Cooperative Finance:
Principles and Practices[1]

A Brief Storyline

Power of understanding. The selection and implementation of an effective financial strategy are critical to the long-term success of any business, especially a cooperative business. Unfortunately, some co-op leaders and advisors to co-ops do not have a good working understanding of the unique nature of the co-op business model and the implications it has for co-op finance. Many of them attempt to apply standard business finance concepts without regard to the unique co-op business model and thereby limit the effectiveness of the strategies they construct. At the other extreme are co-op leaders and advisors who claim to understand the co-op business model but do not understand business finance and thereby limit the effectiveness of the strategies they construct. To construct effective financial strategies for cooperatives a thorough understanding of finance, strategy, the co-op business model and their relationships is essential.

The ability to integrate risk management with financial and strategic management and apply it to the unique co-op business model will also be critical in the 21st Century. Risk management is a natural companion to finance and strategy and should be utilized in constructing financial strategies. The success and failure of cooperatives in the past can be directly tracked to the ability of leaders to master this integration.

Unique business model. A cooperative uses a unique business model that most experts agree has significant disadvantages in equity capitalization or financing of assets compared to businesses using the investor-oriented business model. Those disadvantages include limited access to capital, lack of liquidity or transferability of equity claims among owners, and therefore, lack of appreciation (or depreciation) in value to reflect market value. To make matters worse most cooperatives use the open or traditional co-op business model instead of the closed or new generation co-op model. More precisely, almost all co-ops use the non-proportional instead of the proportional co-op business model. The proportional co-op business model aligns all relationships on the customer relationship, including the claim on profits, ownership and voting or control. For non-proportional co-ops, their disadvantages also include a lack of close alignment between the separate and unique interests or roles of customers, patrons, owners and members in a user or customer oriented business.

This customer orientation and the relationship to patrons, owners and members is the defining or unique characteristic of cooperative or mutual companies. Core customers own and control the co-op. More specifically, eligible customers are (1) patrons who have the claim on the benefits associated with patronage, (2) owners who have the residual claim on assets and (3) members who have the votes to control or govern the co-op. So core customers have the benefits of buy or

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sell marketing transactions and the benefits of patronage refunds. Core customers also have the responsibilities of ownership and governance.

Theory, applied research and education. This is a brief summary or storyline outlining the principles of cooperative finance and a discussion of the practices followed by many cooperatives in relationship to these principles. It represents the views of the author based on over 20 years of research and experience gained from working frequently and intensively with the leaders and advisors of cooperative businesses on financial issues and strategies. The story begins with the broadest, most basic points and progresses to the more specific. The story continues by outlining a comprehensive strategy consisting of five important financial decisions. Guidelines are provided on how to make the decisions, progressing in a natural sequence from the broadest to most specific. The story ends with an example of a good sustainable financial strategy for most co-ops. The leaders and advisors of a co-op can use this information in combination with the presentation slides and discussion provided at the conference to formulate a financial strategy that best fits the co-op.

There are many additional issues that can arise in specific co-op situations that are not discussed in detail. This principle-based foundation provides a very powerful and robust framework to address these issues. Here are some examples of critical strategic issues that often come up. What are the long-run consequences of distributing a high proportion of patronage income to unallocated retained earnings instead of to retained patronage refunds thereby creating an equity structure with high retained earnings? What are the advantages and disadvantages of distributing patronage refunds in qualified versus nonqualified form? How can you implement a redemption program that uses a revolving fund if you don't have accurate year retained information? Or, how can you discontinue using less desirable redemption methods, like age of patron at age 65, and implement a more desirable method like a revolving fund? Or, how should you manage equity in a merger of two or more dissimilar entities into one surviving entity when each entity has several allocated equity classes and each class uses a different redemption program?

This framework isn't based just on theory and financial concepts. It has been thoroughly field tested and proven as effective. The author and the staff of the Arthur Capper Cooperative Center have assisted many co-ops in implementing these research-based principles in the spirit of the Land-Grant University mission. Fifty-four extensive research and education projects have been completed for the top leadership group of 35 different agricultural co-ops located in five different states. The top leadership group typically includes the CEO, CFO, other top executives and the board of directors. Each project typically has three basic components. First, we provide education about co-op finance principles and how they relate to their unique situation. Second, we provide an analysis of their historical financial performance, strength and practices, especially related to income distribution and equity management. This helps them understand their unique situation and the strategic alternatives that make sense. Third, we provide a comprehensive financial projection and analysis of alternative financial strategies of interest to the leadership team. To assist in the analysis we have developed a very sophisticated and robust financial planning simulator, FINPLAN. To evaluate the consequences of each strategy we utilize the actual financial data of the cooperative, the alternative strategies of interest to the leadership team, and the principles of cooperative finance. Strategic and risk management concepts are also applied.

