a problem. Such interest charges should be below the loans rates

charged. Adequate provision of allowances for loan loss is another consideration that institution should opt that safeguard to depositors. An institution working professionally develops its image that helps to attract more new depositors.

Table 4.6: Saving Deposits to Total Assets

E ₅	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
Saving Deposits/Total Assets (%)	14.76	15.22	13	13.04	14.55
PEARLS Standard of Excellence (%)	70-80	70-80	70-80	70-80	70-80

Source: Annual Reports, PasGGB. Ltd.

The data given in the Table 4.6 exhibits that the ratio of saving deposits to total assets are 14.76 percent, 15.22 percent, 13 percent, 13.04 percent and 14.55 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The ratio is in decreasing trend with the highest increase 15.22 percent in FY 2060/61 and the lowest 13 percent in FY 2061/62. The ratio of savings deposits to total assets is far below the PEARLS standard in all the consecutive years.

4.1.2.5 Borrowed Funds to Total Assets (E₆)

This indicator measures the percentage of total assets financed by external borrowings. The external funds are mandatory when the institution becomes unable to accrue the savings deposits in order to finance in productive areas.

Table 4.7: Borrowed Funds to Total Assets

E ₆	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Borrowed Funds	426,604	482,585	505,771	500,333	467,449
b. Total Assets	599,331	685,558	701,998	708,960	691,455
Borrowed Funds/Total Assets (%)	71.18	70.39	72.05	70.57	67.60
PEARLS Standard of Excellence (%)	Max 5	Max 5	Max 5	Max 5	Max 5

Source: Annual Reports, PasGGB. Ltd.

In data given in the Table 4.7 shows that the ratios of borrowed funds to total assets are 71.18 percent, 70.39 percent, 72.05 percent, 70.57 percent and 67.60 percent in FYs 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The ratio is in fluctuating trend in the first-four study periods. It decreased to 67.60 percent in FY 2063/64 from 71.18 percent in FY 2059/60. The ratios are enormously high compared to the PEARLS standard. It indicates that PasGGB Ltd. has extensively relied on the borrowed funds.

4.1.2.6 Institutional Capital to Total Assets (E₈)

It measures the percentage of total assets financed by Institutional Capital. Since institutional capital has no explicit interest cost, it will generate 100% return to the institutions investing to the productive assets.

According to CU, focus on pandemic is a crucial that institution should pay heed in its operation. Institution need to strengthen its institutional capital so that it can withstand losses associated with pandemic such as death, defaulted loans for medical and hospital expenses, school fees for foster children etc. A stronger defense against such problems is of mandatory for institution for long-term survival.

Table 4.8: Institutional Capital to Total Assets

E ₈	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
Institutional Capital/Total Assets (%)	0.87	0.91	0.93	0.71	0.93
PEARLS Standard of Excellence (%)	Min 10	Min 10	Min 10	Min 10	Min 10

Source: Annual Reports, PasGGB. Ltd.

The data given in the Table 4.8 reveals that the ratio of institutional capital to total assets are 0.87 percent, 0.91 percent, 0.93 percent 0.71 percent and 0.93 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The ratio is far below the PEARLS standard. This

occurred, as the institution could not allocate sufficient capital due to failure in earning as a result of high level of delinquency.

4.1.2.7 Net Institutional Capital to Total Assets (E₉)

It measures the real level of institutional capital, after adjusting the allowances for risk assets to meet the standards of P1, and covering any other potential losses. Net Institutional Capital is calculated by deducting the all-delinquent loan balances and problems assets.

Table 4.9: Net Institutional Capital to Total Assets

E ₉	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
Net Institutional Capital/Total Assets (%)	1.84	1.75	1.88	1.93	2.08
PEARLS Standard of Excellence (%)	Min 10	Min 10	Min 10	Min 10	Min 10

Source: Annual Reports, PasGGB. Ltd.

The data given in the Table 4.9 exhibits that the ratio of net institutional capital to total assets is 1.84 percent, 1.75 percent, 1.88 percent, 1.93 percent and 2.08 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. All ratios are far below the PERALS standard of minimum 10 percent. PasGGB Ltd. could not achieve the standard as the income from the operation could not be satisfactorily attained. PasGGB Ltd. has not apportioned the problems assets that have to be liquidated in the study year period.

4.1.3 Asset Quality

Asset Quality indicators measure the impact of assets which do not generate income such as loan delinquency and non-earning assets. The delinquency ratio is the most important measurement of institutional weakness. Delinquency is measured using the portfolio at risk method, which defines as delinquent the entire outstanding balance of any loan affected by arrears. The higher the ratio of non-earning assets, the more difficult it is to generate sufficient earnings.

Under Assets Quality (A), the tools A₁ and A₂ have been calculated and analyzed.

4.1.3.1 Total Loan Delinquency to Total Loan Portfolio (A₁)

It measures the total percentage of delinquency in the loan portfolio, using the criterion of outstanding delinquent loan balances instead of accumulated delinquent loan payments. The poor credit analysis put the institution into a serious problem in collection of loans on timely fashion. The institution in the event of the loan delinquency should establish surcharge charges of certain percent a month to mitigate the problem that might arise in its operation. This challenge is largely due to the wider and adverse macro economic factors.

Table 4.10: Total Loan Delinquency to Total Loan Portfolio

A ₁	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Loan Delinquency	0.00	17,009	23,336	24,305	38,832
b. Total Loan Portfolio	330,971	347,851	345,581	385,423	430,753
Total Loan Delinquency/Total Loan Portfolio (%)	0.00	4.89	6.75	6.31	9.01
PEARLS Standard of Excellence (%)	<=5	<=5	<=5	<=5	<=5

Source: Annual Reports, PasGBB. Ltd.

The data in the Table 4.10 reveals the ratio of loan delinquency to total loan portfolio is 4.89 percent, 6.75 percent 6.31 percent and 9.01 percent in FYs 2060/61, 2061/62, 2062/63 and 2063/64 respectively. In FY 2059/60, data were not available, as the institution has not categorized the delinquent loan based on its time. The ratio is in fluctuating trend with the highest ratio 9.01percent in FY 2063/64 and the lowest 4.89 percent in FY 2060/61. All the ratios are not within the PEARLS standard of excellence

except in FY 2060/61. The delinquency has increased tremendously than in growth in loan portfolio in FY 2063/64.

4.1.3.2 Non-earning Assets to Total Assets (A₂)

It measures the percentage of the total assets, which do not produce income. Monitoring the ratio of non-earning assets to total assets comes at hand and is ensured these non-earnings assets are not financed by savings deposits or member shares. The non-earning assets include cash at hand, fixed assets, inter-office advances and dues, other assets and total delinquent loans.

Table 4.11: Non-earning Assets to Total Assets

A ₂	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
Non-earning Assets/Total Assets (%)	5.12	4.68	3.87	4.35	5.29
PEARLS Standard of Excellence (%)	<=5	<=5	<=5	<=5	<=5

Source: Annual Reports, PasGGB. Ltd.

The data given in the Table 4.11 shows that the ratio of non-earning assets to total assets is 5.12 percent, 4.68, 3.87 percent, 4.35 percent and 5.29 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The ratio is in fluctuating trend with the highest ratio 5.29 percent in FY 2063/64. The increase of ratio in 2063/64 is due to the significant investment in the fixed assets and other assets. The ratios in the FY 2060/61, 2061/62 and 2062/63 are within the PEARLS standard of excellence but have exceeded the standard in FY 2059/60 and 2063/64.

4.1.4 Rate of Return and Cost

Earnings and Costs are determined by dividing all interest income, delinquent interest penalties, and commissions from lending operations by the total loan portfolio to give the return on loans. This is compared to the

return on financial investments, income from bank savings accounts, and liquidity reserves divided by the amounts invested in those areas.

This indicators measure the average income yield for each of the most productive assets of the Balance Sheet. In addition, they measure the average yield for each of the most important liability and capital accounts. The indicators of Return and Costs monitor the return earned on each type of assets and costs on each type of liabilities.

Under Rate of Returns and Cost (R), the tools R_1 , R_3 , R_5 , R_6 , R_8 , R_9 , R_{10} , and R_{11} and R_{12} have been calculated and analyzed.

4.1.4.1 Total Loan Income to Average Loan Portfolio (R_1)

It measures the yield on the loan portfolio during the year. The purpose of this ratio, R_1 is the loan prices to be set at entrepreneurial rates. The entrepreneurial rate needs to cover the cost of funds, the cost of operations and administration, the cost of provisions and the cost of contributions to increase capital at least 10 percent. The loan income also includes commissions, fees, and delinquent interest penalties. When institution falls in a high loan delinquency, it encounters a problem in earning that cover all the costs. This ratio is most affected by P_1 .

Table 4.12: Total Loan Income to Average Loan Portfolio

R_1	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Loan Income	48,558	55,823	53,892	50,692	57,716
b. Net Loan Portfolio (Net of Allowances for Loan Losses) as of Current year-end	325,206	329,986	319,763	355,168	390,480
c. Net Loan Portfolio (Net of Allowances for Loan Losses) as of Last year-end	270,893	325,206	329,986	319,763	355,168
Total Loan Income/Av. Loan Portfolio (%)	4.07	4.26	4.15	3.76	3.87

Source: Annual Reports, PasGGB. Ltd.

The data in the Table 4.12 reveals the ratio of total loan income to average loan portfolio is 4.07 percent, 4.26 percent, 4.15 percent, 3.16 percent and 3.87 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The ratio increased to 4.26 percent in FY 2060/61 from FY 2059/60 and showed fluctuating trend over the years in later study periods. This ratio is dependent upon the entrepreneurial rate. It is, to some extent, satisfactory as it has covered the cost of funds, the cost of administration and operation, the cost of provisions and the cost of contributions to increase capital. The institution has not, however, attained the goal of institutional capital to be at least 10 percent.

4.1.4.2 Financial Investment Income to Average Financial Investments (R₃)

It measures the yield on all long-term investments i.e. fixed deposits, shares, securities etc. Investing in fixed deposits, shares or the government securities yields high than bank saving accounts. CU suggests the ratio should be rest consistently as prevailing market rate the institution adheres.

Table 4.13: Financial Investment Income to Average Financial Investments

R ₃	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Financial Investment Income	14,862	16,834	23,630	19,257	16,505
b. Total Financial Investments as of Current year-end	191,815	222,815	272,815	239,189	183,224
c. Total Financial Investments as of Last year-end	138,815	191,815	222,815	272,815	239,189
Fin. Investment Income/ Avg. Fin. Investments (%)	8.99	8.12	9.54	7.52	7.81

Source: Annual Reports, PasGGB. Ltd.

The data in the Table 4.13 exhibits the ratio of financial income to average financial investments is 8.99 percent, 8.12 percent, 9.54 percent, 7.52 percent and 7.81 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The trend of the results is fluctuating over the years. The high ratio is 9.54 percent in FY 2060/61 and low is 7.52 percent in FY 2062/63. This ratio is dependent upon the market rate that adequately yields the income.

