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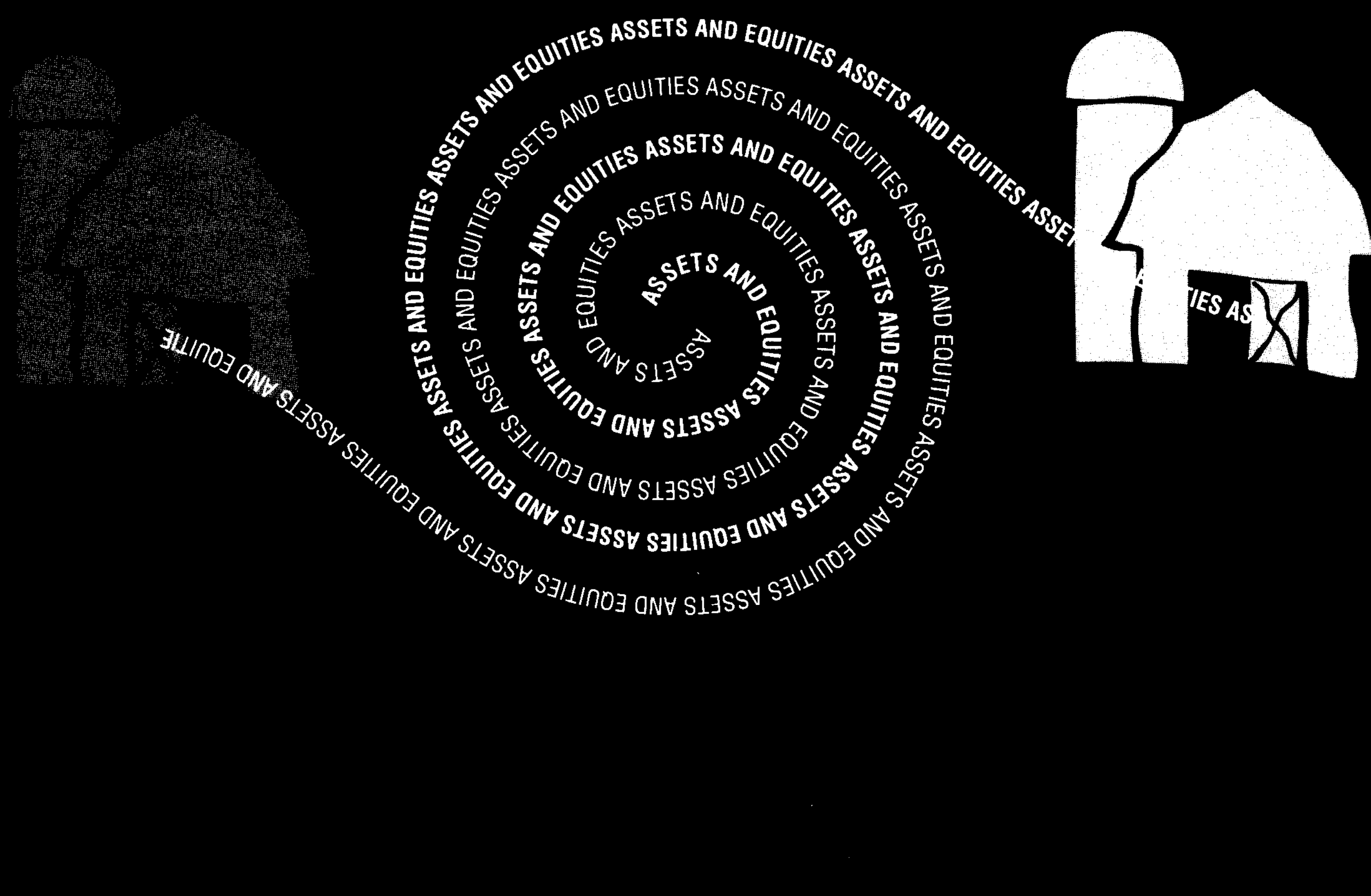
Consolidation of Balance Sheet Components During Cooperative Mergers



Abstract

This report provides information on consolidating critical balance sheet components during cooperative mergers. It discusses the implications of combining assets and liabilities and provides information and examples on various methods of consolidating member equities. Several case studies of cooperatives that have merged are included. They provide actual examples on how equities were combined during mergers, consolidations, and acquisitions.

Key Words: Merger, plan, equity, assets, liabilities

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Preface

Cooperatives or cooperative leaders studying merging or in the midst of merging are likely to confront some difficult issues when planning to consolidate major balance sheet components-assets, liabilities, and equity. This report describes the implications and presents information and examples on methods for consolidating these important financial elements.

This information was obtained from: (1) literature by noted authors on cooperative mergers; (2) intra-agency development of examples and relevant information; and (3) case studies of several fanner cooperatives recently involved in mergers.

This report is intended to aid cooperative leaders and others interested in (a) better understanding financial aspects involved in mergers, and (b) developing a plan to combine major balance sheet components for the merger, consolidation, or acquisition being considered.

The authors thank the six cooperatives that participated as case-study subjects. Their contributions were essential for this report.

For brevity, the term "merger" is used throughout the report rather than specifying merger, consolidation, and acquisition in every instance.

The portions of this report that refer to the tax implications of mergers do not represent official policy of the U.S. Department of Agriculture, the Internal Revenue Service, the U.S. Department of the Treasury, or any other govemment agency. Hence, this report is not providing tax recommendations. Cooperatives studying or interested in tax issues of mergers should seek pro fessional/legal tax advice.

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Highlights

Cooperative leaders pursuing merger will benefit by developing and following an organized plan to carry them through the process. Part of this plan entails the careful study of the characteristics and structure of the participating cooperatives' assets, liabilities, and equity. Major questions need to be answered pertaining to those structures:

- What are the assets, what will be needed, and what are they worth?
- How should assets be evaluated (book or appraised value)?
- How do debt-to-asset ratios compare?
- Must assets be sold to retire debt?
- Are liabilities at similar levels and structured the same?
- What types of equities do the cooperatives have?
- What are the redemption plans?
- Are the cooperatives current in redeeming equity?
- What alternatives are available for consolidating member equities?
- What redemption plan will best suit the unified cooperative?

These and other questions should be addressed in the merger plan. Doing so will require a thorough examination of each cooperative's balance sheet and financial characteristics. Every merger is different depending on the attributes of each cooperative, what precipitated the merger, and what each cooperative has to offer a unified organization.

Handling member equity is, perhaps, the most difficult financial issue in a merger. Member investment needs to be respected and protected. Alternatives for combining equity must take that into consideration.

Not all alternatives for combining equity provide complete member equality. Develop alternatives and assess attributes of each to narrow the field to the most suitable alternative given the conditions and the overall situation of the participating cooperatives.

This report contains 21 alternatives or examples for combining equity. Eleven are described in general. Ten are examples from cooperatives that participated in a merger. Cooperatives considering merger may use them to help develop a field of alternatives.

Cooperatives usually don't face the same problems in acquisitions as they do in mergers. While member financial interests and their patronage still must be respected, the acquiring cooperative usually dictates most actions taken to combine assets, liabilities, and member equity, especially if the cooperative being acquired is financially weak. In any event, acquisitions are gaining in popularity given the relative ease by which the applicable transactions can be completed.

Cooperatives considering merger must work to let members know that their interests are being represented and protected and that their financial stake in the unified cooperative is important.

The new or unified cooperative should emerge with an equity capitalization and redemption program that closely adheres to the **"user-owner"** cooperative principle-the equity structure should reflect current patterns of usership. Cooperative leaders should adhere to that precept in developing the merger plan.

Consolidation of Balance Sheet Components During Cooperative Mergers

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Balance sheet characteristics of cooperatives involved in a merger are rarely identical. Problems often arise when organizations with different depreciable assets, liabilities, types of equity, and equity redemption programs attempt to combine their assets and equities into a single organization.

Asset evaluation, liability realignment, and equity transfer during cooperative mergers are delicate issues and must be handled in an equitable or mutually agreeable manner.

In a merger, one or more business organizations absorb another firm. The survivor maintains its identity. Many of its organizational features are operated on an expanded basis, given its increased size and capacities. Consolidation combines two or more business organizations into a new organization. In an acquisition, the assets of one cooperative are purchased by another.

This report examines and clarifies the alternative methods for evaluating and consolidating critical balance sheet components during mergers, consolidations, and acquisitions. The report provides references for cooperatives involved in planning and negotiating a merger, and/or for those interested in the types of financial structural changes that result from the consolidation of cooperative balance sheets during mergers.

Mergers result in expanded assets, realigned liabilities, and transferred and consolidated member equities. Cooperative members involved in mergers have a personal stake in the methods used to evaluate and consolidate these critical financial elements.

This report has seven sections. The first is a general plan for consolidating major balance sheet components during a cooperative merger. The second describes the appraisal of cooperative assets and handling liabilities, while the third analyzes and describes alternatives for consolidating member equities-some summarized from another literature source and some developed.

The fourth section provides some general alternatives for consolidating equity, examples borrowed from other literature and other developed examples. The fifth section includes case studies of cooperatives that have merged, some originating from a past study and some from recent case studies. Section six discusses some financial issues pertaining to merger. Section seven summarizes the report and discusses implications of the findings.

CONSOLIDATING BALANCE SHEET COMPONENTS

Cooperative leaders contemplating or actively pursuing merger will benefit by developing and following an organized plan that will carry the participants through the merger process. A well-developed plan for merger indicates steps to follow and the components or elements in each step.[1]

Part of the plan should include strategies for consolidating the balance sheet components of the participating cooperatives. A joint merger or study committee evaluates all implications of consolidating the participants' balance sheets and provides recommendations to the boards of directors about the most suitable strategies for completing the task.

Initial phases of those studies often involve outside consultants. Later phases of merger proposals usually involve a range of complex issues that require the outside assistance from legal counsel, accountants, and occasionally professional mediators.

This part entails careful study of the characteristics and structure of participants' assets, liabilities, and equity (figure 1). The figure portrays the

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[1] **See Swanson (ACS Research Report 43-Merging Cooperatives: Planning, Negotiation, and Implementation) for general information, guidelines, and step-by-step procedures for merging cooperatives.**

consolidation of assets, liabilities, and equities of two cooperatives into a single organization.

The variations and implications of consolidating these major financial elements can be complicated. To limit disruption to the merger process, financial consolidations should be handled carefully. In proceeding with merging these components, a number of questions, such as those included in figure 1, need to be answered in their regard.

Successfully answering these and other more detailed questions requires a thorough understanding of the characteristics of each merger participant's financial statements. Thus, financial statements must be carefully examined by the merger committee.

The final plan or strategies for consolidating the financial elements may vary according to the status of the cooperatives contemplating merger. For example, cooperatives with a similar financial structure and similar financial strength and performance will find it relatively easy to consolidate financial elements.

On the other hand, consolidating the financial elements of cooperatives with significantly different structures and financial strengths may be more difficult. If one cooperative is financially strong and the other in danger of bankruptcy, the stronger cooperative may feel that the equity position of the weaker one should be adjusted in relation to current financial predicament in terms of debt and the probability of future losses without the merger.

Other circumstances may require special plans for financial consolidation-(a) the cooperatives have similar levels of financial success, but one is relatively larger than the other, (b) the cooperatives have similar financial performance, but one has superior operating assets in superior locations, (c) the cooperatives have a similar financial structure, but one owns property with windfall potential, (d) the cooperatives have different types of equity instruments or revolvement periods vary, etc. Such differences must be considered when planning the consolidation of financial (balance sheet) components of merging cooperatives.

A merger plan must examine possible tax implications associated with the various aspects of financial consolidation. Different methods for consolidating financial elements may have different tax implications. This may be especially true when cooperatives are merging across State lines, or when asset disposal returns windfall profits.

