

## Savings Product Management: Establishing the Framework

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Savings mobilization is a demand-driven activity. Any savings institution, whether a bank, credit union, or other type of microfinance institution (MFI), must offer savings products that meet the demands of existing and potential clients. A savings institution asks savers to place their funds within its care taking and then uses those funds to finance its loan portfolio. This relationship reverses the traditional power dynamic between clients and MFIs in which borrowers approach the institutions to ask for loans. In this new dynamic, a savings institution must market and sell itself to clients; it must convince savers that their savings will be safe and well managed.

Through surveys of savers in various regions of the world, WOCCU has discovered a common pattern in what savers look for in a place to deposit their savings. First, savers most frequently report that the key feature they seek is safety. A savings institution will be successful only if it can demonstrate to clients that it is safe and secure. Secondly, savers look for convenience: access and liquidity. They want to be able to access their funds whenever they need or desire them. Thirdly, savers look for a positive return on their savings. Savers place priority in this order: safety, convenience, and return.

These priorities shape the way we develop savings programs and tailor savings products to meet client demands. Building a safe and sound savings institution involves establishing sound financial disciplines that will protect the value of savings. The effective design and management of savings products provides savers the convenience and return they seek.

Once a savings institution designs products to meet the local demand, it must effectively manage those products. Savings policies

define the products offered and outline the procedures by which their liquidity, pricing, and transactions are managed. Savings policies should be updated regularly in response to market demand in order for products to remain competitive in the marketplace.

Interest rates determine the returns savers will receive on their deposits. To mobilize savings on a large scale, savings institutions must offer attractive rates. When setting interest rates, savings institutions should pursue three general principles: (1) market-driven, competitive rates; (2) cost-based rate setting; and (3) real return on savings. In addition to these principles, institutions should also consider the core characteristics of each product, together with the associated transaction costs, so that savings products are cost-effective for the institution, as well as gainful for the saver.

For institutions that have not offered savings services previously, the introduction of a savings program presents a new set of risks. Savings institutions should establish policies and procedures for liquidity management, cash management, and implementation of internal controls to address the new risks.

## **Savings Products**

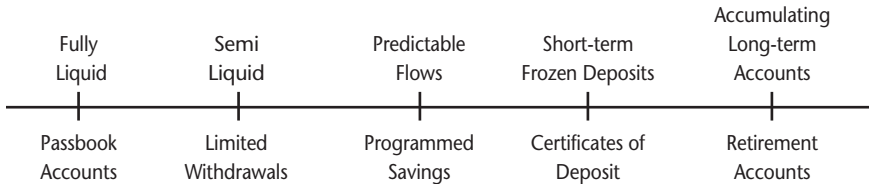
Savings products are built in three ways. Products are designed to balance the trade-off between liquidity (access) and return (compensation). Savings products are tailored to respond to the demands of particular market niches; for example, farmers who save in large amounts after a harvest and withdraw savings gradually through the year, or youth who save in small amounts due to limited incomes. Products are adapted to the purposes for which clients save; for example, to pay education fees or to purchase large expense items such as appliances or homes. In any case, products should be designed to satisfy local client demands for savings services.

### ***Liquidity Versus Returns***

Savings products exist along a continuum of trade-offs between liquidity (access) and return (compensation). Some products offer complete access to deposits (withdrawals whenever the saver wishes) with relatively low returns. Other products restrict liquidity (withdrawals), but offer higher returns. For instance, fixed deposits are not withdrawable for a stated period of time, but offer higher interest rates than the liquid

passbook accounts. A mix of products offers options of fully liquid, semi-liquid, fixed short-term, and accumulating long-term accounts, as shown in Figure 3.1. A range of product offerings should serve to satisfy the convenience and return demands of savers.

**Figure 3.1 A Mix of Products Offers Alternatives**



Small and low-income savers often seek small accounts that offer high levels of liquidity. These savers exhibit strong preferences for products such as passbook accounts, or demand savings, with low minimum balances and immediate access to savings at all times. These small and low-income savers are willing to sacrifice return for open access to their funds. Smaller savers may graduate from low-balance, low-return products to larger, higher-return products as their income and assets grow.

Alternatively, larger and wealthier savers seek to maximize their returns on savings and are willing to sacrifice access for higher returns. Larger savers often prefer products such as fixed-term certificates of deposit and long-term retirement accounts, which provide higher returns. Many of these savers prefer to build illiquid longer-term savings in pursuit of future goals while maintaining a minimum amount in a liquid passbook account for immediate or emergency needs.

### ***Tailored Savings Products***

A savings institution may offer a combination of generic savings products for the market at large and tailored savings products to address the particular demands of an identified niche. For example, youth accounts are designed to combine low returns and limited liquidity with small balances to serve the limited-income market segment under the age of formal client status (usually 18 years of age). At the other end of the continuum, savings products developed for businesses and institutions are usually large-balance time deposits that combine high returns and restricted liquidity. If savers have medium- or long-term plans to finance large personal investments such as education or housing, programmed

savings accounts with set terms, moderate returns, and limited liquidity can help them to achieve their goals. A savings institution must identify the particular demands of the local market in order to design the right mix of marketable savings products.

### ***Product Development***

When developing products, savings institutions first conduct market studies to identify local client preferences and evaluate local competitive conditions. Market studies provide two types of information: (1) client profiles and preferences, and (2) intelligence about services and product characteristics that competitors offer. Both types of information are key to tailoring savings services to meet the local demand.

To reach a diverse clientele and attract net savers, savings institutions must first identify who the savers are in a community. Market studies examine local demographic and economic characteristics to help managers define a strategy to penetrate the market. *Quantitative* research provides data from secondary information sources such as census and databases. *Qualitative* data is gathered from primary sources such as focus groups and member surveys (discussed in Chapter 4).

Market studies enable managers to identify competing savings institutions and evaluate the quality of their services. Savings institutions can design attractive products by comparing the service characteristics—price, interest rate scale, term, minimum amount, convenience, waiting period, service variety, sophistication of product—with those of other local savings institutions and then improving those service characteristics.

### ***Presentation of Products***

Product design must be simple and clear, so that clients can choose products with the confidence that they understand all the benefits and costs. Simplicity also helps reduce administrative procedures and contain operating costs. Some credit unions offer a limited range of savings products, while others offer a highly differentiated, wide range of products. The extent of variation generally depends on the size of the market served and the variety of demands in that market. Products should not be designed to compete with each other, but to meet specific niche demands of clients.

Successful savings products most often have attractive and memorable names. Frequently, positive adjectives are added to the account

names, such as platinum, gold, or silver. In this example, the higher the value of the metal, the higher the interest paid on the named account. And the higher the interest paid, the higher the minimum balance requirement. Product names may also be related to the market niches to which they are targeted; for example, “Home Savings” or “Education Accounts.”

The credit union experience in mobilizing voluntary savings has focused primarily on six savings products: passbook accounts, fixed-term certificates of deposit, youth savings, programmed savings, institutional accounts, and retirement accounts. Table 3.1 shows the core characteristics of these products, defined as: target market, interest rate, minimum opening deposit, minimum balance requirement, withdrawal policy, promotion, and institutional implications.

Some basic product types are described here, with interest rates and pricing mechanisms, withdrawal policies, relationships to lending, promotional requirements, and advantages and disadvantages for both clients and savings institutions. Examples of real products demonstrate the impact of effective product design.

### *Passbook Savings Accounts*

The passbook account is the most popular savings product in credit unions. The characteristics that make the passbook account attractive to a wide market are its complete liquidity, easy accessibility, minimum amount to open, no or low minimum balance requirement, and competitive rate of return. Clients can deposit money and withdraw it as they wish. This product is aimed at micro and small savers who demand high liquidity. It also serves larger savers who maintain a portion of their funds in these liquid accounts for withdrawal on demand.

**Pricing.** Interest rates on passbook accounts should be market-based, competitive with other financial institutions, and provide positive real returns above inflation. The savings institution should offer an interest rate up front, with the rate remaining variable so that it can be adjusted up or down as market conditions warrant. Many credit unions tier their interest rates on passbook accounts according to account balances. In order to encourage savings growth and to compensate for the higher percentage transaction costs on small accounts, credit unions pay higher interest on accounts with larger balances.

