COOPERATIVE FINANCE AND EQUITY MANAGEMENT

By Dr. Michael Boland, University of Minnesota, E. Fred Koller endowed chairholder in agribusiness management and information technology

This article summarizes topics discussed at the 2012 CHS Insight Meetings which were held at 12 locations around the United States. Over 225 cooperatives sent directors, managers, and employees to the meetings. The article draws upon the discussion of the participants and issues raised in the meetings.

Overview of Cooperative Finance

Cooperatives must be competitive like any business. The local farm supply and oilseed / grain marketing cooperative business model is unique but it is still a business that is subject to the principles of business finance, business management and economics. It must be managed as a business that can compete in a capitalistic and highly competitive market economy. Cooperatives can have unique benefits to the marketplace. They can help producers offset the market power of large firms or provide a missing service. The presence of the cooperative can help keep the market competitive. This effect is often referred to as the "competitive yardstick role" of cooperatives. Economists refer to these benefits as correcting market failures and this can be an economic justification for organizing and operating a cooperative. Many cooperatives operate simply to allow producers to achieve economies of scale and increased bargaining power in purchasing inputs and marketing their commodities.

Irrespective of its purpose and role, a cooperative should strive to be as profitable as possible and then distribute those profits to its patrons. A core principle of the cooperative business model is service or operation at cost. This does not imply that the cooperative should set prices to eliminate the opportunity for a profit. Instead, a cooperative should implement this principle by being competitive in the market place, making as much profit as possible, and then distributing profits and residual cash to patron-owners. Profits should be distributed in a way that maximizes the long-run benefits to the members, keeping in mind that the group has heterogeneous interests due to their unique place in their business and personal life cycle. This distribution of patronage refunds or patronage income implements the service at cost principle of cooperatives. Patron-owners get what is left over through a combination of cash patronage payments (e.g., immediate redemption), cash equity redemption payments and cash payments of net marketing proceeds.

Cooperative firms are unique in that they create equity when they pay patronage refunds in the form of stock and they destroy equity when they redeem previously issued equity for cash. Cooperatives should actively manage their balance sheet when making decisions on income distribution and equity redemption. A cooperative must position and protect the business for short-run and long-run sustainability by adhering to a balance sheet management philosophy that manages both liquidity and solvency. Adequate risk capital must be provided by retaining and managing equity as an element in the overall business strategy. Then the cooperative should pay out to patron-owners any residual cash as cash patronage refunds and equity redemptions. Owners, as residual claimants, always get what is left over in any business. The patron-owners of cooperatives are no different.

The evaluation and choice of alternative strategies must be done within an integrated and comprehensive finance, strategy and risk management framework. For an agricultural cooperative, that framework should include both the patron-producer perspective and the cooperative business perspective. In other words, a cooperative can be viewed as an extension of the patron's business, such as a farm, or as an independent firm that attempts to prosper in a market economy. Both perspectives are important.

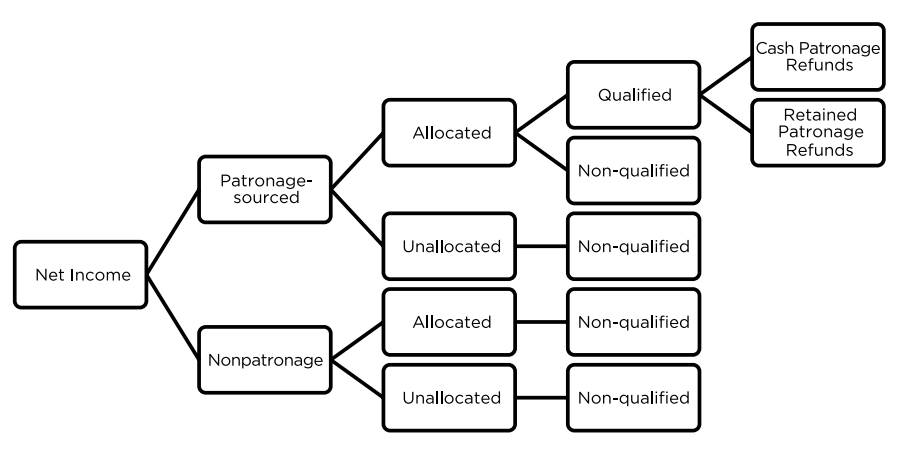
Most members of agricultural cooperatives are unique in that they seek to remain farmers in their own geography. That is, a member will not typically sell their farm and move to another geographic region or country to buy land and begin farming again. With that in mind, a member utilizes a cooperative to receive goods and services at a lower cost than they could by doing it themselves. Thus, a cooperative should align itself on the needs of its customers who are its members and owners and help make them profitable and cost efficient so they can achieve their goal of remaining a farmer in that geography.

Overview of Key Board Decisions in Equity Management

Figure 1 shows the initial step and then the decision making process for boards of directors with regard to distributing income. The first step, which is necessitated by U.S. tax laws, is to separate member sourced (patronage) and non-member sourced (non-patronage) income. Most cooperatives distribute non-member income to unallocated equity (unallocated reserves).

This implies that it is not paid out in cash, will not be redeemed in future years but instead serves as permanent equity. A minority of cooperatives allocate non-patronage income to members' accounts where it could be paid out in the event the cooperative was dissolved. However, this equity is not redeemed or revolved while the cooperative is in operation so it still functions as permanent equity.

