

Abstract

Nonqualified Notices: An Alternative for Distributing Cooperative Earnings

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Nonqualified written notices of allocation and per-unit retain certificates offer alternative means for distributing cooperative earnings and allocating patron equity that may have advantages over the methods used by most farmer cooperatives. Nonqualified written notices can be used to delay patron taxes and income and to avoid negative cash flows due to tax. Nonqualified notices also offer cooperatives an additional tool for managing taxes and handling losses. This report defines nonqualified written notices of allocation and per-unit retain certificates, illustrates the application of nonqualified notices, and discusses the extent of their use by U.S. farmer cooperatives. A computer cash flow analysis of qualified and nonqualified patronage refund distributions is conducted to identify characteristics of cooperatives and patrons that would benefit from using nonqualified notices. A number of additional features are discussed, including tax management, equity, and accounting considerations, the use of nonqualified notices in federated systems, factors limiting their use, and steps cooperatives should take in initiating their use.

Key Words: Cooperatives, finance, taxation, patronage refunds, equity retirement, nonqualified written notices of allocation.

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Maintaining an adequate supply of equity capital for financing assets and growth is a continual challenge for most business organizations. This is especially true for farmer cooperatives, which are organizations owned by their patrons and which employ unique methods for obtaining equity investments based on patronage.

The methods of equity investment used by most cooperatives place a direct burden on their patron-owners. Retained patronage refunds and perunit capital retains reduce the proceeds patrons receive from business transactions with their cooperative. In addition, Federal tax law usually assigns the tax responsibility for patronage refund and per-unit capital retain allocations to the patron.

Recent financial difficulties in the agricultural economy have affected both farmer cooperatives and their patrons and have refocused attention on cooperative equity capitalization methods. Because of financial pressures, many patrons have expressed interest in reducing the tax burden on their equity investments.

Nonqualified written notices of allocation and per-unit retain certificates offer alternative means for distributing cooperative earnings and allocating patron equity that may have advantages over the methods used by most cooperatives. Nonqualified written notices of allocation can be used to delay patron taxes and income and avoid negative patron cash flows due to tax. Nonqualified notices also offer cooperatives an additional tool for managing taxes and handling losses.

This report is intended for cooperative managers and directors interested in examining alternative equity capitalization methods as well as accountants, attorneys, extension workers, and others who advise cooperatives on financial and tax matters. The report defines nonqualified written notices of allocation and per-unit retain certificates, illustrates the application of nonqualified notices, and discusses the extent of their use by U.S. farmer cooperatives. A computer cash flow analysis of qualified and nonqualified patronage refund distributions is conducted to identify characteristics of cooperatives and patrons that would benefit from using nonqualified notices. A number of additional features are discussed, including tax management, equity, and accounting considerations, the use of nonqualified notices in federated systems, factors limiting their use, and steps cooperatives should take in initiating their use.

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uncertain aspects of it, the contents of this report should not be construed as representing the opinions of these individuals.

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Nonqualified written notices of allocation and per-unit retain certificates offer alternative means for distributing cooperative earnings and allocating patron equity that may have advantages over the methods used by most farmer cooperatives. Some patrons, particularly those with high tax rates, may wish to delay receiving income and therefore would prefer receiving nonqualified distributions. Cooperatives can use nonqualified written notices of allocation to avoid negative cash flows to these patrons resulting from tax on qualified notices. Nonqualified notices also offer cooperatives an additional tool for managing taxes and handling losses.

Although this tool has been available to cooperatives since enactment of subchapter T of the Internal Revenue Code in 1962, nonqualified notices account for a small proportion of total patronage distributions. Data on the 100 largest U.S. farmer cooperatives suggest there has been an increase in the use of nonqualified notices in recent years, but large cooperatives probably have used these notices more than small cooperatives because large cooperatives have had better access to information about them.