**Table 3.1 Savings Product Characteristics**

PRODUCT	TARGET MARKET	INTEREST RATE	MINIMUM OPENING DEPOSIT
PASSBOOK ACCOUNTS	Primarily micro and small savers, large savers for on-demand use of some funds	X (base rate), rate increases with increasing account balance	None or very low
FIXED-TERM CERTIFICATES OF DEPOSIT	Net savers who seek to maximize returns	X + 2%, fixed at opening of certificate, higher for longer term or larger balance	High
YOUTH SAVINGS	Population under the legal age of client status (usually 18 years of age)	X – 1%, paid only on accounts with balances above certain threshold	None or very low
PROGRAMMED SAVINGS	Clients with specific goals or set targets, examples are Christmas clubs and education or housing accounts	X + 1%, higher than passbook and lower than certificates of deposit	Higher than passbook
INSTITUTIONAL ACCOUNTS	Organizations such as NGOs, churches, foundations, associations or corporations that require servicing of funds	X + 2%, increases with balance	Highest
RETIREMENT ACCOUNTS	Net savers who seek to maximize returns for long-term planning	X + 2%, tied by contract to real return above inflation	High

MINIMUM BALANCE REQUIREMENT	WITHDRAWAL POLICY	PROMOTION	INSTITUTIONAL IMPLICATIONS
None or very low	Unlimited, or completely liquid	Brochures, flyers, lobby signs, lotteries, prizes, and advertising	Most popular product. Provides abundant and low-cost source of funds. Higher transaction costs when balances are low or withdrawals are frequent.
Set at opening of account	Term stated at opening of account, only upon reaching maturity, minimum 30 days	Brochures, flyers, lobby signs, and lotteries	Low administrative costs. Stable funds to finance longer term loans or investments. Facilitates cash and liquidity management.
None or very low	Unlimited, or completely liquid	School outreach, brochures, flyers, lobby signs, and targeted gifts or promotional items	Establish early client relationships, attract parents of youth to become clients. High transaction costs and low consolidated volume.
Accumulates with consecutive deposits	Specified at opening of account, only at end of planned savings period, penalty assessed if withdrawn early	Brochures, flyers, and lobby signs	Provides easily managed, predictable liquidity flows. Low administrative costs with only one withdrawal.
Highest	Unlimited, or completely liquid	Visits to institutions	Provides access to larger savings collected by institutions or groups. Very sensitive to interest rates, can create liquidity risk if constitute large portion of total deposits.
High, accumulates with consecutive deposits	Upon reaching retirement age, highly restricted	Brochures, flyers, lobby signs, and visits to target groups	Prior to offering services, institution must find out about applicable laws. Facilitate liquidity management due to restricted withdrawals.

**Passbook accounts in Ecuador.** The passbook product serves a wide market, but is particularly attractive to micro and small savers who demand high liquidity. Credit unions in Ecuador offer savings services to a large number of savers with small accounts. The savings account distribution in Table 3.2 shows low average and median savings account sizes. The average passbook deposit size in these 22 Ecuadorian credit unions was \$77. The median account size was \$61; in other words, half of all savings accounts were less than \$61. Women held 43 percent of the accounts, comprising 37 percent of the total savings volume.

**Table 3.2 Passbook Savings Account Profiles in 22 Ecuadorian Credit Unions<sup>1</sup>**

	MEN	WOMEN	TOTAL
TOTAL VOLUME	37,984,825	21,865,727	59,850,552
NUMBER OF ACCOUNTS	446,281	335,351	781,632
AVERAGE ACCOUNT SIZE	85	65	77
MEDIAN ACCOUNT SIZE	68	52	61

*All numbers are rounded to nearest whole, in U.S. dollars.*

<sup>1</sup>As of March 2001.

Table 3.3 shows the distribution of passbook accounts by size. The Ecuadorian credit unions displayed a pattern consistent with more mature credit unions: many small accounts that are held by low-income members, a small number of large accounts over which to spread fixed costs, and a moderate number of mid-range accounts that provide a stable base of funds.

The majority of passbook accounts—81 percent—had less than \$100. These small accounts provided only 19 percent of the total savings volume. The credit unions serviced another 100,000 accounts with balances between \$101 and \$300; thus, 94 percent of all accounts held less than \$300. This 94 percent of accounts represented 41 percent of the total savings volume in the credit unions.



The 6 percent of accounts with balances greater than \$301 accounted for 59 percent of the total savings volume. The few large accounts offset the fixed costs of the savings services, reducing the fixed costs per dollar deposited, and fund much of the loan portfolio for low- and middle-income borrowers of the credit unions.

**Table 3.3 Passbook Account Size Distribution in 22 Ecuadorian Credit Unions<sup>1</sup>**

ACCOUNT SIZE IN U.S. \$	VOLUME	%	ACCOUNTS	%
1 – 100	11,387,591	19	634,817	81
101 – 300	12,899,450	22	101,027	13
301 – 500	7,995,400	13	20,810	3
501 – 1,000	9,542,151	16	15,244	2
1,001 +	18,025,960	30	9,734	1
<b>TOTAL</b>	<b>59,850,552</b>	<b>100</b>	<b>781,632</b>	<b>100</b>

*All numbers are rounded to nearest whole in U.S. dollars.*

<sup>1</sup>As of March 2001.

Some credit unions establish a minimum passbook balance before interest can accrue. Accounts below the minimum balance do not earn interest. This allows an institution to offset the maintenance costs of smaller accounts, where transaction costs are high relative to the balance of the account. At the same time, it offers the smallest savers a store of value for their savings as well as the opportunity to build their accounts over time from small amounts to larger ones that do earn interest.

**Withdrawal policy.** As fully liquid products, passbook accounts generally allow unlimited withdrawals. Some credit unions have experimented with semi-liquid variations of passbook accounts that limit the number of withdrawals per month or charge fees for withdrawals over a certain number. Such limited passbook accounts have proven to be less popular than basic passbook products; savers consistently prefer unlimited withdrawals on passbook savings.

**Relationship to lending.** Passbook accounts respond to market demand for savings for the sake of saving. There is no leveraging relationship to lending. The amount in a passbook savings account provides little information on an individual's income earning capacity or debt repayment capacity.

**Promotions.** Credit unions offer savers incentives to increase deposits by tiering interest rate structures to offer higher interest rates for larger balances and by holding lotteries for benefits or prizes. Interest rate premiums on new accounts serve to attract new savers to an institution.

*Lotteries.* Credit unions have found that the lottery of benefits or prizes, with the associated publicity, provides significant incentives for small savers. Lottery prizes may include food, household items, bicycles, motorcycles, or even sums of money. A savings institution can hold lotteries periodically to maintain incentives for both small and large savers. For example, *Union Popular* in Guatemala holds one lottery every three months to award small prizes to smaller deposit holders and another lottery every six months to award larger prizes to the larger depositors. In all cases, the rules for all lotteries should be clearly defined and publicly available.

Lotteries can serve the dual purposes of increasing the size of deposits from existing clients and attracting new deposits from new clients. The most effective lotteries provide incentives not only for increasing account balances, but also for maintaining them. If savers must have a minimum balance to participate, they are likely to maintain higher account balances over the long term. When savers deposit into their accounts, they receive lottery entries based on the amount

**Limited withdrawals in Mexico.** In one instance, a *caja popular* experimented with passbook accounts that permitted withdrawals only on certain days of the month and limited the number of withdrawals allowed each month. The accounts were designed to facilitate the credit union cash flow needs, but were inconvenient for members and unpopular as a result. They never accounted for more than one percent of the *caja's* total savings volume.

deposited. When they withdraw from their accounts, they disqualify themselves from the lottery for that period.

Lotteries do incur some costs to the savings institution. Administrative costs include the costs of the prize and the costs for publicity and printed materials (tickets and posters). As the savings pool competing for the prizes grows, however, the costs as a percentage of the savings mobilized through the promotion falls. The costs are usually more than offset, since the provision of a prize allows the savings institution to offer lower interest rates and incur lower financial costs on the accounts included in the lottery. With one-time or temporary campaigns, savings institutions must be sure to have enough liquidity available to pay out any savings withdrawn after the close of the promotion.

*Interest rate premiums.* Another way to increase savings mobilization is to offer interest rate premiums to new savers. The savings institution announces, through public notices and posters on the walls or in the windows, that an additional fraction of a percent—on top of the normal rate—will be paid on new passbook accounts or fixed-term certificates of deposit opened during a certain period of time. This increase in the rate creates a financial incentive for non-saver clients and unaffiliated members of the community to deposit their savings in the institution.

Offering interest rate premiums is a fast and efficient way to attract new resources and stimulate savings growth. Premiums incur much lower administrative costs than lotteries. Rate-based promotions have proven to attract deposits rapidly, but they also risk prompting savers to withdraw existing deposits that earn lower rates in order to deposit them at expected higher rates during future promotions. Premiums may also create an expectation that rates will always be high; rules and rates of the premium must be well publicized.

**Advantages and disadvantages.** The advantages of the passbook account for the client are twofold: it provides easy access for withdrawals, and it offers a market return on savings.

For the savings institution, the passbook savings product can be an abundant and low-cost source of funds. It is also the master account that supports other financial services and products. For instance, passbook accounts can serve as the crediting accounts for loan disbursements, as the receiving accounts for wire transfers, or for the liquidation

of fixed-term certificates of deposit when they mature.

The drawbacks of this account for a savings institution are: high transaction costs when the balances are low or when withdrawals are frequent, high operating costs to administer transactions and calculate interest in non-computerized institutions, and volatility of deposits and withdrawals. These factors can complicate daily and weekly cash flow management and therefore command disciplined savings management.