4.1.4.3 Financial Cost: Savings Deposits to Average Savings Deposits (R₅)

It measures the yield (cost) of Saving Deposits. The total interest and premium paid on savings deposits and taxes paid by MFI on savings deposits interest are included in the yield (cost). This ratio is most affected by the quality of assets and the overall income generated by the institutions. Quality assets yields high earnings and the institutions, in most of the times, can offer a competitive interest rate to the depositors in the financial market.

Table 4.14: Financial Cost: Savings Deposits to Average Savings Deposits

(in Thousand Rupees)

R ₅	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Interest Paid on Savings Deposits	6,225	7,406	6,280	5,591	5,439
b. Total Insurance Premium Paid on Savings Deposits	0.00	0.00	0.00	0.00	0.00
c. Total Tax Paid on Savings Deposits	0.00	0.00	0.00	0.00	0.00
d. Total Savings Deposits as of Current year-end	88,454	104,327	91,239	92,459	100,637
e. Total Savings Deposits as of Last year-end	67,874	88,454	104,327	91,239	92,459
Savings Deposits/Avg. Savings Deposits (%)	7.96	7.68	6.42	6.09	5.63
Inflation	2.9	4.8	4	4.5	8

Source: Annual Reports, PasGGB. Ltd.

The data given in the Table 4.14 reveals that the ratio of financial cost: savings deposits to average savings deposits is 7.96 percent, 7.68 percent, 6.42 percent, 6.09 percent and 5.63 percent in the FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The PEARLS standard suggests maintaining the market rate above inflation rate so as to increase the savings of member-clients. Market rates stood above the inflation rates throughout the first-four study periods. In FY 2063/64, market rates fell down the inflation rate. In other words, the real rate of interest is positive during the first-four study periods and negative in the FY 2063/64. PasGBB Ltd. pays taxes only on the savings deposits exceeding or equal to 15, 000 rupees. No such cases have been experienced by the institution and, as a result, no taxes have been paid on savings deposits by the institution so far. PasGBB Ltd. has not practiced insurance premium payment on savings deposits so far.

4.1.4.4 Financial Cost: Borrowed Funds to Average Borrowed Funds (R₆)

It measures the yield (cost) of all borrowed funds. The yield consists of interest paid on borrowed funds.

CU suggests the ratio should be maintained according to prevailing market rate or the rate on the borrowed funds should be same or lesser yield than yield on savings deposits. Institutions should differentiate savings interest rates on different ranges of external credit to ensure it gives a fair interest income to and among the creditors who have the large amounts of idle and frozen money. The non-earning assets and level of delinquency loan affect this ratio. A high percentage written-offs loan remain hinders the level of earning.

Table 4.15: Financial Cost: Borrowed Funds to Average Borrowed Funds

R ₆	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Interest Paid on Borrowed Funds	22,451	25,053	25,742	21,003	19,799
b. Total Borrowed Funds as of Current year-end	426,604	482,585	505,771	500,333	467,449
c. Total Borrowed Funds as of Last year-end	337,774	426,604	482,585	505,771	500,333
Borrowed Funds/Average Borrowed Funds (%)	5.87	5.51	5.21	4.18	4.09

Source: Annual Reports, PasGGB. Ltd.

The data in the Table 4.15 exhibits that the ratio of financial cost: borrowed funds to average borrowed funds is 5.87 percent, 5.51 percent, 5.21 percent, 4.18 percent and 4.09 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The ratio is in decreasing trend and it decreased to 4.09 percent in FY 2063/64 from 5.87 percent in FY 2059/60. The data revealed the ratios of financial cost in borrowed funds to average borrowed funds are below than savings deposits to average savings deposits. This ratio is dependent upon the market rates.

4.1.4.5 Gross Margin to Average Total Assets (R₈)

It measures the gross income margin generated, expressed as a yield on all assets before subtracting operating expenses, provisions for loan losses and other extraordinary items. This indicator provides the institutions in the yield of an adequate income to cover all operating expenses and allowances for loan losses and provide for adequate increases in institutional capital. Institution needs to generate an adequate income to cover all operating expenses and allowances for loan losses and provide for adequate increases in institutional capital.

This ratio is linked to R9, R11 and R12. It is affected by income from loan, level of delinquency loan, non-earning assets, liquidity and the

financial costs. Adequate uphold of liquidity, a higher delinquency loans, non-earning assets and heavy incurrence of financial costs hinder the earnings which determine the sustainability of institutions. Minimizing the operating expenses and augmenting the earning level from both recurring and non-recurring activities significantly give rise to increase in this ratio. Dividend, in general, is not termed the expenses. It is the apportionment of income to shareholders which is also regarded the interest to shareholders. But, CU has categorized it as an expense. Non-financial income is the income generated from the investment made on Pharmaceuticals, Grocery and Schools. PasGGB Ltd. has not experienced such income as a result of non-financial investments.

Table 4.16: Gross Margin to Average Total Assets

R ₈	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
Gross Margin/Avg. Total Assets (%)	7.30	6.80	6.39	5.88	7.40

Source: Annual Reports, PasGGB. Ltd.

The data given in the Table 4.16 shows that the ratio of gross margin to average total assets is 7.30, 6.80, 6.39, 5.88 and 7.40 in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The ratio is in decreasing trend for the first-four study periods and increased in FY 2063/64. This ratio is linked with R₉, R₁₁ and R₁₂. The institution has been able to lower R₉, however R₁₁ and R₁₂ is not sound to ensure this ratio is within the PEARLS standard.

4.1.4.6 Operating Expenses to Average Total Assets (R₉)

It measures the cost associated with the management of institution overall assets. This cost is measured as a percentage of total assets and indicates the degree of operational efficiency or inefficiency. These costs include the both office management cost and staff salary. For survival of institution, a meticulous review in administrative structure is dire to

determine the need for each position and to readjust salaries. Operating expenses should not be incurred over the allocation of budget. In most of the times, institutions do not use budget as a tool for the authorization of expenses. A sound resource only ensures the institution that it can spend but with a thorough analysis in the allocation of resources for expenses.

Table 4.17: Operating Expenses to Average Total Assets

R ₉	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Operating Expenses (exclusive of Provisions for Loan Losses)	32,207	29,695	31,467	31,709	34,006
b. Total Assets of Current year-end	599,331	685,558	701,998	708,960	691,455
c. Total Assets as of Last year-end	481,529	599,331	685,558	701,998	708,960
Operating Expenses/Avg. Total Assets (%)	5.96	4.62	4.54	4.49	4.86
PEARLS Standard of Excellence (%)	5 %	5 %	5 %	5 %	5 %

Source: Annual Reports, PasGGB. Ltd.

The data in the Table 4.17 exhibits that the ratio of operating expenses to average total assets is 5.96 percent, 4.62 percent, 4.54 percent, 4.49 percent and 4.86 percent in FYs 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. PasGGB Ltd. has been able to maintain the ratio in average with PEARLS standard in all the study period. It has decreased to 4.49 percent in FY 2062/63 from 4.96 percent in FY 2059/60 and finally it rose up to 4.86 percent in FY 2063/64.

4.1.4.7 Provision for Loan Losses to Average Total Assets (R₁₀)

It measures the cost of losses from risk assets such as delinquent loans or un-collectible accounts receivables. This cost is different from other operational expenses and should be separated to highlight the effectiveness

of MFI collection policies and procedures. PEARLS suggests the institution to maintain the provision enough to cover 100 percent of delinquent loans for more than 12 months and 35 percent for loans delinquent from 1 month to 12 months. Generally, lowering the delinquency as much as it can gives a safe cushion to institution from going into an adverse effect.

Table 4.18: Provision for Loan Losses to Average Total Assets

(In Thousand Rupees)

R ₁₀	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Current Year Provision Expense of all Risk Assets	5,765	17,865	25,818	30,254	40,273
b. Total Assets as of Current year-end	599,331	685,558	701,998	708,960	691,455
c. Total Assets as of Last year-end	481,529	599,331	685,558	701,998	708,960
Provision for Loan Losses/Avg. Total Assets (%)	1.07	2.78	3.72	4.29	5.75

Source: Annual Reports, PasGGB. Ltd.

The data in the Table 4.18 shows that the ratio of provision for loan losses to average total assets is 1.07 percent, 2.78 percent, 3.72 percent, 4.29 percent and 5.75 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The ratio is in increasing trend and it increased to 5.75 percent in FY 2063/64 from 1.07 percent in FY2059/60. This ratio depends upon the level of loan delinquencies.

4.1.4.8 Non-Recurring Income to Average Total Assets (R₁₁)

It measures the net amount of non-recurring income and expenses. These items typically should not be a significant amount if the MFI is specializing in financial intermediation.

Table 4.19: Non-Recurring Income to Average Total Assets

R ₁₁	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Non-recurring Income	2,712	3,471	4,816	4,149	2,844
b. Total Assets as of Current year-end	599,331	685,558	701,998	708,960	691,455
c. Total Assets as of Last year-end	481,529	599,331	685,558	701,998	708,960
Non-recurring Income /Avg. Total Assets (%)	0.50	0.54	0.69	0.59	0.41

Source: Annual Reports, PasGGB. Ltd.

The data in the Table 4.19 reveals that the ratios of non-recurring income or expenses to average total assets are 0.50 percent, 0.54 percent, 0.69 percent, 0.59 percent and 0.41 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The ratio, at inception, increased to 0.69 percent in the FY 2062 from 0.50 percent in FY 2060. Later, it decreased to 0.41 percent in FY 2063/64 from 0.69 percent in the FY 2061/62. This ratio is very much minimal and within the PEARLS standard.

4.1.4.9 Net Income to Average Total Assets (R₁₂)

It measures the adequacy of earnings and also, the capacity to build institutional capital. This ratio is most linked to R9. Control and reduction of unnecessary overhead produce high earnings. Besides, a prompt collection of loan in the stipulated time frame produces the earnings. The level of high delinquencies debar from earning the income. Such loans should be lowered and reinvested them in productive assets that give a good margin.

Table 4.20: Net Income to Average Total Assets

(in Thousand Rupees)

R ₁₂	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Net Income (After dividends)	3,432	4,233	3,175	365	1,728
b. Total Assets as of Current year- end	599,331	685,558	701,998	708,960	691,455
c. Total Assets as of Last year-end	481,529	599,331	685,558	701,998	708,960
Net Income/Average Total Assets (%)	0.64	0.66	0.46	0.05	0.25

Source: Annual Reports, PasGGB. Ltd.

The data in the Table 4.20 exhibits that the ratio of net income to average total assets is 0.64 percent, 0.66 percent, 0.46 percent, 0.05 percent and 0.25 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. It initially increased to 0.66 percent in FY 2059/60 from 0.64 percent in FY 2059/60. Later it showed the decreasing trend up to the FY 2062/63 and finally increased to 0.25 percent in FY 2063/64 from 0.05 percent in FY 2062/63. This ratio is linked to institutional capital to total assets ratio, E_9 . Since E_9 has not attained the goal, the net income to average total assets ratio is not adequate.