One of the most recent projects was completed in late 2006 for Central Valley Ag Cooperative (CVA) headquartered in O'Neill, Nebraska under the direction of their CEO, Doug Derscheid. A very involved advisor on this project was CVA's banker, Tom Houser with the Omaha office of CoBank. Both Doug and Tom are providing their perspectives on co-op financial strategies at this 2008 Farmer Cooperatives Conference based on this project and their broader experience with co-ops.

Five General Observations and Recommendations

The work in the field with many different co-ops has utilized a mix of theory, applied research, basic cooperative finance education for leaders, and in-depth technical assistance projects. This has proven to be a stimulating, informing and fruitful testing laboratory. The lessons learned from these real world applications have been distilled into the following five general observations and recommendations. They are followed by five specific recommendations constructed as a logical five step process.

1. ***Co-ops must be competitive.*** The cooperative business model is unique but it is still a business that is subject to the principles of business finance, business management and economics. A co-op must be managed as a business that can compete in a highly competitive market economy. The primary economic justification for organizing and operating a cooperative is to correct and prevent market failure that was or could impact the customer-patrons by being one of the best competitors in the marketplace, the competitive yardstick. A co-op cannot rely on "member loyalty." It must earn the business of its customer-patrons.

2. ***Co-ops should make as much profit as possible.*** A cooperative should implement the core principle of the cooperative business model, service or operation at cost, by:
    1) Being competitive in the marketplace,
    2) Making as much profit as possible, and then
    3) Distributing excess cash to patron-owners in a way that maximizes their aggregate long-run benefits as a group, keeping in mind that the group has heterogeneous interests at any one time. This distribution implements the service at cost principle of co-ops.

Being competitive doesn't necessarily mean beating the competition with the best prices as some leaders and patrons often assume. It does mean being able to match the price of major competitors offering similar packages of goods and services and still make at least acceptable profits, but ideally, very high profits. Only co-ops with cost efficient business models can accomplish this over the long run.

3. ***Co-ops should use balance sheet management.*** A cooperative must position and protect the business for short-run and long-run sustainability by adhering to the balance sheet management philosophy. Adequate risk capital must be provided by establishing and following liquidity and solvency guidelines as an element in the overall business strategy. Then the co-op should pay out in cash to patron-owners any income (as cash patronage refunds or equivalent) and allocated equity (as equity redemptions) not needed to meet the guidelines. Patron-owners always get what is left over in any business, as residual claimants, and co-ops are no different. The use of balance

sheet management makes it clear the biggest driver of high cash payout co-ops, such as high cash patronage refunds and short revolving fund lengths, is high profitability.

4. ***Serving core customers comes first.*** **C**ore customers are customers who are also patrons, owners and members. Serving the customer role in a competitive way is the primary purpose ("end") of the co-op. The related unique roles of patron, owner and member are means to the end. There is a natural financial conflict of interest between the customer, patron and owner roles built into the co-op model that must be managed. But keep in mind that serving core customers is by far the most important role when assessing the tradeoffs that occur when dealing with these conflicts of interest within a heterogeneous membership. In other words, focusing on meeting the economic needs of core customers in a profitable way is much more important than selecting the theoretically perfect income distribution program or equity redemption program that serves the needs of patrons and owners. The marketing strategy is supported by the financial strategy, especially by protecting the business through use of balance sheet management. Co-op leaders cannot weaken or destroy the co-op business to please customers. If a co-op is not successful in practicing points one through four significant changes may need to be made to the business model and/or the leadership team. Otherwise the end is coming.

5. ***Finance, strategy and risk management should be integrated.*** The evaluation and choice of alternative strategies must be done within a comprehensive finance, strategy and risk management framework. Finance and strategy have always gone hand-in-hand but in today's environment, risk management should be an equal partner. If the co-op is an agricultural cooperative, that framework should include both the patron-producer perspective and the co-op business perspective.