### *Fixed-term Certificates of Deposit*

The fixed-term certificate of deposit is the second most popular savings product in credit unions. A certificate of deposit is a signed contract between a financial institution and a client. The contract specifies a certain amount to be deposited, until a stated maturity, for a set interest rate.

Fixed-term savings products are targeted to the market niche with greater savings capacity. They are designed for net savers who seek to maximize returns on their savings and are willing to sacrifice liquidity to do so. The primary users of these accounts tend to be people who have accumulated some stock of savings or wealth. The market for fixed-term products often includes associations or firms that want to realize higher returns on large volumes of funds. This market may also include individuals who want to save for long-term goals such as home building, land purchase, or education.

Fixed-term accounts offer limited liquidity, but provide higher returns than more liquid products such as passbook accounts. Larger minimum balances are required for fixed-term deposits. A certificate of deposit contract bears the saver's name and signature and the institution's identifying marks. The contract is non-transferable and non-negotiable. The fixed-term deposit can have either discretionary or automatic renewal upon maturity, according to the terms agreed upon when opening the account.

Credit unions often start by offering fixed-term deposits with 30- and 60-day maturities, adjusting or expanding the offerings according to member demand. An institution's fixed-term offerings might include: 30 days, 60 days, 90 days, 120 days, 180 days, one year, two years, and three years. These deposits should be matched to loan products of comparable terms so savings institutions can maximize earnings while maintaining sufficient liquidity.

**Pricing.** The interest rate is set when the certificate of deposit is signed. The interest is paid upon maturity for all fixed-term products. To compensate the saver for sacrificing liquidity, these accounts offer higher rates of return than other products. Fixed-term products, or certificates of deposit, are usually the most costly for the savings institution in terms of the rate of return paid. The longer the term of the certificate, the higher the interest rate paid.

Fixed-term funds tend to be interest rate sensitive. As fixed-term deposits come to maturity, clients will renew the certificates or move them elsewhere, according to where they find the best returns.

**Withdrawal policy.** As a general rule, fixed-term deposits may not be withdrawn until the date of maturity. In some cases, however, the early withdrawal of some or all funds may be approved, but the client pays a penalty for early withdrawal.

**Relationship to lending.** Clients may use fixed-term deposits to secure loans. (Note: this is a security relationship and not a leveraging relationship.) The loan term should match the deposit maturity. Deposits used to secure a loan may not be withdrawn while the loan is outstanding.

**Promotion.** Posters and brochures that display the rates of return paid on the certificates of varying terms are the most effective means to promote the product. The posters and brochures should be displayed prominently in the lobby and at the teller counters of the savings institution.

**Advantages and disadvantages.** For the client, fixed-term certificates of deposit offer higher interest rates than other savings products. Fixed-term savings can also serve as security for loans.

The primary advantages of fixed-term products for a savings institution are in cash flow and liquidity management. Since both the price and the term of the product are fixed through a contract at the outset, the savings institution can use the funds in fixed-term accounts to finance longer-term loans or investments. Fixed-term products have lower administrative costs, with only one initial deposit transaction and one withdrawal transaction upon maturity. Fixed-term

accounts typically provide a large portion of the savings mobilized by credit unions.

The higher financial cost of funds from fixed-term accounts is the primary disadvantage for the savings institution. Another drawback is that there is no guarantee of renewal upon maturity of the term, as renewal decisions are sensitive to interest rates.

### *Programmed Savings Accounts*

Savings products that are tailored to assist savers in the achievement of certain goals or set targets are popular in credit unions. Programmed savings are accounts in which deposits are made on a regular basis for specific purposes and time periods. For example, a regular deposit is made into the account each month for 11 months. On the 12th month, the client withdraws the full amount of the savings plus the interest accrued during the specified period. In other cases, regular deposits may be made on a daily or weekly basis.

Programmed savings typically include:

- Christmas clubs and vacation accounts, which usually have one year terms.
- Education accounts for families who save for cyclical school fees on a six- to 12-month basis.
- Housing accounts in which clients save a fixed amount each month for periods of one to three years to use as down payments and to qualify for loans for the purchase of a home or land.

**Pricing.** Programmed accounts pay higher returns than passbook accounts to provide clients with added incentives to make scheduled deposits. The higher interest rates compensate clients for the restricted liquidity.

**Withdrawal policy.** The client may not make withdrawals from a programmed account until the specified maturity date. If clients withdraw funds before the maturity date, they must pay fines or penalties of no interest on the amount withdrawn, for each withdrawal.

**Relationship to lending.** Programmed savings deposits may be used as collateral to secure loans. (Note: this is a security relationship and not a leveraging relationship.) Account withdrawals are frozen when

programmed deposits serve as security for a loan, even when clients reach the maturity date of the program.

**Promotion.** Posters and brochures that outline the characteristics of the programmed savings accounts offered should be displayed prominently in the lobby and at teller counters.

**Sample housing product.** Housing finance is a high priority for many low-income savers and client families of savings institutions. Housing finance requires significant down payments and larger loan amounts. In response to this, many credit unions provide a product that enables members to save in order to accumulate capital for down payments and qualify for loans to meet their housing needs.

The Housing Savings Product has the following characteristics.

- A term of one to three years with required monthly deposits of a fixed amount.
- Upon reaching the period end and fulfilling the terms of the program, the client may withdraw his or her savings, including the interest received, renew it, or roll it over into a fixed-term certificate of deposit.
- Upon fulfillment of the program schedule, the client may qualify for a preferential housing loan up to a specified amount, for a specified term, at a special interest rate.
- If a client does not deposit during one, or even a few months, the funds are not affected, and interest continues to accrue on the accumulated total. This may be sustained for up to three months, after which time the contract would undergo liquidation at a lower interest rate than the institution pays on savings deposits.
- No withdrawals are allowed until the end of the period.
- If a client does withdraw funds before the end date, he or she must pay a fine or penalty of no interest on the amount withdrawn, for each withdrawal.

**Advantages and disadvantages.** The principal advantage of programmed savings for clients is that it provides them with a structure to save toward a specific goal. Programmed accounts offer savings alternatives to taking out loans in order to accomplish these goals. Programmed accounts also provide higher returns to clients than pass-book accounts.

For the savings institution, programmed savings provide regular cash inflows that facilitate liquidity management. Fixed monthly savings installments are deposited in stable and predictable amounts, for known periods of time. A savings institution can be reasonably confident that the funds will come in or exit at a specified time. Programmed savings serve to soften market cycles. Furthermore, the product has low administrative costs, since deposits are scheduled and only one withdrawal is permitted at maturity.

Programmed savings do carry risks for the savings institution. For most programmed accounts, there is no assurance that the saver will comply with scheduled deposits, or continue to pursue the end goal and fulfill the terms of the contract. At the end of the program period, there is no guarantee the client will continue with the savings program. To mitigate renewal risk, a savings institution must manage these funds under the assumption that the program will not be renewed.

### ***Youth Savings***

The infant, children, and student savings accounts that comprise youth savings programs serve the market segment under the legal age

**Retirement accounts.** Retirement accounts are very long-term programmed savings accounts. They are usually offered as long-term savings accounts with regular deposits but no or highly restricted withdrawals. The rate of return is tied by contract to a real return above the inflation rate. Prior to offering these accounts, a savings institution must find out if there are any laws within the country that regulate retirement accounts. For the savings institution, retirement accounts can facilitate liquidity management since they hold longer terms than traditional fixed-term savings and often operate as semi-liquid funds with restrictions on withdrawals.



of adulthood (usually 18 years of age). Through youth savings programs, a savings institution can establish early client relationships with the young people in the local market, develop the future loyalty of young savers, and attract the parents of youth savers to become clients. The minimum balance required to open a youth savings account is usually lower than other accounts, to address the low savings potential of this market.

**Pricing.** Youth savings accounts operate like passbook accounts; they are fully liquid and offer variable market rates of return. Because youth savings is characterized by small amounts, this product has high relative transaction costs. The cost of administering a deposit or withdrawal is high relative to the size of the account. For that reason, the interest rate offered on youth savings is usually lower than that offered on passbook accounts. The balance required to earn interest tends to be higher for youth accounts.

**Relationship to lending.** Youth accounts have no relationship to lending since infants, children, and students are not eligible for loans.

**Promotion.** Targeted promotional items, such as piggy banks, stuffed animals, or school supplies, are often given out to provide incentives for the young to open savings accounts. Outreach in local schools is an effective way to promote youth accounts.

**Advantages and disadvantages.** For the savings institution, youth savings offers an attractive and highly visible service for markets with large concentrations of infants, children, and students. Youth accounts provide a less volatile source of funds with lower financial costs than passbook savings accounts.