The mission of a merger is to create synergies, and at the very least, a financially and operationally sound cooperative that enhances the economic well-being of owner-members. A merger should produce greater economies of scale, less business duplication, a greater resource base from which to operate, and an expanded member base from which to derive and achieve broader market penetration, greater leadership abilities, and expanded capitalization.

The merged cooperative also has an opportunity for a new beginning by following important cooperative financial principles and practices, regardless of whether or not the participants completely followed them before the merger.

In other words, the merged organization has a renewed opportunity to improve or continue adherence to the "user-owned" cooperative principle regarding member capitalization, financial policies, and equity redemption. The members must have a substantial financial stake in their cooperative and the equity structure should reflect current patterns of usership.

ASSETS AND LIABILITIES

Assets

As cooperative leaders examine the value and quality of assets involved in a merger, questions invariably arise (figure 1):

(1) What assets (capacity) will be needed?
(2) What are the fixed assets worth?
(3) What depreciation, writeoff, or salvage valuation methods are used? Is there windfall potential?
(4) Should assets be considered at book value or revalued?
(5) Is any compensation necessary (if assets are sold)?
(6) What is the status of accounts receivable (and bad debts)?

The leaders need to determine what assets will be needed to adequately serve the members of the unified cooperative. In some cases, all assets will be retained, as when the merger involves complimentary cooperatives and there is little duplication or trade overlap. It may be more complex in other cases (duplication and overlap) and assets of both cooperatives are of equal quality and capacity and have similar locations.

Once the decision is made about which assets will be needed by the unified cooperative, the merging parties must agree on the value of assets.

It is generally advantageous to simply accept the balance sheet asset (book) values of the merging cooperatives. This is the simplest and most commonly used method in mergers. However, when using book values, make sure that asset values (e.g., inventory, investments, and fixed assets) are reported accurately.

On the other hand, when joining organizations

Figure 1-- Consolidating **Balance Sheet Components**

Cooperative A Assets
+ Cooperative B Assets

Unified Cooperative Assets

(1) What assets (capacity) will be needed?
(2) What are the fixed assets worth?
(3) What depreciation, writeoff, or salvage valuation methods are used? Is there any windfall potential?
(4) Should assets be considered at book value or revalued?
(5) Is any compensation necessary (ii assets are sold)?
(6) What is the status of accounts receivable (and bad debts)?

Cooperative A Liabilities
+ Cooperative B Liabilities

Unified Cooperative Liabilities

(1) How do the total debt to total assets ratios compare (are debt levels equivalent)?
(2) Are accounts payable levels similar?
(3) Are asset sales to retire debt necessary?
(4) Are liabilities similarly structured (i.e., current, long-term)?

Cooperative A Equity
+ Cooperative B Equity

Unified Cooperative Equity

(1) How are equities identified?
(2) What are the differences in equity types?
(3) What are the respective redemption plans?
(4) What are the redemption schedules (if applicable)?
(5) Are the cooperatives current in redeeming equity?
(6) What alternatives are available/applicable for consolidating member equities?
(7) What redemption plan will best suit the unified cooperative?

Assets = Liabilities + Equity

If tax implications are relevant to the situation, what are they?

use considerably different methods for depreciation, debt writeoff, salvage valuation, or have properties of possible windfall potential, procedures other than the general acceptance of book values may be necessary. Other procedures include evaluating assets on a liquidation basis, collateral basis, or appraisal basis.

The evaluation of assets of the cooperatives contemplating merger must reflect member-equity values. If book values are used, member-equity values also can be accepted. However, if assets are valued by appraisal or some other method, then member-equity values may have to be adjusted.

Reevaluation of assets and member equity may negatively impact some member good-will. Therefore, reevaluation must be done fairly and its impact well communicated to members.

When compensation for assets of one of the merging cooperatives is necessary (e.g., assets are sold or their value is appreciably high) the form of compensation must be negotiated. Compensation can be in cash, stock, notes, debentures, or book credit. Cash payments may be made in a lump sum or over a period of years.

Liabilities

Merger questions related to the examination of liabilities include (figure 1):

(1) How do the total debt to total assets ratios compare (are debt levels equivalent)?
(2) Are accounts payable levels current and similarly structured?
(3) Must assets be sold to retire debt?
(4) Are liabilities similarly structured (i.e., current, long term)?

Real differences in liabilities and long-term debt obligations can pose problems for merging cooperatives. However, differences must be analyzed in relative terms. The merger committee or analysts should start by examining the ratios of total debt (total liabilities) to total assets.

Ratio differences may indicate a possible source of friction between members of the participating cooperatives. If friction occurs, one method of alleviating the problem is to dispose of some of the assets from the cooperative(s) with greater debt to reduce the debt burden.

However, the outcome of such action (the sale of assets) must be carefully examined. First, to whom are the assets being sold. Will competitors be bidding on assets? If so, how will such a sale affect the unified cooperative's operations? Second, critical assets must not be sold simply to alleviate a difference in debt-the capacity of the assets that remain after sale must be sufficient to meet the unified organization's needs.

Therefore, in some cases, debt levels may have to be transferred as they are (or paid off in some other manner) so that the unified organization keeps the physical assets it needs to operate.

There is usually little concern when debt loads and structures are relatively similar. In most cases, such debt can be consolidated and / or restructured in a mutually agreeable manner.

Current liabilities should also be examined. If there are major relative differences in current liability categories-deposits received, advance payments, trade acceptances, notes payable, short-term loans, and current portions of long-term debt-the reasons for such differences must be clarified and a course of action set for resolving or accepting differences.

MEMBER EQUITIES

Member equity must be carefully examined during cooperative mergers. Member equity provides the definition and direct measure of members' investment and, thus, ownership in their cooperative. Data from 1991 (ACS Research Report **124—Equity** Redemption and Member Equity Allocation Practices of Agricultural Cooperatives) indicate that equity made up 49 percent of assets for those cooperatives with active equity redemption programs (table 1). For those with inactive equity redemption programs (where equity is subject to but not redeemed) and those whose equity is not subject to redemption, equity made up 44 percent of assets. This ownership in their cooperative makes members particularly interested in how their equity is handled (i.e., transferred / exchanged) in a merger.

Table 1— Equity redemption practices of agricultural cooperatives, 1991[1]

	Percent
Active redemption programs	
Total equity to total assets	**49**
Unallocated equity to total equity	21
Inactive redemption programs	
Total equity to total assets	44
Unallocated equity to total equity	15
Systematic programs only	16
Special programs only	34
Systematic and special programs	26
Subtotal	76
No equity redemption program	10
Not subject to equity redemption	14
Total	**100**

[1] Rathbone and Wissman (ACS Research Report 124).

Figure 1 lists seven questions pertaining. to consolidating members' equity:

(1) How are equities identified?
(2) What are the differences in equity types?
(3) What are the respective redemption plans?
(4) What are the redemption schedules (if applicable)?
(5) Are the cooperatives current in redeeming equity?
(6) What alternatives are available/applicable for consolidating member equities?
(7) What redemption plan will best suit the unified cooperative?

Cooperative leaders negotiating a merger must determine how to handle differences in equity types and what equity instruments should be used by the unified cooperative. They will also need to examine alternatives for consolidating equity and redeeming equity, and work out various related issues.

Allocated Equity

Equity capital in a cooperative is either allocated or unallocated. Allocated equity is capital assigned proportionally to each member on the basis of the patronage or business the member conducts with the cooperative.

Allocated equity is acquired in several different ways: (1) by direct investment from members (common stock, preferred stock), (2) through a retained patronage allocation (i.e., preferred stock, allocated equity), or (3) through per-unit retains. Conversely, unallocated equity is capital retained by the cooperative that is not assigned or designated to specific member accounts.

Cooperatives involved in mergers may have different allocated equity profiles. In some, equities may be accrued and labeled differently. Redemption plans and schedules may be at different stages. Others may carry old allocated equity of inactive, retired, or deceased members. Differences in the equity profiles of merging cooperatives may or may not cause problems. Small differences can usually be overcome easily. On the other hand, variations in redemption schedules and/or the presence of old allocated equity may create conflict between the members of merging cooperatives.

Unallocated Equity

While not assigned to a member's account, unallocated equity makes up varying amounts of total equity in cooperatives. In 1991, unallocated equity made up 21 percent of total equity for cooperatives with active redemption programs. For those cooperatives with inactive redemption programs, unallocated equity made up 15 percent of total equity (table 1).

Even though not individually assigned, members have a vested interest in how unallocated equity is handled. This is especially true when one cooperative has a much larger unallocated account in relation to its allocated equities than the other cooperative(s). It may be prudent to transfer some unallocated equities from the cooperative with the relatively larger amount into associated member allocated accounts. However, such a procedure requires careful study and administration.

Equity Redemption Plans

There are three types of systematic equity redemption programs in agricultural cooperatives: revolving fund plan, base capital plan, and percent-of-all-equities plan. There are also special programs activated by events that occur to individual members, such as when they die, retire from farming, or reach a prescribed age.

In 1991, 76 percent of all cooperatives had some type of active equity redemption program, 10 percent had no program, and 14 percent were not subject to equity redemption (table 1). These data suggest that cooperatives discussing merger are likely to have either different or no equity redemption programs. Such differences can lead to problems if each cooperative feels its program or policy is superior.

Members of a cooperative current in redeeming its equity may be reluctant to merge their equity on an equal basis with a cooperative that is not current. In other words, members of a cooperative in a more current equity position may be reluctant to dilute their equity by assuming the redemption burden of a cooperative in a less current position. While the concern of members in such a situation is understandable, it is important to carefully examine these differences and reach an agreeable solution.

If one (or more) of the merging cooperatives is significantly behind in redeeming its equity, a plan should be devised to either reallocate the old equity into a current equity rotation schedule or pay it off. On the other hand, if merger participants are current in redeeming member equity and have similar redemption programs, then the major issues to address are how to unite the equities and phase-in the equity redemption program chosen for the unified cooperative.

To alleviate potential problems, leaders of each cooperative should openly analyze positive and negative aspects of each plan. The program ultimately chosen should be a current-user based plan supported by the members. Of course, the level of support members exhibit will likely be tied to how well they perceive that their leaders analyzed each plan and handled respective differences in redemption schedules and/or outstanding equity

Merger participants should develop and implement an equity structure for the emerging cooperative that reflects current patterns of usership and then adhere to it. Farmers benefitting from the cooperative today should be those who finance it.

If old allocated equity of inactive, retired, or deceased members is still on the books of the cooperatives studying merger, then a strategy should be developed to retire or pay it off.

ALTERNATIVES FOR CONSOLIDATING EQUITY

There are numerous ways to consolidate equities during cooperative mergers. This section provides information and examples, in a general sense, pertaining to several methods of consolidating the member equity of cooperatives being merged. Other information pertaining to mergers, consolidations, and acquisitions is also included in this section.

Examples-Hatfield, et al. Report

A report by Hatfield, et al. *(Consolidation of Allocated Equity for Merging Cooperatives Previously Operating on a Revolving Fund,* 1986*),* describes six options for consolidating the equity of cooperatives in different stages of redemption: immediate payoff, delayed payoff, prorate old equity, reassignment to unallocated reserves, equity reevaluation, and base capital plan. The options are described here and examples provided where applicable.

Immediate Payoff In this option, the surviving cooperative pays all allocated equity older than a predefined date. That date, prescribed by the merging cooperatives, corresponds to the age-in years-that the oldest allocated equities are to be in the unified cooperative. For example, if the cooperatives agree to 7 years, all allocated equity older than that would be considered old equity and immediately paid. All allocated equity is brought into the merger as is. No concern is given to the amount or actual status (age) of the equity.

Delayed Payoff This option is similar to the immediate payoff. Existing equity levels are brought into the merged cooperative. The difference is that the old allocated equity (as set by the predefined date) is paid off at some specified rate (e.g., 2 or 3 years at a time), on a delayed basis (e.g., per fiscal year), and not all at once. The delayed payments are continued until all the old allocated equity has been redeemed (up to the predefined date).