Figure 1



Different types of equity classes available for a cooperative board of directors to consider with their income distribution decision.

The first decision, after separating non-member income, is to decide what portion of patronage income should be retained as unallocated equity and what portion should be allocated to members. Unallocated equity, which is also referred to as unallocated reserves or retained earnings, has an important function as a "cushion" which can absorb unexpected losses without writing down the value of allocated equity. Retaining income as unallocated equity is one option for generating cash for infrastructure investment and/or equity redemption.

Unallocated equity is considered permanent equity because it is not redeemed and thus does not require managing redemption. Because the cooperative cannot exclude income distributed to unallocated equity from their earning calculations, the cooperative pays the corporate tax rate on these earnings. Distributing patronage income to unallocated equity reduces the member's realized return because it is never redeemed for cash. When the ratio of unallocated to allocated equity becomes excessive, members have an incentive to liquidate the cooperative to capture the value not represented in the stock balances. The board should consider all of these factors in their decision to distribute a portion of patronage income to unallocated equities.

The second decision is whether to distribute allocated income as cash (immediately redeemed) or as retained patronage (redeemed at a later date). The member reports the cash patronage as income while the cooperative excludes the distributed income from their earnings calculations. Cash patronage distributions create immediate benefit to the member while reducing the cooperative's cash flow. This decision involves an obvious balancing act between member return and the cooperative's cash flow.

The third decision for a board of directors is to determine the taxability of the income distributed in the form of equity (stock). A qualified distribution is one where the member receives equity which is taxable income in the current year and the cooperative is able to exclude the distribution from its earning calculations and does not pay corporate tax on the allocation. The board makes the decision to redeem the equity at a later date and, since the member has already paid taxes on the earnings, there is no tax effect at redemption.

A non-qualified distribution of equity is one where the cooperative does not exclude the distribution from its earning calculation and the distribution is not reported to the IRS as income to the member. The cooperative pays the corporate tax on the earnings. At the time of redemption the cash payment is reported as income to the patron and creates a deduction for the cooperative. The decision to distribute in qualified versus non-qualified equity therefore >>>

changes the timing of the tax payment, but in either case the tax burden is ultimately transferred to the member as an extension of their farm business.

The qualified versus non-qualified decision is somewhat inter-related with the decision on the portion of cash patronage. A cooperative issuing qualified equity must also pay 20% in cash. There is no cash requirement when issuing non-qualified equity. Because a non-qualified distribution increases the cooperative's current year taxes, the cash flow impacts may require the cooperative to reduce the portion of cash patronage.

This taxability decision is probably the most commonly misunderstood concept of cooperative finance. Historically, cooperatives have followed a practice of issuing qualified distributions because the producer was in a much lower marginal tax bracket than the cooperative and it made sense to issue a qualified distribution. Because a producer pays tax on the retained patronage, many directors consider this equity as debt like obligations that must be redeemed at a prescribed future date. A common phrase that is often heard is, "The cash patronage I received from the cooperative barely covered the taxes on the stock I received. I took on the tax burden from the stock and the cooperative owes it to me to redeem it on schedule."

This confusion over whether equity redemption is a fixed obligation or residual claim on net income leads to problems as discussed further in this article. A related issue mentioned at the CHS Insight meetings was the growing lack of tax preparers who understand cooperative accounting and finance. Qualified distributions are a difficult concept to explain to a tax preparer because there is nothing similar to it in other classes of equity.

In recent years, as more and more producers (principally crop farmers) face higher marginal tax rates similar to a cooperative's marginal tax rate, boards of directors have begun to look at non-qualified distributions as a way to better align members with the cooperative. The members pay tax only on the cash patronage refunds and understand that the non-cash portion is being retained to invest in capital investments needed by the cooperative or to strengthen the balance sheet to provide working capital. Because the members have not pre-paid the tax on the stock patronage, they are more receptive to the concept that the future redemptions will only occur when the cooperative no longer needs that equity on its balance sheet. Many non-agricultural cooperatives use non-qualified distributions.

The use of non-qualified distributions is easier to communicate to members. Traditionally it has been difficult for a cooperative to transition from qualified to non-qualified distributions, unless they reduced the cash patronage rates because they lose the tax effect of qualified distributions and do not get the tax benefit of non-qualified redemptions until the first non-qualified issued reaches the revolving cycle. There is a unique opportunity to consider non-qualified distributions because a cooperative with excess Domestic Activities Production Deduction (DPAD) available can utilize the credit to eliminate the tax impact of a non-qualified distribution. As an additional benefit, the tax deduction at the time of redemption will reduce the effective redemption budget.

Cash patronage for a non-qualified distribution is less than a rate for a qualified distribution to make them tax neutral

Boards of directors that move from a policy of qualified distribution of allocated patronage-sourced income to non-qualified often seek to make the change "tax" neutral to the cooperative. A non-qualified distribution means that the cooperative has an added expense of an increase in income taxes payable. To make it tax neutral, a board will reduce the percentage of patronage paid in cash. Suppose a member earned $100 of patronage. Under a qualified distribution with 40% paid in cash, a member received $40 in cash but paid tax on the entire $100. For example, if the member was in the 25% tax rate they would pay $25 in tax and have an after tax cash refund of $15 ($40 - $25). If the board decided to redeem that non-cash portion at a later date, there is no additional tax effect.

