A Technical Guide to PEARLS
A Performance Monitoring System
What Is PEARLS?

PEARLS is a financial performance monitoring system designed to offer management guidance for credit unions and other savings institutions. PEARLS is also a supervisory tool for regulators. PEARLS can be used to compare and rank institutions; it can provide comparisons among peer institutions in one country or across countries.

PEARLS is a set of financial ratios or indicators that help to standardize terminology between institutions. In total, there are 44 quantitative financial indicators that facilitate an integral analysis of the financial condition of any financial institution. The purpose for including a myriad of indicators is to illustrate how change in one ratio has ramifications 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 World Council of Credit Unions, Inc. (WOCCU) based on its field experience working to strengthen and modernize credit unions and promote savings-based growth. Depositors can have confidence that savings institutions that meet the standards of excellence are safe and sound.

PEARLS, primarily a management tool for institutions, can also be used as a supervisory tool by regulators. As a management tool, PEARLS signals problems to managers before the problems become detrimental. For boards of directors, PEARLS provides a tool to monitor management’s progress toward financial goals. For regulators, PEARLS offers indicators and standards to supervise the performance of savings institutions.

Who Uses PEARLS?

In partnership with credit unions, WOCCU created PEARLS in the late 1980s. WOCCU has refined and adjusted PEARLS over the past decade. WOCCU uses PEARLS with all credit unions participating in its technical assistance programs around the world. In addition to individual credit unions and credit union national federations and associations (including many WOCCU members), the Bolivian Superintendency of Banks uses PEARLS to supervise regulated credit unions in Bolivia.
What Does PEARLS Monitor?

Protection

The primary goal of evaluating the Protection indicators, as the heading implies, is to ensure that the financial institution provides depositors a safe place to save their money. **Provisions for loan losses are the first line of defense against unexpected losses to the institution.** Allowances for loan losses are essential, since delinquency signals that loans are at risk; thus, the institution must set aside earnings to cover those possible losses so that member-client savings remain protected.

When financial intermediaries do not recognize loan losses:
- Asset values are inflated;
- Reported net income is overstated;
- Provisions for loans losses are lacking;
- Member-client savings are not secure; and
- Dividends are overstated and erroneously paid out.

The most critical ratio under Protection is P1. **The goal of P1 is to have 100% provisions for loan losses from loans that are greater than 12 months delinquent.** Accurate measurement of delinquency (total outstanding balance of portfolio-at-risk at 30 days), indicator A1, is integrally linked to the creation of adequate allowances for loan losses.

The Protection section considers loan write-offs, on a quarterly basis, for loans delinquent greater than 12 months (P3 and P4). 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 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.

To write-off a loan does not mean the institution stops seeking to collect payment on the loan; for this reason, protection indicators also consider amounts recovered from written-off loans (P5).

The last indicator under the Protection heading is P6, Solvency. This indicator measures the relative worth of one dollar in member-client savings after adjusting for known and probable losses. The formula for calculating this ratio is:

\[
\frac{\text{[(Total Assets + Total Allowances) - (100% of Loans Delinquent > 12 Months + 35% of Loans Delinquent from 1-12 Months + Total Liabilities + Problem Assets) - Deposits]} \text{ / Total Shares and Total Deposits}}
\]

**P = Protection Indicators**

<table>
<thead>
<tr>
<th>Protection Indicators</th>
<th>Standards of Excellence</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1. Allowance for Loan Losses/Delinquency &gt; 12 months</td>
<td>100%</td>
</tr>
<tr>
<td>P2. Net Allowance for Loan Losses/Delinquency of 1-12 months</td>
<td>35%</td>
</tr>
<tr>
<td>P3. Total Write-off of Delinquent Loans &gt; 12 months</td>
<td>100%</td>
</tr>
<tr>
<td>P4. Annual Loan Write-offs/Average Loan Portfolio</td>
<td>Minimal</td>
</tr>
<tr>
<td>P5. Accumulated Loan Recoveries/Accumulated Loan Write-offs</td>
<td>100%</td>
</tr>
<tr>
<td>P6. Solvency (Net Value of Assets/Total Shares and Deposits)</td>
<td>&gt;= 110%</td>
</tr>
</tbody>
</table>
What Does PEARLS Monitor?