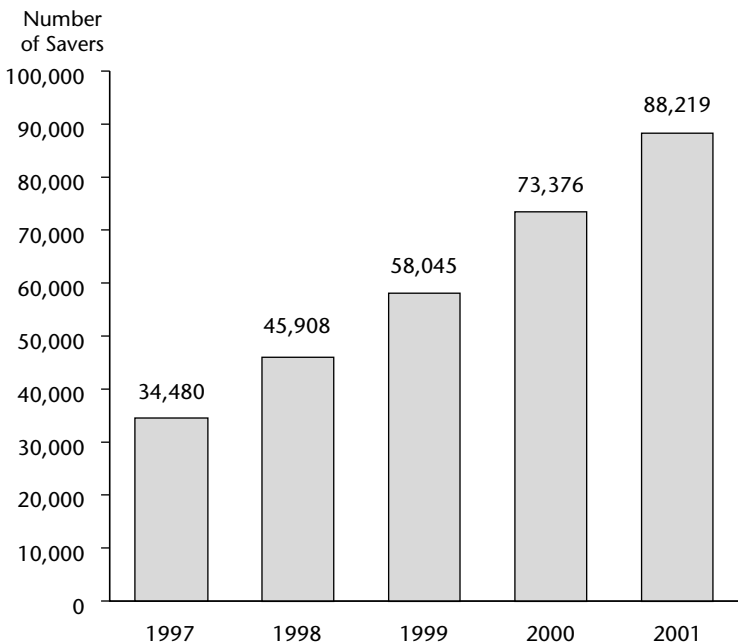
The disadvantages of offering youth accounts are the high transaction costs associated with handling the small accounts, the low volume of savings, and the high levels of direct marketing required to educate and attract youth savers. Youth savings are expensive to administer, but many credit unions offer the product as part of their marketing efforts. They hope to build youth loyalty, as well as attract the parents to use other financial services.

### *Institutional Savings*

Savings institutions can offer institutional accounts to neighborhood associations, churches, corporations, other associations, unions, foundations, and non-governmental organizations (NGOs): organizations that require safe, convenient servicing of institutional funds. The terms and conditions will be the same for organizations as they are for indi-

**Youth savings in Guatemala.** After conducting market research and identifying unmet demand, Guatemalan credit unions introduced youth savings. They launched a full-fledged marketing campaign for children and adolescent savers in 1996. As of December 31, 2001, youth savers made up 21.7 percent of the 406,074 member-clients and accounted for 0.6 percent of the total savings volume. Figure 3.2 shows the growth in the number of youth savers since the campaign began.

**Figure 3.2 Growth in Youth Savers in Guatemalan Credit Unions<sup>1</sup>**



<sup>1</sup>As of December 31, 2001.

vidual clients. Since institutional savings accounts tend to have higher levels of activity than personal accounts and the transaction costs are greater, minimum balance requirements are higher and fees may be charged for account maintenance.

**Advantages and disadvantages.** Institutional products can enable the savings institution to access the larger volume of savings available from organizations. Savings institutions may also gain access to the members of the organization for the purpose of marketing individual savings services.

Institutional savings are often sensitive to interest rates and can be volatile. These large deposits can create liquidity problems for the savings institution if they constitute a large portion of total funds and the organization removes the funds abruptly. Sufficient liquidity reserves and investment in short-term liquid assets are required to manage the risks associated with institutional savings.

### ***Shares and “Social Capital”***

In addition to offering voluntary savings products, most credit unions require members to purchase obligatory shares (or equity paid-in capital). In some credit unions, the member shares are withdrawable upon the departure of a member. In others, member shares are non-withdrawable investments.

Note that where shares are withdrawable, they do not meet the definition of permanent or institutional capital. They are a liability, not capital. Where shares are included in net worth calculations, withdrawal is restricted if total credit union shares decrease by a specific percentage (for example, 10 percent or to a minimum net worth requirement). Shares counted as non-withdrawable capital or as withdrawable net worth must be free of encumbrances and cannot be used to guarantee loans.

Dividends paid on shares are based on available earnings and paid at the end of the accounting period each year (when the books are closed). No dividends should be paid on shares until the capital reserves-to-assets ratio reaches minimum standards; that is, 8 percent of total assets. To provide members with a return for their risk participation in the credit union, the rate of return on these shares should be higher than the returns paid on savings accounts. Management may advertise an anticipated rate to be paid on these accounts based on the rate that

was paid at the end of past accounting periods. Credit unions should provision funds quarterly to pay the projected dividend to be paid on shares at year-end.

## Account Procedures

Procedures for managing savings accounts include opening accounts, making deposits and withdrawals, and closing accounts.

### *Opening Accounts*

To open a savings account, a client fills out an identification card that records his or her name, address, and signature. The identification card is completed only when the first savings account is opened, not for additional accounts. The client must sign the card in the presence of an official representative of the savings institution to ensure that a valid signature is obtained. The card designates one or more beneficiaries for the account in the case of death of the saver. To verify the new client's identity, a staff member photocopies a photo identification card, such as a driver's license or other government-issued identification card. The mother's maiden name is recorded and later used for individual verification. The identification cards should be stored in fireproof boxes that are locked when the institution is closed.

A client may open a passbook savings account with a minimum deposit. At this point, the client will receive an account number. Account numbers are issued in consecutive order beginning with 1. The numbers are permanent and non-transferable. A client may have more than one savings account. Each additional account should have the same number with a different suffix (255-1, 255-2, 255-3).

In the case of youth clients, the adult who is responsible for the minor must fill out and sign the identification card. Minors may make deposits and use funds as allowed by law. Upon reaching 18 years of age, a youth client may fill out an adult application. With the authorization of a relative, he or she may close the youth account and transfer the balance to another type of savings account.

**Passbooks.** If the savings institution is manual, or without computerized systems, the client presents a passbook that is updated as a record of transaction. A sample passbook page is shown in Figure 3.3. Even in many computerized credit unions, passbooks are still provided to

members who want to hold their own records of their accounts or where mail delivery systems are unreliable. A teller or savings promotion employee opens a savings passbook in which all future activity will be registered: deposits, withdrawals, and capitalization of interest. In credit unions, dividends earned on shares are also recorded in the passbook. The balance must be brought up to date with each transaction. A teller or other staff member of the savings institution records transactions and balance adjustments in client passbooks.

The same procedures should be used to open passbook, programmed, youth, and institutional accounts.

If the current savings deposit accounts portfolio is managed with an automated computer program, passbooks are not issued and instead savers receive account statements in the mail each month, within ten days of the close. When clients make transactions, whether deposits or withdrawals, they receive copies of the deposit or withdrawal slips. The evidence in a computerized system is the receipt generated after each transaction, together with the monthly statements.

**Certificates of deposit.** To open a fixed-term certificate of deposit, a client must fill out an application. The teller completes a deposit slip and the certificate of deposit with the name of the client, date and amount of deposit, interest rate, term, date of maturity, schedule, and method for payment of interest. The client should designate two or more beneficiaries as part of the process of opening a certificate. The teller sets up a suffix number for this account if the client has other existing accounts with the institution or provides a new account number if this is the client's first account. The certificate becomes a contract between the savings institution and the client.

Replacement of a passbook or certificate of deposit due to loss, destruction, or theft is the responsibility of the client. If a fee is associated with replacement, the client is responsible for paying the fee prior to receiving the new passbook or certificate. The new document will show the account balance kept by the institution, unless the client has convincing evidence of a different balance.

**Procedures.** Institutions must adopt clear and consistent procedures for the administration of savings accounts. The standardized text on forms used to open savings accounts might appear as:

**Figure 3.3 Example of a Typical Passbook**

LOGO	SAVINGS INSTITUTION Address Phone number			
<b>PASSBOOK ACCOUNT</b>				
Name: _____				
Address: _____				
Account Number: _____				
Client Number: _____				
DATE	DEPOSITED	WITHDRAWN	BALANCE	CASHIER

Note: Terms and conditions of the account are printed on the reverse side if the passbook is one page folded.

If the passbook is a small book, the logo, savings institution, and account holder name and account number are printed on the outside of the front cover and the terms and conditions of the account are printed on the inside front or back cover.

The initial deposit to open this account is \_\_\_\_\_.  
 The minimum savings deposit allowed thereafter is \_\_\_\_\_.  
 The minimum balance of savings required in order to earn interest is \_\_\_\_\_. The maintaining balance is \_\_\_\_\_. The maximum allowable savings balance is \_\_\_\_\_. The minimum withdrawable amount is \_\_\_\_\_. On a monthly basis, the number of withdrawals allowed is \_\_\_\_\_. Withdrawals of less than \_\_\_\_\_ can be paid in cash. A withdrawal over that amount will be paid by check.

**Fees.** To help cover administrative costs, some credit unions charge fees or commissions to savers for opening accounts, issuing passbooks, making withdrawals, or maintaining accounts with low balances. Such fees must be limited so they do not have the effect of crowding out microsavers. In fact, most credit unions have eliminated these fees to minimize both transaction costs and barriers to entry for persons who want to join or save in the institution.