4.1.5 Liquidity

Liquidity ratios reveal if the MFI is managing its cash so that it can meet deposit withdrawal requests and liquidity reserve requirements while minimizing the amount of idle funds that earn no interest income. The indicators reveal if institution is administering its cash to meet deposit withdrawal requests and liquidity reserve requirements while, at the same time, minimizing the amount of idle funds. Depositors' confidence will be destroyed if an institution is not able to serve client withdrawals.

The "ideal" target is to maintain a minimum of 20 percent of deposit savings in liquid accounts, after paying all immediate obligations under 30-days. The idle liquid funds ratio should be as close to zero percent as possible.

Under Liquidity, the tools L_2 and L_3 have been calculated and analyzed.

4.5.1 Liquidity Reserves to Savings Deposits (L_2)

It measures the compliance with obligatory of CU or other liquidity reserve deposit requirements. An excess uphold of liquidity reserves encumbers institution from generating income. As the interest margin on depository institutions or other commercial banks is significantly low than investing them in productive assets, such deposition in liquidity reserves is discouraged to institutions. The heavy portion of liquidity leads to institution negativity in earning and institution needs to assess the level of liquidity to maintain to off-set the unexpected demand from member's savings accounts.

Table 4.21: Liquidity Reserves to Total Deposits

L_2	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Liquidity Reserves (Earning Asset)	49,256	82,821	56,410	53,201	40,699
b. Total Liquidity Reserves (Non-earning Asset)	4,986	4,733	2,732	2,308	4,027
c. Total Savings Deposits	67,874	104,327	91,239	92,459	100,637
Liquidity Reserves/Total Deposits (%)	79.92	83.92	64.82	60.04	44.43
PEARLS Standard of Excellence (%)	10	10	10	10	10

Source: Annual Reports, PasGGB. Ltd.

The data in the Table 4.21 exhibits that the ratios of liquidity reserves to total assets are 79.92 percent, 83.92 percent, 64.82 percent, 60.04 percent

and 44.43 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. It at inception increased to 83.92 percent in FY 2060/61 from FY 2059/60 and declined gradually in FY 2061/62, 2062/63 and 2063/64. It shows that the ratio is in decreasing trend, it is, however, still an enormously high over PEARLS standard.

4.1.5.2 Non-Earning Liquid Assets to Total Assets (L₃)

It measures the percentage of total assets that is invested in non-earning liquid accounts. Non-earning assets is the cash at hand which do not generate income. But institution should establish maximum amounts to keep in cash and monetary deposits for deposits withdrawal. An analysis in administering the cash mitigates institutions how much cash to be uphold at hand at the event of member-clients deposit withdrawal.

Table 4.22: Non-Earning Liquid Assets to Total Assets

(in Thousand Rupees)

L ₃	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Liquid Non-Earning Assets	4,986	4,733	2,732	2,308	4,027
b. Total Assets	599,331	685,558	701,998	708,960	691,455
Non-earning Liquid Assets/Total Assets (%)	0.83	0.69	0.39	0.33	0.58
PEARLS Standard of Excellence	<1%	<1%	<1%	<1%	<1%

Source: Annual Reports, PasGGB. Ltd.

The data in the Table 4.22 exhibits that the ratios of non-earning assets to total assets are 0.83 percent, 0.69 percent, 0.39 percent, 0.33 percent and 0.58 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. It decreased to 0.33 percent in FY 2062/63 from 0.83 percent in FY 2059/60 and rose up to 0.58 percent in FY 2063/64 from 0.33

percent in FY 2062/63. The ratios are within the PEARLS standard, it is, however, indicating that it may rise up after FY 2063/64.

4.1.6 Signs of Growth

Growth is measured by inflation-adjusted real growth, which is the key to long-term viability. By comparing the growth in total assets to other key areas, it is possible to detect changes in the balance sheet structure which have an impact on earnings. The loan portfolio is the most important and profitable institution's asset. The growth of total assets depends on the growth of savings. Growth of institutional capital, which consists almost entirely of retained surpluses, is the best indicator of profitability within the MFIs. One sign of success for a MFI is sustained growth of institutional capital, usually faster than the growth of total assets.

In this section of PEARLS, the indicators measure both financial and membership growth. The indicators under signs of growth enables balance sheet account comparisons between structure and yield, while simultaneously trying to achieve real growth. It measures the increase in new member in the community.

Under Signs of Growth (S), the tools S_1 , S_2 , S_3 , S_5 , S_6 , S_8 and S_{11} have been calculated and analyzed.

4.1.6.1 Growth in Loans (S_1)

It measures the year-to-date growth of the loan portfolio. The likelihood of profitability is possible if growth in total loans keeps pace with growth in total assets. This ratio is affected by R1 and R10. The earnings from loans and the provision of allowances for loan delinquency greatly affect in the growth in loans. A prompt collection of loan in a specified time schedule helps institution from falling in the bracket of loan delinquency. When delinquencies do not occur, the earning of institution increases and can further be re-invested in productive assets, which yields income.

It is important to know various investment opportunities for income. Loan portfolio is profitable for institution and emphasis should be set in such areas. If loan growth keeps pace with growth in total assets, there is likelihood that profitability will be maintained. If loan growth drops, it indicates that less profitable areas are growing more quickly. According to PEARLS standard, if institution needs to increase the percentage of total loans outstanding (E_1), the growth in loans (S_1) should be greater than growth in total assets (S_{11}).

Table 4.23: Growth in Loans

S_1	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Current Loan Portfolio balance	330,971	347,851	345,581	385,423	430,753
b. Loan Portfolio balance as of Last year-end	272,245	330,971	347,851	345,581	385423
Growth in Loans (%)	21.57	5.10	(0.65)	11.53	11.76

Source: Annual Reports, PasGGB. Ltd.

The data in the Table 4.23 reveals that the growth in loans is 21.57 percent, 5.10 percent, (0.65) percent, 11.53 percent and 11.76 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64s respectively. Initially, in the first three study years, it decreased even at negative growth of 0.65 percent in FY 2061/62 with respect to its previous year but again rose up constantly in FYs 2062/63 and 2063/64. It decreased by (0.65) percent in FY 2061/62 from FY 2060/61 and it increased to 11.53 percent and 11.76 percent in FYs 2062/63 and 2063/64 with respect to its previous year. The growth in loan is not in tune with the total assets. This ratio is dependant with E_1 . The problem of growth in loan was due to a high delinquent loan and a provision of adequate allowances for loan delinquency.

4.1.6.2 Growth in Liquid Investments (S_2)

It measures the year-to-date growth of liquid investments. Generally, excess investments in the liquid assets are discouraged due to its low earning. A heavy investment in liquid assets impedes the institution from investing in productive assets. According to PEARLS standard, if institution needs to increase the percentage of liquid investments (E_2), the growth in liquid investments (S_2) should be greater than growth in total assets (S_{11}).

Table 4.24: Growth in Liquid Investments

S_2	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Current Liquid Investments	45,873	82,821	56,410	53,201	40,689
b. Total Liquid Investments as of Last year-end	49,256	45,873	82,821	56,410	53,201
Growth in Liquid Investment (%)	(6.87)	80.55	(31.89)	(5.69)	(23.52)

Source: Annual Reports, PasGGB. Ltd.

The data in Table 4.24 exhibits that the growth in liquid investments is (6.87) percent, 80.55 percent, 31.89 percent, (5.69) percent and (23.52) percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The growths in liquid investments are in fluctuating trend. The ratio declined tremendously in FY 2060/61 from FY 2060/61. It increased by 80.55 percent to 82.821 million rupees in FY 2060/61 from FY 2060/61 and declined by (31.89) percent to 56.41 million rupees in FY 2061/62 with respect to its previous year. It rose up slightly in FY 2062/63 and declined in FY 2063/64. This ratio is dependent upon the E_1 . Since the liquid investment is in tune with the total assets the growth in liquid investments is satisfactory.

4.1.6.3 Growth in Financial Investments (S₃)

It measures the year-to date growth of financial investments. Investing in financial securities reduces the risk but consequently results a slightly low earning compared to the investments on loan portfolios. Institution relying heavily on financial investment has to borne a severe effect from earning income. CU encourages investing the fund in the loan portfolio which yields a high portion of income. This growth depends upon the financial investments to total assets, E₃.

Table 4.25: Growth in Financial Investments

S ₃	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Current Financial Investments	191,815	222,815	272,815	239,189	183,224
b. Total Financial Investments as of Last year-end	138,815	191,815	222,815	272,815	239,186
Growth in Financial Investments (%)	38.18	16.16	22.44	(12.33)	(23.40)

Source: Annual Reports, PasGGB. Ltd.

The data in the Table 4.25 exhibits that the growth in financial investments is 38.18 percent, 16.16 percent, 22.44 percent, (12.33) percent and (23.40) percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The growth trend in financial investments in first three years is fluctuating trend. It increased by 16.16 percent to 222.815 million rupees in FY 2060/61 from FY 2059/60 and increased by 22.44 percent to 272.815 million rupees in FY 2061/62 from FY 2060/61. It decreased sharply in FY 2062/63 and 2063/64 consecutively. This ratio is in decreasing trend; however it is not up to the PEARLS standard.

4.1.6.4 Growth in Saving Deposits (S₅)

Savings deposits are the cornerstone of institution growth. Its growth largely governs the change in total assets if mobilized properly. The growth

of total assets is dependent on the growth of savings. To stimulate growth in new savings deposits, aggressive marketing programs should be initiated which, in turn, affect the growth of other key areas.

It measures the year-to-date growth of savings deposits. The skill in marketing program will help in accumulating the saving deposits which affect growth in other key areas.

Table 4.26: Growth in Saving Deposits

S ₅	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Current Savings Deposits	88,454	104,327	91,239	92,459	100,637
b. Total Savings Deposits as of the Last year-end	67,874	88,454	104,327	91,239	92,459
Growth in Saving Deposits (%)	30.32	17.94	(12.54)	1.34	8.85

Source: Annual Reports, PasGGB. Ltd.

The data in the Table 4.26 shows that the growth in saving deposits is 30.32 percent, 17.94 percent, (12.54) percent, 1.34 percent and 8.85 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The growth in saving deposits has decreased by (12.54) percent to 91.239 million rupees in FY 2061/62 from FY 2060/61. It increased by 1.34 percent to 92.459 million rupees in FY 2062/63 from FY 2061/62 and again considerably increased by 8.85 percent to 100.637 million rupees in FY 2063/64 from FY 2062/63. This growth is dependent upon the E₅. Since the savings deposits to total assets are far below the PEARLS standard in all the study years, the growth in savings deposits is very minimal throughout the study periods.