Using the same assumptions, a non-qualified distribution resulted in a member only paying tax on the $40. Using the same redemption rate of cash patronage means that the cooperative is paying increased taxes and has less net income. To make it tax neutral, a cooperative reduces its cash redemption rate from 40% to a percentage that reduces the amount of cash paid for redemption but that cash is now used to pay the additional income tax. In this case, that cash patronage percentage is 20%. For example, if the cooperative was also in the 25% tax rate their taxes would increase from $0 to $20.00 (80% * $100 * 25%). In this case it is also tax neutral to the member since they pay tax only on the $20 leaving them with an after tax cash refund of $15 ($20 - $5 where the $5 = 25% * $20). If the board decided to redeem that non-cash portion at a later date, the member pays tax on that distribution and the cooperative receives a tax credit.

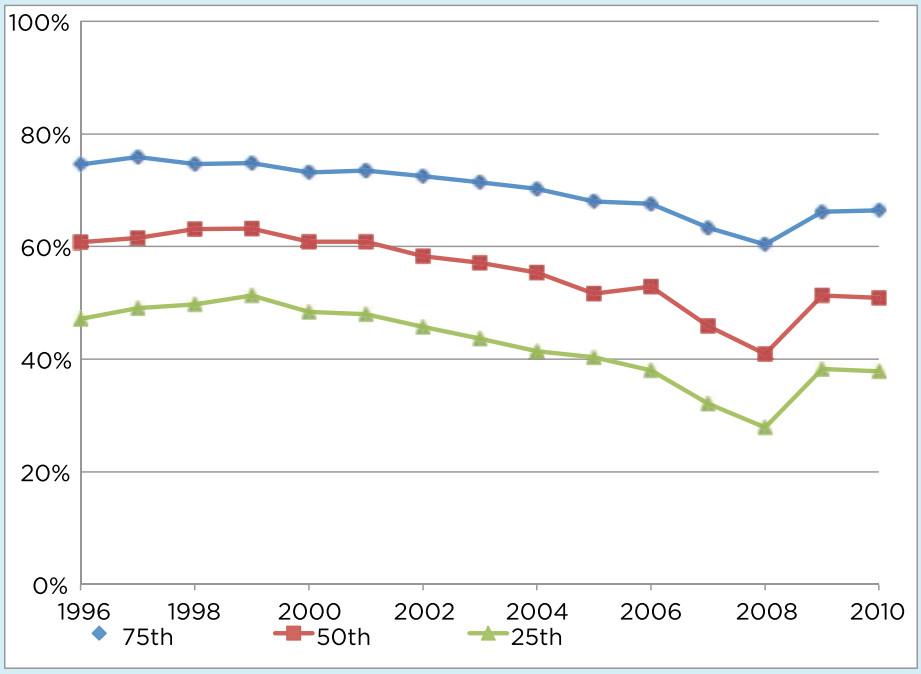
Looking at Cooperative Financial Performance Measures over Time

Information about figures 2-8
The data from these figures is from audited accounting data collected by a lender. Note that the data shown in these figures are shown in percentiles. The percentiles are broken into 25th, 50th, and 75th percentile. This allows the reader to calculate the same ratios for their cooperative and see what percentile they would have been at in that year.

Figure 2 describes equity as a percentage of assets from 1996 to 2010. Note that this ratio was greatest in 1997 and lowest in 2008 calendar years. In general, this ratio follows the trend with profitability as seen by net income as a percentage of equity (ROE) and net income as a percentage of assets (ROA) in figures 3 and 4. Note that the dispersion or variability between the cooperatives across percentiles is greatest for ROE. This is not unusual since boards of directors in cooperatives who have negative income usually use equity to balance that loss rather than asking members for cash to make up for that loss in equity. This suggests that cooperative boards have not followed balance sheet management and not considered liquidity and solvency goals in their decisions for cash patronage and equity redemption. We currently have a research project at the University of Minnesota looking at this issue with this data.