A comparative analysis of patron cash flows suggests that neither the qualified nor the nonqualified method of distributing patronage refunds is clearly superior to the other. Patron cash flows are sensitive to changes in several factors, and which method of distributing patronage refunds results in the greatest cash flow to patrons depends on the level of each of these parameters.

Two critical factors affecting cash flow from qualified and nonqualified notices are the cooperative and patron marginal tax rates. If the cooperative marginal tax rate is less than the patron rate, the nominal value of total patron cash flow from nonqualified notices is greatest because cash drains on the cooperative system from taxes on nonqualified notices are less than for qualified distributions. The present value of total patron cash flow generally is greatest for nonqualified notices if the cooperative faces low marginal tax rates and patrons face high marginal rates. Increases in the patron marginal tax rate generally decrease the comparative present value of qualified distributions because the increased cash drain from patron income tax on the distributions occurs early and weighs heavily in present-value computations.

If the cooperative tax rate is relatively low, the cash drain the cooperative faces from issuing nonqualified notices may be less than from distributing patronage refunds in cash and qualified notices, and the cooperative can accelerate equity revolvement. However, increases in cooperative taxable income resulting from growth produce higher tax rates due to the generally progressive corporate tax rate structure. Higher rates increase the cash drain on the cooperative, thereby decreasing equity retirement and patron cash flow. Cooperative size plays a part in that larger cooperatives generally will face higher tax rates sooner.

What type of cooperatives and patrons can benefit from using nonqualified notices? Basically, cooperatives with low tax rates and patrons

with high tax rates. If patron tax rates are high relative to the cooperative rate, nonqualified notices will provide patrons greater cash flows than qualified distributions. Patrons with high tax rates are those most affected by cash drains from income tax on qualified distributions. Therefore, they may prefer receiving nonqualified notices to receiving cash patronage refunds and paying income tax on qualified notices. Nonqualified notices also may provide these patrons with a means of deferring taxable income from patronage until after they have retired and face lower tax rates.

Because of the generally progressive corporate income tax rate structure, patrons of small cooperatives are more likely to benefit from the use of nonqualified notices. Large taxable incomes due to size and growth increase the marginal tax rate faced by the cooperative and reduce the cash flow to patrons from nonqualified notices. Large cooperatives probably cannot do much to reduce the corporate tax rates they face although those with high rates of return can reduce taxable income by accelerating equity retirement. Although new, lower corporate tax rates may have reduced the cash drain on many cooperatives from issuing nonqualified notices, others may be hurt by the elimination of investment tax credit. This credit was more valuable to patrons of cooperatives issuing nonqualified notices, especially those cooperatives facing high marginal tax rates.

Because of timing differences in the tax treatment of patronage refund distributions, nonqualified notices may provide higher present values of patron after-tax cash flow in many situations where qualified distributions result in higher nominal values. One reason cooperatives have used nonqualified notices so little may be that managers and boards of directors have not considered present values in making distribution decisions.

Whether an individual cooperative and its patrons can benefit from issuing nonqualified notices depends on specific circumstances. In general, current tax rates do not favor one allocation method over the other. Nevertheless, cooperatives may find they can use nonqualified notices effectively in responding to various income and tax situations, including extraordinary occurrences such as losses or changes in the tax law.

Cooperatives have flexibility in issuing and redeeming nonqualified notices. A cooperative can include authorization for issuing both qualified and nonqualified notices in its bylaws. Then it can make the choice whether or not to issue nonqualified notices on a yearly basis according to the situation it faces each year. If conditions are such that patrons have high tax rates relative to the cooperative, it may choose to issue nonqualified notices that year. A cooperative also can choose to issue both qualified and nonqualified notices in the same year.

A cooperative likewise may time the redemption of nonqualified notices according to income and tax considerations. The rules for computing the tax deduction for redemption of nonqualified notices can contribute to this flexibility.