Effective Financial Structure

The financial structure is the most important variable that affects growth, profitability and efficiency. Credit unions that maintain most (70-80%) of their total assets in the loan portfolio have the greatest opportunity to maximize returns on these productive assets while providing their member-clients with the credit services they seek. Similarly, institutions that fund their assets primarily (70-80%) with member-client deposits are independent from the fluctuating price of external funds.

Financial structure is always changing and requires careful management, especially in cases of rapid growth. The Effective Financial Structure area of PEARLS focuses on an institution’s sources of funds (savings, shares, external credit and institutional capital) and its uses of funds (loans, liquid investments, financial investments and non-earning assets). The PEARLS system provides information over time; therefore, managers, directors and regulators can observe the structural evolution of both the sources of funds and the 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, is the second line of defense to absorb unexpected losses. Institutional capital can be invested to expand products and services. It also can be used to pay for the high costs of technology and building construction.

Net Institutional Capital, the ratio E9, is Reserves, Retained Earning and Provisions net of 100% of delinquent loans greater than 12 months and net of 35% of delinquent loans between 30-364 days overdue divided by Total Assets.

The USAID Nicaragua-funded example reveals a shift in the sources of funds from external credit to savings deposits from 1997 to 2002. Savings have increased thus far from 2% to 55% of total assets. External credit, having dropped from 57% to 17%, continues to decrease as a percentage of total assets. Over three-fourths of the member-clients of these credit unions are rural. Outreach has increased from 2,784 member-clients in June 1997 to 20,818 member-clients. More than half of member-clients are women in June 2002.

### Nicaragua 17 CUs — Evolution of Sources of Funds

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Savings Deposits</strong></td>
<td>2%</td>
<td>6%</td>
<td>13%</td>
<td>22%</td>
<td>38%</td>
<td>55%</td>
</tr>
<tr>
<td><strong>External Credit</strong></td>
<td>57%</td>
<td>46%</td>
<td>49%</td>
<td>46%</td>
<td>27%</td>
<td>17%</td>
</tr>
<tr>
<td><strong>Shares</strong></td>
<td>12%</td>
<td>15%</td>
<td>12%</td>
<td>9%</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td><strong>Institutional Capital</strong></td>
<td>16%</td>
<td>29%</td>
<td>20%</td>
<td>16%</td>
<td>18%</td>
<td>18%</td>
</tr>
</tbody>
</table>
As the HIV/AIDS pandemic increasingly affects and infects members throughout Sub-Saharan Africa, credit unions need to strengthen their institutional capital so that they can withstand losses associated with the pandemic such as death, defaulted loans for medical and hospital expenses, school fees for foster children, etc. Bandari Savings and Credit Cooperative, one of 16 credit unions that participated in a USAID Washington-funded WOCCU program in Kenya, has improved its net institutional capital (E9) position from less than 1% to greater than 10%, the PEARLS standard of excellence for E9. Bandari now has a stronger defense against HIV/AIDS associated losses.

### E = Effective Financial Structure Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Standard of Excellence</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1. Net Loans/Total Assets</td>
<td>70%-80%</td>
</tr>
<tr>
<td>E2. Liquid Investments/Total Assets</td>
<td>Maximum 20%</td>
</tr>
<tr>
<td>E3. Financial Investments/Total Assets</td>
<td>Maximum 10%</td>
</tr>
<tr>
<td>E4. Non-financial Investments/Total Assets</td>
<td>0%</td>
</tr>
<tr>
<td>E5. Savings Deposits/Total Assets</td>
<td>70%-80%</td>
</tr>
<tr>
<td>E6. External Credit/Total Assets</td>
<td>Maximum 5%</td>
</tr>
<tr>
<td>E7. Member Share Capital/Total Assets</td>
<td>10-20%</td>
</tr>
<tr>
<td>E8. Institutional Capital/Total Assets</td>
<td>Minimum 10%</td>
</tr>
<tr>
<td>E9. Net Institutional Capital/Total Assets</td>
<td>Same as E8</td>
</tr>
</tbody>
</table>
### P PROTECTION