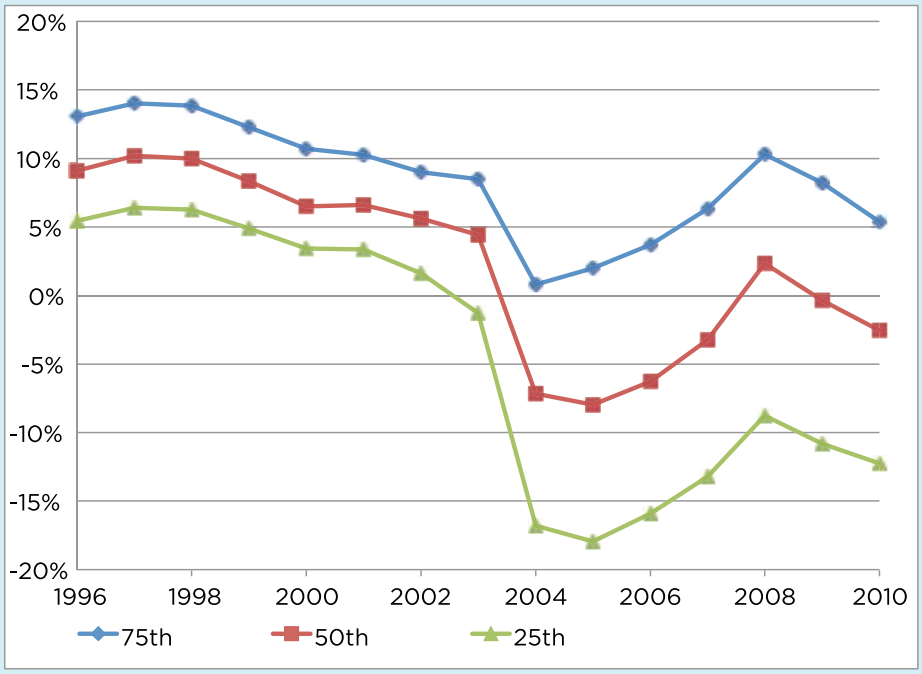
What other factors might have increased cooperative leverage over time? Government policy which led to low interest rates since 2001 is one factor. Increased capital expenditures due to customer demand (e.g., changing cropping patterns, increased grain and oilseed volumes, etc.) could be another contributing factor. What factors might contribute to variation in profitability? Government policy in renewable fuels, consumer demand for increased meat and dairy products, and inability to maintain margins due to competition are several reasons. >>>

Figure 2



Equity as a percentage of assets for local farm supply and grain and oilseed marketing cooperatives, 1996 to 2010, by percentile.

Figure 3

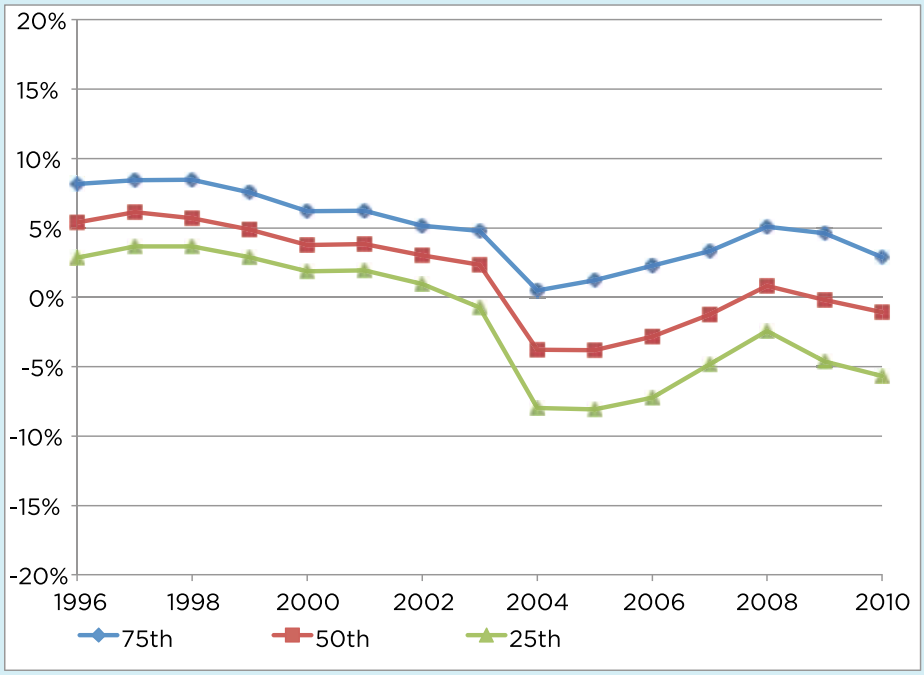


Net income as a percentage of equity (Return on Equity) for local farm supply and grain and oilseed marketing cooperatives, 1996 to 2010, by percentile.

A closer look at board of director decisions on equity management can be seen in Figure 5 which shows the percentage of equity allocated to members that was paid in cash in that year. For example, in 2010, cooperatives in the 75th percentile or higher paid almost 50% of patronage allocated to members in cash and the remaining 50% (100% less 50%) of patronage allocated to members was retained by the board and could be redeemed at a later date subject to board approval. In general, these rates have increased in recent years for cooperatives in the 50th percentile or higher. Why have boards of directors decided to increase cash patronage rates over time? Cooperative boards may have become more sensitive to their members' marginal tax rates and increased cash patronage to offset the tax impacts of qualified distributions. Increased competition could be another factor as producers in some geographical regions have seen more buyers of grains and oilseeds and more suppliers of inputs especially crop nutrients. A third factor can be seen in Figure 2 as cooperatives have substituted debt for equity.