### ***Deposits and Withdrawals***

**Over-the-counter deposits.** Generally, cash or “over-the-counter” deposits are accepted with presentation of the appropriate passbook or identification. Upon presenting the sum for deposit, the client fills out a deposit slip and the teller updates the balance in the passbook. The updated passbook and a copy of the slip are given to the client as evidence of the deposit. If an institution does not issue passbooks, the client must retain all deposit slips and receipts as evidence of transactions.

Deposits may be accepted without presentation of the passbook if the client submits the required deposit slip. A third party may make deposits on behalf of an account holder as long as the required deposit slip is submitted with the deposit. In both cases, the passbook is updated at a later date. Clients are responsible for presenting passbooks or receipts as evidence in cases of error.

The teller should count all cash and put it in the drawer immediately after each transaction. No money should be left on the counter. In many countries, tellers are required by local regulation or money-laundering controls to notify managers if they receive a deposit above a certain amount.

If checks are accepted for deposits, accounts should not be credited until the savings institution determines that there are sufficient funds in the issuing account to cover the check. Interest is paid from the day the deposit is made until the date of withdrawal, even though the funds are not available for withdrawal until the check has cleared. Fees should be charged for returned checks.

A sample deposit slip is shown in Figure 3.4.

**Direct deposits.** Through cooperative agreements with employer institutions, credit unions often arrange to deduct directly from the payroll specific amounts authorized by employees for deposit into individual savings accounts. This provides a low-cost, stable inflow of funds for an institution.

**Withdrawals.** A saver is required to present identification when requesting a withdrawal. For each transaction, the client completes and signs a double-copy receipt. One copy stays with the savings institution; the other is given to the client as evidence of the transaction. A sample withdrawal slip is shown in Figure 3.5.

The teller registers the withdrawal in the passbook, recording the amount of withdrawal and updating the balance. The client receives a copy of the slip, the passbook, and the cash for the amount of the withdrawal. Withdrawals of funds can be made only by the account holder, by his or her legal representative, or by a person authorized through a signed order or power of attorney. Tellers should count cash three times before disbursing it to avoid counting errors.

The most convenient service would provide clients with cash for their withdrawals. However, when the withdrawal amount is too large for a small savings institution to administer safely, it becomes policy to disburse withdrawals above a certain threshold by check.

If an individual who is not the account holder tries to withdraw funds from a passbook and without written authority to do so, the savings institution does not permit the withdrawal and it confiscates the passbook. The institution should immediately inform the account holder of the withdrawal attempt and notify the authorities as necessary. The steps for making a withdrawal or deposit are presented in Figure 3.6.



Figure 3.4 Sample Deposit Slip

DEPOSIT SLIP				
SAVINGS INSTITUTION				
Deposits may not be available for immediate withdrawal				
DATE	ACCOUNT NO.			
NAME				
ADDRESS				
CASH		OTHER		
	Dollars	Cents	Dollars	Cents
Deposits				
Personal Loans				
Real Estate Loans				
Interest				
Late Charges				
Vacation Club				
Christmas Club				
Insurance Fee				
Other				
<b>Total</b>				
Savings Balance \$ _____		Teller Initials _____		
Loan Balance \$ _____		_____		
Checks Credited Only Subject To Collection				

Figure 3.5 Sample Withdrawal Slip

WITHDRAWAL SLIP SAVINGS INSTITUTION		
DATE	ACCOUNT NO.	
NAME		
MUST BE SIGNED BY CLIENT		
Deposits	\$	
Cash		
Checks		
<b>TOTAL</b>		
<div style="display: flex; justify-content: space-between;"> <span>CLIENT SIGNATURE</span> <span>TELLER INITIALS</span> </div>		

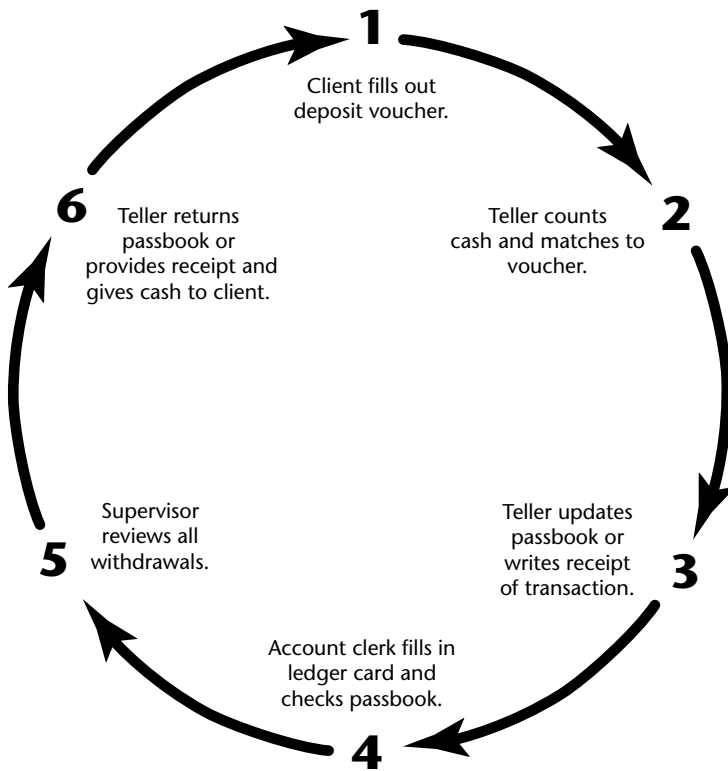
The general powers of credit unions allow them to place liens on member deposits as security, to freeze member deposits when loans are delinquent, and to write off unrecovered delinquent loans against delinquent borrower's or co-signer's savings deposits and paid-in shares.

### *Closing Accounts*

Savers may close their savings accounts at any time, in accordance with the terms for each type of account. When closing an account, staff members in the savings institution must ensure that the deposit is not securing a loan. A savings account that secures an active loan may not be closed until the loan is repaid. If a client is delinquent on a loan, he or she may not withdraw funds or close the savings account.

When an account is closed, the signature card should be pulled from the active account file and placed in a closed account file. Every

**Figure 3.6 Steps Required to Make a Withdrawal or Deposit**



month, a list of closed accounts should be presented to management. The list should include account number, member name, and the reason for closing. The list should be kept as a permanent record.

For certificates of deposit, the client must indicate how he or she would like to receive the liquidation upon maturity. The client may receive the funds in cash, by check, in another savings account, through renewal of the certificate, or through a combination of these options. Fixed-term certificates of deposit closed prior to stated maturity are subject to a fee or penalty on the interest rate.

When a client dies, the savings institution must be given legal proof of death. When that document is received, the institution delivers the balance of any accounts held by that client to the named beneficiaries. If no beneficiary was named, the funds are delivered to

the testamentary or legitimate heirs after the legal confirmation of the death of the client.

**Insurance.** Many credit unions provide life insurance on savings, which pays beneficiaries a benefit equal to the amount of savings that the deceased member had in the credit union (in addition to transferring the actual savings to the beneficiary). Where such insurance is offered, the legally identified beneficiaries receive any benefits related to the insurance protection.

**Inactive accounts.** A passbook savings account without activity of deposit or withdrawal for 12 months should be considered inactive. The client is sent a written notice to the address indicated on the identification card. After 18 months of inactivity, the savings institution sends a second letter to the account holder. After two years of inactivity, and if there has been no response to the letters, the savings institution closes the account and transfers the balance to non-distributable reserves or institutional capital.

## **Interest Rates**

Surveys of credit union members in many countries drew consistent responses with regard to what members look for in savings institutions. After safety and convenience, savers seek returns on their savings (determined by interest rates). To achieve and maintain financial self-sufficiency, an institution must be able to pay competitive returns on savings deposits.

Given the wide range of alternatives (both financial and non-financial) available to savers, credit unions have learned that they cannot assume that members will deposit their funds with them out of institutional loyalty. Instead, savers want to invest their funds in the safest and most convenient alternative available, where they will receive the highest return on their savings. Where savings interest rates at credit unions are lower than those at other financial institutions, members have consistently taken their savings elsewhere, regardless of their affiliations.

### ***Interest Rate Principles***

In setting interest rates, savings institutions should pursue three general

principles: market-driven, competitive rates, cost-based rate setting, and real return on savings.

**Market-driven, competitive rates.** To mobilize savings on a large scale, savings institutions must offer interest rates that are competitive with the rates offered in the local financial market. Managers should monitor competing savings institutions monthly to track the rates they offer on savings products and adjust interest rates as necessary to keep savings products competitive. Many credit unions pay one or two percentage points above their competitors. This may reflect an aggressive competitive effort. Or, it may reflect a higher return needed to where credit unions are not supervised by the Superintendent of Banks and do not enjoy the same level of public confidence as other formal financial sector institutions. Savings generally earn higher interest rates in urban centers where competition is stronger than in rural areas where savers have fewer alternatives.

**Cost-based rate setting.** Interest rates should be established through entrepreneurial planning. An institution's business plan should authorize rates that will cover operating costs and fund growth. Through business planning, managers can determine the interest rates to be paid on savings, and then set loan interest rates to cover the financial costs of savings products, the administrative costs of the institution, the provisions for non-collectible loans, and the necessary contributions to capital reserves. If market conditions require an increase in the interest rates offered on savings products beyond what is authorized in the business plan, managers will have to adjust the business plan to see if the increase is sustainable.

