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Consolidation of Allocated Equity for Merging Cooperatives Previously Operating on a Revolving Fund

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FOREWARD

The authors wish to acknowledge the cooperation of the two cooperatives that provided the detail used to illustrate options for combining equity of cooperatives with dissimilar equity histories.

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HIGHLIGHTS

Cooperatives have some latitude when capital requirements are reassessed and allocated equity is consolidated at the time of merger between two or more cooperatives. This study provides information that may be used by merging cooperatives operating under a revolving equity retirement plan to expedite consolidation of allocated member equities.

Six options are presented. Four of them involve different ways of handling unredeemed allocated equity that is older than an agreed upon length of revolving fund. These options are immediate payoff, delayed payoff schedule, prorating old equity among years of desired revolving fund, and reassigning old equity to unallocated reserves. The other two options include reevaluation of allocated equity and direct conversion to a base capital plan. Possible combination of these options, potential impact on membership of the merging cooperatives, and fairness to members are discussed. The stockholders may choose to change their equity retirement plan. They may also choose to reevaluate their equity or liquidate old equity at a discount rate.

CONSOLIDATION OF ALLOCATED EQUITY FOR MERGING COOPERATIVES PREVIOUSLY OPERATING ON A REVOLVING FUND

Harlan K. Hatfield, David W. Cobia
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Cooperatives are becoming involved with merger, consolidation, or acquisition at a record rate, often because of financial difficulty caused by forces beyond their control. These forces include bad debt loss, need for high cost handling and processing equipment, transportation facilities, changing economies of size, and market conditions. Additionally, farms are becoming fewer and larger, and with better transportation farmers can deliver larger loads longer distances. These factors dictate the need for fewer but larger cooperatives that are able to take advantage of economies of size.

This report illustrates and analyzes the consolidation of member equities when two or more cooperatives merge that use the revolving fund equity redemption plan. Historical information, problems encountered in the merging of equity, and options that may be used in equity consolidation are examined.

Liquidations and mergers have taken place at an increasing rate during the 1970s compared with the previous 20 years (Table 1). The number of cooperatives in the United States reached a peak of 10,179 in 1951 and has been generally declining since. The rate of decline in the 1970s more than doubled over the previous 20-year period from -1.14% per year for the 1950-1970 period to -2.86% per year for the 1970-1980 period. During the 1970s slightly less than one-half of cooperative disappearances was accounted for by dissolution. The remainder disappeared through merger.

Merging cooperatives often find themselves at different stages and levels of allocated member equity redemption. For example, one cooperative may be revolving allocated equity on a nine-year basis while the second may have no contingency for redemption or may be on a plan that settles estates only. This situation causes a dilemma. Members of a cooperative that is redeeming its allocated member equity on a planned schedule may be reluctant to assume old outstanding equity from the second cooperative when they (the members of the first cooperative) have already invested heavily in an equity redemption program. Alternatively, if the second cooperative is not in a strong financial position, it cannot afford to redeem old, outstanding equity without further weakening its financial position. Another problem is that inactive members who have had their equity invested for many years without receiving services or interest from the cooperative may believe they should receive full face value from their investment. Furthermore, members of the cooperative with an up-to-date equity reserve program may feel, with some justification, that members of the other cooperative should bear the entire burden of their own old equity because they have not required the board of directors to promote a more efficient operation. Why should their earnings be diluted by having to redeem someone else's outstanding equity? This creates an awkward situation.

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TABLE 1. NUMBER OF AGRICULTURAL COOPERATIVES IN THE UNITED STATES

Period	Cooperatives	Period	Cooperatives
1950-1951	10,064	1966-1967	8,125
1951-1952[a]	10,179	1967-1968	7,940
1952-1953	10,128	1968-1969	7,747
1953-1954	10,072	1969-1970[a]	7,790
1954-1955	9,903	1970-1971[a]	7,994
1955-1956	9,894	1971-1972	7,786
1956-1957[a]	9,991	1972-1973	7,535
1957-1958	9,735	1973-1974	7,239
1958-1959	9,658	1974-1975	6,999
1959-1960	9,345	1975-1976	6,939
1960-1961	9,163	1976-1977	6,792
1961-1962	9,039	1977-1978	6,765
1962-1963	8,907	1978-1979	6,562
1963-1964	8,847	1979-1980	6,145
1964-1965	8,583	1980-1981	5,982
1965-1966	8,329		

[a]Years in which the number of cooperatives increased.