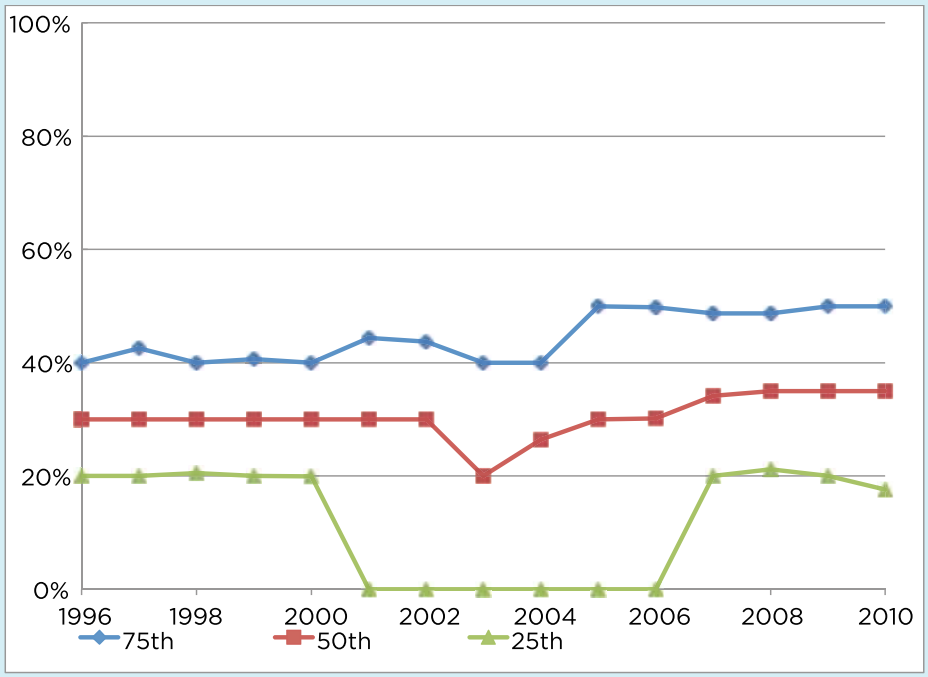
Figure 6 shows that unallocated equity as a percentage of total equity has increased over this time. Unallocated equity is not subject to redemption and does not have a member's name on it. Why have boards of directors increased this type of equity in recent years? One factor may be an increase in non-member business which is non-patronage and must be placed in unallocated equity. A second factor has been the advice of lenders who have encouraged cooperatives to increase the amount of equity not subject to redemption so that it becomes "permanent." To some extent this shows a lack of faith in the board's discipline with balance sheet management. Allocated equity can be as "permanent" as needed if >>>

Figure 4



Net income as a percentage of assets (Return on Assets) for local farm supply and grain and oilseed marketing cooperatives, 1996 to 2010, by percentile.

Figure 5



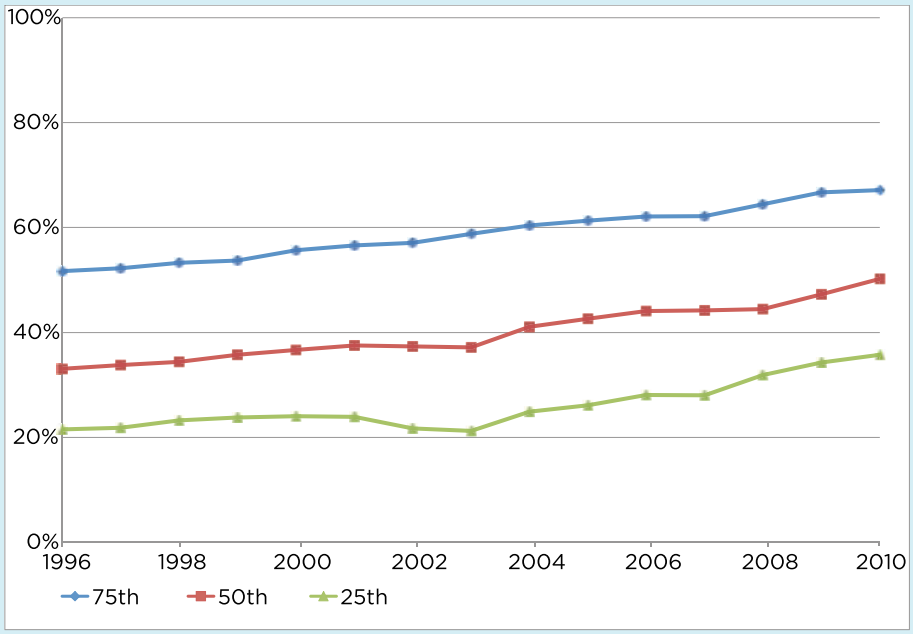
Cash patronage as a percentage of total cash and non-cash patronage allocated to members for local farm supply and grain and oilseed marketing cooperatives, 1996 to 2010, by percentile.

the board is disciplined in relating redemption to the cooperative's financial condition.

Some participants reported at the CHS Insight Meetings that their practice was to retain patronage from regional cooperatives or income from joint ventures as retained earnings. This could be another factor. Finally, some directors at the CHS Insight Meetings recalled that after the bankruptcy of a regional cooperative and equity losses in other regionals, local cooperatives reduced unallocated equity to offset the lost value of the regional stock rather than write down the value of allocated equity. The risk of similar events in the future may have led these cooperatives to increase the amount of unallocated equity by retaining a greater portion of patronage-sourced income as unallocated equity. The DPAD is being used by grain and oilseed marketing cooperatives. Using this at the cooperative level has brought additional equity into some cooperatives. However, while unallocated earnings as a percentage of equity has been increasing, unallocated as a percentage of assets has remained somewhat constant at 20% as shown in Figure 7.