1. Allowances for Loan Losses/Delinquency >12 Mo.  
   - Standards: 100%  
   - Results: 100.00%  
   - Complete: Yes
   - Standards: 35%  
   - Results: 8.12%  
   - Complete: Yes
3. Total Write-off of Delinquent Loans > 12 Mo.  
   - Standards: 100%  
   - Results: No  
   - Complete: NA
4. Annual Loan Write-offs/Average Loan Portfolio  
   - Standards: Minimal  
   - Results: 8.20%  
   - Complete: No
5. Accumulated Loan Recoveries/Accum Loan Write-offs  
   - Standards: 100%  
   - Results: 0.00%  
   - Complete: Yes
6. Solvency (Net Value of Assets/Total Shares & Deposits) >= 110%  
   - Standards:  
   - Results: 84.84%  
   - Complete: Yes

### E EFFECTIVE FINANCIAL STRUCTURE

1. Net Loans/Total Assets 70-80%  
   - Standards: 75.23%  
   - Results: 100.00%  
   - Complete: Yes
2. Liquid Investments/Total Assets Max 20%  
   - Standards: 5.07%  
   - Results: 8.12%  
   - Complete: Yes
3. Financial Investments/Total Assets Max 10%  
   - Standards: 0.00%  
   - Results: 0.00%  
   - Complete: Yes
4. Non-financial Investments/Total Assets 0%  
   - Standards: 0.00%  
   - Results: 0.00%  
   - Complete: Yes
5. Savings Deposits/Total Assets 70-80%  
   - Standards: 8.56%  
   - Results: 34.36%  
   - Complete: Yes
6. External Credit/Total Assets Max 5%  
   - Standards: 18.06%  
   - Results: 24.09%  
   - Complete: Yes
7. Member Share Capital/Total Assets 10-20%  
   - Standards: 40.83%  
   - Results: 23.95%  
   - Complete: Yes
8. Institutional Capital/Total Assets Minimum 10%  
   - Standards: 9.27%  
   - Results: 3.75%  
   - Complete: Yes
9. Net Institutional Capital/Total Assets Same as E8 -15.95%  
   - Standards:  
   - Results: 0.22%  
   - Complete: Yes

### A ASSET QUALITY

1. Total Loan Delinquency/Gross Loan Portfolio <= 5%  
   - Standards: 52.79%  
   - Results: 16.52%  
   - Complete: Yes
2. Non-earning Assets/Total Assets <= 5%  
   - Standards: 10.18%  
   - Results: 12.58%  
   - Complete: Yes
3. Net Zero Cost Funds/Non-earning Assets > 200%  
   - Standards: 72.00%  
   - Results: 111.86%  
   - Complete: Yes

### R RATES OF RETURN AND COSTS (ANNUALIZED)

1. Net Loan Income/Average Net Loan Portfolio Entrepreneurial Rate  
   - Standards: 23.94%  
   - Results: 30.06%  
   - Complete: Yes
2. Total Liquid Inv. Income/Avg. Liquid Investments Market Rates  
   - Standards: 1.22%  
   - Results: 2.18%  
   - Complete: Yes
3. Fin. Investment Income/Avg. Fin. Investments Market Rates  
   - Standards: 0.00%  
   - Results: 0.00%  
   - Complete: Yes
4. Total Non-fin. Inv. Income/Avg. Non-fin. Investments > R1  
   - Standards: 1.28%  
   - Results: 5.75%  
   - Complete: Yes
5. Total Interest Cost on Savings Deposits/Avg. Savings Dep. Inflation Rate  
   - Standards: 5.99%  
   - Results: 3.77%  
   - Complete: Yes
6. Total Interest Cost on External Credit/Avg. External Credit Variable – Linked to R9, R11, R12  
   - Standards: 1.79%  
   - Results: 7.77%  
   - Complete: Yes
7. Total Int. (Dividend) Cost on Shares/Avg. Member Shares Inflation Rate  
   - Standards: 2.46%  
   - Results: 5.81%  
   - Complete: Yes
8. Total Gross Income Margin/Avg.Total Assets Variable – Linked to R9, R11, R12  
   - Standards: 18.90%  
   - Results: 22.90%  
   - Complete: Yes
9. Total Operating Expenses/Avg.Total Assets 5%  
   - Standards: 10.91%  
   - Results: 14.41%  
   - Complete: Yes
10. Total Loan Loss Provision Expense/Avg.Total Assets Dependent on Delinquent Loans  
    - Standards: 0.49%  
    - Results: 1.85%  
    - Complete: Yes
11. Non-recurring Income or Expense/Avg.Total Assets Minimal  
    - Standards: 0.00%  
    - Results: 0.00%  
    - Complete: Yes
12. Net Income/Average Total Assets Linked to E9  
    - Standards: 7.51%  
    - Results: 16.12%  
    - Complete: Yes