SOURCE: Abrahamsen, Martin A., Cooperative Business Enterprise, New York: McGraw Hill Book Co., (1976) and Ralph M. Richardson, Agricultural Cooperative Service for 1972-1981 data.

The challenge is to devise a plan that provides for consolidation of allocated member equities in proportion to use while minimizing tax liability and, most importantly, assuring equity and fairness to members of the merging cooperatives. Cooperatives have an opportunity to select a plan of equity consolidation from several options that best fit their local situation yet conserve capital for the newly merged organization.

Cooperatives have a unique problem with capital formation. They depend on their member patrons for raising equity capital, whereas investor-oriented corporations raise investment capital by issuing shares of stock that can be sold to the general public. Further, benefits in a cooperative are distributed on the basis of patronage rather than on the amount invested. These practices give publicly held corporations an advantage over cooperatives in investment capital formation.

Increased pressure for capital caused by reduced margins, inflation, growth, high cash refunds, and interest expense has caused cooperatives to continue retaining equity of inactive members. As a result, equity capital has been supplied by inactive members rather than current patrons.

In the case of merging cooperatives there should be equitability or freedom from bias and favoritism between active and inactive members in evaluation and consolidation of outstanding member equity. Member equities, therefore, should be distributed to achieve a balance of the needs of the cooperative and current patrons with the rights of inactive members. Any program that moves ownership of allocated equity in the direction of members providing equity in proportion to the amount of business transacted over time is both equitable and in harmony with cooperative principles. For example, it would not be fair for members of one cooperative to be forced to assume the liability of redeeming old, outstanding equity of a second cooperative. There is a need to (1) evaluate the program for redemption of equity used by each cooperative, (2) evaluate patronage relative to investment, and (3) select an equitable consolidation and equity redemption plan that will reflect the needs and rights of different classes of members.

Background

Members benefit from cooperative operations through patronage refunds, favorable prices, services, and product availability. Active members should provide financing, while retired or inactive members should receive equities accumulated from their past patronage. Cooperatives that fail to have a systematic equity retirement plan are forcing inactive members to provide financing for services they no longer use. This causes two types of inequities: (1) provisions of equity without any benefits by members who are no longer patrons and (2) ownership without control, that is, if the inactive member loses his vote. Inactive members receive no direct benefit from their equities unless limited dividends are paid on allocated equity. It is the responsibility of active members, therefore, to provide funds for operations and to redeem inactive members' equity on an orderly basis. Cooperatives should recognize, however, that funds budgeted for this purpose will affect cash flow and not be available for growth. Alternatives are debt financing, slower growth, wider margins, per-unit capital retains, or direct member investment.

A Plan for Merging Equity

Merging cooperatives need to develop a plan for merging the equity of the previously separate cooperatives and for redeeming retained member equity of inactive members. An efficient way to accomplish this is through the steps discussed in the following section. An Agricultural Cooperative Service study found that a given program may not lend itself equally well to all organizations (Cobia et al. 1982). For example, size of organization, farm size, member turnover rate, and the type of organization (i.e., supply or marketing cooperative) may all play a role in deciding which program to choose.

Select a Committee

A balanced committee composed of management, board members, and other members knowledgeable of finance principles should be named. This committee should gather information and make recommendations on the merger. Sources of funds for the new organization, consolidation of equity and type of redemption program best suited for the new organization, and legal considerations are among the topics this committee should address and make recommendations to the board of directors. The committee may wish to seek help from outside sources, such as the Bank for Cooperatives, a federated cooperative and/or a law firm that specializes in cooperative law.

Finances

The committee should investigate the four sources of financing that are generally used by cooperatives. These sources include retained refunds, per-unit capital retains, cash investment, and borrowed funds. Several publications discuss these options (e.g., Abrahamson, Cobia, et al.).

Recapitulate Equity

A systematic evaluation of equity redemption programs being used by cooperatives in the merger should be made to determine the following:

1. Type of plan being used,
2. Performance of equity redemption program, for example,
   a) Length of revolving period,
   b) Percent of ownership by inactive members,
3. Amount of unallocated equity,
4. Provision for special situations (estates, etc.),
5. Effect of equity redemption on working capital, and
6. Leverage of participating cooperatives.