4.1.6.5 Growth in Borrowed Funds (S₆)

Generally, the growth in borrowed funds is necessary for financial stabilization. In case the institution is in dire need of emergency credit, the

institution has to borrow the external funds. This indicator measures the year-to-date growth of borrowed funds. The growth in borrowed funds is affected by the ratio of borrowed funds to total assets, E_6 .

Table 4.27: Growth in Borrowed Funds

S_6	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Current Borrowed Funds	426,604	482,585	505,771	500,333	467,449
b. Total Borrowed Funds as of Last year-end	337,774	426,604	482,585	505,771	500,333
Growth in Borrowed Funds (%)	26.30	13.12	4.80	(1.08)	(6.57)

Source: Annual Reports, PasGGB. Ltd.

The data in the Table 4.27 shows that the growth in borrowed funds is 26.30 percent, 13.12 percent, 4.80 percent, (1.08) percent and (6.57) percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The ratio is in decreasing trend from 26 percent in FY 2059/60 to negative growth of 6.57 percent in FY 2063/64 with respect to its previous year. The growth in borrowed funds is decreasing but still not up to the PEARLS standard. This is due to the heavy reliance in the borrowed funds rather than in savings deposits.

4.1.6.6 Growth in Institutional Capital (S_8)

It measures the year-to-date growth of institutional capital. Static or declining growth trends in institutional capital usually indicate a problem with earnings. Earnings are necessary for a robust institutional reserve.

Usually, growth in institutional capital should be greater than the growth of total assets. A static or declining growth trend in institutional capital indicates a problem with earnings. Institutional capital reserve is essential and it should be added to get earnings. The problem may arise in the addition of institutional capital reserves if earnings are low. The growth is dependent on E_8

Table 4.28: Growth in Institutional Capital

S ₈	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Institutional Capital	5,233	6,265	6,549	5,058	6,396
b. Total Institutional Capital as of the Last year-end	4,835	5,233	6,265	6,549	5,058
Growth in Institutional Capital (%)	8.24	19.72	4.54	(22.77)	26.46

Source: Annual Reports, PasGGB. Ltd.

The data in the Table 4.28 exhibits the growth in institutional capitals is 8.24 percent, 19.72 percent, 4.54 percent, (22.77) percent and 26.46 percent in FY 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The growth in institutional capital is fluctuating trend over the years with massive negative growth by 22.77 percent to 5.058 million rupees in FY 2062/63 from FY 2061/62 and remarkable growth by 26.46 percent to 6.396 million rupees in FY 2063/64 from FY 2062/63. The growth in institutional capital shows an alarming drift as a result of poor earning.

4.1.6.7 Growth in Total Assets (S₁₁)

It measures the year-to-date growth of total assets. Total assets growth is one of the most important ratios. Strong and consistent growth in total assets improve many of the PEARLS ratios. By comparing the growth in total assets to other key areas, it is possible to detect changes in the balance sheet structure, which could have a positive or negative impact on earnings.

Table 4.29: Growth in Total Assets

S ₁₁	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Current Assets	599,331	685,558	701,998	708,960	691,455
b. Total Assets as of the Last year- end	481,529	599,331	685,558	701,998	708,960
Growth in Total Assets (%)	24.46	14.39	2.40	0.99	(2.47)
Inflation	2.9	4.8	4	4.5	8

Source: Annual Reports, PasGGB. Ltd.

The data in Table 4.29 exhibits that the growth in total assets is 24.46 percent, 14.39 percent, 2.40 percent, 0.99 percent and (2.47) percent in FYs 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. The growths in total assets are declining trend with the massive decrease in first three years of study periods and slightly low in the later two years compared to its previous year. The growth decreased by (2.47) percent to 691.46 million rupees in FY 2063/64 from FY 2062/63. The growth in total assets stood above inflation rate in FY 2059/60 and 2060/61 and below in later three study periods.

4.2 Major Findings of the Study

4.2.1. Over the five studies year period, PasGGB Ltd. has been able to make provisions for delinquent loans at 100 percent of the required PEARLS standard of delinquency. The delinquency of institution is very high, it can, however, defend with future uncertainties by the provision of allowances for the delinquency.

4.2.2. PasGGB has been consistently maintaining the solvency ratio in increasing trend except in FY 2061/62. The decrease in ratio in FY 2061/62 was due to the sharp decrease of total savings, which has a direct relationship with total assets. The lowest ratio is 63.47 percent in FY 2059/60 and the highest ratio is 67.64 percent in FY 2063/64.

The ratio has not attained the PEARLS standard, which is high below throughout the study year periods.

- 4.2.3. PasGGB Ltd. has consistently maintained the ratio of net loans to total assets above 45 percent during the 5 year period, but has not still attained the minimum prudential PEARLS standard of 70-80 percent. This ratio is decreasing from FY 2059/60 to FY 2061/62 and increasing in later two consecutive years. The standard was not geared up due to a heavy portion of non-earning assets and delinquency adhered in the institution.
- 4.2.4. The ratio of liquid investments to total assets of PasGGB Ltd. is decreasing consecutively from FY 2060/61 to FY 2063/64. The highest ratio is 12.08 percent in FY 2060/61 and the lowest in FY 2063/64 and has maintained within PEARLS standard.
- 4.2.5. PasGGB Ltd. has maintained financial investments to total assets ratio above the PEARLS standards for the five-year study period. The ratio highly increased to 38.86% in the FY 2062 and gradually decreased to 33.74 percent and 26.50 percent in FYs 2062/63 and 2063/64 respectively
- 4.2.6. PasGGB Ltd. has not been able to maintain the ratio of savings deposits to total assets with the PEARLS standard of 70-80 percent in all the consecutive periods. The highest ratio is 15.22 percent in FY 2060/61 and the lowest is 13 percent in FY 2061/62. It is fluctuating trend but increasing in later two consecutive years. It indicates that the institution has relied on the external funds or the interest on the savings deposits was relatively low and market rate fell below inflation. No concerted effort has been traced out in the savings deposits program, which has, in turn, caused poor ratio in this category.

- 4.2.7. PasGGB has maintained the ratio of borrowed funds to total assets tremendously high above the PEARLS standard of maximum 5 percent in all the consecutive periods. The institution has maintained the highest ratio 42.05 percent in FY 2061/62 and the lowest in FY 2063/64.
- 4.2.8. PasGGB has not maintained the ratio of institutional capital to total assets within the PEARLS standard. The highest ratio of institution is 0.93 percent in FYs 2061/62 and 2063/64 and the lowest is 0.71 percent in FY 2062/63. The failure in the maintenance of this ratio is inability of generating adequate earnings due to its delinquency.
- 4.2.9. For FY 2060/61, PasGGB Ltd. has maintained the ratio of loan delinquency to total loan portfolio with PEARLS standard. In later 4 years, it exceeded the standard of PEARLS standard below or equal to 5 percent. The highest ratio was 9.01 percent in FY 2063/64. This was due to increase in delinquency. The growth of delinquency exceeded with respect to increase in total loan portfolio.
- 4.2.10. For the study periods under review, the ratio of non-earning assets to total assets has been above the PEARLS standard of equal or below 5 percent. The highest ratio was 10.91 percent in FY 2063/64. This increase in ratio is attributable to the acquisition of fixed assets and fall of high delinquency in this period.
- 4.2.11. The highest ratio of loan income to average loan portfolio ratio 4.26 percent in FY 2060/61. Over the five-year periods, PasGGB Ltd. has managed to maintain this rate to cover the cost of funds, cost of administration and operation, the cost of provisions and the cost of contribution. These costs of contribution have satisfactorily added to increase institutional capital.
- 4.2.12 PasGGB Ltd. has experienced the financial investments income to average financial investments ratio fluctuating trend over the five

years period. The highest ratio is 9.54 percent in the FY 2062 and the lowest 7.52 percent in the FY 2063. This is affected by the idle liquidity and non-earning assets the institution has uphold.

4.2.13. Over the first-four study periods, PasGBB Ltd. has experienced the market rates above inflation rates. The observed market rates were 7.96 percent, 7.68 percent, 6.42 percent and 6.09 percent in FYs 2059/60, 2060/61, 2061/62, and 2062/63 respectively. However, in FY 2063/64 the market rates fell below inflation rate. The highest ratio was 7.96 percent in FY2059/60 standing above inflation rate and the lowest was 5.63 percent in FY 2063/64, which was below the inflation rate. The ratios of financial cost: savings deposits to average savings deposits is decreasing trend in the consecutive years.

4.2.14. The financial cost: ratio of borrowed funds to average borrowed funds of PasGBB Ltd. is decreasing consecutively over the five years period. It decreased to 4.09 percent in the FY 2064 from 5.87 percent in the FY 2060. The interest on borrowed funds is decreasing with respect to decreasing level of borrowed funds.

4.2.15. For the first-four study periods the ratio is decreasing trend. It decreased to 5.88 percent in FY 2062/63 from 7.30 percent in FY 2059/60. Finally, it increased to 7.40 percent in the FY 2064. It was due to the increase in loan income and decrease in interest cost on borrowed funds. The gross spread is not significantly increasing due to the asset quality that has been entrapped in delinquency. This spread should necessarily provide a cushion to add up the institutional capital up to its standard.

4.2.16. PasGBB Ltd. has not been able to maintain the ratio of operating expenses to total assets in FY 2059/60 within the proximity of PEARLS standard. But, it has recognized to maintain the ratio within the PEARLS standard of 5 percent over the remaining four FYs. It

indicated that it has embarked the administrative and personnel exercises through the relentless efforts to reduce the incurrence of over expenditure that, in turn, gives rise to a noteworthy in its earning level.

4.2.17. Over the five FYs, PasGBB Ltd. has set aside the requisite amounts to cover the losses during the study periods. It has encountered the ratio of allocation or provision for loan losses to average total assets in increasing trend over the years. It increased to 5.75 percent in FY 2063/64 from 1.07 percent in FY 2059/60. It occurred as a result of entrap in high delinquency at this category in consecutive year periods. PasGBB Ltd. has not been able to control the delinquency despite the effort put forth by administrative and personnel shrewdness to reduce delinquency.

4.2.18. PasGBB has attained the ratio of non-recurring income or expenses to total assets as minimal which is prudential and within the PEARLS standard. Over the first three year periods, it increased consecutively and finally declined in later two year periods. This ratio increased to 0.69 percent in FY 2061/62 and decreased to 0.41 percent in FY 2063/64 from 0.50 percent in FY 2059/60. The decreasing trend is due a lesser amount of gain as a result of transaction of assets and liabilities, services charges on deposit accounts and other fiduciary activities.

4.2.19. Over the five FYs, PasGBB has been able to maintain the ratio of net income to average total assets but not adequate in terms of growth of total assets. It rested the highest 0.64 percent in FY 2059/60, it went decreasing up to FY 2062/63, and finally it rose to 0.25 percent in FY 2063/64 from 0.05 percent in FY 2062/63. This is due to the level of delinquency and which in turn, affected the gross spread of institution.