The co-op should be viewed as an extension of the farm business, a vertically integrated business that includes the producer and co-op enterprises. Co-ops have traditionally been used to pool or diversify risk for producers by assuming the risk at the co-op level. But in the current environment, for some business lines, supply chains or transactions, like those involving fertilizer marketing, it may make sense for co-ops to develop programs to pass risk to producers. That is because producers may be better able to manage risk at the producer level than co-ops are at their level.

Risk management is a complex topic and won't be described here in detail. In general, co-ops need to consider themselves as a portfolio of assets and be able to determine which risks are diversifiable and therefore of less interest, and which are not diversifiable ("market risk") and therefore of great interest. For example, ownership of fertilizer inventory by the co-op without some mechanism to transfer risk to the supplier or the buyer (the producer) creates a high level of market risk. Categories of risk at both the co-op and producer levels include: (1) production, (2) marketing, (3) financial, (4) legal-governmental, and (5) human resources. This paper deals most directly with financial risk, but has some connections to production (operations) and marketing risk. In the future, the biggest risk may be human resources.

Five Specific Recommendations: A Logical Process

The five recommendations are presented as a logical, sequential process that embody balance sheet management and the equity management process. The most important decisions are listed first and the least important come last. In reality, the five decisions are interrelated because they represent the implementation of the finance decision framework: asset investment, financing assets with debt and equity and income distribution. This means they are actually made simultaneously as a set of decisions we call a strategy. When constructing strategies it is helpful to walk through the construction in the sequence presented. When evaluating and then modifying strategies in a “what if” way it is common to select one component, such as the solvency target or the cash patronage rate, and modify it to attempt to get more desirable results.

1. ***First, make profitable asset investments.*** The most important financial decision a co-op makes is the asset investment decision. In other words, what assets should the co-op own, acquire or dispose of to best support its business model and strategy? Previous research on co-op financial performance suggests that local agricultural co-ops (retailers) have been over-invested in assets, especially fixed assets. The most sophisticated approach to this issue incorporates a risk management and portfolio management perspective. The cash returns on the assets, the riskiness of the returns (income risk) and the riskiness of the assets (balance sheet risk) are all important.

Assets that are accounted for on the balance sheet through normal financial accounting are important but may not be the most important. From a strategic perspective, there is increasing evidence that the most important assets are people, the human resources of the company. This paper confines the discussion to assets measured by financial accounting.

2. ***Second, finance assets with sufficient equity.*** The second most important financial decision a co-op makes is the debt and equity financing or capital structure decision. Previous research on co-op financial performance suggests co-ops have too much equity relative to debt. The structure of the agricultural and global economy has changed substantially since this research was completed. In the current and expected highly turbulent and risky economic environment, with much higher and more volatile commodity prices for grain and farm inputs, and more profitable agricultural production and agricultural cooperative businesses, it is logical to expect co-ops to try to secure more risk capital, in the form of working capital and equity capital. Balance sheet management is the tool used to implement this strategy.

3. ***Third, choose equity structure, equity investment and income distribution strategies most beneficial to patron-owners.*** The third most important financial decision a co-op makes is the income distribution decision, in combination with the related capital and equity structure decisions. A recommended process is:

> **Equity structure.** First, choose the equity structure the co-op wants to achieve including the source of equity (purchased, patronage income, nonpatronage income), the ownership rights (allocated, unallocated), the permanency of the equity investment (revolving, semi-permanent, permanent) and the division into equity classes (common stock, preferred stock, retained patronage refunds, retained earnings).

Purchased equity. Second, choose the method to secure purchased stock classes (private offering, public offering). In the typical traditional co-op very little equity is purchased with cash by owners. Some larger traditional co-ops, like CHS and CoBank, are selling or issuing Preferred Stock in a publicly traded market. But almost all co-ops require a very small initial cash investment to become a voting patron-member or a nonvoting patron.

Earned equity from income distribution. Third, choose the best way to distribute income, especially patronage income. In general income will be split between cash payments to patron-owners, creation of additional allocated equity in patron-owner equity accounts, increases in unallocated equity and payment of income taxes. A good criteria to use in making this choice is the after-tax cash flow to patron-owners.