Hatfield, et al. noted the disadvantage of these two options is that they may be inequitable, especially if a significant difference exists in **revolve**ment periods and amounts of old allocated equity. Also, the pressure put on cash reserves may weaken the capital structure of the unified cooperative (although more so in the immediate payoff plan than in the delayed plan). These options should only be considered **when** leaders are assured that the unified cooperative will not be left with insufficient net worth and financial strength once the merger is completed.

The advantage is that they are likely to be well perceived in a public relations light-especially to those members whose cooperatives are on equal footing in equity redemption, and to those members whose cooperative is behind in equity redemption in relation to its merger partner(s). However, members of a cooperative further along in equity redemption may not agree with the good-will gesture.

Prorate Old Equity The old equity of the merging cooperatives is prorated over a revolvement schedule. If there is a significant difference between the age of each cooperative's equity, this option will not be equitable to the parties involved. The cooperative more current and with less old equity will be paying part of the old equity of the other partners.

Table 2 (example I) shows prorating old equity.

Table 2— Example 1, prorating old allocated equity, Cooperative A and Cooperative B merging

Age in years[1]	Allocated equity: Coop A[2]	Allocated equity: Coop B[3]	Combined equity4	7-year total[5]	Prorated equity[6]	Revised equity total: Coop A'	Revised equity total: Co-op B[8]	Revised equity total: Combined[9]
	Thousand dollars			Percent	Thousand dollars			
7	50	55	105	7	17	67	55	122
6	125	200	325	21	52	177	200	377
5	100	125	225	14	35	135	125	260
4	75	150	225	14	35	110	150	260
3	55	250	305	19	48	103	250	353
2	110	95	205	13	33	143	95	238
1	80	100	180	12	30	110	100	210
Totals	595	975	1,570	100	250	845	975	1,820
Equity over 7 years old	250	0	250		0	0	0	0

SOURCE: Hatfii, et al., p8. (modified example)

[1] Cooperative B is on a 7-year revolving fund plan and current, and Cooperative A does not have a member redemption plan or has never redeemed allocated equity.

[2] Allocated equity of Cooperative A-last 7 years and total allocated equity over 7-years old.

[3] Allocated equity of Cooperative B—last 7 years.

[4] Allocated equity from Cooperative A and Cooperative B added together for each year, overall, and old equity.

[5] Combined equity in each year of the 7-year period divided by the total of the 7 years.

[6] The $250 old outstanding equity of Cooperative A multiplied by the corresponding percent data in the preceding column.

[7] Revised equity of Cooperative A-original allocated equity (2nd column) plus prorated old equity.

[8] Cooperative B revised equity the same as previously because there was no old equity.

[9] Combined revised equity total of Cooperative A and Cooperative B.

In this example, Cooperative A has allocated equity more than 7 years old, while Cooperative B is redeeming equity on a 7-year revolvement cycle. The older allocated equity of Cooperative A ($250,000) is prorated over the latest 7 years to coincide with the redemption schedule of Cooperative B. The equity is prorated by multiplying total allocated equity older than year 7 by the percentage in column 5 of table 2 (combined equity for each year as a percent of 7-year combined total) for each year of the 7-year period.

The resulting amount is then added to the equity of Cooperative A for redemption in the corresponding year. While example I shows the total amount of old equity of Cooperative A being prorated, actually, the old equity of each member of Cooperative A is being prorated.

This plan brings the older equity of one cooperative into the shorter revolving cycle of the other cooperative. Spreading the old equity redemption obligation over a number of years softens the financial burden of trying to redeem significant equity amounts all at once.

Example A-I shown in appendix table 1 is similar to example I except that both Cooperative A and Cooperative B have old equity prorated. This case assumes that a 9-year revolving fund is chosen (both cooperatives were revolving on a longer schedule at the time of merger) for the unified cooperative. **Thus, the old equity of each cooperative is prorated over the 9-year schedule.**

This option shortens the period of equity rotation of one or both cooperatives in example I and example A-I. However, when cooperatives have significantly different equity profiles prior to the merger, such as in example I, the plan is not equitable to all members.

Reassignment to Unallocated Reserves This option also alleviates the equity redemption differences of Cooperative A and Cooperative B. The less current cooperative-Cooperative **A—** absorbs an amount of equity (recent equity) equal to its old equity (amount older than the **agreed-**upon 7 years) and crediting it to unallocated reserves of the unified cooperative. Cooperative A (as used in the previous example) would deduct $250,000 from its recent 7-year allocated equity total ($595,000; the deduction could be prorated over the **7-year** rotation schedule) and the unified cooperative would be credited with $250,000 in unallocated reserves (table **3—example** II).

To account for the loss of recent equity, each patron of Cooperative A could be issued a capital loss statement equal to the amount deducted from his/her recent equity portion. However, this exercise still results in the need to account for the $250,000 old equity (greater than 7 years). One solution is to bring it into the 7-year-redemption schedule. Prorating this amount over the most recent 7 years in the same manner as presented in example I (table 2) leaves the unified cooperative with combined equity of **$1,820,000** as shown in the last column of table 3, including the $250,000 of unallocated reserve.

Hatfield, et al. point out that this option treats all members fairly and equitably because it places the responsibility for older unredeemed equity on the cooperative with the older equity.

Equity Reevaluation An interesting formula is provided in this option. The book values of the merging cooperatives' allocated equity are adjusted according to appraised values of that equity. These conversion ratio formulas are used to adjust book values in this option:

Conversion ratio formula for Cooperative A:

$$A_r = \frac{A_a / A_b}{B_a / B_b}$$

Conversion ratio formula for Cooperative B:

$$B_r = \frac{B_a / B_b}{A_a / A_b}$$

A and B represent Cooperatives A and B while
a = appraised value,
b = book value, and
r = reevaluation multiplier.

Table 4 (example III) uses this approach for reevaluating allocated equity. The example assumes that Cooperative A's allocated equity (book value of $845,000) is appraised at $950,000 and Cooperative B's allocated equity (book value of $975,000) is appraised at $1.3 million. The reevaluation multipliers are derived by using the conversion ratio **formulas—**

A, = **[950,000 ÷ 845,000] ÷ [1,300,000 ÷ 975,000]**
= 0.843 and

B_r = **[1,300,000 ÷ 975,000] ÷ [950,000 ÷ 845,000] =1.186).**

Thus, Cooperative A's reevaluation formula is 0.865 and Cooperative B's is 1.186.

Using these multipliers, the allocated equity of Cooperative A adjusts to $712,000 ($845,000 x 0.843) and that of Cooperative B **adjusts** to $1.156 million ($975,000 x 1.186). The combined total for the unified cooperative would be $1.868 million. This example indicates total equity figures-in practice, adjustments are made to each member's individual equity.

Hatfield, et al. report that because each cooperative's allocated equity is discounted to reflect its relative value (based on an appraisal), members are treated equitably. Further, this approach allows the unified cooperative to develop any form of redemption program. The adjusted total equity

Table 3— Example II, transferring old outstanding equity to unallocated reserve, Cooperative A and Cooperative B merging

Age in Years	Allocated equity of Cooperative A: Original equity	Percent of 7-year total	Deduction[1]	Adjusted balance[2]	Equity of Cooperative B	Intermediate combined equity[3]	Co-op A old equity prorated4	Revised combined equity[5]
	Thousand dollars	*Percent*	*Thousand dollars*					
7	50	8	20	30	55	85	17	102
6	125	21	53	72	200	272	52	324
5	100	17	43	57	125	182	35	217
4	75	13	32	43	150	193	35	228
3	55	9	23	32	250	282	48	330
2	110	19	47	63	95	158	33	191
1	80	13	32	48	100	148	30	178
Totals	595	100	250	345	975	1,320	250	1,570
Old equity	250				0	250		
Unallocated reserve						250		250
Total equity	845				975	1,820		1.820

SOURCE: Hatfii. et al.. p. 9 (modified example).

[1] Recent equity deduction of allocated equity—derived by multiplying percent (of Cooperative A 7-year total) by equity greater than 7 years-to be credited to unallocated reserve of new cooperative.

[2] Adjusted balance is the original equity of Cooperative A less the deduction.

[3] Adjusted balance of equity of Cooperative A plus corresponding-year equity of Cooperative B.

[4] Old equity of Cooperative A prorated over most current seven years based on percentage of equity ownership (of both cooperatives combined) in most recent 7-year period (see 6th column of table 2).

[5] Intermediate combined equity plus prorated equity.

Table 4— Example iii, adjusting allocated equity based on conversion ratio formula, Cooperative A and Cooperative B merging

	Cooperative A	Cooperative B	Combined totals
	Thousand dollars		
Book value	845	975	1,820
Appraised value[1]	950	1,300	2,250
Conversion ratio[2]	0.843	1.188	
Adjusted equity[3]	712	1,158	1,858

Source: Hatfield, et al., p.11 (modified example).
[1] Appraised values assumed for example purposes.
[2] Conversion ratio derived by conversion ratio formula (see text).
[3] Adjusted equity is derived by multiplying equity at book value by conversion ratio.

could be divided equally to fit into an equity redemption schedule, or it could be converted to a base-capital plan, or a percentage-of-all-equities plan.

The basis of this alternative is the appraisal process. It must consider each cooperative's potential for deriving positive returns as well as the condition of the fixed assets. A cooperative may show a capital loss in the reevaluation process due to a decline in property values or earning power (as Cooperative A did in example III).

Base Capital Plan Under this plan, a total equity requirement is determined for the unified, cooperative. Each member would be obligated to hold equity in the unified cooperative based on his/her business volume during the year.

Each member's annual business volume would be divided by the total business volume of the unified cooperative (a 3- or S-year average for instance) to find a basis. The resulting basis-percent (i.e., relative proportion of cooperative use and thus, equity requirement)-for each member would be multiplied by the unified cooperative's total equity requirement to derive each member's required equity investment.

Then, a comparison between each member's required equity investment and current equity holding in his/her pre-merger cooperative would be made to determine if the member is over- or under-invested. Equity of over-invested members would be retired while under-invested members would make up the equity deficiency (some combination of direct cash payment, retained earnings, capital retains, and/or the purchase of equity from an over-invested member). The investment would be adjusted annually according to the individual's patronage and the cooperative's capital needs.

This method for consolidating equity may be the easiest to administer in situations where there are significant differences in the amounts of member equity between the pre-merger cooperatives. However, Hatfield, et al. point out that pre-merger inequities will continue to exist unless there is a stock reevaluation. If stock is revalued, inequities can be corrected.

Handling Inactive Patrons Hatfield, et al. also presented a buyout option for paying off the equity of inactive patrons. In contrast to leaving inactive patron equity in the unified cooperative for redemption in the chosen schedule, inactive patrons may receive a lump-sum payment for their allocated equities. After reaching agreement of a discount rate, the present value of future equity payments from the revolving fund plan would be calculated and the total paid in lump sum.

This procedure gives the inactive member the option of immediately receiving cash for his/her equity at a discounted rate rather than having it placed in the equity revolvement rotation of the unified cooperative for later redemption.

Table 5 (example IV) illustrates this situation. One member of Cooperative A has old equity of $400 that is prorated over the 7-year redemption period. To discount the equity, the prorated amount for each year is multiplied by the present value multiplier for the established discount rate (e.g., 8 percent) and for the appropriate time period. (because the equity from year 7 would be redeemed in year 1, the corresponding multiplier would be found by using 8 percent and 1 year.) Following this pattern for all 7 years results in a discounted total value of $297 for the member. Thus, this member would have the option of receiving a lump sum

Table 5— Example IV, present value of old equity of one inactive member of Cooperative A

Age in years	Old equity of member[1]	Present value multiplier[2]	Present value[3]
	Dollars	*Number*	*Dollars*
7	27	0.926	25
6	63	0.857	71
5	57	0.794	46
4	57	0.735	42
3	70	0.681	53
2	52	0.630	33
1	46	0.583	27
Totals	400		297
Old outstanding equity	400	(portion of $250,000 total old equity)	

[1] Old equity of one member prorated over 7-year redemption period Prorated the same as total old equity of Cooperative A in table 2.
[2] Present value multipliers from appendix table 2 (discount rate of 6 percent).
[3] Discounted old equity (prorated equity times multiplier).

payment of $297 in cash or waiting to receive the face value of $400 according to the 7-year equity redemption schedule.