- 4.2.20. PasGBB Ltd. has not been able to maintain the ratio of liquidity reserves to total deposits within the PEARLS standard of 10 percent over the five-year study periods. The trend of this ratio is decreasing but still very high which affects the earning power of institution. It indicates that the ratio will continue to decline as PasGBB Ltd. has consistently undertaken upholding the low amount of liquidity reserves to offset the member withdrawals in the consecutive periods.
- 4.2.21. Over the five FYs, PasGBB has consistently maintained the ratio of non-earning liquid assets to total assets within the PEARLS standard of less than or equal to 1 percent. It has maintained the highest ratio of 10.91 percent in FY 2063/64 and the lowest 7.16 percent in FY 2060/61. For the first-four years, it showed the decreasing trend but later it rose up in FY 2063/64.
- 4.2.22. Over the five-year periods, PasGBB Ltd. has experienced the growth of loans fluctuating. The highest growth is 21.57 percent in FY 2059/60 and lowest growth is minus 0.65 percent in FY 2061/62. Since this ratio is dependent upon the net loans to total assets (E1), the result fell below the standard due to the level of delinquency. The problem of growth in loan was due to a high delinquent loan and a provision of adequate allowances for loan delinquency.
- 4.2.23. Over the five-year periods, the growth in liquid investments is fluctuating trend with the highest decline by 31.89 percent in the FY 2061/62 and the highest increase by 80.55 percent in FY 2060/61. It is decreasing in FY 2063/64 from FY 2062/63. It indicates PasGBB Ltd. is paying less attention investing in liquid assets in coming year.
- 4.2.24. PasGBB Ltd. has been reducing the investment in the financial areas for the last three study periods. The growth in financial investments rose up by 22.44 percent in FY 2061/62, which is a high than the growth in FY 2060/61. It tremendously decreased by 23.40 in FY

2063/64. It is dependent on the ratio of financial investment to total assets, E3 and this E3 is high above PEARLS standard.

4.2.25. The growth in savings deposits of PasGGB Ltd. has decreasing trend from FY 2059/60 to FY 2061/62 and later it increased consecutively in later two years. The highest growth was by 30.32 percent in FY 2059/60 and the lowest growth was by 12.54 percent in FY 2061/62. The growth in savings deposits shows that the institution has a potentiality to invest in loan portfolio which significantly generates more income.

4.2.26. The growth in borrowed funds of PasGGB Ltd. reveals the highest growth by 26.30 percent in FY 2059/60 and the lowest growth by 6.57 percent in FY 2063/64. The growth is decreasing trend in the five consecutive periods but not good enough even though it is decreasing.

4.2.27. The growth in institutional capital of PasGGB Ltd. exhibits the highest growth by 26.46 percent in FY 2063/64 and the lowest by 22.77 percent in FY 2062/63. The ratio is fluctuating due to the lopsidedness in the earnings over the periods.

4.2.28. The growth in total assets of PasGGB Ltd. reveals 24.46 percent, 14.39 percent, 2.40 percent, 0.99 percent and minus 2.47 percent in FYs 2059/60, 2060/61, 2061/62, 2062/63 and 2063/64 respectively. Except in FY 2059/60 and 2060/61, the growth in total assets rested below inflation rates. The highest growth ratio increased by 24.46 percent in FY 2059/60 lying above inflation rates and the lowest ratio decreased by 2.47 percent in FY 2063/64 standing below inflation rates.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter embodies three parts of the study-Summary, Conclusion and Recommendation. The first part goes over with a summarization of the whole study, the second part depicts the conclusion and the last part presents recommendation in the light of its findings.

5.1 Summary

In the microfinance community, microfinance professionals have put a great deal of effort into understanding how to measure success in its performance that determines the financial health eventually. Few Microfinance Institutions have reached self sufficiency, and fewer have made the transition to regulated financial institutions. Various methodologies and tools have been applied to know about the financial position of institution and they act as accordingly ensuring the norms are appropriate. But, they find different results if the same information is appraised from PEARLS approach. Thus, the interest was expressed to analyze the performance of MFIs with undertaking a case study of PasGBB Ltd. in the framework of PEARLS. The rationale to undertake this research is to provide new insights and methodologies to and among the microfinance practioners in the field of microfinance which determines the financial health of the institution.

The study was initiated with setting the objective to find out the fact about health check-up of PasGBB Ltd. The general, at inception, objective of the study was set to diagnose of financial health of PasGBB Ltd. to conduct the study. In addition, the specific objectives of the study were put forth to know the trend in the protection, level of effective financial structure, trend in asset quality, rates of returns and cost, liquidity position and sign of growth of institution over the five year periods.

PEARLS is a financial performance monitoring system which determines the financial health of institution through the application of its indicators. The indicators of PEARLS were applied to find a better insight in terms of financial health of PasGBB Ltd. These indicators were put forth to illustrate how change in one ratio has ramification for numerous other indicators. The financial health of PasGBB Ltd has been analyzed on the basis of PEARLS tools.

Various materials were incorporated in order to build up the conceptual review and to manifest a way to its destination of research work. The historical background of MFI, government policy on microfinance, outreach of microfinance, rationale of performance evaluation, historical background of PasGBB Ltd., theoretical prescription and interlocking concept of PEARLS- protection, solvency, risk to solvency, concept of effective financial structure, concepts of assets, liabilities and institutional capital, concept of assets quality, concept of delinquency and its causes, implication and control, , concept of non-earning-assets and its financing, concept of rates of returns and cost, concept of loan portfolio, liquid and financial investments, concept of financial intermediation and administrative costs, concept of provision for loan losses, non-recurring income, concept of liquidity and concept of sign of growth, were, to a greater extent, embodied as conceptual review. On the other part, the review of articles and review of dissertations were included in research review section.

The work was advanced as a suitable philosophical framework for the prosecution of the study that offers a methodological rationale for vigorous investigation. The research study was undertaken with respect to five years time period i.e. from FY 2058/59 to FY 2062/63, to analyze the performance of PasGBB Ltd. The study was designed within the framework of descriptive and analytical research design and the analysis therein has been made in the same way. PasGBB Ltd. was selected for the research study so as to find out more reliable and accurate data as this institution is running in

a profitable drift compared to other Grameen Bikas Banks and MFIs. The required data and information were collected from secondary sources. In addition, primary data were also used in this research work, which was collected, by using unstructured interview with senior staff in the bank. PEARLS ratio has been scrupulously implied to get the meaningful result of the collected data and information in this research work.

The analysis has been made through the calculation of ratios of PasGGB Ltd. comparing with PEARLS standard. In addition, the inflation has also been depicted as suggested by PEARLS in Nepalese scenario. With respect to protection, the institution has adequately protected the loan loss with the provision of allowance for more than one year though the trend of delinquency is rising up consecutively. The solvency of institution is very low compared to PEARLS standard due to high level of delinquency and low increase of savings. The net loans to total assets ratio is also below the PEARLS standard due to the high increase of delinquency. The institution has maintained the liquid investment to total assets ratio within the PEARLS standard. The financial investments to total assets ratios are high above the standard due to poor investment climate in loan portfolio. The savings deposits to total assets ratio is falling high below the PEARLS standard due to reliance of institution in external funds as borrowed funds to total assets ratio is high above the PEARLS standard. The ratio of institutional capital to total assets is below the PEARLS standard due to a high delinquency as a result of poor assets quality. The delinquency ratio with respect to total loan portfolio is slightly above the PEARLS standard in latter periods is due to the assets quality. The non-earning assets to total assets ratio is slightly above the standard due to the delinquency and investment in fixed assets and other assets. The loan income to average loan portfolio ratio is satisfactory but not adequate with respect to institutional capital ratio due to non-earning assets. The financial cost: savings deposits to average savings deposits is decreasing trend with the market rates standing below inflation rate in the

last study periods. The operating expense to average total assets ratio of institution is below the standard due to its administrative structure. The provision for loan loss ratio to average total assets ratio is increasing due to increase in delinquency. The net income to average total assets is decreasing due to the poor asset quality. The liquidity reserves to total deposits ratio is high above the standard relying heavily on earning liquid assets. PasGBB Ltd. has maintained the non-earning liquid assets to total assets below the standard. The growth in loans, institutional capital, savings deposits, financial investments and total assets of PasGBB Ltd. are not increasing compared to PEARLS ratio.

In short, though PasGBB Ltd has been able to allocate the allowance for loan loss, maintain non-earning liquid investments up to its standard and lower the operating expense consecutively over the periods, the institutional capital has not been attained up to its norms. This is due the poor assets, which has been fallen in a higher delinquency and unable to attract more deposits so as to augment the total assets. The poor in savings to invest in quality loan portfolio and delinquency has resulted sternly from earning a significant level of earnings so as to build up the institution's sound health in a substantial level with respect to PEARLS standard. The institution in the event of focusing primarily in savings deposits to invest in quality loan portfolio will substantially add up the institutional capital as a result of yielding earnings that shall, eventually ensures the sound financial health of PasGBB Ltd.

5.2 Conclusion

Based on the findings, the following conclusions have been drawn as its final shape of the study on financial health check-up of PasGBB Ltd.

I

The allowances for loan losses to allowances required for loan losses ratio reveals that the institution has been maintaining its standard as per

PEARLS standard. This also indicates the institution has adequate earnings to defend any future losses. It realized that delinquency, though a part of normal business risk, is expensive and therefore reducing delinquency has been an area of sustained focus. The sign of growth in this ratio reveals the institution may face an acute problem in coming years as the growth is tremendously increasing in later year, which, in turn, yields low earning. The solvency of the institution is not adequate as the ratio is falling high below the PEARLS standard. This is due to speedily increase of delinquency and low increase of total savings, which has invariably affected the total assets.

II

The ratio of net loans to total assets falling below the PEARLS standard is due to the high level of delinquency resulted from poor quality of assets and provision of allowances for the loan losses. The growth in loan portfolio in the consecutive years shows that the institution has a nascent potentiality to earn the income in coming years.

The decreasing trend of liquid investment to total assets the institution has maintained within its standard is that it does not produce adequate earnings investing in this category. For the five-year study period, PasGGB Ltd. has maintained the ratio of financial investment to total assets high above the maximum 10 percent. Such noticeable deviation reflected and the institution has relied on was mainly due to current dismaying investment climate.

The ratio of savings deposits to total assets falling high below the PEARLS standard is that the institution heavily relied on the external funds. The increasing trend of this ratio in the later two years indicates that the institution has a sign of financing in the productive areas to yield earnings. The upholding of the ratio of external funds to total assets high above the PEARLS standard of maximum percent is due to the heavily reliance on external funds; mainly in the form of soft loan. The ratio of institutional

capital to total assets lying high below the PEARLS standard is that the institution is entrapped in high level of delinquency.