Unallocated equity is not available to a member unless the cooperative is sold, merges, dissolves, or similar events where the fair market value of the cooperative's assets must be determined. As stated earlier, greater amounts of unallocated equity relative to allocated equity could tempt some members to seek to "sell the co-op" to monetize this unallocated equity. This was discussed at every CHS Insight Meeting. A common question at CHS Insight Meetings was "What is the appropriate amount of unallocated equity?" Participants at CHS Insight Meetings used an exercise to discern their preferences for an appropriate ratio and there was near unanimity among the participants that more allocated equity relative to unallocated equity was preferred. Yet, Figure 6 shows that cooperatives in the 75th percentile or higher have more unallocated equity than allocated equity. Furthermore, cooperatives in the 50th percentile are approaching 50% allocated equity and 50% unallocated equity. As was discussed at the CHS Insight Meetings, this is a >>>

Figure 6



Unallocated equity (also called retained earnings) as a percentage of total equity for local farm supply and grain and oilseed marketing cooperatives, 1996 to 2010, by percentile.

The use of allocated equity

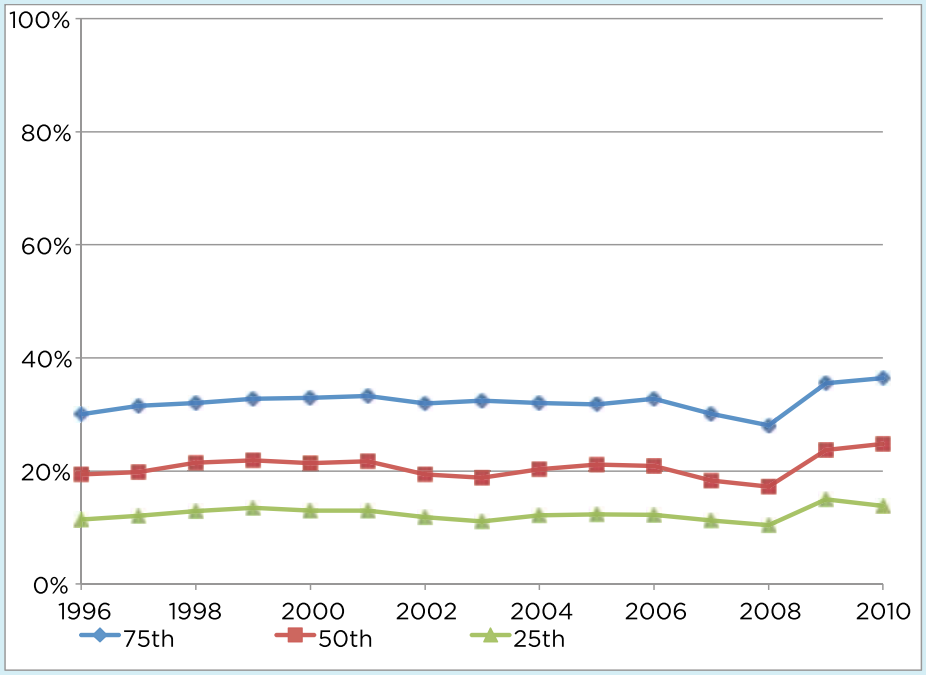
A question that is often asked by directors is, "What is the optimal amount of unallocated equity or retained earnings?" The traditional "pure" cooperative model was to allocate 100% of patronage-sourced income and have most of its income derived from members. This was reflected in many bylaws that stated that no more than 10% of patronage-sourced income in a given year could be unallocated. As long as the cooperative was profitable, it could redeem equity over time. An exercise used at the CHS Insight Meetings found that virtually everyone believed that a cooperative should have greater amounts of allocated equity relative to unallocated equity with the most frequent response being 1.5 to 2 times as much allocated equity relative to unallocated equity. For example, suppose a cooperative had $100 of assets and $30 of liabilities and desired that the ratio of allocated equity to unallocated equity be 2:1. The $70 of equity (the accounting identity states that assets are equal to liabilities plus equity) would have $23.33 of unallocated equity and $46.67 of allocated equity. Note that it is possible for a cooperative to operate as a "pure" cooperative by allocating 100% of its patronage-sourced income provided that the members had an expectation that redemption would only occur if the cooperative could afford to do so which means consistent profitability is needed. If the cooperative experienced a loss, the members' stock value would be written down since losses have to be offset with a decrease in equity balances.

topic that every board should discuss and develop a philosophy regarding preference of allocated and unallocated equity. If, as was discussed at the CHS Insight Meetings, directors prefer more allocated than unallocated equity, cooperatives in the 50th percentile or higher should examine their equity management programs to allocate more patronage refunds to member equity accounts instead of unallocated equity. Factors boards should also consider are the size of the cooperative, its working capital needs, ability to raise capital, tolerance for risk, and how its members view its governance structure and control by producers.

Many cooperatives have increased capital expenditures in recent years for reasons discussed earlier. Figure 8 shows the relationship between depreciation and capital expenditures. A good practice of finance is to "spend your depreciation" every year if a firm is to maintain its fixed assets in good condition. This relationship should be analyzed over time as opposed to just one year because a firm can have a major expansion in one year that leverages their balance sheet as seen for the average co-op in Figure 8. In general, cooperatives at the 50th percentile or higher are following this practice of reinvestment. However a significant number of cooperatives are not following this practice as seen in the 25th percentile.