**Real return on savings.** The interest rates on deposits should be higher than the inflation rate to preserve the value of the deposits and provide a positive real return to savers. If this is not the case, the savings institution actually provides a disservice to savers, since their money loses value while deposited in the institution. Depositors have come to expect a positive real return on their savings. Small savers will often shift their savings to real goods, which can be resold without losing their value (a chicken or a calf in rural areas, tires or construction blocks in urban areas), if financial instrument returns are below the rate of inflation.

### *Pricing*

Different products and levels of service incur different costs to the savings institution. Once an institution establishes interest rate policies based on the three principles above, it must attend to the operational management of rates. Interest rates will vary according to transaction costs, account balances, terms, withdrawal policies, and services provided.

It is the responsibility of managers to set the interest rate for each savings product. Managers must have the authority to quickly increase or decrease the rates paid on deposits so they keep pace with market trends and remain competitive. If the authority to set rates rests with the board of directors, the ability of an institution to respond to market conditions and remain competitive is compromised. The operating rules of an institution may authorize a range within which the manager may adjust interest rates without prior board approval.

Interest is paid on each account based on the periods stipulated by the savings policies. Variable interest is paid on passbook accounts, with the interest calculation based on the daily or average monthly balance. Accounts are credited monthly, or quarterly in some cases, with the corresponding amount of interest earned on the balance of current savings on deposit. Accounts are credited on the last day of the month. The 365-day calendar, and the corresponding monthly calendar, is used for the calculation of interest. When a client closes an account, interest is paid through the day prior to the closing.

Fixed interest rates are paid on fixed-term savings products. The savings institution pays the interest on fixed-term certificates of deposit in a lump sum upon maturity, together with the value of principal. The interest paid on fixed deposits is calculated based on the terms of the contract.

It is important that both the rates offered and the periods for calculation of returns are clear to all clients. They should be published and clearly visible in the lobby area.

**Differentiation by balance.** The administrative costs and transaction costs are a higher percentage of the value of smaller accounts than of larger accounts. Consequently, savings institutions offer higher interest rates on accounts with higher balances and lower interest rates on

Two Guatemalan credit unions, *Union Popular* in the rural coastal area and *Union Progresista Amatitlaneca (UPA)* in the metropolitan area of Guatemala City, increase the interest rate paid on savings as the amount in the account increases. Table 3.4 shows how rates rise with account balances.

**Table 3.4 Comparison of Interest Rate Structures in Two Guatemalan Credit Unions<sup>1</sup>**

**Rural Credit Union: *Union Popular***

ACCOUNT SIZE IN U.S. \$	PASSBOOK RETURN %	THREE MONTH FIXED-TERM RETURN %
3.50 – 17	4.0	–
18 – 175	8.0	9.0
176 – 877	8.5	9.5
878 – 1,754	9.0	10.0
1,755 – 8,772	11.0	12.0
8,773 – 17,544	12.0	13.0
17,545 +	13.0	14.0

**Urban Credit Union: *UPA***

ACCOUNT SIZE IN U.S. \$	PASSBOOK RETURN %	THREE MONTH FIXED-TERM RETURN %
4.40 – 351	8.0	8.5
352 – 1,754	9.0	10.0
1,755 – 3,509	10.0	12.0
3,510 – 13,158	11.0	13.0
13,159 – 43,860	11.5	14.0
43,861 – 70,175	12.5	14.5
70,176 +	13.0	15.0

<sup>1</sup>Inflation = 8%.

accounts with lower balances. The positive relationship between the interest rate and the account balance provides an incentive for savers to increase their balances, or not to withdraw their savings.

Minimum balances are established for each type of account, and the balance requirement is one variable in setting the interest rate for each product. Balances below a certain minimum are not paid interest to compensate for the higher relative administrative costs of small accounts. A client may begin saving by opening a very small account. The savings institution compensates for the high administrative costs for such an account by saving on interest costs. As the client saves more, the relative administrative costs of the account decrease and the savings institution begins to pay interest on the account.

A negotiated interest rate can be offered on larger individual or institutional accounts with high balances and limited withdrawals. The flexibility of negotiated rates enables the savings institution to attract deposits from market segments with larger savings capacities, where savers seek to maximize returns on large deposits. Such accounts tend to be extremely interest rate sensitive.

**Differentiation by term.** Interest rates on fixed-term certificates of deposit increase as both the account balance and the term of the certificate increase. Interest rates increase with the term length for fixed-term savings because the savers must be compensated for providing a stable source of funds for that term. In turn, the savings institution may invest those funds since they are not available for withdrawal. Table 3.5 provides an example of how rates differentiated by term might be structured.

**Differentiation by product.** A savings institution's costs vary according to a product's transaction costs, account balance, term, and withdrawal frequency; therefore, interest rate pricing is directly related to the variations in those characteristics. Lower interest rates are paid for those products with more administrative steps and more frequent transactions to cover the higher costs associated with those accounts. Products with restrictions on the availability of funds or on the number of withdrawals pay higher interest rates to compensate clients



**Table 3.5 Average Nominal Interest Rates<sup>1</sup> on Fixed-term Certificates of Deposit According to Size and Term**

MINIMUM BALANCE IN U.S. \$	PERCENT INTEREST ACCORDING TO NUMBER OF MONTHS					
	1-3	4-6	7-9	10-12	13-24	>24
200	8.88	9.88	10.63	11.88	12.75	12.75
500	8.88	9.88	10.63	11.88	12.75	12.75
1,000	9.00	10.00	10.88	12.00	12.75	12.75
2,000	9.13	10.13	11.00	12.13	12.75	12.75
5,000	9.25	10.38	11.25	12.38	12.88	12.88

<sup>1</sup>Takes average rate on U.S. dollars and local cordobas.

for the limited liquidity of their savings. Table 3.6 shows an example of interest rate differentiation by product.

The basic level interest rate is tied to the common passbook account. If we compare a typical interest rate structure according to varied savings services:

- Interest rates on withdrawable passbook accounts serve as the base rate (X) for the savings interest rate structure. The base rate is set according to competitive market rates, transaction costs, and the rate of inflation. The base rate is lower than most other rates because the passbook account offers low minimum balances and unlimited withdrawals. Clients accept a discount on their rate of return in exchange for complete access to their savings.
- Interest rates on youth savings accounts are slightly lower than the base rate (X-1) to compensate the savings institution for the higher administrative costs associated with very small accounts.
- Interest rates on programmed savings accounts may be a point higher than the base rate (X+1) to compensate savers for the limited liquidity.

**Table 3.6 Sample Interest Rate Differentiation by Product**

TYPE OF SERVICE	INTEREST RATE	WITHDRAWAL ACCESS	ACCOUNT BALANCE	MINIMUM DEPOSIT
PASSBOOK ACCOUNTS	X (Base Rate)	Unlimited	Rate increases with increasing account balance	Low
YOUTH SAVINGS	X - 1	No Restriction	Uniform rate	Lowest
PROGRAMMED SAVINGS	X + 1	Only at end of planned savings period	Uniform rate with increasing balance	Higher than passbook
FIXED-TERM CERTIFICATES OF DEPOSIT	X + 2 (Increases with term)	Only upon reaching maturity	Rate increases with increasing account balance	High

- Interest rates on fixed-term certificates of deposit may be a couple of points higher than the base rate (X+2) to compensate savers for the limited liquidity.
- Dividend earnings on shares in credit unions should be higher than the rates paid on savings accounts to compensate and reward members for providing risk equity investment to the institution.

**Penalties.** Penalties are applied on interest returns when clients make early withdrawals from fixed-term deposits or programmed savings before the accounts mature. For example, if fixed-term savings are withdrawn before maturity, the resulting interest rate paid could be below the base rate paid on passbook savings.

No interest on savings is paid to clients who are delinquent on their loans (principal or interest). The interest is either withheld or applied directly to the delinquent loan. Clients with delinquent loans may not withdraw savings until their loans are brought current. In credit unions, the earnings dividends on shares are also withheld when a member is delinquent on loans.

**Claims on returns priority.** Claims on savings accounts returns follow this order:

- Fixed-term certificates of deposits have first claim on earnings. The savings institution has entered into a contract with the saver and the return on these deposits must be paid at the rate and time stated in the contract.
- The interest return on programmed savings accounts is paid after fixed-term deposits.
- The interest returns on passbook savings are paid after the returns contracted in fixed-term and programmed savings have been paid.
- The dividends earned on member shares are paid last, after payment of all savings liabilities. Where earnings are not available, dividends are reduced or eliminated. Where a credit union's institutional capital does not meet capital adequacy standards, the dividend on member shares may be suspended to allocate earnings to reserves until capital adequacy is restored.