III

The fluctuating trend of total loan delinquency to total loan portfolio is due to the fluctuating trend of total loan portfolio and the total loan portfolio has not been increased with respect to increase in total loan delinquency. This ratio may further increase in coming years if not taken a serious measure through a prompt collection of loan. The increasing trend of the ratio of non-earning assets to total assets is due to investment in fixed assets and other assets.

IV

The fluctuating trend of the ratio of total loan income to average loan portfolio is due to the poor asset quality and investment in the financial investments. PasGGB Ltd. has not significantly contributed in generating loan income with respect to its amount of investment in the loan portfolio due to its poor credit analysis. This result has affected the gross spread of institution. The fluctuating trend of financial income is attributed to the upholding of idle liquidity and non-earning assets that could be reinvested to level up the income in this category.

The decreasing trend of financial cost on savings deposits is that the institution is relying less in accumulating the savings deposits which significantly contributes in low interest cost. The decreasing trend of financial cost on borrowed funds is that the institution is lowering the financial cost on borrowed funds.

The decreasing trend of gross spread ratio for the first-four years is due to the increase of interest cost on borrowed funds and decrease in loan income. The increase in gross spread in the last fiscal year indicates the institution has a glowing potentiality in future. The operating expense to average total assets ratio is within the PEARLS standard in average over the

five-year periods is that the administrative and personnel acumen paying the relentless efforts to reduce the incurrence of over expenditure.

The increasing trend of provision for loan losses to average total assets ratio shows that the institution is unable to control the delinquency over the study periods despite its considerable efforts. The ratio of non-recurring income to average total assets is minimal and within the PEARLS standard. The net income to average total assets ratio shows that the institution is not encouraging to generate stable and safe earnings with respect to linking it with institutional capital to total assets ratio, E9. Since E9 has not attained the prudential PEARLS standard, this ratio is also not running properly. This is due to the quality of assets that have been entrapped in delinquency.

V

The ratio of liquidity reserves to total deposits shows that the institution has maintained a high amount of liquidity reserves with respect to total deposits. The distribution of heavy portion of liquidity reserves hinders from earning income. PasGBB Ltd. has consistently taken a step of minimizing liquidity reserves and indicates it will be decreasing tremendously in coming years. The ratio of non-earning liquid assets to total assets is within the PEARLS standard over the five year periods. PasGBB Ltd. has taken a significant step in reducing the non-earning liquid assets but it is increasing in the last fiscal year.

VI

The growth in loans ratio is not tune with increase in total assets. It is increasing in the last two consecutive year periods but still not satisfactory as the ratio of net loans to total assets is below the PEARLS standard. The problem of growth in loans is due to the poor quality assets resulted from delinquency. The growth in liquid investment is up to standard as it is dependent upon with the ratio of liquid investment to total assets, E2. The

E2 is within the prudential of PEARLS standard. The growth in financial investments is decreasing trend for the last three years but, but still not good enough as the ratio of financial investment to total assets is high above PEARLS standard. The decreasing trend shows it is paying its significant effort in minimizing the financial investments.

The growth in savings deposits shows that PasGGB has been unable to attract more depositors. It is due to low cost of funds on savings deposits that the institution has not paid its heed in this category and the institution has relied heavily on borrowed funds. The growth in institutional capital has fluctuating trend over the years and below the PEARLS standard. This is due to the quality of assets that entrapped in delinquency and upholding the idle liquidity. The growth in total assets has decreasing trend over the years. It indicates that the institution has not relied on to increase the savings deposits so as to augment the total assets.

5.3 Recommendations

Base on the conclusion of the study, the following recommendations have been made as a suggestion to come up over the weakness as faced by PasGGB Ltd for its sound financial health.

I

The allowances for loan losses to allowance required for loans delinquent loan greater than 12 months have been maintained as per PEARLS standard. But, PasGGB Ltd. has been entrapped in growth in delinquency, which results meager in earning. The institution is advised to reduce delinquent portfolio through a better credit analysis and effective collection procedure. The institution is advised to maintain solvency as PEARLS directives. Total assets should be added up with more reliance on savings deposits and delinquencies of institution need to be reduced with a meticulous credit analysis.

II

PasGBB Ltd is recommended to set the optimal level of the net loans to total assets ratio in terms of liquid investments (E2) and the yield of this investment (R1) with regard to other investment alternatives. To increase this ratio up to its standard, it is advisable to institution to readapt lending policies and standards with respect to the competitive and worthwhile interest rates on savings.

The institution is advisable to maintain liquid investments to total assets ratio with its continuous effort to stabilize this ratio. Reduction of financial investments to total assets ratio with setting the optimal level in terms of liquid investments (E2) and the return on this investment (R3) with regard return on loan investments (R1) is mandatory.

In terms of savings deposits to total assets ratio, it is advisable to pay attract interest rates on deposits but to set savings rates within the market average. It needs to make entrance requirements more flexible for savings members and promote savings protection mechanisms through insurance. The institution is suggested to go into external funds only for emergency credit and for financial stabilization which the institution has greatly relied on in the study periods. To increase the institutional capital ratio, the institution is recommended to reduce delinquency so as to yield sufficient earnings.

III

PasGBB Ltd. is suggested to improve credit analysis and restrict credit until the delinquency problems have been solved for the control of delinquency. In terms of non-earning assets to total assets ratio, it is recommended to institution to evaluate leasing alternatives against purchase or construction of fixed assets and establish depreciation and amortization policies in order to reduce the level of non-earning assets

IV

The institution has as a satisfactory level in terms of its cost recovery but not adequate with respect to the institutional capital. It is recommended to the institution to set different interest rates on loans according to their purpose, amount, term and risk. The institution needs to minimize the idle liquidity (L_3) and liquidate non-earning assets (A_3) and reinvest them in earning assets so as to maintain the financial investment income.

The institution is advised to differentiate savings interest rates on the different ranges to attract deposits and ensure the depositors that the savings interest rates are competitive on the financial market. In terms of financial cost on borrowed funds, it is advisable to the institution to maintain this ratio in an optimum level according to its needs.

The institution needs to increase the gross margin to average total assets ratio by relying on quality assets that yield high earnings and control the loan portfolio from falling in delinquency. The institution needs to eliminate superfluous expenses and establish discipline in expenses of leadership and employee bodies in term of controlling the operating expenses to average total assets.

The provision for loan losses to average total assets ratio is linked to level of delinquent loans. The institution is recommended to reduce delinquency (A_1). It needs to analyze gross spread on a monthly basis to ensure that there is sufficient income to create estimates. In terms of ratio of non-recurring income to total assets, it is advisable to increase the amounts of income from fiduciary activities and other service charges but with a meticulous attention. The controlling in delinquency and reducing allocation for bad loans focusing primarily in productive assets is advisable.

V

PasGBB Ltd. is recommended to make adjustments in the cash reserve levels at the end of each month. Institution should ensure it could meet minimum liquidity levels before approving new loans. The institution

is advised to establish maximum amounts to keep in cash and monetary deposits in order to maintain the non-earning liquid assets. It is also recommended to keep a daily account of deposit entries and withdrawals to become familiar with its seasonal trend.

VI

PasGBB Ltd. is recommended to readapt policies and standards by competitive and worthwhile interest rates, amounts to be granted, term and purpose, leverage and security to increase the loan portfolio. The institution needs to give less priority in the growth of financial investments and to focus in this segment according to its needs.

The institution is recommended to increase the savings deposits offering an attractive interest rate. Institution should build up its credibility to attract the more depositors. It is advisable to control delinquency and focus reinvesting in productive assets in order to increase the level of institutional capital. The institution is recommended to focus on the savings deposits as the main source of growth in total assets and develop an effective marketing program to attract more savings. The total assets should be vigorously emphasized in the area where it contributes maximum gross spread.

APPENDIX 1.1

Paschimanchal Grameen Bikas Bank Limited Butwol

Balance Sheet

Fiscal Year Capital and Liabilities	2059/60	2060/61	2061/62	2062/63	2063/64
Issued and Paid-up Capital	60,000,000.00	60,000,000.00	60,000,000.00	60,000,000.00	60,000,000.00
Reserve Fund					
General Reserve Fund	1,130,684.59	1,359,569.22	2,615,706.23	3,873,223.31	4,218,311.40
Institutional Reserve	50,073.00	37,555.00	58,166.00	43,624.00	32,718.00
Staff Welfare Fund	620,000.00	635,000.00	700,000.00	776,077.29	417,326.24
Borrowed Funds	426,604,044.84	482,585,308.05	505,770,993.58	500,333,089.76	467,449,028.04
Savings Deposits					
a. Group Savings	77,054,571.90	90,021,748.01	78,228,669.82	80,926,738.44	88,056,855.06
b. Personal Savings	6,689,901.30	7,538,477.21	4,640,932.89	4,900,660.13	4,928,369.14
c. Other Savings	4,709,754.00	6,766,738.02	8,369,781.64	6,631,505.52	7,652,066.16
Other Provision & Liabilities					
a. Loan Loss Provision	5,764,908.00	17,864,894.18	25,817,619.00	30,254,486.00	40,272,880.00
b. Other Liabilities	12,865,513.35	14,490,820.32	12,608,091.75	20,845,084.52	16,696,642.74
c. Program Grant Fund	409,345.33	25,510.00	13,050.00	10,510.00	3,010.00
Profit & Loss	3,432,182.95	4,232,721.47	3,175,208.34	364,840.74	1,727,938.71
Total Capital & Liabilities	599,330,979.26	685,558,341.48	701,998,219.25	708,959,839.71	691,455,145.49
Assets					
Cash	4,986,380.27	4,732,554.05	2,732,329.87	2,308,274.77	4,027,418.29
Bank					
a. Nepal Rastra Bank	13,927,061.59	1,215,412.93	3,749,602.42	5,375,495.86	
b. Other Domestic Bank	31,945,830.70	81,605,983.19	52,660,278.87	47,825,285.00	40,688,953.85
Investments					
a. Share Investment	815,000.00	815,000.00	815,000.00	815,000.00	
b. Fixed Deposit Investments	191,000,000.00	222,000,000.00	272,000,000.00	234,500,000.00	815,000.00
c. Gratuity Fund Investments				774,000.00	2,909,470.08
d. Staff Welfare Investments				600,000.00	
e. Emergency Fund Investments				2,500,000.00	2,500,000.00
Savings Borrowings				274,002.00	185,099.00
Loan					
a. Micro-enterprise Loan		346,841,058.00	342,618,708.00	330,000,935.79	356,759,195.00
b. Micro entrepreneurship Loan			2,508,240.00	38,853,054.00	63,140,742.00
c. Third Livestock Loan	329,423,314.26			16,568,969.00	10,853,310.00
d. Group Loan	1,548,074.00	1,010,201.00	453,648.00		
e. Group Savings Loan	2,875,555.85	2,585,354.74	2,429,224.11	2,076,851.79	3,174,003.40
Fixed Assets	209,602.68	176,480.94	143,660.63	194,539.38	98,639.02
Inter Office A/c	22,600,159.91	24,576,296.63	21,887,527.35	26,293,432.91	29,303,314.85
Other Assets					
Total Assets	599,330,979.26	685,558,341.48	701,998,219.25	708,959,839.71	691,455,145.49

Source: Annual Reports, PasGBB. Ltd.