Hatfield, et al. point out that the equity of inactive members could either be bought by the unified cooperative or sold to an active under-invested member at the discounted value.

Other Alternatives

The options and information provided from the study by Hatfield, et al. yield some excellent choices for cooperative leaders to consider for consolidating equity while examining and negotiating mergers. Some alternatives and information in addition to those are provided in this section.

Transfer Stock Most agricultural cooperatives are organized as stock cooperatives. (See definitions of stock and nonstock cooperatives in the Appendix glossary.)

If differences in stock types, amounts, or dividend rates are not too great between merging cooperatives, it may be feasible to bring the outstanding stock of each cooperative into the unified organization in its current and original form. Under this scheme, the original policies from each cooperative prior to merger would continue until the stock could be retired or voluntarily exchanged for another type of member equity.

Exchange Stock When merging cooperatives have different forms of stock, or stock of differing dividend rates, problems may be avoided by changing the stock and/or dividend rates of one to match that of the other. This option leaves the members of the unified cooperative with the same types of stock.

For example, issue unified cooperative preferred stock (similar to that of one cooperative) to members of a cooperative who have only common stock. Or, exchange stock from one cooperative that has a lower dividend rate with that from the unified cooperative with a higher dividend rate.

Exchanging stock or equities may involve incorporating a simplified capital structure for the unified cooperative. One method combines all types of stock and equities of the participating cooperatives into one account. Then, distribute one share of common stock to each eligible member and convert the remaining equities to some form of nonvoting stock (e.g., preferred.stock) or allocated capital reserve (e.g., capital certificates) that retains the original order of redemption.

Group Old ***Equity*** Some mergers involve cooperatives that have allocated equity extending beyond the new (agreed upon) equity redemption rotation period. An alternative for handling that old equity is to break it down into groups and allocate it to selected age-years of the new redemption period.

This alternative uses a prorated approach, but unlike the equity examples used by Hatfield, et al., the equity is not prorated systematically. Equity is grouped and allocated into select years of the rotation schedule via a pragmatic examination of the equity data. No precise formula is used. The old equity is grouped into the schedule years to create equity redemption similarities among the merging cooperatives.

The equities of Cooperative A and Cooperative B-used in the previous examples from Hatfield, et al. (table 2, example I)-could be grouped. Table 6 (example V) shows that the $250,000 of old equity of Cooperative A is arbitrarily broken into three groups ($65,000, $165,000, and $20,000). These groups are allocated into three age-years (4, 3, and 1, respectively) of the 7-year rotation schedule. The net result is that the old equity of Cooperative A is grouped and distributed into the chosen 7-year equity rotation schedule relative to the distribution of Cooperative B equity in the schedule.

This option allows old equity of Cooperative A to be reallocated into the new 7-year equity redemption rotation period. However, the equity is grouped and placed into age-years that will result in the old equity being redeemed in future years. While this goes somewhat against the principle that current users be current financers, it is more equitable to the members of Cooperative B. The older equity of Cooperative A is placed in later revolving years.

This equity grouping and allocation could also be done in other ways. In essence, the precise type of distribution followed is irrelevant as long as both cooperative memberships are satisfied with the results. However, two rules should be followed when using this option to ensure that the equity grouping and subsequent allocations are logically made:

(1) Avoid allocating any equity groupings into the oldest equities (front years of the schedule) that will be redeemed during the unified cooperative's first few years of operation-this avoids placing an additional financial burden on the unified cooperative. (In table 6, example V, no groups are allocated to schedule years 7, 6, and 5.)

(2) Develop equity group sizes relative to equity amount differences between the merg-

Table 6— Example V, grouping and reallocating old allocated equity, Cooperative A and Cooperative B merging[1]

Age in years	Allocated equity: Coop A	Allocated equity: Co-op B	Grouped equity Coop A[2]	Revised equity totals: Co-op A	Revised equity totals: Coop B	Combined
	Thousand dollars					
7	50	55		50	55	105
6	125	200		125	200	325
5	100	125		100	125	225
4	75	150	65	140	150	290
3	55	250	165	220	250	470
2	110	95		110	95	205
1	60	100	20	100	100	200
Totals	595	975	250	645	975	1,820
Equity over 7 years old	250	0	0	0	0	0
Grouping of old equity:						
Group 1			65			
Group 2			165			
Group 3			20			

[1] Equity data from same cooperatives in table 2.
[2] Pragmatic grouping of old equity of Cooperative A and reallocation among years 4, 3, and 1.

ing cooperatives in the various years chosen for allocation. (In example V the third $20,000 group allocated to age-year-l makes the equity amounts between the members of the two cooperatives even.)

This option would be more complicated if both (or more) cooperatives have old allocated equity that extends beyond the agreed-upon rotation period for the unified cooperative. However, grouping and reallocating the old equity could still be a valid and equitable option as long as the resulting aged equities of each cooperative are similar and not so large that a substantial financial burden is placed on the unified cooperative.

Equal but Weighted Grouping Another option for reallocating old equity is to prorate it among the years of the new schedule on an equal, yet weighted basis. Old equity would be allocated among the age-years by multiplying it by a scaled percentage derived for each year of the rotation.

Table 7, example VI, shows this option. Part of the over 7-year equity of $250,000 of Cooperative A is allocated among each rotation year by multiplying it by a scaled prorate percent. To determine appropriate scaled percents, divide 100 percent by 7 years. The resulting percent figure is used for the middle year of the rotation. Then, each preceding and additional year is decreased and increased, respectively, by 1 percent for each consecutive year.

In example VI, 100 percent divided by 7 years equals 14.3 percent. This percentaged is given to the middle year (year 4). Then scale each consecutive year higher than year 4 by 1 percent lower than the preceding year, and each consecutive year lower than year 4 is scaled by 1 percent higher than the preceding year. (Note that the scaled prorate percent for age-year 7 is slightly different. An adjustment was made to that year to make the percentages sum to 100.)

Follow a similar procedure for any number of odd years in a schedule. For schedules with an even number of years, use the resulting percent figure (100 percent divided by the number of years) for the middle two years and then follow a similar scaling procedure (example VI) for the rest of the schedule.

Table 7— Example VI, scaled prorating of old allocated equity, Cooperative A and Cooperative B merging[1]

Age in Years	Allocated equity Co-op A	Allocated equity Coop B	Combined equity	Scaled prorate percent[2]	Prorated equity[3]	Revised equity total Co-op A	Revised equity total Coop B	Revised equity total Combined
	Thousand dollars			Percent	Thousand dollars			
7	50	55	105	11.2	28	78	55	133
6	125	200	325	12.3	31	156	200	356
5	100	125	225	13.3	33	133	125	258
4	75	150	225	14.3	36	111	150	261
3	55	250	305	15.3	38	93	250	343
2	110	95	205	16.3	41	151	95	246
1	80	100	180	17.3	43	123	100	223
Totals	595	975	1,570	100	250	845	975	1,820
Equity over 7 years old	250	0	250		0	0	0	0

[1] Equity data from Cooperative A and Cooperative B-same as table 2, example A.

[2] Scaled prorate percents derived by dividing 100 percent by 7 years, using that result for the middle year, and then scaling that fiire higher toward earlier years (and lower toward later years of schedule). In this example, 14.3 percent is the result used for the middle year (4th year). Then each consecutive year higher than year 4 is scaled 1 percent lower than the preceding year, and each consecutive year tower than year 4 is scaled 1 percent higher than the preceding year.

[3] Prorated equity derived by multiplying $250,000 (old equity) by the scaled prorate percent figures of the preceding column.

While this option may not be equitable to all members (those of Cooperative B), it may be palatable because of the way it distributes a higher proportion of the old equity (such as Cooperative A) toward the later years of the redemption rotation schedule.

Percentage-of-All-Combined Equities This option is analogous to the **Percentage-of-All-**Equities redemption plan used by many cooperatives.

The cooperative would redeem a percentage of all outstanding allocated equities. All members would receive the same percentage of their equities regardless of when they were originally allocated. The percent figure used for redemption would be determined by the board of directors, given the unified cooperative's financial performance and capital needs. Members would receive an equity redemption derived from a percentage of their total equity accounts included in the combined equities of the unified cooperative. Equity would be redeemed annually or as determined by the board.

All combined equity would be redeemed by the percentage-of-all-combined equities plan before any new allocated equity, accumulated from the operations of the unified cooperative, would be redeemed. Once all past equity is redeemed, the new equity could be similarly redeemed or a revolving fund established.

Table 8, example VII, shows this option using the same'two cooperatives in the previous examples. After appraisal, Cooperative A's $845,000 of allocated equity is adjusted to $950,000 and Cooperative B's $975,000 is adjusted to **$1.3** million for a combined equity total of $2.255 million (each member of Cooperative A would have his/her equity adjusted by a multiplier of 1.12 **($950,000/$845,000).** Those in Cooperative B would have their equity adjusted by a multiplier of 1.33 ($1.3 **million/$975,000)**.

In the first year of operation, the board makes $135,000 available for redemption. This amount, applied against the combined adjusted equity total, is 6 percent. Thus, each member would have 6 percent of equity redeemed (equity in the adjusted combined equity total). This procedure would be followed each year until all the combined equity is redeemed.

In this example, assets shown were revalued. This illustrates that this option fits well with mergers that involve asset reevaluation. Equity is adjusted to reflect asset values provided by the reevaluation and then combined. This option also applies to situations where no assets or equity are revalued.

The major factor to consider in using this option is its fairness or unfairness to members, given that all their equities will be combined into one grouping without regard to original dates of issuance.

The Percentage-of-All-Combined Equity plan is easy to administer and understand. It can also be financially beneficial. Annual redemption of the combined equities would not be predetermined based on historically allocated sums but rather determined on the unified cooperative's most recent financial performance and capital requirements.

The disadvantage is that if equity is revalued at higher levels for both cooperatives, such as in example VII, then the unified cooperative will be responsible for redeeming higher levels of equity than originally prescribed.

Table 8— Example VII, percentage of all combined equities plan

	Cooperative A	Cooperative B	Combined
	Thousand Dollars		
Equity—book value	845	975	1,820
Equity-adjusted[1]	950	1,300	2,250
Equity redeemable[2]			135 (6%)

[1] Equity adjusted following valuation of assets.
[2] Equity redeemable after first year of operation—percent of all combined equity plan, subject to financial performance and equity requirements. (Each member would receive 6 percent of equities he/she has allocated in combined equity.)

Acquisitions

Acquisition characteristics distinguish them from merger and consolidation transactions. In an acquisition, one cooperative purchases the assets of another. The cooperative being acquired is dissolved and ceases to exist. The acquiring cooperative assumes the assets, and sometimes the liabilities.

The board of directors of the acquiring cooperative must vote whether or not to proceed with the transaction. A full vote of the members is not required. However, members of the cooperative being acquired generally must vote on liquidation/voluntary dissolution. While a full membership vote is not necessary for the acquiring cooperative, lack of membership support may inhibit future operations of the unified cooperative. Thus, it is in everyone's interest that directors of the acquiring cooperative proceed with the transaction only with sound member support. A strong director-to-member communication program will be required.

When cooperatives aspire to combine assets through an acquisition, consolidation of critical balance sheet components requires careful negotiation and analysis, just as in a merger or consolidation. Members of both cooperatives have a vested interest in how the transaction is completed. Often, the assets of the cooperative being acquired will be reevaluated (e.g., market value).