## Savings Management

Effective savings management requires liquidity management, procedures for handling cash on hand, and internal controls for managing non-financial risks.

### *Liquidity Management*

**Liquidity reserves.** Sound liquidity management is essential to ensure that funds are available for clients to withdraw their savings. Liquidity management requires a reserve percentage calculated on all withdrawable savings and deposited in other formal financial institutions. The liquidity reserve should be 10 percent of the deposit portfolio. The liquidity reserve should be invested in low-risk, liquid financial instruments with a high level of security; it should be interest earning.

When credit unions shifted their focus from illiquid shares (forced savings) as the primary source of funds to withdrawable, voluntary savings, some managers and regulatory officials voiced concerns that such savings funds would be highly volatile and unstable. With the transition to voluntary savings, credit unions found that there was indeed

movement of cash in and out of the liquid accounts. But they also found that this movement comprised only a small percentage of the total volume of funds. As long as savers had confidence in the safety and soundness of the institution, the many small accounts, primarily passbook savings, tended to be stable. Larger savings accounts, on the other hand, tended to be more market-sensitive and to move rapidly with changes in market interest rate levels. In other words, credit unions found that the real liquidity risk did not stem from the many small, liquid accounts, but from the few large accounts, which made up a large percentage of the total volume of savings. These large accounts were likely to move without warning as shifts in the market occurred.

A high concentration of savings in a few large accounts will expose the savings institution to high liquidity risk. Large accounts tend to be very market-rate sensitive, and the rapid withdrawal of one or more of these accounts could leave the savings institution with insufficient cash to meet its withdrawal or disbursement requirements. Yet there is no advantage in turning away these large savings accounts. To mitigate the large-account concentration risk, some credit unions maintain the standard liquidity reserve of 15 percent of deposits for all accounts below a certain threshold and a liquidity reserve of 20 to 25 percent of accounts above the threshold. The higher reserve rate compensates for the higher liquidity risk of deposits concentrated in the large accounts.

**Asset-liability management (ALM).** Savings institutions must carefully manage their assets and liabilities to prevent asset-liability mismatches in terms and rates. For example, liquid passbook savings which can be withdrawn from the savings institution immediately are not safe sources of funding for long-term loans which are paid back to the institution over a long period.

Savings institutions should try to match the terms for loans granted with the terms of the deposits mobilized. Short-term savings funds should be invested in short-term assets. Savings institutions should finance short-term loans with funds obtained through current and short-term deposits and

medium-term loans with medium and long-term deposits. Longer-term loans are often funded with illiquid shares in credit unions or with longer-term, external sources of credit.

Savings institutions may face earnings problems if they take in short-term savings at one rate and then lend them out for a longer term at a fixed rate. If the market rates on savings rise, increasing the finance costs to the savings institution, while the earnings on loans or investments remains locked in for longer terms, the institution will suffer a squeeze on its earnings. In the same way that liquidity management requires a balance between terms on savings coming in and loans going out, earnings management requires a balance between interest rates on savings and the loans they fund. Lending at variable interest rates rather than fixed interest rates can decrease the risk of rate mismatches.

**Central liquidity pools.** In many credit union systems, the liquidity reserve is pooled in a second-tier entity, such as a central finance facility (CFF). These CFFs collect and reinvest the funds in large amounts for higher returns than one credit union could earn. The abilities of credit unions to safely manage liquid savings are supported by their abilities to cooperate as a system. To receive the liquidity reserves of credit unions, the CFF must meet the same prudential standards that credit unions have to meet to attract the savings of individual members. The CFF holds the required liquidity reserves of 15 percent of deposits, but competes with the wider financial market for the additional liquidity reserves that credit unions hold. The CFF operates as a source of system-wide liquidity and an internal transfer mechanism that shifts funds from credit unions that have excess liquidity to those that are short of liquidity but still meet sound underwriting standards.

Access to a liquidity pool support mechanism such as a CFF reduces the amount of cash an institution must hold in-house. Daily management of the non-earning cash needed for operations should reduce cash to only what is necessary to cover demands for savings withdrawals and loan disbursements. Cash holdings should be kept at a minimal level of 1 percent of deposits. Institutions that do not have access to a CFF should negotiate with a formal financial institution to establish a line of credit for backup liquidity.

**Inter-institution operations and transfers.** A CFF may also serve as a

central clearing house among institutions. Credit union networks provide services for deposits, transfers, and savings withdrawals between credit unions to benefit members regardless of where they are. In other words, members of a credit union in one town may enter a credit union in another town and make deposits or withdrawals on their savings accounts. Transactions are verified and cleared through the network's central clearing facility. With a national network of points of service, the credit unions can better compete with other financial institutions.

These inter-institution transfer procedures require security and account verification, but they are fairly simple. If the objective is to transfer funds from one institution to another to manage liquidity, the CFF ensures adequacy of funds by requiring all participating institutions to deposit the liquidity generated by business activities within a specified number of days. If the objective is to establish and present an image of a safe and sound system in which all participating institutions adhere to the same standards, the challenge is in establishing risk controls that are adhered to by all institutions. Participating institutions must have confidence in one another for this type of system to function. They must operate with the same financial standards, consistent policies, similar products, and uniform customer service standards. A networked system also requires appropriate technology and communications infrastructure to support the transaction requirements.

### *Cash Management*

Many institutions operate today without taking deposits, providing only credit services. Some savings-based institutions rely exclusively upon payroll deduction as their source of funds. The strategic decision to accept cash deposits requires the establishment of procedures and controls to protect the integrity of the cash management.

**Teller space.** Teller counters must provide security and adequate workspace for tellers. At a minimum, teller counters must have drawers that can be locked, with cash trays to organize bills and coins. High-traffic lobbies should have grills or glass partitions in front of the teller counters.

Adding machines with tapes should be easily accessible at all teller stations. Adding machines with tapes minimize teller errors and

omissions. The tapes also serve to document the daily activities, and are helpful to have in the event that the teller drawer does not balance.

**Daily procedures.** Each morning, before the savings institution begins operations, the head teller retrieves the teller cash from the vault. The money should be kept in a locked container inside the vault. Each teller has keys to his or her cash drawer, but not to the vault. A predetermined amount of cash is prepared in each cash drawer on the previous day. As transactions increase, it may be necessary to increase the amount prepared for the daily cash drawers. Each teller verifies the cash amount in the teller drawer. The teller lists on a report the number of bills of each denomination, their subtotals, and the grand total. An adding machine with a tape should be used to add the cash; the tape is dated, signed, and attached to the report. Each teller completes a Teller Balancing Report to record cash inflows and outflows. The teller begins by writing the opening cash figure on the Teller Balancing Report.

**Teller drawers.** The teller drawer has a cash tray with separate compartments for each denomination and type of coin. The cash bills are arranged in sequence facing up: the smallest denomination to the largest across the front of the money tray. Small bills should be within closest reach, as the tellers will use them the most. Larger denomination bills and strapped currency (strapped in bands of 100 pieces) are placed in the back of the money drawer or in another locked drawer in the teller stall. Loose coins are kept in a separate coin tray or in the coin compartment of the teller cash tray.

One person uses and is responsible for each teller drawer; only that person has the key to that specific teller drawer. Teller drawers should not be accessible to other employees or to the public. When tellers leave their stations, they should lock their cash drawers and log off their computer systems, where computers are used.

Keys to teller drawers must be carefully controlled. Extra keys for each drawer should be inserted into envelopes and sealed, with each teller signing over the seal to his or her key. If the seal is broken, a teller will know that someone has accessed his or her teller drawer. The extra keys should be kept in the safe and controlled by management or appointed staff.

**Opening procedures** should follow the same sequence every day:

1. Head teller retrieves funds from the safe,
2. Tellers arrange in teller stations,
3. Tellers count funds in cash drawers to verify opening amounts,
4. Tellers fill out vault tickets to “purchase” additional cash; they count the additional cash “sold” to them for the day and put all cash away in teller drawers, and
5. Tellers record the opening cash figure on the Teller Balancing Report.

**Teller Balancing Reports.** At the end of each day, tellers complete Teller Balancing Reports on the computers or on printed forms. If tellers use printed forms, all additions and subtractions should be made with an adding machine, with the adding machine tape then attached to the Teller Balancing Report (example shown in Figure 3.7.). “Receipts in” and “withdrawals out” tickets are also stapled to the report. A teller:

1. Records the bill and coin totals from the end of the previous day.
2. Records the vault cash “purchased” and “sold” tickets.
3. Records the “cash in” tickets (cash deposits).
4. Records the “cash out” tickets (cash withdrawals).
5. Records the number and the amount of each denomination and coin in the proper box on the form.
6. Totals the checks.
7. Totals the cash and checks in the drawer, and enters that amount in the Total Cash and Checks box on the report. The total cash and checks amount should agree with the closing cash amount on the top of the Teller Balancing Report.
8. If the Teller Balancing Report balances, the cash is stored in the vault.