### L LIQUIDITY

1. ST Inv. + Liquid Assets - ST Payables/Savings Deposits Minimum 15%  
   - Standards: 80.06%  
   - Results: 29.60%  
   - Complete: Yes
2. Liquidity Reserves/Savings Deposits 10%  
   - Standards: 0.00%  
   - Results: 4.12%  
   - Complete: Yes
3. Non-earning Liquid Assets/Total Assets <1%  
   - Standards: 0.00%  
   - Results: 0.00%  
   - Complete: Yes

### S SIGNS OF GROWTH (YEAR-TO-DATE GROWTH)

1. Growth in Net Loans  
   - Standards:  
   - Results: 5.12%  
   - Complete: Yes
2. Growth in Liquid Investments  
   - Standards:  
   - Results: -20.24%  
   - Complete: Yes
3. Growth in Financial Investments  
   - Standards:  
   - Results: 0.00%  
   - Complete: Yes
4. Growth in Non-financial Investments  
   - Standards:  
   - Results: 159.62%  
   - Complete: Yes
5. Growth in Savings Deposits  
   - Standards:  
   - Results: -38.16%  
   - Complete: Yes
6. Growth in External Credit  
   - Standards:  
   - Results: -9.21%  
   - Complete: Yes
7. Growth in Member Shares  
   - Standards:  
   - Results: 18.74%  
   - Complete: Yes
8. Growth in Institutional Capital  
   - Standards:  
   - Results: -3.22%  
   - Complete: Yes
9. Growth in Net Institutional Capital  
   - Standards:  
   - Results: -215.46%  
   - Complete: Yes
10. Growth in Membership  
    - Standards:  
    - Results: 7.51%  
    - Complete: Yes
11. Growth in Total Assets > Inflation  
    - Standards:  
    - Results: 10.57%  
    - Complete: Yes

Inflation Rate (Annualized)  
- 10.57%  
- 2.60%  
- 6.60%  
- 3.90%  
- 3.00%  
- 0.00%
What Are the Key PEARLS Indicators?

<table>
<thead>
<tr>
<th>Key PEARLS Indicators</th>
<th>Standards of Excellence</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1. Allowance for Loan Losses/Delinquency &gt; 12 months</td>
<td>100%</td>
</tr>
<tr>
<td>P2. Net Allowance for Loan Losses/Delinquency of 1-12 months</td>
<td>35%</td>
</tr>
<tr>
<td>E1. Net Loans/Total Assets</td>
<td>70%-80%</td>
</tr>
<tr>
<td>E5. Savings Deposits/Total Assets</td>
<td>70%-80%</td>
</tr>
<tr>
<td>E6. External Credit/Total Assets</td>
<td>Maximum 5%</td>
</tr>
<tr>
<td>E9. Net Institutional Capital/Total Assets</td>
<td>Minimum 10%</td>
</tr>
<tr>
<td>A1. Total Loan Delinquency/Gross Loan Portfolio</td>
<td>&lt;= 5%</td>
</tr>
<tr>
<td>A2. Non-Earning Assets/Total Assets</td>
<td>&lt;= 5%</td>
</tr>
<tr>
<td>R7. Total Interest (Dividend) Cost on Shares/Average Member Shares</td>
<td>Market Rates &gt;= R5</td>
</tr>
<tr>
<td>R9. Total Operating Expenses/Average Total Assets</td>
<td>5%</td>
</tr>
<tr>
<td>R12. Net Income/Average Total Assets</td>
<td>Linked to E9</td>
</tr>
<tr>
<td>L1. ST Investments + Liquid Assets – ST Payables/Savings Deposits</td>
<td>Minimum 15%</td>
</tr>
<tr>
<td>S11. Growth in Total Assets</td>
<td>&gt; Inflation</td>
</tr>
</tbody>
</table>

NOTE: If there is a difference between the PEARLS standards of excellence and a country’s national standards of performance, then WOCCU encourages its credit union partners to opt for the more conservative of the two standards.

What Do the BCS PEARLS Key Indicators Reveal?

Bansalan Cooperative Society (BCS), a credit union on the island of Mindanao, has participated in the WOCCU Philippines program since 1998. BCS serves 100% rural member-clients. Member-clients grew from 1,308 in 1998 to 8,412 in mid-2002.