To speed the process, the acquiring cooperative may find it practical to assume the liabilities of the other. However, the acquiring cooperative is not required to assume the liabilities of the dissolving cooperative. But, the dissolving cooperative cannot be folded until it pays its liabilities, so the acquiring cooperative often assumes them. The liabilities can be assumed as is or be restructured. Restructuring may be advisable when the cooperative being purchased is in poor financial health.

Equity instruments will be issued to the members of the cooperative being acquired. This is usually done in relation to the value of assets and may also be contingent on outstanding liabilities that must be assumed and the future earning potential of the cooperative being acquired.

The acquiring cooperative may issue equity certificates, stock (preferred, common), bonds, notes, equity credits, nearly any kind of financial instrument, to the members of the acquired cooperative as part of the transaction. The type issued will usually depend on what acquiring cooperative currently uses and the circumstances pertaining to the member equity of the cooperative being acquired (i.e., equity age and type).

Equity is often transferred during an acquisition by issuing new equity credits (e.g., stock, certificates) to the new members in exchange for the equity they hold in their cooperative. The exchange rate may depend on specific factors (e.g., assets value, equity level) associated with the acquisition transaction. The simplest case will involve cooperatives with similar types of equity. A simple exchange can be made. However, in some cases an acquiring cooperative may wish to issue different types of equity instruments to different members in a way that makes the equity capitalization plan of the acquiring cooperative more fair to members. For example:

Issue stock and debenture bonds. Cooperative A is acquiring Cooperative B. Cooperative A has a **7**-year equity redemption schedule while its partner has not redeemed equity in many years. Cooperative A issues one share of common (voting) stock and preferred stock (its primary member equity instrument) to Cooperative B's current-user members in exchange for their accrued equity. Cooperative A then issues debenture bonds (with given due dates) to the inactive members of Cooperative B in exchange for their accrued equity.

This allows the current-user members of Cooperative B to participate in Cooperative A's equity capitalization and redemption program and provides a way to retire the old equity of Cooperative B's inactive members. Their equity will be redeemed in the form of debenture bonds that become due in the future. Most cooperatives allow members to cash in debenture bonds before they are due.

Acquisitions are disruptive, particularly to the members of the dissolving cooperative who may feel a severe sense of loss. For this reason, it is important that the interests of all members effected be respected and protected by the individual boards as the transaction is completed.

Summary

The six alternatives described earlier as developed by Hatfield, et al., provide sound examples of consolidating the equity of merging cooperatives.

The first four options should be included among equity combination considerations of cooperatives with revolving fund plans (or cooperatives that have no set redemption plan but are willing to implement a revolving fund plan). The last two options should be included among equity combination considerations of cooperatives with base capital, percentage of all equities, or other special plans. Of course, the last two options also could be used by cooperatives with revolving funds.

Five additional alternatives are described in the second part of this section. The first two alternatives involve the simple transfer and exchange of stock. The third and fourth should be considered by cooperatives with revolving fund plans or whose merger plan involves implementing a revolving fund. The fifth alternative would fit any merger situation. The example corresponding to this alternative indicates that equity is adjusted to reflect asset reevaluation. The other four alternatives could be made more equitable to members of merging cooperatives by adjusting members' equity in accordance with an asset reevaluation.

Acquisition, another way to combine cooperatives, is a popular alternative to merger and consolidation. The authority granted to the acquiring cooperative via the acquisition makes difficult asset-utilization, financial, personnel, and other operational decisions a little easier to carry out.

COOPERATIVE EXAMPLES OF COMBINING EQUITY

Up to this point, general information and examples of consolidating member equity among merging cooperatives have been presented, some from previous studies and some developed. While they demonstrate different methods, they don't indicate precisely how cooperatives complete member equity transfers/exchanges during actual mergers.

This section provides some examples and case studies of actual cooperative mergers, consolidations, and acquisitions. Ten cases are described. Four originate from a report by Haskell (FCS Research Report 8—Results and Methods of Four Mergers By Local Farm Supply Co-ops) completed in 1970. The others stem from a survey of recently merged cooperatives.

In the first four case examples, two farm supply cooperatives participated in each merger. They are identified as Cooperative A or Cooperative B.

Merger-Different Size and Strength

A relatively larger and stronger Cooperative A merged with Cooperative B. After the merger, Cooperative A assumed operation of all facilities and services previously operated by Cooperative B. Cooperative A became the unified cooperative and assumed all assets, debts, and other liabilities of Cooperative B.

The shares of common stock, share credits, deferred patronage refunds, and patrons' equity reserves held by members of Cooperative B were converted, at par value, into shares and partial shares of common stock of Cooperative A (the unified cooperative). Preferred stock was carried into the unified cooperative at par value.

Cooperative B was 9 years behind Cooperative A in stock redemption prior to the merger, so two alternative redemption methods were described in the merger plan.

Alternative *1.* The board of directors of the unified cooperative could call stock for redemption or retirement in the order of issuance by years. The oldest outstanding stock would be called first. Whenever common stock of Cooperative A issued prior to the effective date of merger would be called for redemption or retirement, the board of directors would also call a proportionate share of stock issued to common stockholders of Cooperative B, in the order of issuance by years. Further, no common stock of the unified cooperative issued after the effective date of the merger would be retired until all common stock issued by Cooperative B prior to the effective date had been retired.

Alternative 2. The board of directors of the unified cooperative could retire common stock after the date of merger on the basis of a percentage of all the common stock outstanding. In this event, the same percentage of the stock of each common shareholder would be called at the same time, regardless of issue date.

Consolidation-Different Size and Strength

In this case, a smaller but more financially sound Cooperative A was consolidated with a slightly weaker Cooperative B. The existence of Cooperatives A and B ended and a new cooperative emerged. The unified (surviving) cooperative assumed ownership and operation of all facilities and services of the original cooperatives.

The plan of consolidation contained specific arrangements concerning the conversion of stock and stock credits of the original cooperatives to stock and allocated reserves of the unified cooperative.

Cooperative A had preferred stock, first issue (6 percent cumulative dividend), preferred stock, second issue (5 percent cumulative dividend), and patronage common stock and credits (no dividends). Cooperative B had preferred stock (5 percent noncumulative dividend) and patronage common stock and credits (no dividends).

An owner of stock and / or stock credits in either original cooperative could determine the securities (i.e., of those offered) of the unified association that he / she would receive for presently held stock. All exchanges were completed on a dollar-fordollar basis as to stated or par amounts.

The consolidated cooperative offered preferred stock (5 percent noncumulative dividend) and 6 percent debenture bonds due in 15 years. Bonds could be exchanged within 3 months from the effective time of merger for preferred stock at 5 percent noncumulative dividend.

Acquisition l-Different Size and Strength

A stronger and slightly larger Cooperative A acquired Cooperative B, a smaller cooperative experiencing management and financial difficulties.

Cooperative A purchased all of Cooperative B's plant facilities and equipment, supplies, furniture, fixtures, office equipment, accounts receivable, contracts, leases, and interests in all real and personal property, all at book values.

Cooperative B agreed to exert all possible effort to assure transfer of at least 75 percent of its outstanding preferred stock held by its members to the surviving association at par value. Preferred stockholders of Cooperative B would receive no dividends that had been passed. At its option, Cooperative A could void the transaction if 75 percent of the stock had not transferred.

Acquisition 2—Similar Size and Strength

In this case Cooperative A acquired Cooperative B. Both were about the same size and strength but there was a sharp contrast in the types of businesses and services they offered. Cooperative A (surviving) assumed operation of all facilities and services of Cooperative B.

The shares of common stock of Cooperative B were converted into shares of common stock of the unified cooperative at par value. The unified cooperative ended up with common stock at $5 a share entitling each holder to one vote, and nonvoting common stock with a par value of $5 a share. Dividends on both types were eligible for declaration by the board of directors out of any net savings not distributable as patronage refunds.

Preferred stockholders of Cooperative B were apportioned one or more subordinated promissory notes bearing interest at 4 percent a year, and maturing in 20 years from issue date. Promissory notes were in the principal amount of the par value of the preferred stock so exchanged. No dividends were to be paid on the outstanding preferred stock of Cooperative B for any year beginning on or after the effective date of consolidation, whether or not the stock had been surrendered in exchange for a promissory note.

The oldest outstanding common stock of Cooperative B was issued 18 years prior to merger and 21 years in Cooperative A. To deal with stockholders of both cooperatives equitably, the unified cooperative retired all of the common stock issued 18 years prior to merger. Next came stock issued 20 years prior to merger followed by 17 years, 19 years, and 21 years. Thereafter, stock issued 16

years prior and in any subsequent years was retired in the order of issuance. This stock redemption sequence is clarified as follows:

(1) Stock issued 18 years prior-Cooperative B's oldest stock and Cooperative A's 18th year stock.
(2) Stock issued 20 years prior-Cooperative A stock.
(3) Stock issued 17 years prior--stock from both cooperatives.
(4) Stock issued 19 years prior-Cooperative A stock.
(5) Stock issued 21 years prior--Cooperative A's oldest stock.
(6) Stock issued 16 years prior-stock from both cooperatives.
(7) Stock issued 15 years prior, followed by **14,13,** etc.

The stock redemption gap between members of each cooperative would be equal following the redemption of stock reflected in the 5th sequence (stock issued 21 years prior).

Recent Case Study Examples

This section includes six case studies of farmer cooperatives that have merged in recent years. Two cooperatives were involved in each merger. They were asked several questions pertaining to the financial aspects of the merger (see Appendix B).

In all but one case, a committee was appointed to study and negotiate various aspects of the merger. The average committee size was nine. Participants consisted largely of directors and management personnel from both cooperatives involved. A couple committees also had attorneys and other outside individuals. In one case, accountants were used. One case study subject indicated that the committee performed very well, two indicated that it performed well, and the others said it performed okay.

The first case study is described in detail while the others are summarized.

Case Study &Cooperatives 0 and P Two relatively small cooperatives were consolidated and adopted a new name. A **12-member** committee negotiated merger issues. Member support was moderate. (The cooperatives identified member support as strong, moderate, weak, or none.)

The unified cooperative had assets of about $3.8 million. **Pre-merger** data showed:

Cooperative 0	Cooperative P
Sales of about $3.3 million.	Sales of about $2.2 million.
Assets of about $2.2 million.	Assets of about $1.6 million.
Low debt; short-term debt-to-asset ratio of 14 percent; limited **long-term debt.**	**Low** debt; short-term debt-to-asset ratio of about 17 percent; no-long-term debt.
Membership common stock, certificates of indebtedness.	Common stock, preferred stock, preferred stock **A.**
No set redemption program; redeemed equity at board discretion.	**No set** redempton program; redeemed equity at board discretion

Excess equipment assets were sold at book value and the proceeds used to pay off some existing debt. Common stock from both cooperatives was exchanged for unified cooperative common stock (par value **$10)** to members of the participating cooperatives (0 and P). The conversion had to be made within 30 days after the consolidation. Members who neither wished to join nor convert their common stock could surrender that stock for cash payment. Stock surrenders also had to be made within 30 days.

The cooperatives developed and followed a plan for transferring equities. Records were examined to determine equity amounts. The board of directors of the unified cooperative (within 60 days of consolidation) determined the allocated and total equities of each constituent cooperative.

For Cooperative 0, the amounts of allocated patronage equities consisting of qualified, nonqualified, and certificates of indebtedness were determined as well as the total amount of Cooperative 0

equities less the face value of outstanding memberships (the difference being total Cooperative 0 equities).

For Cooperative P, the amount of preferred stock A and preferred stock was determined as well as the total patrons' equities less membership or capital stock (the difference being total Cooperative P equities).