**Outages (drawer out of balance).** If the teller drawer does not balance, the teller reviews the accuracy of the recorded opening cash, vault tickets, receipts, withdrawals, closing cash, cash amount, and checks. If the outage still has not been found, the teller rechecks every transaction made during that day, using the adding machine tapes to review the items one at a time. The teller checks to see that the proper form for each transaction has been used.

The drawer will be over if:

- A deposit ticket is missing from a deposited check;
- A deposit ticket is missing from “cash in” tickets; or
- A client withdrawal form has been included but there is no “cash out” ticket.

The drawer will be short if:

- A withdrawal form is missing from the “cash out” tickets;
- A client deposit form has been included but does not have a corresponding “cash in” ticket or check; or
- A client withdrawal form has been included but does not have a corresponding “cash in” ticket or check.

If the outage cannot be found, the outage is entered into the “over” or “short” box on the Teller Balancing Report. If the drawer is over, the amount is subtracted. If the drawer is short, the amount is added. Tellers are required to pay short outages. Teller outages should be rare; more than three occurrences should result in dismissal.

### ***Internal Controls***

Savings institutions incur non-financial risks in receiving cash savings from members and clients. Those risks include employee fraud, robbery, employee endangerment, monetary errors, and losses due to fire or vandalism. Management of such risk requires security measures, proper equipment, staff training, internal control procedures, and confidentiality of account information.

**Security measures.** Secure infrastructure requirements include locked drawers at teller stations, vaults for holding cash, and grill or glass partitions between teller stations and the public. Grills and bars

Figure 3.7 The Teller Balancing Report

SAVINGS INSTITUTION																																																															
TELLER BALANCING REPORT																																																															
Teller: _____		Date: _____																																																													
<b>RECEIPTS</b> Deposits Entrance Fees Late Charges Interest on Loans Loans Total receipts from members  Miscellaneous Income from Investments Other Income Other (list below)  Total cash receipts  Opening change fund Change Fund Increase  Total Cash			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="text-align: center; padding: 2px;">CASH COUNT</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"><u>Bills</u></td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">500's</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">100's</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">50's</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">20's</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">10's</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;"><u>Coins</u></td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">Ten dollars</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">Five dollars</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">One dollar</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">0.25's</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">0.10's</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">0.05's</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">Total Money</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">Checks &amp; Drafts</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">    Last name</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">    Last name</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">    Last name</td> <td></td> <td></td> </tr> <tr> <td style="padding: 2px;">*Total</td> <td></td> <td></td> </tr> </tbody> </table>	CASH COUNT			<u>Bills</u>			500's			100's			50's			20's			10's			<u>Coins</u>			Ten dollars			Five dollars			One dollar			0.25's			0.10's			0.05's			Total Money			Checks & Drafts			Last name			Last name			Last name			*Total		
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should be in place over doors, windows, and air conditioners. Alarm systems should connect with local police stations or security companies. Management should know ahead of time how police will respond to an alarm or robbery.

Guards should be present in larger institutions, and trained in what to do in the event of a robbery. Training of all staff is necessary to ensure the safety of the employees. The security training should teach employees how to act in case of robbery and what steps to take after the thief has left the building.

A vault (or safe) is used to keep:

- Legal documentation backing up loans and investments;
- The metal box containing cash;
- The blank sequentially numbered forms, including receipts and checks; and
- Expense vouchers and documentation.

Custody of the vault should be dual; that is, the responsibility of two people. If the vault has two combinations, one person has the combination of one side and another person has it for the other side. If the vault has a combination and a key, one person will have the key and the other will have the combination. The combination or key to the vault must be changed immediately when either of the two persons with custody changes. A written copy of the combination and a duplicate of the key to the vault should be deposited with another institution in a different location. Finally, the vault must be fireproof.

Access to the teller and vault areas by persons unrelated to the cash operations should be restricted. Internal control policies regulate the maximum amount of cash kept on hand in order to minimize potential losses and to avoid endangering the persons responsible for handling it. The amount of cash on hand should not exceed the insurance coverage for cash losses.

The total amount of money received, either by check or cash, in daily operations should be deposited into a formal bank account. The total of this daily deposit serves as a verification of the total daily income report.

**Internal control procedures.** Internal controls for savings management are implemented through rules for common transactions, such as:

- All teller transactions are to be documented with receipts.
- All passbook entries and receipts should contain teller identification.
- Tellers are not permitted to hold or keep client passbooks at the institution.
- No official or employee may transact business on his or her account or on a family member's account.
- Employee and official accounts and, if desired, family member accounts are to be reviewed by the internal auditor or supervisory committee for unusual or abnormal activity on a quarterly basis.
- All clients should be notified immediately in person, telephone, or writing if a deposit error occurs.
- All change of address requests must be in writing and signed by the client.
- Account closures must be in writing after the presentation of proper identification.
- When an account is closed, the signature card is to be promptly pulled from the active account file and placed in a closed account file.
- A list of closed accounts including account number, client name, and reason for closure is maintained by the manager and available for review.

Savings institutions must maintain a separation of functions. The employees who approve or conduct business or transactions in the organization should not be the same ones who do the processing, prepare accounting entries, and maintain the internal part of the transaction. The administration function should take charge of those duties.

The manager, head teller, or person in charge of accounting is responsible for the general cash in the vault. The manager or head teller should conduct daily surprise cash counts to make sure that there are no discrepancies in the daily activities. The cash count covers the daily money in the teller drawers, as well as the daily money kept in reserve

in the vault. The total of the cash count must be equal to the ledger account of the same date. The person in charge of conducting the daily cash count should collect the cash assigned to each teller and should deposit it in the vault. This same person is responsible for collecting cash that exceeds the amount authorized for each teller and for providing tellers with new funds when their drawers are short of the authorized amount.

All the deposits and withdrawals on savings accounts should be handled by the person in charge of the general cash and included in the daily activity report. The teller notes down the respective accounting entries affecting each account on the vouchers. The accountant or another designated person maintains auxiliary records in the name of each account holder with the activity and balances up to date. The sum of these records must equal the amount recorded in the appropriate ledger account.

**Confidentiality of account information.** The personnel of a savings institution must not reveal to third parties any information regarding the savings or deposits of clients, unless the third party produces written authorization from the saver or if there is a written order from a competent authority in accordance with applicable law. Account information is confidential, available only to the depositor and his or her beneficiaries or legal representatives.

## Conclusion

Savings mobilization is a demand-driven activity aimed at clients who wish to save using financial instruments. As such, the savings institution must offer savings products that satisfy the demands of local clients. Savers look for a savings institution that can provide them with safety, convenience, and return, in that order of priority.

Savings services are designed by trading off liquidity (or access) with returns (compensation). A continuum of savings products can be designed, ranging from passbook accounts, which offer complete liquidity and lower returns, to fixed-term accounts with restricted liquidity and higher returns. Low-income and small savers generally prefer to have complete access to their savings accounts, whereas larger and wealthier savers will sacrifice liquidity in order to obtain higher returns on their savings. Products are also designed by tailoring them to the demands of particular market niches (for example, farmers or youth), or

to purposes for which clients save (for example, education fees or housing). Product design must be simple and clear to attract savers and to keep administrative costs low.

The credit union experience in mobilizing voluntary savings has focused primarily on six savings products: passbook accounts, fixed-term certificates of deposit, youth savings, programmed savings, institutional accounts, and retirement accounts. The most popular savings product is the passbook account, followed by fixed-term certificates of deposit and programmed savings accounts. Products are defined by their core characteristics: target market, interest rate, minimum opening deposit, minimum balance requirement, withdrawal policy, promotion, and institutional implications. Each type of product offers advantages and disadvantages for the saver and the savings institution.

Passbook savings tend to be characterized by many small accounts. Larger accounts help spread the fixed costs; moderate-sized accounts provide the base of funds. Smaller accounts tend to be more stable while larger accounts are interest rate sensitive and can be volatile. The larger accounts must be managed with stronger liquidity reserves in order to offset the concentration risk.

Interest rates are the price an institution pays for receiving savings; the rates vary with the product offered. Interest rates should be competitive with market rates, cost-based, in accordance with the business plan of a savings institution, and positive in real terms (above the rate of inflation). They should be adjusted as market conditions change. Interest rates vary with certain characteristics of products: minimum balance required, liquidity, and transaction costs. Savings products are designed to vary positively with the amount in accounts to provide incentives to savers for increasing their savings on deposit. Interest rates also vary with the term of the product to compensate savers for the restricted liquidity of their savings.

For those institutions that have not offered savings services previously or have received savings only via payroll deduction, the reception of over-the-counter cash deposits introduces a new set of risks. The institution must put into place procedures and internal controls for opening accounts, withdrawals, safe and teller cash management, as well as liquidity management.

Credit unions that have assessed client demands and offered innovative products together with solid returns have been successful in

mobilizing savings and increasing outreach. MFIs will be able to offer the most effective savings services where they have designed demand-driven products, established frameworks for managing those products through clear policies and procedures, and set up systems to minimize the non-financial risks associated with savings mobilization.

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