Financial needs, the limited occurrence of specific tax situations, and the

requirements of a cooperative's equity capitalization and retirement program can restrict the tax management flexibility from issuing and redeeming nonqualified written notices of allocation. A cooperative policy designed to minimize income tax can disrupt the smooth operation of an equity program. Sudden changes made to meet special circumstances can create costs in terms of patron understanding and good will. However, if a cooperative is in a difficult financial situation, disruption of the existing financing system and implementation of a temporary system may be an acceptable means of obtaining tax benefits.

Cooperatives that issue nonqualified notices may face unique problems because of the notices' tax treatment. The income reporting and tax recapture characteristics of nonqualified notices necessitate unique accounting methods for both cooperatives issuing nonqualified notices and recipients.

A transfer of earnings through a federated system to producer patrons generally cannot be made as easily with nonqualified notices as with qualified notices. A cooperative that receives nonqualified written notices of allocation from another cooperative faces both theoretical and practical questions concerning how the notices should be reported and handled. The recipient cooperative must decide how and when to acknowledge the nonqualified notices as income and how to account for these notices in a manner that provides information understandable by its members and others. A cooperative receiving nonqualified notices also must decide how to transfer this income to its members in a manner that is acceptable to them and that satisfies its patronage agreements and Federal income tax rules.

Simple methods of transferring nonqualified patronage refund distributions between cooperative levels may be possible, but lack of experience in this area is an impediment. For cooperatives that transfer patronage refunds between cooperative levels and want secure procedures for preserving single-tax treatment, qualified written notices of allocation, and not nonqualified notices, appear to be the more conservative choice.

Maintaining equitable financing becomes more difficult as cooperatives adopt more complex financing plans and members become more diverse in character. This difficulty is compounded if a cooperative uses two methods for allocating and redeeming equity. Although either qualified or nonqualified notices can provide the basis for an equitable financing system, use of both allocation methods can introduce inequities if there are inconsistencies in how individual members or allocations are treated.

Two factors that limit the use of nonqualified notices are a general lack of experience with them and the delayed tax consequences of their redemption. Qualified notices have been used widely for more than 25 years. Prior to enactment of subchapter T of the Internal Revenue Code, cooperatives generally followed tax procedures similar to current procedures for qualified notices except for the cash distribution requirement. Since then, cooperatives and their patrons have incorporated the cash patronage refund

and patron income reporting requirements into their operating routines. In addition, cooperative literature and legal precedents have firmly established the procedures for issuing and redeeming qualified written notices of allocation and per-unit retain certificates.

Cooperatives also may be discouraged from issuing nonqualified notices because the final tax consequences to the cooperative and its patrons are not determined until the notices are redeemed in cash, perhaps many years after they are issued. Between the time when a nonqualified notice is issued and the time it is redeemed, the business environment of a cooperative or legislative changes can affect the benefits from redeeming nonqualified notices.

It may be prudent for a cooperative to include nonqualified notices in its financial planning to ensure it has the flexibility to meet future situations optimally. However, a cooperative should take several steps before issuing nonqualified written notices of allocation. It should review its bylaws and relevant State income tax laws to determine if the use of nonqualified notices is compatible with them and if any potential tax problems may arise. It should review its financing and equity retirement methods to ensure that the use of nonqualified notices will not cause unforeseen complications. It also should review the expectations and experience of members to determine what member relations and education steps need to be taken.

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I. INTRODUCTION

Farmer cooperatives are unique business enterprises organized to benefit their patrons by providing farm supplies and services and marketing farm products at cost. Most farmer cooperatives operate at cost by returning margins to patrons in proportion to each patron's volume of business. These cooperatives rely heavily on retained patronage refunds and per-unit capital retains to supply equity capital necessary for financing.

Retained patronage refunds are margins allocated to patrons but retained by a cooperative as equity capital. The cooperative uses these funds to provide working capital and finance capital assets. The cooperative returns these funds to patrons as they are replaced with other allocations through a revolving fund or other equity capitalization plan. Per-unit capital retains are equity investments in a cooperative made by patrons based on volume of products marketed through the cooperative and withheld from sales proceeds. These funds also are returned to patrons as they are replaced.