**P1 & P2**
- BCS lacked allowances for loan losses in 1998 when delinquency was 53%; thus, savings were at risk. Within a year, BCS made, and has maintained, complete loan loss provisions.

**E1, E5, E6 & E9**
- BCS has met the goal of placing 70-80% of its total assets in loans to its members (E1). While the ratio of savings deposits to total assets (E5) was less than 10% in 1998, by 2002, BCS had increased this ratio to 60%. BCS’ business plan target is to raise E5 to 74% by January 2003.
- External credit of up to 24% decreased to below 1% of total assets (E6). Net institutional capital (E9), negative in 1998, increased to 14%, offering BCS the strength to confront unexpected losses.

**A1 & A2**
- More than half of the BCS loan portfolio (53%) was delinquent in 1998. By improving credit administration and collection, BCS lowered its portfolio-at-risk at 30 days (A1) to 7%.
- Unlike many Filipino credit unions that have substantial assets tied up in non-earning assets, BCS has lowered its ratio of non-earning assets to total assets to under 10% (A2).

**R7, R9 & R12**
- In 1998, BCS paid its members a dividend on their non-withdrawable shares (R7) that was below inflation and less than the rate of interest paid on voluntary savings deposits (R5). By December 2001, BCS paid real, above inflation, dividends on member shares.
- BCS has operating expenses (R9) higher than the standard of excellence maximum of 5%, but, since December 2001 it has managed to maintain this expense under 10%.
- BCS was drastically undercapitalized in 1998. Increases in net income (R12) have helped to build net institutional capital (E9) to above the standard of excellence of 10%.

**L1**
- BCS has not faced significant difficulties maintaining a minimum of 15% of its savings deposits in liquid instruments (L1) in order to meet member-client withdrawal demands.

**S11**
- In 1998, the total assets of BCS were barely keeping pace with inflation. From 1999 onwards, growth in total assets (S11) has been steady and above annualized inflation.
What Does PEARLS Monitor?

Asset Quality

Asset Quality is the main variable that affects institutional profitability. An excess of defaulted or delayed repayment of loans and high percentages of other non-earning assets have negative effects on credit union earnings because these assets are not earning income. As mentioned in the Protection discussion, it is essential that delinquency be measured correctly and minimized. 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 of institutional weakness because if delinquency is high, then other key areas of credit union operations could be weak, e.g., loan loss provisions, institutional capital and net income.

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 (in the case of a credit union or other user-owned financial cooperative). 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.

### A = Asset Quality

<table>
<thead>
<tr>
<th>A = Asset Quality</th>
<th>Standards of Excellence</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1. Total Loan Delinquency/Gross Loan Portfolio</td>
<td>&lt;= 5%</td>
</tr>
<tr>
<td>A2. Non-earning Assets/Total Assets</td>
<td>&lt;= 5%</td>
</tr>
<tr>
<td>A3. Net Zero Cost Funds (Net Institutional &amp; Transitory Capital + Non Interest-bearing Liabilities)/Non-earning Assets</td>
<td>&gt; 200%</td>
</tr>
</tbody>
</table>

Setting aside loan loss allowances for delinquent loans (P1 and P2) decreases net income (R12). On the contrary, if delinquency (A1) can be controlled, then this decrease correlates positively with an increase in net income. The USAID Washington-funded WOCCU Philippines program began working with 11 credit unions in 1998. These credit unions, serving 75% women member-clients and 74% rural member-clients, have increased their outreach from 36,433 in 1998 to 131,521. Today, WOCCU Philippines now works with a total of 17 credit unions, serving 205,811 member-clients in June 2002.
The USAID Washington-funded WOCCU Romania program has worked to modernize 26 credit unions, or CARs, to convert their below-market pricing inherited from central planning days to market-based pricing in the transition economy. In 1999, not only were CARs charging interest rates on loans that were below the high inflation rate, but also they were paying more on savings than on loans. Within 30 months, the CARs have managed to charge and pay rates above inflation as well as to include a spread between rates charged on loans and rates paid on deposits.

**Yields and costs directly affect the growth rates of an institution.** The intent is for an institution to: pay real rates of return on savings and shares, charge rates on loans that recover all costs and pay competitive salaries for employees.