Legal Implications

The committee should be responsible for developing a constitution and bylaws for the new organization. The bylaws should have a section pertaining to equity redemption to ensure that there is

1. adequate capital supplied by members,
2. fair treatment of all members, and
3. consideration of financial needs for the next five to seven years immediately following the merger.

Under law, cooperatives have considerable discretion in structuring redemption policy. Because no state requires systematic redemption of equity, boards of directors determine how equities shall be redeemed (9). Statutes requiring redemption are limited to termination of membership.

Analysis

Member equity is created by members' making direct cash investments to the cooperative or by the cooperative's retaining net savings and/or deducting per-unit capital retains. Four commonly recognized ways of returning this equity to members in cash are (1) the Revolving Plan, (2) the Base Capital Plan, (3) the Percent of Total Equities Plan, and (4) situation of member plan (also called "special"). Each of these is discussed briefly. See Cobia et al. (1982) for a detailed description which includes a list of advantages and disadvantages.

Ninety percent of all farmer cooperatives in the United States that have a program for systematic redemption utilize the Revolving Plan (Cobia et al. 1982). It employs a first-in, first-out revolvement where member equity is retained for a period of time for operations and then is redeemed in chronological order.

The Base Capital Plan requires the board of directors to specify the amount of capital needed by the cooperative. Each member's obligation to provide equity capital is determined by his use of the cooperative. The primary objective is to have every member's equity share be directly related to his/her patronage. Excess equity of an over-invested member can be redeemed, and an under-invested member's equity can be built up by cash investment, retained refunds, or per-unit capital retains.

The Percent of Total Equities Plan redeems allocated equity by paying a percentage of allocated equity without regard to age of equity. The percentage is determined by the board of directors and is based on the needs of the cooperative, the total amount of equity outstanding, and available funds.

Many cooperatives redeem allocated equity only when the situations of members change in specified ways. Redemption may be triggered by events such as retirement, death, or a move from the trade area.

Options for Consolidation of Equity

When a merger is planned, a dilemma will develop if the merging cooperatives use different equity redemption plans and/or are at different stages of equity redemption. This problem is illustrated by two cooperatives using the Revolving Fund Plan (Table 2). The data presented here have been modified from actual cases to avoid disclosure. Cooperative A has $370,850 in outstanding member equity older than nine years, while Cooperative B has no outstanding equity older than nine years. The merger committee should develop a plan for merging the equity of these two cooperatives that will be fair and equitable to all members. Consideration should be given to those members of Cooperative B who have already invested in their cooperative to redeem old equity prior to the merger.

Six options or methods for combining equity of cooperatives will be discussed and illustrated below. Cooperatives contemplating merger may select the option that best suits their needs. To make these options meaningful, the following assumptions are made:

TABLE 2. EXAMPLE OF TWO COOPERATIVES AND THEIR ALLOCATED MEMBER EQUITY POSITIONS PRIOR TO MERGER[a]

Age in Years (1)	Cooperatives' Allocated Equity A (2)	Cooperatives' Allocated Equity B (3)	Combined Equity (4)	Percent of 9-Year Total (5)
9	$ 32,040	$ 24,751	$ 56,791	2.225
8	176,244	395,414	571,658	22.400
7	211,496	364,523	576,019	22.571
6	151,348	213,261	364,609	14.287
5	74,305	133,348	209,653	8.136
4	0	115,004	115,004	4.508
3	0	125,189	125,189	4.906
2	35,637	165,445	201,082	7.879
1	125,321	208,673	333,994	13,088
9-year total	806,391	1,745,608	2,551,999	100.000
Over 9 years old	370,850	0	370,850	
Total allocated equity	$1,177,241	$1,745,608	$2,922,849	

[a]Data have been modified to avoid disclosure.

1. Two local cooperatives are merging.

2. One of the cooperatives is on a nine-year revolving fund plan, and the other is on a situation of member plan or has never redeemed allocated equity.

3. The merging cooperatives agree to adopt a nine-year Revolving Fund Plan, a Base Capital Plan, or a Percent of Total Equities Plan, whichever suits the needs of the cooperative.

Option One--Immediate Payoff

The newly merged cooperative pays off all allocated member equity that is older than the agreed on year of equalization (nine years). Therefore, the $370,850 in old equity which is held by members of Cooperative A (Table 2) would be redeemed at the time of merger. The cost of redemption would be borne by all members of the merging cooperatives by a cash payment from the new cooperative.