APPENDIX 1.2

Paschimanchal Grameen Bikas Bank Limited Butwol

Profit & Loss A/c

<i>Fiscal</i> <i>Year</i>	2059/60	2060/61	2061/62	2062/63	2063/64
Income					
Interest Income					
Loan	48,557,713.03	55,822,603.59	53,891,898.00	50,692,462.00	57,716,275.00
Investment	14,861,982.89	16,833,535.61	23,630,173.34	19,256,546.46	16,504,502.58
Other Income	2,712,374.99	3,471,401.54	4,815,670.43	4,148,870.57	2,844,433.61
Total Income	66,132,070.91	76,127,540.74	82,337,741.77	74,097,879.03	77,065,211.19
Interest Expense					
Savings Deposits	6,225,215.00	7,406,486.67	6,280,197.85	5,591,171.77	5,439,258.90
Borrowed Funds	22,451,052.57	25,053,037.95	25,742,322.93	21,002,657.46	19,798,931.12
Total Interest Expense	28,676,267.57	32,459,524.62	32,022,520.78	26,593,829.23	25,238,190.02
Staff Overhead Expense					
Salary Allowance	16,402,373.05	15,584,317.00	15,346,107.75	16,159,022.00	17,525,281.00
Provident Fund	1,659,415.50	1,242,019.40	126,8290.00	1,273,187.90	1,516,205.00
Other Expense	4,177,592.34	3,881,051.50	4,060,222.00	5,065,376.50	5,421,703.99
Total Staff Overhead Expense	22,239,380.89	20,707,387.90	20,674,619.75	22,497,586.40	24,463,189.99
Office Operating Expense	9,967,796.39	8,987,915.57	10,792,717.70	9,211,317.93	9,542,326.22
Provision for Risky Loan	4,412,750.01	12,099,986.18	7,952,724.82	4,436,867.00	9,908,882.00
Provision for Gratuity Fund Repayment			774,000.00	1,226,000.00	5,000,000.00
Provision for Staff Bonus	81,079.98	181,654.47	996,934.14	1,013,227.85	291,262.30
Special Fee	25,076.28	56,181.79	151,817.38	136,785.76	
Provision for Tax	218,915.94	490,467.06	2,691,722.16	2,694,679.46	786,408.20
Total Provision	4,737,822.21	12,828,289.50	12,567,198.50	9,507,560.07	16,096,064.50
Total Expense	65,621,267.06	74,983,117.59	76,057,056.73	67,810,293.63	75,339,770.73
Gross Profit	510,803.85	1,144,423.15	6,280,685.04	6,287,585.40	1,725,440.46
Income from PY	3,123,539.87	3,432,182.95	4,232,721.47	3,175,208.34	364,840.74
Available for Appropriation	3,634,343.72	4,576,606.10	10,513,406.51	9,462,793.74	1,834,952.46
Reserve Fund	102,160.77	228,884.63	1,256,137.01	1,257,517.08	345,088.09
Staff Welfare Fund		15,000.00	65,000.00	61,527.00	17,254.40
Provision for Gratuity Fund	100,000.00	100,000.00			
Special Fee (Last Year)			17,061.16		
Tax Provision (Last Year)				1,778,908.92	
Provision for Dividend			6,000,000.00	6,000,000.00	
Net Income	3,432,182.95	4,232,721.47	3,175,208.34	364,840.74	1,727,938.71

Source: Annual Reports, PasGBB. Ltd.

APPENDIX 2.1

Protection (P)

Allowances for Loan Losses/ Allowances Required for Loans Delinquent > 12 Months (P₁)

$$P_1 = \frac{a}{b}$$

Where,

a = Allowance for Loan Losses

b = Loan Balances of all loans delinquent more than 12 months

Solvency (P₆)

$$P_6 = \frac{[(a+b) - (c + .35(d) + e + f - g)]}{(g+h)}$$

Where,

a = Total Assets

b = Allowances for Risk Assets

c = Balance of Loans Delinquent greater than 12 months.

d = Balance of Loans Delinquent from 1 to 12 months

e = Total Liabilities

f = Problem Assets (Losses that will be liquidated)

g = Total Savings

h = Total Shares

Appendix 2.2

Effective Financial Structure (E)

Net Loans/Total Assets (E₁)

$$E_1 = \frac{(a-b)}{c}$$

Where,

- a =Total Gross Loan Portfolio Outstanding
- b =Total Allowance for loan losses
- c =Total Assets

Liquid Investments/Total Assets (E₂)

$$E_2 = \frac{a}{b}$$

Where,

- a =Total Liquid Investments
- b =Total Assets

Financial Investments/Total Assets (E₃)

$$E_3 = \frac{a}{b}$$

Where,

- a =Total Financial Investments
- b =Total Assets

Savings Deposits/Total Assets (E₅)

$$E_5 = \frac{a}{b}$$

Where,

- a =Total Savings Deposits
- b =Total Assets

Borrowed Funds/Total Assets (E₆)

$$E_6 = \frac{(a+b)}{c}$$

Where,

- a =Total Short-term loan obligations
- b =Total Long-term loan obligations
- c =Total Assets

Institutional Capital/ Total Assets (E₈)

$$E_8 = \frac{a}{b}$$

Where,

a =Total Institutional Capital

b =Total Assets

Net Institutional Capital (E₉)

$$E_9 = \frac{[(a+b) - (c + .35(d) + e)]}{f}$$

Where,

a =Institutional Capital

b =Allowances for Risk Assets

c =Balance of Loans Delinquent greater than 12 months

d =Balance of Loans Delinquent from 1 to 12 months

e =Problem Assets (Losses that will be liquidated)

f =Total Assets

Appendix 2.3

Asset Quality (A)

Total Loan Delinquency / Total Loan Portfolio (A₁)

$$A_1 = \frac{a}{b}$$

Where,

a =Sum of all delinquent loan balances (a non-bookkeeping control)

b =Total (Gross) Loan Portfolio Outstanding

Non-Earning Assets / Total Assets (A₂)

$$A_2 = \frac{a}{b}$$

Where,

a =Total Non-earning Assets

b =Total Assets

Appendix 2.4

Rate of Returns and Costs (R)

Total Loan Income / Average Net Loan Portfolio (R₁)

$$R_1 = \frac{(a - b)}{\left(\frac{(c + d)}{2} \right)}$$

Where,

- a = Total Loan income during year
- b = Insurance Premiums paid on Loans
- c = Net Loan Portfolio (Net of Allowances for Loan Losses) as of Current year-end
- d = Net Loan Portfolio (Net of Allowances for Loan Losses) as of Last year-end

Liquid Investment Income / Average Liquid Investments (R₂)

$$R_2 = \frac{a}{\left(\frac{(b + c)}{2} \right)}$$

Where,

- a = Total Liquid Investments Income during year.
- b = Total Liquid Investments as of Current year-end
- c = Total Liquid Investments as of Last year-end

Financial Investment Income / Average Financial Investments (R₃)

$$R_3 = \frac{a}{\left(\frac{(b + c)}{2} \right)}$$

Where,

- a = Total Financial Investments Income
- b = Total Financial Investments as of Current year-end
- c = Total Financial Investments as of Last year-end

Financial Cost: Savings Deposits / Average Savings Deposits (R₅)

$$R_5 = \frac{(a + b + c)}{\left(\frac{(d + e)}{2}\right)}$$

Where,

- a = Total Interest Paid on Savings Deposits
- b = Total Insurance Premium Paid on Savings Deposits
- c = Total Taxes Paid by CU on Savings Deposit Interest
- d = Total Savings Deposits as of Current year-end
- e = Total Savings Deposits as of Last year-end

Financial Cost: Borrowed Funds / Average Borrowed Funds (R₆)

$$R_6 = \frac{a}{\left(\frac{(b + c)}{2}\right)}$$

Where,

- a = Total Interest Paid on Borrowed Funds
- b = Total Borrowed Funds as of Current year-end
- c = Total Borrowed Funds as of Last year-end

Gross Margin / Average Total Assets (R₈)

$$R_8 = \frac{[(a + b + c + d + e) - (f + g + h)]}{\left(\frac{(i + j)}{2}\right)}$$

Where,

- a = Loan Interest Income
- b = Liquid Investments Income
- c = Financial Investment Income
- d = Non-Financial Investment Income
- e = Other Income
- f = Interest Cost of Savings Deposits
- c = Dividend or Interest Cost of Member Shares
- d = Interest Cost of Borrowed Funds

e =Total Assets as of Current Year-end

f =Total Assets as of Last Year-end

Operating Expenses / Average Total Assets (R₉)

$$R_9 = \frac{a}{\left(\frac{(b+c)}{2}\right)}$$

Where,

a =Total Operating Expenses (exclusive of Provisions for Loan Losses)

b =Total Assets of Current year-end

c =Total Assets as of Last year-end

Provisions for Loan Losses / Average Total Assets (R₁₀)

$$R_{10} = \frac{a}{\left(\frac{(b+c)}{2}\right)}$$

Where,

a =Total Current Year Provision Expense of all Risk Assets

b =Total Assets as of Current year-end

c =Total Assets as of Last Year-end

R11: Non-Recurring Income or Expenses / Average Total Assets (R₁₁)

$$R_{11} = \frac{a}{\left(\frac{(b+c)}{2}\right)}$$

Where,

a =Total Non-Recurring Income or Expenses (Current Year)

b =Total Assets as of Current year-end

c =Total Assets as of Last year-end

Net Income / Average Total Assets (R₁₂)

$$R_{12} = \frac{a}{\left(\frac{(b+c)}{2}\right)}$$

Where,

- a =Net Income (After dividends)
- b =Total Assets as of Current year-end
- c =Total Assets as of Last year-end

Appendix 2.5

Liquidity (L)

Liquidity Reserves / Savings Deposits (L_2)

$$L_2 = \frac{(a + b)}{c}$$

Where,

- a =Total Liquidity Reserves (Earning Asset)
- b =Total Liquidity Reserves (Non-earning Asset)
- c =Total Savings Deposits

Non-Earning Liquid Assets / Total Assets (L_3)

$$L_3 = \frac{a}{b}$$

Where,

- a =Total Liquid Non-Earning Assets
- b =Total Assets

Appendix 2.6

Sign of Growths (S)