Research and the pragmatic application of this research to many operating co-ops suggests that choosing an alternative that leads to high allocated equity is sustainable and provides the highest after-tax cash flow to patron-owners. High allocated equity is accomplished by distributing 100 percent of patronage income as patronage refunds, split between cash patronage and retained patronage refunds.

However, many co-ops are now distributing a large portion of patronage income to unallocated equity or retained earnings and paying corporate income taxes on this distribution. The perception of many co-op leaders and advisors is that servicing revolving allocated equity in the future will be more difficult, will create cash outflow pressures to redeem allocated equity, and may not be sustainable. Therefore, many co-ops have shown a preference for income distribution strategies that create more unallocated or permanent equity not subject to future redemption. Again, research and numerous examples of actual co-op experiences verify this perception is not justified in most normal situations. Only in unusual or extreme conditions, such as relatively low profitability, relatively high growth rates or poorly constructed financial strategies is this perception justified by the facts.

Consider non-qualified distributions. Fourth, for any portion of patronage income distributed as retained patronage refunds, many co-ops should consider making the distribution in non-qualified form as opposed to the more traditional qualified distribution. This alternative typically is viewed more positively by patron-owners with respect to cash flow and taxation impacts. The patron-owner only pays income taxes on cash received when retained patronage refund distributions are distributed in non-qualified form and later redeemed. One significant disadvantage can be the cash flow impacts on the co-op when making a transition from qualified to non-qualified equity, especially in the early years of the transition. However, in most situations this disadvantage can be reduced or eliminated if a strict balance sheet management philosophy is implemented.

4. ***Fourth, calculate a total redemption budget using balance sheet management.*** The fourth most important financial decision a co-op makes is the calculation and use of a redemption budget, based on the strict application of the balance sheet management process. This protects the balance sheet by requiring the redemption budget to be based on liquidity and solvency policy guidelines. Only surplus equity is redeemed to eligible owners. Owners get what is left over as the residual claimants. Unfortunately, many co-ops violate this basic

economic and business principle by the way they normally determine the size of the redemption budget. Most co-ops get the horse ahead of the cart by selecting the desired redemption methods and related policy, such as age of patron at age 65, or revolving fund 15 years in length. This determines the redemption budget without strict regard for the liquidity and solvency guidelines.

5. ***Fifth, divide the redemption budget up among eligible owners by choosing preferred redemption methods and programs.*** The fifth most important financial decision a co-op makes is the division of the redemption budget among eligible owners. This is accomplished by choosing the redemption methods to use for each class of equity and the priority of call that class-method combination has on the redemption budget. There are several criteria to apply in selecting the best redemption methods for the future, including (1) proportionality of investment, (2) the present value of after-tax cash flow to patron-owners, (3) simplicity and ease of use, (4) popularity with patron-owners and (5) the current methods being used and the issues related to making a transition from less preferred to more preferred methods.

Balance Sheet Management and Redemption Programs

The principles behind balance sheet management are sound but implementing the theory typically raises questions and creates resistance. Following are some observations about some of the points of resistance including some of the political realities in a typical co-op. Practice often deviates to some extent from the strict adherence to principles and is still very successful. Some things matter more than others. So it is important to maintain a pragmatic perspective. A good pragmatic philosophy is “do what works.” In doing so, be aware of what the principles of co-op finance recommend and be able to defend the deviation the practice makes as reasonable and workable.

Theory versus practice. Co-op finance theorists, including professors like myself, generally rank the criteria in the order listed. Pragmatists, including most co-op leadership teams, naturally and initially tend to rank the five steps above in a different order, especially steps four and five. However, leadership teams usually change their ranking to be more consistent with co-op finance theory once they have been thoroughly educated on the principles of co-op finance and assured there are pragmatic ways to make a transition to a substantially improved equity management program.

Proportionality and service at cost principle. In general, the redemption program should try to achieve high proportionality of investment. The ideal outcome is to have the allocated equity investment for each patron-owner exactly proportional to use or patronage. Equity investment by each patron-owner can be viewed as a cost of doing business with a co-op (opportunity cost). A proportional ownership obligation is then consistent with the service at cost principle applied to the calculation of patronage refunds. Proportionality is managed by the choice of redemption methods. Base capital is the highest performing method and relying only on estate settlements is the lowest performing method. If only one method is used the rank order, from highest to lowest performance, is base capital, revolving fund, age of patron prorate, percentage pool, age of patron oldest first, and estate settlements.