The major advantage to this plan would be one of public relations with members of Cooperative A who have equity older than nine years. There are also disadvantages. First, the capital structure of the newly formed cooperative could be substantially weakened. Second, here would be a lack of equitability because members who have already redeemed old equity in one of the merging cooperatives are now asked to help redeem equity of the second cooperative.

Option Two--Delayed Payoff

The newly merged cooperative pays off all allocated member equity older than the agreed on year of equalization (nine years in this case) at a rate of two or three years per fiscal year. Delayed payments would continue until all allocated member equity older than the agreed on year of equalization is redeemed. For example, the $370,850 of old equity held by members of Cooperative A (Table 2) would be redeemed at a delayed rate.

The only change in this option from Option One is the time frame used to bring the equity redemption up to date. The additional advantage over Option One is that less pressure is placed on cash reserves. The disadvantage of inequitability among members still exists.

Option Three--Prorate Old Equity

In Option Three the allocated member equity held by Cooperative A that is older than nine years is prorated over the most current nine years according to the proportion of equity in the most recent nine years for both cooperatives. The reassignment is calculated by multiplying allocated equity older than Year Nine by the percentage from the fifth column in Table 2 for each year of the first nine years. The calculated amount for each year is added to the respective total for that year (Table 3). For example, if a member holds $200 of equity older than nine years, the $200 would be multiplied by 2.225% which yields $4.45. The $4.45 is added to the Year Nine total. This pattern is followed for each patron who holds equity older than nine years. The total amount of equity over nine years to be reassigned to the ninth year ($8,252) is added to the combined total equity of $56,791 to give a revised combined total for Year Nine of $65,042. This calculation is repeated for each succeeding year bringing all allocated member equity into a nine-year revolving plan.

This option brings the older outstanding equity into a shortened period of redemption and spreads the redemption obligation over a period corresponding to the revolving period of the cooperative with the most current

TABLE 3. SUMMARY OF ALLOCATED EQUITY POSITION OF MERGING COOPERATIVES AFTER OLD EQUITY REALLOCATION FOR OPTION THREE

Age in Years (1)	Equity Allocation of Cooperative A Members: Smith (2)	Jones (3)	Patron n (4)	Reassigned Equity[b] (5)	Revised Equity Totals[c] (6)
9	$ 4.45	$ 6.68	......	$ 8,252	$ 65,042
8	44.80	67.20	......	83,070	654,728
7	45.14	67.71	......	83,705	659,723
6	28.57	42.86	......	52,983	417,592
5	16.27	24.41	......	30,172	237,825
4	9.02	13.52	......	16,718	131,722
3	9.81	14.72	......	18,194	143,383
2	15.76	23.64	......	29,219	230,301
1	26.18	39.26	......	48,537	382,530
Totals	$200.00[a]	$300.00[a]	......	$370,850	$2,922,849

[a]Arbitrary amounts
[b]Each year = column total X percentage from Table 2, Column 5
[c]Column 5 + Table 2, Column 4

redemption plan. However, it does not solve the inequity problem caused by the difference in redemption policy of the two participating cooperatives prior to merger, nor does it consider the time value of money. The members of Cooperative B who are on a systematic revolving plan would still be asked to pay part of the old allocated equity from Cooperative A. It also amplifies the already existing variations in redemption demands for future years. This option would not influence the tax status of the new cooperative or of the reassigned equity provided the new cooperative continues to allocate its savings to members.

Option Four--Reassignment to Unallocated Reserves

A fourth method to achieve equity is to have Cooperative A assume the responsibility of absorbing its old allocated equity. This could be accomplished by deducting an amount equal to equity older than nine years ($370,850) from Cooperative A's allocated equity and crediting it to unallocated reserves of the new cooperative. One way to handle this deduction is to prorate it over the most recent nine years based on the portion of equity shown for each year for Cooperative A (Table 4, Column 3), i.e., \$370,850 X 3.975% = \$14,735. The adjusted balance for Year Nine is \$32,040 -\$14,735 = \$17,305. This procedure is repeated for each succeeding year, thus spreading the \$370,850 deduction over the desired nine-year rotation period.