The goal of R1, Net Loan Income divided by the Average Net Loan Portfolio, is for 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.

The income ratios identify income from net loans, liquid assets, financial investments and non-financial investments. Financial cost ratios look at the costs of savings deposits, external credit and dividends on shares. Operating cost ratios (R9, R10) separate out operating costs and provisions for risk assets.

The USAID Washington-funded WOCCU Romania program has worked to modernize 26 credit unions, or CARs, to convert their below-market pricing inherited from central planning days to market-based pricing in the transition economy. In 1999, not only were CARs charging interest rates on loans that were below the high inflation rate, but also they were paying more on savings than on loans. Within 30 months, the CARs have managed to charge and pay rates above inflation as well as to include a spread between rates charged on loans and rates paid on deposits.

---

### Romania 26 CUs Modernize Pricing

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>R1 Return on Loans</strong></td>
<td>32%</td>
<td>37%</td>
<td>37%</td>
<td>71%</td>
</tr>
<tr>
<td><strong>R5 Cost of Savings</strong></td>
<td>47%</td>
<td>46%</td>
<td>34%</td>
<td>57%</td>
</tr>
<tr>
<td><strong>Annualized Inflation</strong></td>
<td>55%</td>
<td>41%</td>
<td>30%</td>
<td>22%</td>
</tr>
</tbody>
</table>

---

### R = Rates of Return & Costs

| R1. Net Loan Income/Average Net Loan Portfolio | Standards of Excellence |
| R2. Total Liquid Investments Income/Average Liquid Investments | Entrepreneurial Rate |
| R3. Total Financial Investment Income/Average Financial Investments | Market Rates |
| R5. Total Interest Cost on Savings Deposits/Average Savings Deposits | > R1 |
| R6. Total Interest Cost on External Credit/Average External Credit | Market Rates > Inflation |
| R7. Total Interest (Dividend) Cost on Shares/Average Member Shares | Market Rates |
| R8. Total Gross Income Margin/Average Total Assets | Market Rates >= R5 |
| R9. Total Operating Expenses/Average Total Assets | Variable – Linked to R9, R11, R12 |
| R10. Total Loan Loss Provision Expense/Average Total Assets | 5% |
| R11. Non-recurring Income or Expense/Average Total Assets | Dependent on Delinquent Loans |
| R12. Net Income/Average Total Assets | Minimal |

**Linked to E9**
What Does PEARLS Monitor?

**Liquidity**

Managing liquidity is an essential component of administering a savings institution. The goal of L1, 15% of short-term investments minus liquid assets minus short-term payables over total savings deposits, serves to maintain short-term investment liquidity to respond to member-client withdrawal and disbursement demands. The goal of indicator L3, to maintain the ratio of costly non-earning liquid assets to less than 1% of total assets, is to minimize non-earning cash to most daily operational needs.

**Signs of Growth**

Signs of Growth reflect member-client satisfaction, appropriateness of product offerings and financial strength. Growth directly affects an institution’s financial structure and requires close monitoring to maintain balance; for example, growth in savings (S5) drives growth in total assets (S11), but if loans (S1) are not growing as quickly as savings, then the institution will have high liquidity (L1) and low earnings (R12). Similarly, as savings are growing, it is important to watch that institutional capital (S8) is increasing at a similar pace so that there will be a buffer to protect those savings against unexpected losses. The growth indicators of PEARLS can help managers maintain a balanced and effective financial structure.

Growth in Total Assets is a critical indicator since 16 of the other PEARLS performance indicators are linked to it.

An institution needs to maintain accurate macroeconomic information, particularly the annualized inflation rate, in order to attain positive real growth.

Depositor confidence will be destroyed if an institution is not able to serve client withdrawals. Trinidad Credit Union in Bolivia, one of 15 credit unions participating in a USAID Bolivia-funded WOCCU strengthening program, has increased and maintained its liquidity (L1) above the standard of excellence level of 15%. Trinidad serves 9,957 members as of June 2002, 50% of whom are women. Trinidad, the only credit union operating in the department of Beni, has a central office and four rural branches. No other financial intermediary in the department matches Trinidad’s rural coverage.