Proportionality and retained patronage refund conflict. Perfect proportionality is only possible if patrons are required to make cash purchases of equity for any amount they are underinvested and receive cash redemptions of equity for any amount they are overinvested. Closed or new generation co-ops have a business model that can achieve this objective. But traditional or open membership co-ops obtain allocated patron equity investment from the income stream, year by year, accumulating equity investment based on the pattern of business. If a co-op is using the traditional model it is not possible to stay perfectly invested through the traditional practice of relying on retained patronage refunds (or per unit retains) for the source of equity investment.

Cash flows versus proportionality. Co-op leaders are much more sensitive to cash flow issues than proportionality issues. They are especially sensitive to the actual and perceived impacts on patron-owners when an old program is discontinued or phased out and a new program is implemented. This concern applies to both income distribution choices and equity redemption choices. They also tend to look at different segments of their heterogeneous membership, if it consists primarily of natural persons such as agricultural producers. For example, they often view young patrons just beginning their business relationship with the co-op and just starting to build equity ownership differently than old owners with relatively high levels of ownership who no longer patronize the co-op. Since cash sooner is better than cash latter, the different redemption methods perform differently over the life cycle of each patron with respect to cash flow than proportionality. The general rank order is percentage pool, revolving fund, base capital, age of patron prorate, age of patron oldest first, estate settlements.

Life cycle perspective: easy in, hard out. The young versus old age-related differences in the body of patron-owners tend to take on less importance once the leadership team understands the importance of viewing these core customers in a "life cycle" context. Patron-owners can be viewed as progressing through an individual life cycle typically beginning with being a younger, smaller producer, building to a middle-age, larger producer, and declining to an older, smaller producer as they exit agricultural production. This is true regardless of their relative size within the patron-owner membership of others their age. Of critical importance is to attempt to treat patron-owners properly and fairly, assuming they will all go through all these life cycle stages.

At the beginning of their life cycle patrons will typically be underinvested in a traditional co-op. They "get in easily" in terms of the equity investment required to get the benefits of being a patron, owner and member. They get a claim on income in the early stage of the life cycle higher than their relative share of equity investment because of the typical income distribution and patronage refund process. At the end of their life cycle patrons will typically be overinvested and get their retained patronage refunds redeemed relatively slowly, compared to their declining pattern of business.

Since the policy of the typical co-op is to allow underinvestment in the early stage of the life cycle it must accept the consequence that there will be overinvestment by those in the late stage of the life cycle. This is a mathematical necessity for the typical co-op: underinvestment equals overinvestment. If customers, as patron-owners, get in easy then they should be willing to accept the consequence or easy in: hard out. That is the consequence of using a co-op business model that (1) gets new equity from the income stream, (2) uses the traditional income distribution programs that distribute some or all patronage income as patronage refunds, part as allocated equity in the form of retained patronage refunds, and (3) then uses traditional equity redemption programs to redeem the revolving allocated equity.

There are other co-op business models where this consequence is not as profound. One is the closed or new generation co-op. Another is the high retained earnings model where very little if any patronage income is distributed as allocated retained patronage refunds. Both models create high levels of permanent equity that is not expected to be redeemed by the co-op at any time, such as the late stage of the life cycle.

Bottom line: systems analysis says it is mostly about profitability. There are many new and innovative financial strategies being considered and tried by co-ops that attempt to eliminate the less desirable outcomes in the dynamics dictated by the principles of finance and the specific nature of the co-op business model being used. Most of the less desirable outcomes show up at the last stage, redemption. That's when the chickens come home to roost. Since everything is interrelated in co-op finance it is critically important to understand how income distribution choices and balance sheet management choices can impact the outcomes, favorably or unfavorably, from the perspective of the co-op business and the patron-owners. Co-op leaders and their advisors must use a comprehensive systems analysis to evaluate the consequences of alternative strategies. A systems analysis confirms the most important driver of high performance financial strategies related to income distribution and equity management is profitability.

There are two fundamental parts to a good systems analysis. The first is a sound conceptual or theoretical framework founded on the principles of finance and the co-op business model being used. The second is a sound empirical evaluation of alternative strategies for a particular co-op, since every co-op is unique in some ways. This requires the use of a comprehensive as well as flexible or robust financial planning tool.