TABLE 4. TRANSFER OF ALLOCATED EQUITY TO UNALLOCATED RESERVE FOR COOPERATIVE A BASED ON PERCENTAGE OF OWNERSHIP FOR THE MOST CURRENT NINE YEARS

	Allocated Equity of Cooperative A				Intermediate Total Equity
Age in Years (1)	Original[a] (2)	% of 9-Year Total (3)	Deduction[b] (4)	Adjusted Balance[c] (5)	of Cooperatives A & B[d] (6)
9	\$ 32,040	3.975	\$ 14,735	\$ 17,305	\$ 42,056
8	176,244	21.855	81,052	95,192	490,606
7	211,496	26.227	97,265	114,231	478,754
6	151,348	18.768	69,603	81,745	295,006
5	74,305	9.214	34,172	40,133	173,481
4	0	0	0	0	115,004
3	0	0	0	0	125,189
2	35,637	4.420	16,389	19,248	184,693
1	125,321	15.541	57,634	67,687	276,360
Total	\$806,391	100.000	\$370,850**	\$435,541	\$2,181,149

[a]Table 2, Column 2
[b]\$370,850 X Column 3
[c]Column 2 - Column 4 (transferred to unallocated reserves)
[d]Column 5 + Table 2, Column 3

Each active patron of Cooperative A would be issued a capital loss statement equal to the amount deducted from his portion of allocated equity and transferred to the cooperative's unallocated reserves. The cooperative would show a capital gain of \$370,850.

The next step is to bring the allocated equity older than nine years into the nine-year rotation. One approach is to multiply the allocated equity older than Year Nine held by each patron by the proportional share of combined allocated equity of both cooperatives in each of the most recent nine years (Table 2, Column 5). The calculated amounts would then be added to the totals for each respective year (Table 5). For example, if a member holds \$200 in equity older than year nine, (\$200 X 2.225 %) \$4.45 is added to this member's Year Nine total. This pattern is followed for each patron who holds equity older than Year Nine. The adjusted balance for this portion of all patron equity is added to the Year Nine revised combined total from Table 4, Column 6, which gives a new allocated member equity total for the merging cooperatives (Table 5, Column 6).

TABLE 5. SUMMARY OF OLD EQUITY REALLOCATION PRORATED OVER MOST CURRENT NINE YEARS BASED ON PERCENTAGE OF EQUITY OWNERSHIP IN MOST RECENT NINE-YEAR PERIOD

Age in Years (1)	Cooperative A[a] Patron Smith (2)	Cooperative A[a] Patron Jones (3)	Cooperative A[a] Patron Others (4)	Cooperative A[a] Totals (5)	Revised Allocated Equity[b] (6)
9	$ 4.45	$ 6.68	$ 8,240.87	$ 8,252	$ 50,308
8	44.80	67.20	82,958.00	83,070	573,676
7	45.14	67.71	83,592.15	83,705	562,459
6	28.57	42.86	52,911.57	52,983	347,989
5	16.27	24.41	30,131.32	30,172	302,653
4	9.02	13.52	16,695.46	16,718	131,722
3	9.81	14.72	18,169.47	18,194	143,383
2	15.76	23.64	29,179.60	29,219	213,912
1	26.18	39.26	48,471.56	48,537	324,897
Unallocated Reserve					370,850
Totals	$200.00	$300.00	$370,350.00	$370,850	$2,922,849

[a]Figures for each year = column total X percentage from Table 2, Column 5.
[b]Column 5 + Table 4, Column 6.

This plan creates equitability for planned allocated equity redemption for the newly merged cooperative. The financial structure of the newly created cooperative is not compromised. Current equity holders of Cooperative A assume liability of old allocated equity, and they receive a corresponding capital loss income tax benefit. Equity older than nine years is placed into the revolving fund at face value. This acknowledges that this older equity should be redeemed at face value because it has been outstanding so long. If the board wished all equity of Cooperative A to share in reduced value, then the steps described above should be reversed. That is, allocate the equity over nine years old to the most recent nine years, then deduct proportionate shares equal to the $370,850.

It may be advisable to obtain a private letter ruling from the Internal Revenue Service regarding tax liability on the portion of equity being transferred to unallocated equity.

Option Five--Stock Reevaluation

In the stock reevaluation option, book value of allocated equity is adjusted according to its appraised values. The conversion ratios can be calculated by multiplying the book value by a ratio from the following formulas:

For Cooperative A: $A_r = \dfrac{A_a/A_b}{B_a/B_b}$.