Growth in Loans (S₁)

$$S_1 = \left(\frac{a}{b} \right) - 1 \times 100$$

Where,

a = Current Loan Portfolio balance

b = Loan Portfolio balance as of Last year-end

Growth in Liquid Investments (S₂)

$$S_2 = \left(\frac{a}{b} \right) - 1 \times 100$$

Where,

a = Total Current Liquid Investments

b = Total Liquid Investments as of Last year-end

Growth in Financial Investments (S₃)

$$S_3 = \left(\frac{a}{b} \right) - 1 \times 100$$

Where,

a = Total Current Financial Investments

b = Total Financial Investments as of Last year-end

Growth in Savings Deposits (S₅)

$$S_5 = \left(\frac{a}{b} \right) - 1 \times 100$$

Where,

a = Total Current Savings Deposits

b = Total Savings Deposits as of the Last year-end

Growth in Borrowed Funds (S₆)

$$S_6 = \left(\frac{a}{b} \right) - 1 \times 100$$

Where,

a = Total Current Borrowed Funds

b =Total Borrowed Funds as of Last year-end

Growth in Institutional Capital (S₈)

$$S_8 = \left(\frac{a}{b} \right) - 1 \times 100$$

Where,

a =Current Institutional Capital

b =Institutional Capital as of the Last year-end

Growth in Total Assets (S₁₁)

$$S_{11} = \left(\frac{a}{b} \right) - 1 \times 100$$

Where,

a =Total Current Assets

b =Total Assets as of the Last year-end

APPENDIX 3.1

Evolution of Sources of Funds (in Percent)

	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
Savings Deposits	14.76	15.22	13	13.04	14.55
External Credit	71.18	70.39	72.04	70.57	67.60
Shares	10.01	8.75	8.55	8.47	8.68
Institutional Capital	0.87	0.91	0.93	0.71	0.93
Other Provisions & Liabilities	3.18	4.73	5.48	7.21	8.24

Source: Annual Reports, PasGBB. Ltd.

APPENDIX 3.2

Assets Composition (in Percent)

	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
Cash & Bank	8.49	12.77	8.42	7.83	6.47

Investment	32	32.6	38.86	33.74	26.50
Loans & Advances	55.26	50.76	49.24	54.43	62.32
Fixed Assets	0.48	0.38	0.36	0.29	0.46
Other Assets	3.77	3.58	3.12	3.71	4.25

Source: Annual Reports, PasGGB. Ltd.

APPENDIX 4.1

Solvency (P₆)

P ₆	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Total Assets	599,331.00	685,558.0 0	701,998.00	708,960.0 0	691,455.0 0
b. Allowances for Risk Assets	5,765.00	17,865.00	25,818.00	30,254.00	40,273.00
c. Balance of Loans Delinquent > 12 months.	0.00	9,559.00	16,947.00	20,158.00	28,716.00
d. Balance of Loans Delinquent from 1 to 12 months	0.00	7,450.00	6,389.00	4,147.00	10,116.00
e. Total Liabilities	599,331.00	685,558.0 0	701,998.00	708,960.0 0	691,455.0 0
f. Problem Assets	0.00	0.00	0.00	0.00	0.00
g. Total Savings	88,454.00	104,327.0 0	91,239.00	92,459.00	100,637.0 0
h. Total Shares	60,000.00	60,000.00	60,000.00	60,000.00	60,000.00

Source: Annual Reports, PasGGB Ltd.

Calculation

$$\begin{aligned}
 P_6 &= \frac{[(a+b) - (c + .35(d) + e + f - g)]}{(g+h)} \\
 &= \frac{[(599,331 + 5,765) - (0 + .35(0) + 599,331 + 0.00 - 88,454)]}{(88,454 + 60,000)} \\
 &= \frac{605,096 - 510,877}{148,454} = \frac{94,219}{148,454} = 0.6347 = 63.47\%
 \end{aligned}$$

The ratios for remaining periods have been calculated as accordingly

Appendix 4.2

Net Loans to Total Assets (E₁)

Calculation

$$E_1 = \frac{(a-b)}{c}$$
$$= \frac{330,971 - 5,765}{599,331} = \frac{355,206}{599,331} = 0.5426 = 54.26\%$$

The ratios for remaining periods have been calculated as accordingly.

Appendix 4.3

Savings Deposits to Total Assets (E₅)

(in Thousand Rupees)

E ₅	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Saving Deposits	88,454	104,327	91,239	92,459	100,637
b. Total Assets	599,331	685,558	701,998	708,960	691,455

Source: Annual Reports, PasGBB Ltd.

Calculation

$$= \frac{a}{b}$$
$$= \frac{88,454}{599,331} = 0.147587 = 14.76\%$$

The ratios for remaining periods have been calculated as accordingly.

APPENDIX 4.4

Institutional Capital to Total Assets (E₈)

E ₈	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Institutional Capital	5,233	6,265	6,549	5,058	6,396
b. Total Assets	599,331	685,558	701,998	708,960	691,455

Source: Annual Reports, PasGBB Ltd.

Calculation

$$= \frac{a}{b}$$

$$= \frac{5,233}{599,331} = 0.0087314 = 0.87 \%$$

The ratios for remaining periods have been calculated as accordingly.

Appendix 4.5

Net Institutional Capital to Total Assets (E₉)

E ₉	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Institutional Capital	5,233	6,265	6,549	5,058	6,396
b. Allowances for Risk Assets	5,765	17,865	25,818	30,254	40,273
c. Balance of Loans Delinquent greater than 12 months	0.00	9,559	16,947	20,158	28,716
d. Balance of Loans Delinquent from 1 to 12 months	0.00	7,450	6,389	4,147	10,116
e. Problem Assets	0.00	0.00	0.00	0.00	0.00
f. Total Assets	599,331	685,558	701,998	708,960	691,455

Source: Annual Reports, PasGGB Ltd.

Calculation:

$$E_9 = \frac{[(a+b) - (c + .35(d) + e)]}{f}$$

$$= \frac{[(5,233 + 5,765) - (0 + .35(0) + 0)]}{599,331} = \frac{10,998}{599,331} = 0.01835 = 1.84\%$$

The ratios for remaining periods have been calculated as accordingly.

APPENDIX 4.6

Non-earning Assets to Total Assets (A₅)

A ₅	(in Thousand Rupees)				
	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Non-earning Assets	30,672	32,071	27,193	30,873	36,603
b. Total Assets	599,331	685,558	701,998	708,960	691,455

Source: Annual Reports, PasGGB Ltd.

Calculation:

$$= \frac{a}{b}$$

$$= \frac{30,672}{599,331} = 0.005117 = 5.12\%$$

The ratios for remaining periods have been calculated as accordingly.

Appendix 4.7

Gross Margin to Average Total Assets (R₈)

(in Thousand Rupees)

R8	Fiscal Year				
	2059/60	2060/61	2061/62	2062/63	2063/64
a. Loan Interest Income	48,558.00	55,823.00	53,892.00	50,692.00	57,716.00
b. Liquid Investment Income	0.00	0.00	0.00	0.00	0.00
c. Financial Investment Income	14,862.00	16,834.00	23,630.00	19,257.00	16,505.00
d. Non-Financial Investment Income	0.00	0.00	0.00	0.00	0.00
e. Other Income	2,712.00	3,471.00	4,816.00	4,149.00	2,844.00
f. Interest Cost of Savings Deposits	6,225.00	7,406.00	6,280.00	5,591.00	5,439.00
g. Dividend or Interest Cost of Member Shares	0.00	0.00	6,000.00	6,000.00	0.00
h. Interest Cost of Borrowed Funds	22,451.00	25,053.00	25,742.00	21,003.00	19,799.00
i. Total Assets as of Current Year- end	599,331.00	685,558.00	701,998.00	708,960.00	691,455.00
j. Total Assets as of Last Year- end	481,529.00	599,331.00	685,558.00	701,998.00	708,960.00

Source: Annual Reports, PasGBB Ltd.

Calculation:

$$R_8 = \frac{[(a+b+c+d+e)-(f+g+h)]}{\left(\frac{(i+j)}{2}\right)}$$

$$= \frac{[(48,558 + 0 + 16,862 + 0 + 2,712) - (6,225 + 0 + 22,451)]}{\left(\frac{(599,331 + 481,529)}{2}\right)} = \frac{39,456}{540,430}$$

$$= 0.07300 = 7.30 \%$$

The ratios for remaining periods have been calculated as accordingly.

APPENDIX 4.8

Liquidity Reserves to Total Assets (L₂)

Calculation

$$L_2 = \frac{(a+b)}{c}$$

$$= \frac{(49,256 + 4,986)}{67,874} = \frac{54,242}{67,874} = 0.79915 = 79.92\%$$

The ratios for remaining periods have been calculated as accordingly.

APPENDIX 4.9

Growth in Loans (S)

Calculation

$$S_1 = \left(\frac{a}{b}\right) - 1$$

$$= \left(\frac{330,971}{272,245}\right) - 1 = 1.2157 - 1 = 21.57\%$$

The ratios for remaining periods have been calculated as accordingly.

APPENDIX 4.10

Growth in Liquid Investments (S₂)

Calculation

$$S_2 = \left(\frac{a}{b}\right) - 1$$

$$= \left(\frac{45,873}{49,256}\right) - 1 = 0.93131 - 1 = (6.87 \%)$$

The ratios for remaining periods have been calculated as accordingly.

Appendix 4.11

Growth in Financial Investments (S₃)

Calculation

$$S_3 = \left(\frac{a}{b}\right) - 1$$

$$= \left(\frac{191,815}{138,815}\right) - 1 = 1.38180 - 1 = 0.3818 = 8.18 \%$$

The ratios for remaining periods have been calculated as accordingly.

Appendix 4.12

Growth in Savings Deposits (S₅)

Calculation

$$S_5 = \left(\frac{a}{b}\right) - 1$$

$$= \left(\frac{88,454}{67,874}\right) - 1 = 1.30320 - 1 = 0.3032 = 30.32 \%$$

The ratios for remaining periods have been calculated as accordingly.

Appendix 4.13

Growth in Borrowed Funds (S₆)

Calculation

$$S_6 = \left(\frac{a}{b}\right) - 1$$

$$= \left(\frac{426,604}{337,774} \right) - 1 = 1.26298 - 1 = 0.26298 = 26.30 \%$$

The ratios for remaining periods have been calculated as accordingly.

Appendix 4.14

Growth in Institutional Capital (S₈)

Calculation

$$\begin{aligned} S_8 &= \left(\frac{a}{b} \right) - 1 \\ &= \left(\frac{5,233}{4,835} \right) - 1 = 1.082316 - 1 = 0.082316 = 8.24 \% \end{aligned}$$

The ratios for remaining periods have been calculated as accordingly.

Appendix 4.15

Growth in Total Assets (S₁₁)

Calculation

$$\begin{aligned} S_{11} &= \left(\frac{a}{b} \right) - 1 \\ &= \left(\frac{599,331}{481,529} \right) - 1 = 1.2446 - 1 = 0.2446 = 24.46 \% \end{aligned}$$

The ratios for remaining periods have been calculated as accordingly.

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