Federal tax treatment of farmer cooperatives generally provides for patronage refunds and per-unit capital retains to be taxed once, at either the cooperative or patron level. This treatment was detailed in 1962 with enactment of subchapter T of the Internal Revenue Code. Subchapter T defines the tax treatment of most cooperatives and the conditions under which a cooperative deducts certain patronage refund and per-unit capital retain distributions in determining its Federal taxable income. The patron to whom a distribution is made must agree to include both the cash and noncash portions in current ordinary income if it is to qualify for deduction from the cooperative's

income. Noncash allocations that meet the conditions for deduction are represented by qualified written notices of allocation or per-unit retain certificates. This is the method of allocating patron equity normally used by most cooperatives.

Subchapter T also specifies a second type of allocation represented by nonqualified written notices of allocation or per-unit retain certificates. Patrons do not agree to accept nonqualified written notices or retain certificates as current ordinary income. Therefore, they do not qualify for deduction from the cooperative's taxable income. However, a cooperative can deduct amounts it pays in redemption of nonqualified notices or retain certificates. A patron who receives cash in redemption of a nonqualified notice or retain certificate includes the amount in taxable income.

Nonqualified written notices of allocation and per-unit retain certificates offer farmer cooperatives alternative means for distributing cooperative earnings and allocating patron equity that may have advantages over qualified written notices and retain certificates in some situations. Because patrons do not recognize nonqualified notices until they are redeemed in cash, they can be used to prevent negative patron cash flows due to tax on qualified notices. Some patrons, especially those in high tax brackets, may wish to delay receiving income and therefore would prefer nonqualified notices. Nonqualified notices also offer cooperatives an additional tool for managing taxes and handling losses.

Shortly after enactment of subchapter T, accountants and others began writing about and planning for use of nonqualified written notices of allocation and per-unit retain certificates. Many cooperatives made changes in their bylaws necessary to permit nonqualified notices and

retain certificates without understanding their potential uses. ¹ After more than a quarter century, only a small proportion of farmer cooperatives in the United States have used nonqualified notices.

This report examines the use of nonqualified written notices of allocation and per-unit retain certificates, as defined in the Internal Revenue Code. In chapter 2, nonqualified written notices of allocation and per-unit retain certificates are described in detail and the use of nonqualified notices is illustrated. Then possible advantages to cooperatives and their patrons from using nonqualified notices are discussed and comments are made on the extent of their current use by U.S. farmer cooperatives.

In chapter 3, results of a computer cash flow analysis of qualified and nonqualified patronage refund distributions are reported. Through this discussion, characteristics of cooperatives and patrons that would benefit from using nonqualified notices are identified. In chapter 4, the tax factors that should be taken into account by cooperatives considering use of nonqualified notices are discussed more thoroughly. Some of the factors that may limit the use of nonqualified notices in managing taxes also are discussed.

Special problems associated with nonqualified notices are explored in chapter 5. These include accounting for nonqualified notices in financial statements, distributing income in a federated system using nonqualified notices, issues of equitable treatment of patrons that may arise among cooperatives using nonqualified notices, how the financial relationships between a cooperative and its patrons may be changed due to a switch to nonqualified notices, and some factors that may limit use of nonqualified notices. Finally, in chapter 6, the findings of this report are summarized briefly and steps cooperatives should take in initiating the use of nonqualified notices are outlined.

II. DEFINITION AND USE OF NONQUALIFIED WRITTEN NOTICES AND RETAIN CERTIFICATES

Taxation of Cooperative Earnings Distributions

Qualified and nonqualified written notices of allocation and per-unit retain certificates are defined in subchapter T of the Internal Revenue Code. Subchapter T, which consists of sections 1381-88 of the code, defines the tax treatment of most cooperatives. Specifically, it applies to "any corporation operating on a cooperative basis" except mutual savings banks, mutual insurance companies, and cooperatives engaged in furnishing electric energy or telephone service to rural areas.