For Cooperative B: $B_r = \dfrac{B_a/B_b}{A_a/A_b}$.

A and B stand for Cooperatives A and B and subscripts are:

a = appraised value
b = book value
r = reevaluation multiplier

In this example (Table 6) the multiplier for Cooperative A would be .71 and Cooperative B would be 1.40.[1] Therefore, these respective contributions to allocated equity of the new cooperative would be $835,841 (1,177,241 X .71) for A and $2,450,787 (1,745,608 X 1.42) for B.

TABLE 6. DATA FOR DETERMINING THE VALUE OF STOCK HELD BY EACH OF THE MERGING COOPERATIVES AT THE TIME OF MERGER

Cooperative	Allocated Equity: Book Value	Allocated Equity: Appraised Value
A	$1,177,241	$1,774,071
B	$1,745,608	$3,728,119

Each member's contribution of allocated equity would be adjusted in a similar way. This option will allow the new cooperative to establish any

[1] $A_r = \dfrac{A_a/A_b}{B_a/B_b} = \dfrac{\$1,774,575/\$1,177,241}{\$3,728,119/\$1,745,608} = \dfrac{1.51}{2.14} = \$0.71$; $B_r = \dfrac{2.14}{1.51} = 1.42$

redemption program it deems desirable. For example, new equity certificates could be issued and divided into nine equal parts and placed in a nine-year rotation, converted to a Base Capital Plan or to a Percentage of Total Equities Plan.

Option Five gives fair and equitable treatment to all members because the cooperative's equity would be discounted to reflect its relative value. In making an appraisal, it is important that values be determined on potential to earn money as well as by condition of buildings and equipment. This option is similar to the method public corporations use to evaluate stock before a merger. The brokerage firm employed by corporations involved is usually asked to do the appraisal.

It is possible that either one or both of the cooperatives could show a capital loss in the reevaluation process due to either decline in property value or earning power.

Option Six--Base Capital Plan

The sixth option gives consideration to the Base Capital Plan. Assume the combined yearly sales of the merged cooperative is $3.5 million (five-year average) and three patrons have an average yearly business as follows:

K	J	L
$30,000	$3,000	$300

Assume also that the invested equity needs of the cooperative are $2.5 million. Each member's equity obligation is determined by using the following five steps.

Step I - Divide each patron's business volume by $3.5 million.

K - ($30,000/$3.5 million = .86%)
J - ($3,000/$3.5 million = .086%)
L - ($300/$3.5 million = .0086%)

Step II - Multiply $2.5 million by the percentage of each patron's business volume.

K - ($2.5 million X .86% = $21,500)
J - ($2.5 million X .086% = $2,150)
L - ($2.5 million X .0086% = $215)

Step III - Compare each patron's total investment to determine if he is over- or underinvested.

a) If K holds $22,000 in equity, he is overinvested by $500.
b) If J holds $2,150 in equity, his investment is correct.
c) If L holds $200 in equity, he is underinvested by $15.

Step IV - Overinvestment should be retired and underinvestment can be made up by some combination of direct cash payment, retained earnings, per-unit capital retains, and/or the purchase of equity from an overinvested member.

Step V - In each succeeding year member equity requirements are adjusted to meet the cooperative's projected equity needs. If the cooperative chooses to use the Base Capital Plan, equity would only be redeemed when the member is overinvested.

The Base Capital Plan is designed to provide fair and equitable treatment to every patron regardless of level of patronage, because the investment is determined by the percentage of business transacted and equity needs of the cooperative. This plan is more complex than the Revolving Plan but may be worth consideration because of the fair treatment of every member. The Base Capital Plan addresses the problem of equitability by making an appraisal of capital requirements of the new cooperative and determining the share of investment required by each member. The plan adjusts the investment by redeeming overinvestment and having underinvestment made up by the underinvested member.

The merger committee should evaluate each of these options to determine which option or combination of options would be best for their local situation. A recommendation and reasons should be explained to the stockholders for their final approval.