After stock determination, the board of directors allocated to Cooperative 0 equity holders a portion of the total equities of Cooperative 0 not already allocated. Total Cooperative 0 equity divided by allocated Cooperative 0 equity had to equal total Cooperative P equity divided by Cooperative P stock. This ratio was calculated:

$$\frac{\textbf{Total Cooperative 0 equity}}{\textbf{Allocated Cooperative 0 equity}} = \frac{\textbf{Total Cooperative P equity}}{\textbf{Allocated Cooperative P stock}}$$

Thus, equal proportions of allocated equities of Cooperative 0 and Cooperative P to total equities of Cooperative 0 and Cooperative P were brought into the consolidation. Because Cooperative O's ratio was larger than Cooperative P's, some of Cooperative O's unallocated equity was allocated to its members to make the ratios similar.

Table 9 shows this procedure. In the example, the allocated equity to total equity ratios are not equal. Cooperative O's ratio is 1.25 while Cooperative P's is 1.22. To make the ratios equal, $27,400 of Cooperative 0 unallocated equity is transferred to Cooperative 0 allocated equity. The equities were allocated to members' allocated equity accounts on a basis similar to that of the members' original equity allocations made over the 5-year period immediately preceding the effective consolidation date.

The equities of Cooperative 0 members brought into the merger were then converted to preferred stock of the unified cooperative. Each dollar of equity was converted to one share of preferred stock (par value $1).

Each share of preferred stock (par value $1) held by the members of Cooperative P was converted to a similar share with the unified cooperative. The same procedure was followed for preferred stock A of Cooperative P.

Remaining unallocated equities of Cooperative 0 and Cooperative P became a part of the unified cooperative's unallocated reserve to be unallocated, permanent capital.

After consolidation, the equity capital structure of the unified cooperative consisted of capital stock-shares of common stock (par value of $10) designating membership and voting rights, and preferred stock A and preferred stock-two classes

Table 9— Case study I, member equity transfer of Cooperative 0 and Cooperative P[1]

	Prior to merger		At merger[2]		
	Co-op 0	coop P	Co-op O	co-op P	Unifii Co-op
			Dollars		
Allocated equity3	1,055,000	787,200	1,082,400	787,200	1,869,000
Unallocated equity	265,000	172,800	237,600	172,800	410,400
Total equity	1,320,000	960,000	1,320,000	960,000	2,280,000
			Ratio [4]		
	1.25	1.22	1.22	1.22	1.22

[1] Numbers are hypothetical, for example purposes. Assumptions: total equity to total assets = 60 percent and for Cooperative P unallocated equity to total equity = 18 percent and unallocated equity to total assets = 11 percent.
[2] To make ratios equal, unallocated Cooperative 0 equity was shifted to Cooperative 0 members allocated equity accounts (in the amount of $27,400).
[3] Allocated equity made up of common stock, preferred stock, and certificates of indebtedness.
[4] Ratio derived by dividing total equity by allocated equity.

of stock that hold neither voting power nor rights to participate in management of the cooperative.

The board of directors of the unified cooperative was authorized to establish book credits, capital funds, and other allocated reserves to provide funds for corporate purposes as provided in the unified cooperative's bylaws (i.e., by retains from margins or proceeds otherwise payable to the members or by other methods of collection).

The unified cooperative's program for retiring equities is to redeem patrons' equities of Cooperative 0 and Cooperative P in the chronological order in which they were issued. The unified cooperative's board of directors was authorized to use discretion in carrying out the equity retirement plan.

Case Study II-Cooperatives Q and R The merging two cooperatives were of significantly different size. The larger one's name was retained after the merger. A g-person committee negotiated merger issues. The merger had moderate member support.

The unified cooperative emerged with assets of about **$4.5** million. Pre-merger data showed:

Cooperative Q	*Coopera* tive *R*
Sales near $15 million.	Sales near $1.5 **million.**
Assets **of** about $4 million.	**Assets of about $0.5 million.**
Carried no debt.	**Debt-to-equity ratio around 40 percent.**
Common stock and credit accounts.	**Common stock and credit accounts.**
Redemption plan: pay 30 percent current qualified allocated refunds in cash; lo-year revolving schedule; redeem **loo percent of remainingequity** when member reaches 70 years of age.	**No set redemption program; no set revolving schedule; had** not redeemed any equity for several years preceding the merger.

During negotiations, both boards agreed to write down the assets and equity of Cooperative R by about 25 percent. Cooperative R was relatively weaker than Cooperative Q. Cooperative R's equity was brought into the merger at the written-down value while Cooperative Q's equity was set at book value.

The unified cooperative paid off Cooperative R's debt. Common stock of Cooperative Q was converted to common stock of the unified cooperative.

because Cooperative R was considerably further behind Cooperative Q in equity revolvement, the merger committee decided to lump all member equity credit accounts of Cooperative R into one equity account. These equities were designated for payment 2 years after the effective merger date.

The original allocation dates corresponding to the equities were ignored and the equity in this lumped account was made available for redemption under the unified cooperative's policy, Equity from each cooperative was placed into the allocated equity pool of the unified cooperative for later revolvement at its new designated allocation date.

Table 10 provides a hypothetical example of the equity transfer. Cooperative R's equity is written down by 25 percent at merger time and brought into the unified cooperative. The Cooperative R allocated equity of $184,500 is lumped into the equity redemption schedule of the unified cooperative and designated for payment 2 years after the merger, regardless of original allocation dates.

The unified cooperative adopted the redemption policy of Cooperative Q (i.e., revolve equity on a **10-year** cycle).

Case Study III-Cooperatives S and T In this example, two similar-sized cooperatives were merged. A committee of 11 negotiated merger issues. Merger support was strong from the members of Cooperative S (more than 80 percent favored) and moderate in Cooperative T (about 70 percent favored it).

At the end of its first fiscal year, the unified cooperative's sales topped $20 million. It had assets of about $13 million. Pre-merger data showed:

Cooperative S	Cooperative T
Sales of nearly $5 million.	Sales topped $10 million.
Assets of about $5 million.	Assets of about $7 million.
Relatively high short-term debt; short-term debt-to-asset ratio just under 50 percent.	Relatively high short-term debt; short-term debt-to-asset ratio over 50 percent.
Common and preferred stock (classes A and B).	Common and preferred stock (classes A and B).
Allocated member equity redeemed when the board determined that there was a sufficient balance of working capital.	Allocated member equity redeemed when the board determined there was sufficient balance of working capital.
12 years behind in revolving member allocated equity; no set revolving period.	7 years behind in revolving member allocated equity; no set revolving period

To keep this merger on equal terms, all assets, liabilities, and member equities were consolidated using book values. However, some of each cooperative's assets were sold to eliminate duplication. Proceeds were used to increase working capital. Some short-term debt from each cooperative was restructured and converted to long-term debt.'

A favorable majority vote of stockholders of each class of stock had to approve consolidation. Cooperative S redeemed all its class A preferred stock (about $10,000 worth) controlled by only seven members prior to the merger vote. (The cooperative was worried that the Class A stockholders would not approve the merger.) Cooperative T wanted to follow suit for its class A preferred stock but lacked the capital to redeem it all valued at $60,000.

The possibility of ending up with high amounts of stock of dissenting members after the merger also concerned the committee. So, the cooperatives limited the amount of this stock they would pay to $12,000. After the merger was approved by a two-thirds majority in each cooperative's stock classes, the amount of stock of dissenting members was about $19,000. Even though this exceeded the $12,000 cap, the cooperatives paid that stock.

The allocated equity (common and preferred stock) from both cooperatives was transferred to the unified cooperative on a book-value basis.

The equity redemption program of the pre-merged cooperatives was adopted by the unified

Table 10— Case study II, member equity transfer of Cooperative Q and Cooperative R[1]

	Prior to merger		At merger[2]		
	Coop 0	Co-op R	Coop 0	Coop R[3]	Unifii Coop
	Dollars				
Allocated equity[4]	1,968,000	246,000	1,968,000	184,500	2,152,500
Unallocated equity	432,000	54,000	432,000	40,500	472,500
Total equity	2,400,000	300,000	2,400,000	225,000	2,625,000

[1] Numbers are hypothetical, for example purposes. Assumptions: total equity to total assets = 80 percent, unallocated equity to total equity = 18 percent, and unallocated equity to total assets = 11 percent.
[2] Cooperative R equity written down by 25 percent.
[3] Allocated equity of $184,500 of Cooperative R was assigned a new date to be fit into the equity redemption schedule of unified cooperative (taken from Cooperative Q-date designated as 2 years later than effective date of merger.
[4] Allocated equity made up of common stock and credit accounts.

cooperative. Member-allocated equity would be redeemed at the discretion of the board of directors if working capital was sufficient. Even though Cooperative S had older allocated equity, no special preference was established for its redemption.

Case Study IV-Cooperatives U and V The two merging cooperatives (U and V) complemented each other--one being largely in marketing and the other principally farm supplies. They shared more than 100 members. A committee of eight negotiated merger issues. Member support was strong. The unified cooperative had assets of about $6 million. Pre-merger-data showed:

Cooperative U	Cooperative V
Sales near $20 million.	Sales near $2 million.
Assets of about $5 million.	Assets of about $1 million.
Relatively low short-term debt.	Relatively low short-term debt.
Total debt-to-equity ratio under 40 percent.	Total debt-to-equity ratio about 40 percent.
Common stock and allocated equity certificates.	Common stock, preferred stock, and allocated equity certificates.
No set equity revolvement schedule; board discretion for redeeming allocated equity; 2-year revolvement schedule; pays off equity when member reaches 70 years of age.	No set equity revolvement schedule; board discretion for redeeming allocated equity, 4 year revolvement schedule; pays off equity when member reaches 77 years of age.

Assets, liabilities, and equity from both cooperatives were consolidated using book values. No assets were sold. Cooperative U's common (voting) stock had a par value of $20 while Cooperative V's was $10. Because of this difference, each member of Cooperative V was required to pay $10 to account for the share differential. The other allocated equities were transferred on a dollar-for-dollar basis.

Case Study V-Cooperatives **Wand *X*** These merging cooperatives had slightly different sales, but about the same value of assets. A seven-member committee negotiated merger issues. Member support for the merger was strong.

Assets of the merged cooperative were about $5 million. Pre-merger data showed:

Cooperative W	Cooperative X
Sales of about $5 million.	Sales of about $4 million.
Assets of about $2.5 million.	Assets of about $2.5 million.
Short-term debt-to-asset ratio of 36 percent; no long-term debt.	Short-term debt-to-asset ratio of 35 percent; no long-term debt.
Total debt-to-equity ratio of 55 percent.	Total debt-to-equity ratio of 55 percent.
Common stock and preferred stock.	Common stock and preferred stock.
Allocated equity redeemed at board discretion and when member reached certain age; no set revolving schedule.	Allocated equity redeemed at board discretion and when member reached certain age; no set revolving schedule.

Assets were combined at book values. No assets were sold. All common stock, preferred stock, per unit retains, and revolving fund credits were combined into one member equity credit account.

One cooperative carried forward a loss from past years. To compensate, the equity credit account of that cooperative was reduced by the loss amount (the equity of each member was reduced proportionately). After this was completed, all member equity was consolidated.

Every member's equity requirement in the unified cooperative was set at $1,000 (10 shares of common stock with a par value of **$100/share).** This is like a modified base capital plan. At merger time, if a member has more than $1,000 equity in his / her account, the excess is placed into a deferred equity account and not immediately redeemed. Conversely, a member with less than $1,000 in equity is required to make up the difference. However, if the member has more than $100 of equity, the difference is to be made up through equity allocations over time. The member with less than $100 equity must pay cash to bring the account up to $100. Subsequent allocations over time would make up the $900 difference.

Equity Redemption Plan

Equity in deferred accounts becomes available for redemption only when members turn 65 years of age. (This is a modified version of a base capital plan.) Portions of the deferred equity of members at age 65 or older are redeemed annually on a percentage basis at the discretion of the board given the cooperative's financial performance.