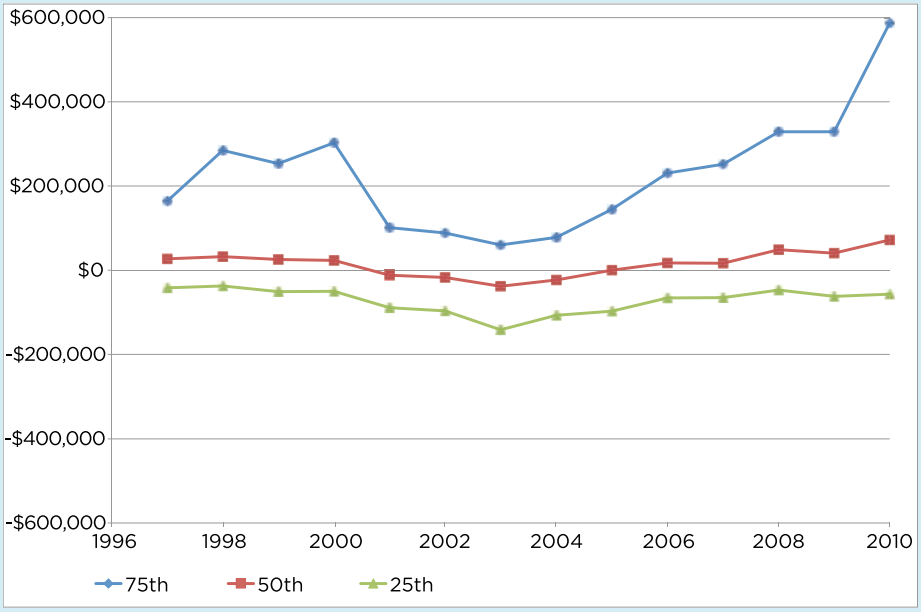
Why would a cooperative allow its assets to deteriorate or depreciate over time? Lack of profitability or inability to borrow money is one reason. In general, most boards of directors decide to use income from operations coupled with term debt to finance major capital expenditures. Research is underway at the University of Minnesota to see whether cooperatives, similar to those in the bottom percentile, are choosing to "destroy equity" through their choice of equity redemption programs.

Figure 7



Unallocated equity (also called retained earnings) as a percentage of assets for local farm supply and grain and oilseed marketing cooperatives, 1996 to 2010, by percentile.

Figure 8



The net difference between capital expenditures and depreciation for local farm supply and grain and oilseed marketing cooperatives, 1996 to 2010, by percentile.

Choice of Equity Redemption Program has Implications for a Cooperative's Balance Sheet

In recent years we have seen cooperatives considering changes in equity management programs, increasing the percentage of unallocated equity, making greater use of debt to fund investments, and implementing non-qualified distributions. A key decision by a board of directors is to set the rules for redemption of equity not needed on the cooperative's balance sheet in that time period. There are three common forms of equity redemption programs: estates, age of patron and revolving fund. But as was seen at the CHS Insight Meetings, virtually every cooperative uses a combination of these three methods with everyone reporting paying off estates in combination with an age of patron method or a revolving fund method.

The first method is to just redeem estates. Under that method when a member dies, the board of directors redeems the member's entire equity balance to the estate. The second method is age of patron. Under the age of patron method a cooperative redeems equity when a member reaches a trigger age with 70 being the most common age reported at the CHS Insight Meetings, with a range of 66 to 82 years of age. A third method is the revolving fund method where the cooperative redeems equity based on the age of the stock (e.g., year the stock was issued). The stock trigger age is typically not fixed but rather varies in accordance with the redemption budget with the oldest equity redeemed first.

Age of patron programs were very popular and early literature on cooperatives compared them to an entitlement program that would pay a member their unredeemed upon retirement from farming. This was discussed at several CHS Insight Meetings where such redemptions were regarded as "the gold watch" or "reward for being loyal to the co-op all those years." At every meeting, a number of cooperatives reported using such a program. In general, many of these cooperatives had smaller amounts of assets and sales. Various reports by the U.S. Department of Agriculture over time have shown that more than a third of farm supply and oilseed / grain marketing cooperatives are using such a program and these programs have become much less popular over time.

Why have many cooperatives moved away from an age of patron program? One factor is that under such a rule, boards of directors redeem equity as members reach the age stated in board policies. As an age profile of members gets older, boards are faced with large redemptions that are often greater than income earned that year. Consequently, a board of directors stresses its balance sheet by using working capital or delaying capital expenditures in order to redeem this equity which might account for the trends seen in Figure 8. This perception of equity redemption as a fixed debt obligation is not a good practice and inhibits strategic thinking in a board room.

A second factor discussed by CHS Insight Meeting participants is that members often farm past the age policy. Many cooperatives distribute 100% cash patronage to members after they reach the redemption age. Consequently older members receive immediate redemption every year. Linked to this factor was a third factor identified at a number of CHS Insight Meetings which was the growing number of multi-generational producers. A member who was past the redemption age could do all of the business for all family members including members much younger than the redemption age and receive immediate redemption. Several directors at the CHS Insight Meetings indicated that their board had adopted a policy of allowing one redemption of stock and all stock earned after that redemption age was paid out in estates. Other cooperatives using the age of patron plan have implemented a second trigger age for redemption of equity earned subsequent to the first redemption age. Both strategies help mitigate the multi-generational farmer issue and allow equity to be transferred to a younger generation.