- Ecuador underwent a severe financial crisis mid-way through the 1996-2001 USAID Washington-funded WOCCU technical assistance program. The 20 participating credit unions, serving 530,619 member-clients in 1996, managed to withstand the crisis, characterized by negative growth combined with high inflation, government freezes on savings withdrawals and bank failures. At year-end 2001, 20 credit unions serving 879,596 member-clients, 45% whom were women, managed to achieve growth in total assets of 45%, twice the level of annualized inflation of 22%.
### L = Liquidity

<table>
<thead>
<tr>
<th>Standard of Excellence</th>
<th>L1. ST Investments + Liquid Assets – ST Payables/Savings Deposits</th>
<th>Minimum 15%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L2. Liquidity Reserve/Savings Deposits</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>L3. Non-earning Liquid Assets/Total Assets</td>
<td>&lt; 1%</td>
</tr>
</tbody>
</table>

### S = Signs of Growth

<table>
<thead>
<tr>
<th>Standard of Excellence</th>
<th>S1. Growth in Loans to Members</th>
<th>Dependent on E1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S2. Growth in Liquid Investments</td>
<td>Dependent on E2</td>
</tr>
<tr>
<td></td>
<td>S3. Growth in Financial Investments</td>
<td>Dependent on E3</td>
</tr>
<tr>
<td></td>
<td>S4. Growth in Non-financial Investments</td>
<td>Dependent on E4</td>
</tr>
<tr>
<td></td>
<td>S5. Growth in Savings Deposits</td>
<td>Dependent on E5</td>
</tr>
<tr>
<td></td>
<td>S6. Growth in External Credit</td>
<td>Dependent on E6</td>
</tr>
<tr>
<td></td>
<td>S7. Growth in Member Shares</td>
<td>Dependent on E7</td>
</tr>
<tr>
<td></td>
<td>S8. Growth in Institutional Capital</td>
<td>Dependent on E8</td>
</tr>
<tr>
<td></td>
<td>S9. Growth in Net Institutional Capital</td>
<td>Dependent on E9</td>
</tr>
<tr>
<td></td>
<td>S10. Growth in Membership</td>
<td>&gt; 12%</td>
</tr>
<tr>
<td></td>
<td>S11. Growth in Total Assets</td>
<td>&gt; Inflation</td>
</tr>
</tbody>
</table>

**How Do PEARLS & CAMEL Differ?**

There are three primary differences between the PEARLS and the CAMEL (Capital Adequacy, Asset Quality, Management, Earnings, Liquidity) monitoring systems:

- **PEARLS** uses strictly quantitative indicators while CAMEL uses quantitative and qualitative; (e.g., Management). PEARLS provides an objective evaluation of financial performance by reviewing the results of the strictly quantitative indicators.

- **PEARLS** evaluates the financial structure of the balance sheet. Financial structure has a direct effect on the efficiency and profitability of a financial institution since the more an institution maximizes productive assets, the more possibilities it has to generate earnings.

- **PEARLS** measures growth rates. Monitoring growth in different areas not only allows institutions to assess the degree of satisfaction among member-clients, but also assists managers to maintain an effective financial structure given that growth directly affects financial structure.

**WHAT IS WOCCU?**

World Council of Credit Unions, Inc. (WOCCU) has credit union affiliates in Africa, Asia, the Caribbean, Central Asia, Central and Eastern Europe, Latin America, North America and the South Pacific. WOCCU manages long-term technical assistance programs to develop, strengthen and modernize credit unions and credit union systems around the world. WOCCU works to create an appropriate regulatory environment for safe and sound credit union operation.

**WHAT IS A CREDIT UNION?**

Credit unions, or savings and credit cooperatives, are user-owned microfinance institutions that offer savings and credit services to their members in developing and transitioning countries. Membership in a credit union is based on a common bond, a linkage shared by savers and borrowers that can be based on a community, organizational, religious or employee affiliation. Depending on a country’s legal framework, credit unions may be authorized either by the Superintendency of Banks, the Central Bank, the Ministry of Finance, the Ministry of Cooperatives or a freestanding law to mobilize member-client savings.
World Council of Credit Unions, Inc.

Home Office
5710 Mineral Point Road
PO Box 2982
Madison, WI 53701-2982  USA
Phone: (608) 231-7130
Fax: (608) 238-8020

Washington Office
601 Pennsylvania Avenue, NW South Bldg., Ste. 600
Washington, DC 20004-2601   USA
Phone: (202) 638-0205
Fax: (202) 638-3410

Website
www.woccu.org

E-mail
mail@woccu.org