An Option for Inactive Members

The newly merged cooperative may wish to give inactive patrons the option of receiving a discounted lump sum payment rather than leaving their investment in the association to be retired at face value in the regular rotation. This payment should be based on the present value of future payments from the revolving fund using an agreed upon discount rate. For example, an inactive member holding $200 may wish to receive cash for this equity at a discount rate rather than have it placed in a current nine-year rotation such as discussed in Option Three. Equity of an inactive member could be bought by the cooperative or sold to an active underinvested member at the discounted value.

To illustrate, allocated equity held by Smith in the amount of $200 is reassigned over the most current nine-year period (Table 3). A discount rate is established by mutual agreement of both the patron and the cooperative, usually based on interest rates for debt financing of corresponding duration. Once the discount rate is established, the present value can be determined for the equity held for each year. Use of present value tables make this process rather straight forward.

Present value multipliers can be taken from present value tables (Smith and Cooper 1967, p. 55). These multipliers are applied to the equity to be redeemed in each future year to determine present value. For example, Smith's equity for year nine (scheduled for redemption in one year) is $4.45. The present value multiplier from the table for 8% and one year is .926. Thus, the present value of $4.45 scheduled for payment in one year is ($4.45)(.926) or $4.12. Corresponding calculations for the balance of the equity in Table 3, Column 2 result in a cumulative present value of $143.44. This member would have the option of accepting $143.44 in cash or receiving $200 according to the nine-year revolving fund schedule. Tax consequences to the member and cooperative and related issues are discussed in Cobia et al. (1982, p. 63).

Summary

Consolidation of allocated member equity when two or more cooperatives merge may be accomplished in several ways. Six options are presented for consideration. Option One (Immediate Payment) and Option Two (Delayed Payment) present plans for payment of old outstanding equity by the surviving cooperative without regard to the status of the equity held by the cooperatives in the merger. No effort is made to achieve equitability in either of these plans when merging allocated equity.

Option Three prorates old allocated equity over a current rotation period that has been agreed to by the merging cooperatives (nine years in this analysis). Option Three shortens the period of rotation but does not correct the inequities that would result from differences in equity status of the cooperatives prior to the merger.

Option Four places the responsibility for older unredeemed equity on the cooperative with this older equity by deducting an amount equal to the old outstanding allocated member equity from allocated equity and crediting it to unallocated reserves. The old allocated member equity would then be brought forward into the agreed upon revolvement period. In this option, all members are treated fairly and equitably.

Option Five involves a reevaluation of stock based on the relative appraised and book values of the merging cooperatives. The net value of the merging cooperatives is determined by appraisal, and new stock is issued based on these values. Newly issued stock can be placed into an acceptable rotation schedule as determined by the needs of the cooperative. It also would be possible for a new cooperative to adopt a Base Capital Plan or Percentage of Total Equities Plan with an exchange of stock.

Option Six uses the Base Capital Plan where each member supplies capital to the cooperative based on the percentage of his patronage during a base period. Each member's investment is adjusted annually based on the member's recent patronage and the monetary needs of the cooperative. If the Base Capital Plan is chosen, inequities will exist unless there is stock reevaluation. Once the equity is reevaluated, each member will be treated equitably because his share of investment capital is based on amount of business transacted.

Only Options 5 and 6 are relevant if the merging cooperatives operate an Equity Redemption program other than the revolving fund.

Recommendations

To maintain equitability among members of merging cooperatives the following recommendations are made:

1. Cooperatives should select a merger committee composed of management, board members, and/or others who are knowledgeable in sound principles of finance.

2. A plan for financing the cooperative should be fair to every member, maintain the cooperative principle that capital be provided by members according to patronage, and provide an adequate equity base.

3. Options One, Two, and Three should only be used when the surviving cooperative has a sizable net worth in relation to the other cooperative and when the redemption of old equity would not substantially weaken the financial structure of the newly merged cooperative. The use of one of these plans could be an important public relations gesture. However, members of the financially stronger cooperative would subsidize members of the other cooperative.

4. Options Four or Five have the advantage of giving fair and equitable treatment to members of both cooperatives. Option Six will also give fair and equitable treatment if cooperative stock is reevaluated. Choosing the most appropriate option would have to be determined by the local situation, which might be dictated by present capital structure, desires of members, or compatibility with the regional or national federated cooperative with which they are affiliated.

In all cases, merging cooperatives must give attention to the effects of the allocation option chosen; the option should ensure (1) equitable treatment of all members, (2) no deterioration of financial position, (3) minimal tax liability, and (4) maintenance of good public relations.

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