Case Study VI-Cooperatives Y and Z This merger included two large similar-sized cooperatives. The name of one of the cooperatives was retained for the new organization. No special merger committee was formed. Member support was strong.

Sales of the merged cooperative exceeded $2 billion. Assets topped **$430** million. Pre-merger data showed:

Cooperative Y	*Cooperative Z*
Sales of about **$1.1 billion.**	Sales of about $1 billion.
Assets of **about $240** million.	Assets of about **$200** million.
Short-term **debt-to-**asset ratio of about 43 percent; **long-term debt-to-asset ratio of 13 percent.**	Short-term debt-to-asset ratio of 34 percent; long-term debt-to-asset ratio of 24 percent.
Common stock, preferred stock, and allocated equities.	Common stock, preferred stock, and allocated equities.
Revolving plan; no set schedule.	Revolving plan; no set schedule.

Assets were combined at book values. No assets were sold. All allocated equities (common stock, preferred stock, and allocated equities) were transferred at face (book) value. Unallocated reserves were identified as pre-merger reserves. As such, they are distributable to owners of merging companies in liquidation. During the merger, certain items under warranty (due diligence) were charged to these pre-merger reserves. After these charges were assessed, the remaining equity was combined.

Difficult financial issues related to the merger included (1) significantly different amounts of unallocated reserves held by the cooperatives, (2) contingent liabilities held by each cooperative, and (3) non-member equities issued and outstanding by one of the cooperatives. The first two issues were resolved through the use (applicable transfer) of the established pre-merger reserves. To resolve the third issue, the non-member allocated equities were accepted as is by the other merging cooperative.

Summary

Four cases were discussed from the Haskell report-a merger, a consolidation, and two acquisitions. All involved a stock / equity conversion or exchange. Two cases, however, included special provisions for redeeming equity.

The merger case involved setting up an equity redemption plan to retire members' old outstanding stock brought to the merger. The plan redeemed a percentage of old outstanding stock provided by board authorization. This plan is similar to the percentage-of-all-combined-equities plan described earlier.

The second acquisition case (acquisition 2) involved cooperatives with a 3-year age difference between their old outstanding stock. To correct the redemption gap, an equity redemption revolving plan was devised that included redeeming equity on a past allocation-year alternating schedule. This creative approach was designed to alleviate the redemption gap after completion of five sequences of the schedule.

Six case studies of cooperatives that had recently merged were described. Some assets were sold in two of the cases (case studies I and III). Debt was paid off in one case (case study II) and some short-term debt was converted to long-term debt in another case (case study III).

In four of the six case studies, allocated equity was converted or transferred on a strict book-value basis. In the other two cases, allocated equity was converted or transferred after adjusting book values. Case study II involved the writedown of assets and equity of one cooperative because of financial difficulties. Case study V involved an equity writedown of one cooperative by the amount of its loss-carry forward.

In all six cases, equity was revolved at the discretion of the board. In case study II, one cooperative had not redeemed any equity for some time, but the unified cooperative adopted the IO-year revolvement cycle of the other cooperative.

Some cases had special clauses attached to equity redemption. For instance, the unified cooperative of case study V redeems equity only when working capital is at "sufficient levels" as determined the board. This cooperative stipulates that its members first must have $1,000 of base capital accumulated. Then, any allocated equity above the $1,000 is redeemable on a revolving cycle after the member has reached a certain age.

OTHER FINANCIAL ISSUES

Evaluating Equity

The interpretation that equity being brought to a merger is debt can lead to problems, especially if one cooperative has more old allocated equity than the other merger participant(s). Members of the cooperative(s) with more current equity may be concerned with the additional debt being assumed by the unified cooperative.

The status of old allocated equity must be resolved during negotiations. Old equity may be paid immediately, paid by some future installment system, or rolled into a redemption plan of the new cooperative. Old equity paid immediately can be construed as a debt obligation at its face value. On the other hand, if paid in future installments or rolled into the redemption rotation, then the value of the obligation is relative to when it will be redeemed.

Equity to be redeemed at some future time should not be interpreted as face-value debt. Rather, the interpretation should be tied to the present value relative to when it may be redeemed.

Table 11 (example VIII) illustrates present values of the equity of Cooperative A and Cooperative B (revised equity values from example I of table 2) calculated at a discount rate of 8 percent. This analysis indicates that the present value of the $847,000 equity of Cooperative A is $626,000 and the present value of the $975,000 equity of Cooperative B is $719,000 (present value figures are 26 percent less than the face value).

Thus, while allocated equity is essentially a debt obligation, its value is directly tied to when it will be redeemed and the discount rate applied. That is how cooperative leaders examining merger need to explain equity to counter negative publicity generated by concerned members and/or those opposing the merger.

Tax Considerations

When examining a potential merger, pay special attention to the tax considerations relating to the resulting change in cooperative capital structure. This section provides a cursory view of some restrictions and implications regarding taxes that

Table II- Example VIII, present value of allocated equity of Cooperative A and Cooperative B relative to time it would be redeemed'

Age in Years	Year Redeem&	Cooperative A		Cooperative B	
		Face value	Present value[3]	Face value	Present value[3]
		Thousand Dollars			
7	1	67	62	55	51
6	2	177	152	200	171
5	3	135	107	125	99
4	4	110	81	150	110
3	5	103	70	250	170
2	6	143	90	95	60
1	7	110	64	100	58
Totals		645	626	975	719
Percent change			-26%		-26%

[1] Equity data (face values) from revised equity totals of table 2.
[2] Assumes 7-year rotation and that equity 7 years of age will be redeemed after first year and so on.
[3] Present values calculated with multipliers from appendix table 2 (discount rate of 8 percent used).

cooperatives involved in merger talks should consider. It is not meant to be all-inclusive, but merely touches on some cooperative merger tax issues.

Merger or consolidation can create major changes in an organization, disappearance of one or more cooperatives, and creation of a new or greatly changed survivor. Capital structure changes that occur because of merger or consolidation are considered corporate reorganization (as defined in Appendix A).

Although cooperatives are taxed under Subchapter T as to patronage distributions, they are subject to the same rules regarding corporate reorganizations as other organizations taxed as corporations under the Internal Revenue Code.

Reorganizations refer to transactions that involve the cooperative's capital structure itself and go beyond generating and redeeming capital instruments as an ongoing capitalization process. These transactions may be subject to specially defined tax treatment. The object of most corporate reorganization tax rules is to establish conditions under which transactions are not taxable like under other circumstances.

Corporate reorganization tax rules do not specifically address any of the unique financing characteristics of a cooperative. However, cooperative reorganizations may be closely analogous to noncooperative corporate reorganizations. An important challenge in cooperative reorganizations is to identify those situations in which corporate tax principles will apply to cooperatives and, if so, how.

The Internal Revenue Code treats certain transactions in corporate reorganizations as tax free. Much of corporate reorganization tax analysis deals with whether a transaction is in fact tax free, in whole or in part, and how to meet all qualifications to make it tax free if desired.

A tax-free transaction has two major implications. First, no taxable income is recognized when stock or assets are sold or exchanged under circumstances in which a taxable gain would be recognized absent corporate reorganization rules. Second, the basis of property in the recipient's hands is a carryover or substituted basis. The tax implications to the new property holder will be incurred upon future sale or exchange. For cooperatives, certain allocated equities may retain their status in a tax-free reorganization.

Sections 368(a)(l)(A) through (F) of the Internal Revenue Code define six types of reorganizations that are essentially tax free, if all of the various statutory requirements are satisfied. Cooperative mergers or consolidations may fit under any one of these six reorganizations.

However, cooperative mergers and consolidations are often type "A" reorganizations-statutory mergers or consolidations. They often fit this type of reorganization because the unique capital structures of cooperatives simply do not usually lend themselves to other types of reorganizations.[2]

Further, they are called "statutory" mergers and consolidations because the merger or consolidation is effected under State incorporation statutes and meet all those requirements.

Statutory provisions that affect merging or consolidating cooperatives will vary. Most State incorporation statutes covering cooperatives contain no provisions for merger or consolidation. In such cases, cooperatives should use the business corporation laws on merger to the extent possible. However, some State statutes contain a reference to cooperative merger among other cooperatives or with noncooperative business organizations. The statutes describe merger procedures in varying detail. A typical procedure described included approval by boards of directors of all merging cooperatives, adoption of a resolution and a written plan of merger, submission to cooperative membership for approval, and formal filing with a State office.[3]

Most merger provisions also specify the contents of the plan. Common requirements include old and new names, terms and conditions of the proposed merger, proposed effects on all members or stockholders of each association, and the articles of the new association.

Provisions typically describe the effects of the merger. The effects are important to implement results compatible with the tax-free nature of a statutory merger.

To be wholly or partially tax free, a reorganization must follow a plan. It may not include a subsequent exchange of one kind of equity for another brought over from a predecessor cooperative if that exchange was not part of the specified reorganization plan.

In most reorganizations, several other overall requirements must be met. For example, courts have required a continuity of interest for stockholders (member/owners) between the old and the new corporations. This means they have retained a substantial interest in the enterprise. The business enterprise itself must show continuity. That is, the merged, consolidated, or acquiring cooperative must continue the "business enterprise" of the predecessors. Such continuity will exist if the successor cooperative either carries on the "historic business" or uses a significant portion of the predecessor "historic business assets" in conducting.the new business.

If reorganization does not have a business purpose, it will be denied tax-free treatment. This requirement aims to prevent reorganization solely for tax purposes. The typical cooperative reorganization will have a clear business purpose.

Finally, while this section has provided some information and described implications that cooperative leaders need to consider while examining a specific merger, the financial transactions that can occur during mergers, consolidations, and acquisitions are limitless. No specific steps can be analyzed in depth for their tax consequences to cooperatives, members, or patrons.

Thus, identifying all the tax consequences and implications specifically related to such transactions is beyond the scope of this study. However, when complicated financial transactions arise during negotiations, leaders must analyze the related consequences and implications. In these cases, cooperative leaders should seek professional exper-

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[2] See Clark and Erickson (Taxation of Cooperatives) for more information pertaining to cooperative reorganizations.

[3] See Baarda (ACS Information Report 30—State Incorporation Statutes for Farmer Cooperatives) for more information on State statutes that apply to farmer cooperatives.

tise and legal counsel so that suitable and accurate reorganization plans can be drawn.

SUMMARY AND IMPLICATIONS

Cooperative leaders examining merger need to decide how to combine the major balance sheet components of each merger participant. A plan should be developed to make the decision-making process a well organized exercise. The plan should include alternative methods and their implications (i.e., positive and negative impacts) for combining assets, liabilities, and equity given the merger situation and attributes of the cooperatives involved.

Assets may be combined using book values or some situations may dictate that assets be reevaluated. Leaders need to carefully examine all the assets of the cooperatives involved in the merger and determine which ones will be needed to operate the unified organization.

The structure and types of liabilities will be examined. Are the structures and debt levels similar? Are any changes needed to alleviate major differences?

Alternative methods for combining member equity must be studied because of the seemingly endless variations of cooperative equity structures with mergers. Equities may be identified and developed in different ways, redemption plans may differ, or cooperatives may be in different stages of redemption.

Cooperative leaders must examine the differences between the merger participants and then consider alternatives for consolidating member equities. Then, they must recommend those alternatives that best fit the structure of the emerging organization and have the best chance of being well received by members. Narrowing the field of alternatives will allow for closer assessment of the positive and negative characteristics of each. A final choice must then be made.

Cooperatives merging with similar equity structures and amounts will usually find the combination of financial instruments to be rather straightforward. Conversely, cooperatives with different structures and amounts may find that combining financial elements is difficult and requires careful examination of several options to find the best method.

This report provides information, examples, and implications of 21 alternatives for consolidating and handling member equity during cooperative mergers. Eleven general options and 10 actual cooperative merger case examples are described.