Subchapter T defines the conditions under which a cooperative deducts certain patronage refund and per-unit capital retain allocations in determining its Federal taxable income. One condition for deduction is that the patron to whom an allocation is made must agree to include it in taxable income. Allocations patrons agree to include in taxable income according to the conditions specified in subchapter T "qualify" for deduction from the cooperative's taxable income and are represented by qualified written notices of allocation or per-unit retain certificates. Allocations patrons do not agree to include are represented by *nonqualified* written notices of allocation or per-unit retain certificates so long as they meet certain conditions.

Nonqualified written notices and retain certificates are not deducted from the cooperative's taxable income for the year they are made. When the cooperative redeems the allocations in cash, it deducts amounts paid in redemption from its taxable income. Patrons receiving amounts paid in redemption of nonqualified notices and retain certificates include the amounts in their taxable incomes.

Qualified and nonqualified written notices of allocation and per-unit retain certificates represent allocations of patronage refunds or per-unit capital retains. Both of these terms have specific meanings with respect to subchapter T. Some allocations commonly thought of as being

¹ John E. Thomas and Kenneth R. Nilsestuen, "Advance Planning for Redemption of Nonqualified Allocations and Retains," *Cooperative Accountant*, Spring 1980, p. 34.

patronage refunds do not meet the requirements of the code. As such, they are not represented by qualified or nonqualified written notices of allocation.

Patronage Refunds

A patronage *refund* is an amount paid a patron from the net margins of a cooperative on the basis of quantity or value of business done with or for patrons under a preexisting legal obligation. A patronage refund does not include amounts paid a patron based on earnings from business not done with or for patrons. It also does not include amounts paid a member based on earnings from business with nonmember patrons to whom smaller amounts are paid for substantially identical transactions. Although the Internal Revenue Code uses the term patronage dividends, patronage refunds is used in this report to avoid confusion with dividends paid on capital stock.

In determining taxable income, a cooperative may deduct from its income any patronage refunds paid in cash, qualified written notices of allocation, or other property with respect to patronage occurring during the tax year. The cooperative must pay a patronage refund during the payment period for the tax year to make it eligible for deduction. The payment period begins the 1st day of the tax year and ends on the 15th day of the 9th month after the close of the tax year. Allocations made to patrons after the 20 1/2-month payment period do not qualify as patronage refunds and must be included in the cooperative's taxable income. Distributions paid in cash to patrons after the payment period also must be included in the patrons' taxable incomes.

A written notice of allocation is any capital stock, revolving fund certificate, retain certificate, certificate of indebtedness, letter of advice, or other written notice that discloses to the recipient the amount allocated to the patron and the portion of the allocation that is a patronage

refund. A written notice of allocation that qualifies for deduction from a cooperative's taxable income is called a *qualified written notice* of allocation.

To qualify a written notice of allocation for deduction, a cooperative must pay at least 20 percent of the patronage refund in cash or by qualified check. In addition, the patron must either have the opportunity to obtain the total refund in cash within 90 days after the allocation is made or consent in one of three ways to have the noncash portion treated as if it had been received in cash and reinvested by the patron in the cooperative.

By consenting to have the retained portion of the refund treated as if it had been paid in cash, the patron agrees to include the stated dollar or face amount of the total refund as ordinary income earned during the year in which it was received. The patron may do this by: (1) agreeing in writing; (2) joining or continuing as a member of the cooperative (so long as the cooperative has a bylaw adopted after October 16, 1962, providing that membership constitutes such consent and members have received written notification and a copy of this bylaw); or (3) endorsing and cashing a qualified check.