A Good Sustainable Financial Strategy Example

Many different financial strategies will work for a subject co-op. But some will work better than others, all things considered. By applying good theory and good analysis a co-op can select a strategy that will work well in practice. Following is an example of a strategy that is sustainable and will work well for co-ops with average profitability of five percent return on equity or higher. Sixty to seventy percent of agricultural co-ops in the country equaled or exceeded this level of performance in almost any five year sequence over the last 25 years. This strategy includes most of the elements that need to be addressed in constructing a financial strategy. A co-op can use this framework to begin constructing and evaluating alternative strategies of interest simply by varying the policy guidelines to better fit its objectives.

Asset investment. Only invest in and retain profitable assets. Asset must have an expected return on assets before interest and taxes (EBIT/asset) that is greater than or equal to an acceptable level or hurdle rate, such as 10 percent. Any existing asset or business unit with a negative return should be sold or closed as soon as possible. Other underperforming assets are evaluated to see what changes are necessary and possible to achieve an acceptable rate of return. If the necessary changes cannot be made the co-op should seriously consider disposing of the asset and, if necessary, the associated business unit. The market is telling this co-op other companies can probably serve their customers better than they can in this arena.

Balance sheet management. Maintain a strong balance sheet that achieves the desirable liquidity, solvency and capital structure characteristics, given the expected risk and profitability of the business. For a typical retail or local agricultural cooperative the following goals are illustrative, but should be modified to fit each co-op's unique situation. These goals are higher than what would have been typical in the last 10 years because business risk is now higher.

A reasonable liquidity goal is a 1.2 to 1.4 current ratio. A reasonable solvency goal is an equity to adjusted assets ratio (assets on a working capital basis) of at least 80 percent or equivalent debt to equity ratio of around 35 percent. Since obtaining new equity capital is slow and difficult in the traditional co-op business model, error on the side of being stronger than what pure finance theory says is desirable. Select the capital structure based on risk and profitability. Working capital will be king, driven by profitability, equity capital position and the ability to quickly secure even more working capital through taking on more long-term debt. Rely on a balance sheet management philosophy to achieve these critical financial goals.

Income generation. The profitability of agricultural cooperatives is likely to be significantly higher in the next 10 years than the last 10 years but the volatility and risk will also be much higher. Growing too fast at the expense of weakening the balance sheet is a risky strategy. To be a highly competitive and profitable company, position your co-op to be very cost efficient. The quality of assets, balance sheet and people will be much more important than quantity.

Income distribution. Implement an income distribution strategy that supports the balance sheet management objectives and strategy. Choose an equity structure that expects each individual patron-owner to have a significant individual or allocated equity investment and for all patron-owners combined, totals at least 50 percent of total equity. Any structure in which less than 25 percent of total equity is allocated equity will create a temptation for the member-patron-owners to vote to sell the co-op to capture their share of the unallocated value. There are many alternative income distribution policies that work well, each with advantages and disadvantages. The distribution of retained patronage refunds in nonqualified form is an innovative option that co-ops should seriously consider.

One simple and sustainable income distribution policy in any co-op with profitability, on average, exceeding 5 percent return on equity (a relatively low profit rate) is the traditional "pure co-op" model. It has the following characteristics:

1) Distribute all nonpatronage income as unallocated retained earnings (after tax)
2) Distribute all patronage income as qualified patronage refunds
3) Divide the patronage refunds between cash and retained to pay at least 40 percent of patronage refunds as cash patronage refunds and the balance of 60 percent or less as retained patronage refunds to be redeemed for cash later as per the redemption program.

This model works if a co-op makes reasonable profits. No model works if a co-op doesn't make reasonable profits. Consider other alternatives, including use of non-qualified distributions, if those choices meet desirable objectives, can be shown to benefit the patron-owners as a group, and don't put the co-op at unnecessary risk.

Equity redemption. Apply the balance sheet management philosophy to determine a total redemption budget following the close of the fiscal year, then divide the budget among individual owners in each major revolving equity class by using the following redemption methods, in priority order: (1) estate settlements to natural person owners and (2) revolving fund redemptions to all eligible owners. If the co-op is using less preferred redemption methods, such as age of patron oldest first at age 65, phase out age of patron and phase in revolving fund.

In some cases, using the age of patron prorate method works well (e.g., redeem 5 percent of the equity of all those age 55 and older.). Consider using the base capital method because it aligns with the theory of co-op finance better than any other redemption method.

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