Cooperative leaders developing their own merger plans can study these options and case examples to identify similarities between the equity structures with which they are working and those of the alternatives. With some modification, they may wish to include some of the similar ones as alternatives in their plan or develop their own.

There are two schools of thought about combining equity during mergers. One is that merging cooperatives should seek to achieve complete equality among members of each cooperative. The second is that equity consolidation should be approached from the perspective of building a stronger cooperative for the future, rather than trying to attain complete equality for members of each cooperative at the time of merger.

The best scenario would be one in which a strong equity base and financial position are achieved and equality between members is maintained.

However, in most mergers, maintaining member equality is difficult. For instance, alternatives that include redeeming or paying off a significant amount of member equity at the time of merger will not likely be equitable to all members. On the other hand, alternatives that include equity adjustments contingent on asset reevaluation and expected cooperative performance will help to achieve greater member equality.

Acquisition is an option for combining cooperative organizations that can alleviate some of the problems commonly confronting mergers. When one cooperative is significantly larger and financially stronger, acquisition is often the only choice the large cooperative will even consider. In other cases, acquisition is often chosen because it is easier to carry out.

Cooperative leaders should work to ensure that they as well as their constituent members fully understand the present-value versus face-value relationship of member equity.

If equity planned for future redemption is considered as face-value debt and the merging cooperatives have significantly different amounts of equity (relative to assets), then ill will may develop among the membership. For proper disclosure and to thwart any potential negative feelings among members, cooperatives should include a section in the merger plan that explains how to correctly analyze the present value of member equity.

Cooperatives developing a merger plan for combining assets and equity must also consider any tax implications that coincide with alternatives in the plan. In short, cooperatives reorganizing due to merger or consolidation are subject to the rules regarding corporate reorganizations. Most often, cooperative mergers and consolidations are statutory mergers or consolidations. As such, cooperatives must adhere to various statutory provisions. A plan must be developed for the reorganization to be wholly or partially tax free.

This report covers only some of the tax issues and information regarding merging cooperatives. When mergers involve more complicated financial transactions other issues will surface. Cooperative leaders should consult legal counsel and accountants when examining various asset, liability, and equity consolidation alternatives.

In a successful merger, members feel their interests have been well represented and protected and that their relative stake in the new organization is important. They also believe that the unified cooperative will have sufficient financial strength to provide services for their benefit. The unified cooperative should develop an equity financing and redemption plan that assures a significant financial stake by members who are current users.

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APPENDIX A-GLOSSARY OF TERMS/CONCEPTS

Acquisition. The outright purchase of a cooperative's assets by another cooperative. The purchased cooperative's members then join the other cooperative. Cooperative A acquires assets of Cooperative B; Cooperative B members join Cooperative A.

Allocated Equity. Equity assigned by amounts (based on proportion of patronage) to a member's account.

Base Capital Plan. Both an equity capital formation and redemption plan. Plan emphasizes both developing a base amount of required equity and systematically adjusting it to the current needs and to patrons' use of the cooperative. A member's equity contribution is tied directly to use of the cooperative.

Certificate of Indebtedness. These certificates represent obligations to repay money advanced by members, or resulting from the conversion of equity investment held by members. Unlike the normal equity certificate, certificates of indebtedness are usually interest bearing.

Consolidation. Combining two or more businesses into a new organization. It survives and the component firms cease to exist. A, B, and C form D; A, B, and C disappear; D survives.

Debenture Bond. A debenture bond is an unsecured bond. Cooperative bonds are generally long-term and bear competitive interest rates. They are often subordinated to other cooperative debt.

Member. An owner-user who meets cooperative membership requirements and is entitled to voting privileges.

Member equity. Ownership or risk capital in the cooperative generally arising from direct investment, retained patronage refunds, per-unit capital retains, and nonmember business. Members' investment or ownership in the assets of the cooperative. Equal to total assets less total liabilities.

Merger. The absorption of one or more businesses by another firm. The survivor maintains its identity. Many of its organizational features are operated on an expanded basis, given its increased size and capacities. A and B merge into C; C survives; A and B dissolve.

Nonstock Cooperatives. The equity capital of nonstock cooperatives takes the form of membership and/or.capital certificates. Membership certificates are fee oriented and represent membership in the organization. Capital certificates supplement membership certificates. They are similar to preferred stock. Capital certificates are sold directly to members, issued as part of patronage refunds, or sold to nonmembers.

Reorganizations. In this report, reorganization refers to a range of actions associated with varying degrees of change in a cooperative's capital structure. Changes may be minimal for modifying the capital structure component identity or major and result from merger.

Revolving Fund. This type of systematic equity redemption plan usually follows a first-in, first-out format. Cooperative pays or retires in cash the oldest outstanding equities when required net worth has accumulated. The revolving fund returns previous investments to patrons on a regular and chronological basis.

Stock Cooperative. Capital of a stock cooperative is divided into shares of stock owned by members. Some cooperatives have only common stock while others have both common and preferred stock. Some stock cooperatives also issue other forms of equity such as membership certificates, which may or may not be owned by members. These cooperatives usually restrict stock transfers to limit ownership of the cooperative primarily to qualifying member-patrons.

Unallocated equity. Equity not assigned to a member's account. Tax-paid retained earnings or reserves.

APPENDIX B—CASE STUDY SURVEY QUESTIONS

Cooperative Merger Survey

(1) What size were the participating cooperatives prior to merger (sales and assets)?

(2) What was the size of the new cooperative following the merger (sales and assets)?

(3) Were any assets sold off during the merger?

(4) What assets were sold?

(5) How were the proceeds allocated or used?
- ___ Pay existing debt
- ___ Settle differences in member equities
- ___ Satisfy members that were merger dissenters
- ___ Minimize duplicate or unused assets
- ___ Other, specify

(6) Were the assets brought into the new cooperative at book value or revalued?

(7) How were assets reevaluated and who completed the reevaluation?

(8) What was the short-term debt/total asset ratio of each participating cooperative prior to merger?

(9) What was the long-term debt/total asset ratio of each participating cooperative prior to merger?

(10) What was the total debt/total equity ratio of each participating cooperative prior to merger?

(11) Was any long-term debt restructured or paid off?

(12) How was debt restructuring handled and what was done?

(13) What type of equity redemption program did the participating cooperatives have before the merger?

(14) If an equity revolvement schedule was in effect, what was the revolving period?

(15) Were the cooperatives current in redeeming their equity? (If no, years behind?)

(16) Was a committee set up to negotiate how equity would be handled during the merger?

(17a) How many people were on the committee?

(17b) Who was on the committee? (mark all that apply)
- ___ Directors
- ___ Members
- ___ Management
- ___ Personnel
- ___ Attorney
- ___ Accountant
- ___ Other outside individuals

(18) How often did the committee meet?

(19) How well did the committee perform its function?
- ___ Performed very well
- ___ Performed well
- ___ Performed okay
- ___ Did not perform well
- ___ Was a waste of time

(20) What plan was followed for consolidating/transferring the equity of the merging cooperatives? (brief summary)

(21) In general, where did information for devising the plan come from? (mark all that apply)
- ___ Obtained from other cooperatives that had merged
- ___ Obtained from professional sources
- ___ Obtained from reports or books
- ___ Creativity--original idea

(22) Did the plan have member support?
- ___ Strong support
- ___ Moderate support
- ___ Weak support
- ___ No support

(23) What types of equity were issued by the participating cooperatives prior to the merger? (e.g., common stock, preferred stock, membership certificates, unallocated equity, etc.)

(24) If applicable, please provide a numerical example of how equity transfer/consolidation was handled (e.g., formula used)

(25) What were some of the financial consolidation difficulties experienced by the merging cooperatives?

(26) How were these differences resolved?

Appendix table 1— Example A-l, prorating old allocated equity of Cooperative A and Cooperative B

Age in years[1]	Allocated equity: Co-op A[2]	Allocated equity: Co-op B[3]	Combined equity[4]	Percent of 7-year total[5]	Co-op A prorated equity[6]	Co-op B prorated equity[7]	Revised equity total: Coop A[8]	Revised equity total: Coop B[9]	Revised equity total: Comb[10]
	Thousand dollars			Percent	Thousand dollars				
9	75	65	140	7	8	9	83	74	157
8	60	100	160	9	10	11	70	111	181
7	50	55	105	6	7	8	57	63	120
6	125	200	325	17	20	21	145	221	366
5	100	125	225	12	14	15	114	140	254
4	75	150	225	12	14	15	89	165	254
3	55	250	305	16	18	20	73	270	343
2	110	95	205	11	13	14	123	109	232
1	80	100	180	10	11	12	91	112	203
Totals	730	1,140	1,870	100	115	125	845	1,265	2,110
Equity over 9 years old	115	125	240		0	0	0	0	0
Total equity	845	1,265	2,110						

[1] Cooperative B has been revolving equity on a lo-year schedule (3 years behind its 7-year revoking fund plan) and Cooperative A has been revolving on a 12-year schedule (3-years behind its Q-year revolving fund plan). A Q-year schedule is chosen for the unified cooperative.

[2] Allocated equity of Cooperative A—last 9 years and total allocated equity over 9 years old.

[3] Allocated equity of Cooperative B-fast 9 years and total allocated equity over 9 years old.

[4] Allocated equity from Cooperative A and Cooperative B added together for each year, overall, and old.

[5] Combined equity in each year of the Q-year period divided by the total equity of the 9 years.

[6] The $115 old equity of Cooperative A multiplied by the corresponding percent data in the preceding column.

[7] The $125 old equity of Cooperative B multiplied by the corresponding percent data.

[8] Revised equity of Cooperative A-original allocated equity (2nd column) plus prorated old equity.

[9] Revised equity of Cooperative B-original allocated equity (3rd column) plus prorated old equity.

[10] Combined revised equity totals of Cooperative A and Cooperative B.

Appendix table 2-Multipliers-present value of $1[1]

Years (n)	Discount rate(r) 1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%
	Present value multipliers											
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826	0.812	0.797
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751	0.731	0.712
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683	0.659	0.636
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621	0.593	0.567
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564	0.535	0.507
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513	0.482	0.452
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467	0.434	0.404
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424	0.391	0.361
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386	0.352	0.322
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350	0.317	0.287
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319	0.286	0.257
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290	0.258	0.229
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263	0.232	0.205
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239	0.209	0.183
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218	0.188	0.163
17	0.844	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.198	0.170	0.146
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180	0.153	0.130
19	0.828	0.686	0.570	0.475	0.396	0.331	0.277	0.232	0.194	0.164	0.138	0.116
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149	0.124	0.104
21	0.811	0.660	0.538	0.439	0.359	0.294	0.242	0.199	0.164	0.135	0.112	0.093
22	0.803	0.647	0.522	0.422	0.342	0.278	0.226	0.184	0.150	0.123	0.101	0.083
23	0.795	0.634	0.507	0.406	0.326	0.262	0.211	0.170	0.138	0.112	0.091	0.074
24	0.788	0.622	0.492	0.390	0.310	0.247	0.197	0.158	0.126	0.102	0.082	0.066
25	0.780	0.610	0.478	0.375	0.295	0.233	0.184	0.146	0.116	0.092	0.074	0.059
26	0.772	0.598	0.464	0.361	0.281	0.220	0.172	0.135	0.106	0.084	0.066	0.053
27	0.764	0.586	0.450	0.347	0.268	0.207	0.161	0.125	0.098	0.076	0.060	0.047
28	0.757	0.574	0.437	0.333	0.255	0.196	0.150	0.116	0.090	0.069	0.054	0.042
29	0.749	0.563	0.424	0.321	0.243	0.185	0.141	0.107	0.082	0.063	0.048	0.037
30	0.742	0.552	0.412	0.308	0.231	0.174	0.131	0.099	0.075	0.057	0.044	0.033

[1] Present value = $\$1(1+r)^{-n}$ where r = discount rate and n = the number of years.

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