A revolving fund based on redeeming oldest equity first is a much superior program especially when used in conjunction with the use of non-qualified distributions. Revolving funds are superior because they do not resemble an entitlement program. Members are less sensitive to adjustments in the revolving period and the board can >>>

How to transition from an age of patronage program to a revolving fund program

A number of CHS Insight Meeting participants shared how their cooperative had moved off an age of patron program and onto a revolving program. Essentially, they used a combination of age of patron program and a revolving fund with oldest equity being redeemed first. The board of directors sets a goal of trying to balance the needs of those nearing the redemption age against those who are using the cooperative and will continue to use it in the future. Cooperatives first look at the age of their equity earned by each member and the age of their members through time. A board sets a transition goal of allowing, say members who are 55 years and older, to remain on the existing age of patron program and have everyone younger than 55 years move onto the revolving fund. The board of directors runs both programs until the redemption age is reached by the current age 55 cohort at which time the age of patron program ceases and the cooperative operates only a revolving plan. In some cases, through a merger or poor recordkeeping, a cooperative has classes of equity that do not have the year that the equity was allocated to that member. A common practice is for a board to decide to pay a percentage of that equity out over a certain number of years or all at once if the amounts are small.

redeem multiple years or a portion of a year in accordance with available funds. Many producers have organized their farming operations under LLCs and Trusts with multiple family ownership. The revolving fund system avoids the problem of "looking through" these structures to assign a patron age. The revolving fund therefore mitigates many of the weaknesses of the age of patron program. It is more flexible and allows a board to think more strategically and redeem equity consistent with a balance sheet management philosophy.

It was evident at every CHS Insight Meeting that directors are doing their best to balance the needs of "those who built the co-op" with "those who are doing business with the co-op today and in the future." These decisions are easier when the cooperative is profitable.

Summary

Cooperative finance and equity management can be complex to a new director and confusing to a member. A goal of the 2012 CHS Insight Meetings was to provide information to members about these topics and discuss ideas being used by other cooperatives such as allocating some patronage-sourced equity into unallocated equity, moving from an age of patron to a revolving fund program, and using non-qualified distributions so that members' tax obligations correspond with cash payments. These latter two goals help meet the goal of aligning a member's ownership in the cooperative with the cooperative goal of helping that producer be profitable.

A large regional cooperative such as CHS operates in many different geographical regions with many different types of member-owners including cooperatives and producers with farming and ranching operations. In geographical regions where yields are higher and rainfall is more consistent, producers intensively manage crop nutrients and risk management tools and cooperatives are more likely to achieve consistent profitability. Cooperatives in these areas that can align with the members' need for speed, space and efficiency provide marketing and risk management solutions with greater opportunities for profitability. This requires alignment through their assets and equity management program and these opportunities also involve risk and competitive pressure. In other geographic regions, where crop yields are less consistent or livestock operations dominate, the cooperative's profitability may be more variable. The key to success for all cooperatives is to concentrate on efficiency and risk management. Actively managing the balance sheet, aligning income distribution and equity management practices with the member needs, and deciding what a board's preferences are for the appropriate amount of allocated equity and unallocated equity are ingredients for success that apply to all of these cooperatives.

Professor Michael Boland is the E. Fred Koller endowed chairholder in agribusiness management and information technology at the University of Minnesota. He is also director of the University of Minnesota Food Industry Center and teaches the course in cooperatives. The Koller endowment includes contributions from Farmers Union Grain Terminal Association (later Harvest States and now CHS Inc.), Land O'Lakes, MSI Insurance (now Country Financial), the St. Paul Bank for Cooperatives/Federal Intermediate Credit Bank of St. Paul and the Federal Land Bank of St. Paul (now AgriBank FCB and CoBank), the University of Minnesota Foundation, Mrs. Koller, and friends and colleagues of Fred Koller who was a respected teacher and educator at the University of Minnesota. Phil Kenkel reviewed this article for CHS Inc.; he holds the Bill Fitzwater Cooperative Chair at Oklahoma State University and is the current editor of the Journal of Cooperatives. David Barton, professor emeritus and former director of the Arthur Capper Cooperative Center at Kansas State University, also reviewed this article.

Other resources to consult

The CHS Foundation funded a project in 2011 on critical issues facing cooperatives. The finance piece on cooperatives was used in this article. These are available online at http://www.choicesmagazine.org/choices-magazine/theme-articles/critical-issues-for-agricultural-cooperatives

Barton, David; Boland, Michael; Chaddad, Fabio; Eversull, Eldon. *Current challenges in financing agricultural cooperatives.* Choices, v.26, no.3, 3rd Quarter 2011.

NCERA 210 Research on Cooperatives is a multi-state consortium of researchers on cooperative issues that meets annually. Their website is http://ncera.aae.wisc.edu/

CHS Foundation has helped fund the electronic website for extension which has resources on cooperative issues. Their website is at http://www.extension.org/cooperatives

CHS is one of many sponsors of the annual Farmer Cooperatives Conference organized by the University of Wisconsin Center for Cooperatives with an advisory board of cooperative educators, leaders, and scholars. The 2011 Farmer Cooperatives program had a special program on cooperative finance. Those presentations can be found at http://www.uwcc.wisc.edu/outreach/FCC/PastConferences/farmercoops11/program.html