A qualified check is a check or other instrument that is redeemable in cash and paid as part of a patronage refund. Imprinted on the instrument is a statement that endorsing and cashing it constitutes patron consent to include in taxable income, as provided in Federal income tax laws, the stated dollar amount of the written notice of allocation that also is part of the patronage refund.

A cooperative cannot deduct a patronage refund allocation from its taxable income unless all requirements for qualified status are met. If the cooperative does not receive patron consent or if it does not pay at least 20 percent of a patronage refund in cash, the allocation is not considered a qualified allocation. However, if the allocation is made before the end of the cooperative's payment period and otherwise meets the definition of a patronage refund, it is considered a *nonqualified written notice* of allocation. Nonqualified allocations are included

² For convenience, definitions of all tax terms are presented in a glossary at the end of this report.

in the cooperative's taxable income and are not taxable income for patrons when received.

There is no requirement that 20 percent of nonqualified patronage refund distributions be paid in cash. If a distribution includes both cash and a nonqualified allocation, the cash portion is included in the patron's taxable income and is deductible from the cooperative's income.

Although a cooperative cannot deduct nonqualified written notices of allocation from current income for the year the notices are issued, it can deduct redemptions of nonqualified notices. When nonqualified notices are redeemed in cash or other property, the cooperative deducts the payments to patrons from its income, and a patron who receives a redemption includes the amount of the payment received in taxable income.

The cooperative's tax in the year a notice is redeemed is the lesser of either: (1) the tax for the current year after deducting the redemption from current income or (2) the tax for the current year without the deduction less the reduction in tax that would have occurred in prior years if the allocation originally had been paid in cash or issued as a qualified written notice. If the reduction in prior years' tax is greater than the current year's tax without the deduction, the cooperative receives a refund. Determination of the reduction in prior years' tax can be complex, particularly if it involves losses or redemptions of notices issued in more than one year.

Other Distributions of Income

Patronage refunds do not include payments to patrons from nonpatronage income, which is incidental income that is not directly related to the marketing, purchasing, or service activities of a cooperative and merely enhances the cooperative's overall profitability. This income may include rents received, investment revenues, gains on the sale or exchange of depreciable property and capital assets, and amounts from business done with the Federal Government. Nonpatronage income also includes income from business done with or for nonmembers but not distributed to them.

Likewise, patronage refunds do not include distributions of patronage income that do not meet the definition of patronage refunds in subchapter T of the Internal Revenue Code. For example, payments made to patrons from patronage income by a cooperative without a preexisting legal obligation to make such distributions are not considered patronage refunds.

Neither distributions of nonpatronage income nor distributions of patronage income that do not meet the definition of a patronage refund are represented by qualified or nonqualified written notices of allocation. Distributions of nonpatronage income generally are not deducted from cooperative taxable income unless the cooperative holds section 521 tax status. Patrons receiving distributions of nonpatronage income must include the distributions in their taxable incomes. Distributions of patronage income that do not meet the definition of patronage refunds are included in both cooperative and patron taxable income.

Per-Unit Capital Retains

A per-unit capital *retain* is an investment in a cooperative made by a patron based on the dollar value or physical volume of products marketed through the cooperative. Cooperatives withhold per-unit capital retains according to a bylaw provision or membership agreement that authorizes the cooperative to make a specified deduction for capital purposes from proceeds due members or cash advances. These retains should be distinguished from deductions authorized to cover operating expenses. Per-unit capital retains do not depend on cooperative net margins.

Per-unit capital retains are allocated to patrons and taxed in a manner similar to patronage refund allocations. Cooperatives notify individual patrons of per-unit capital retain allocations by giving them per-unit retain certificates. A *per-unit retain certificate* is any written notice that discloses to the recipient the dollar amount of a per-unit retain allocation

made by the cooperative.

Recipients of per-unit retain certificates may consent to include the amount of the retains in their taxable incomes by agreeing in writing or by joining or retaining membership in a cooperative with a bylaw agreement. A cooperative must issue a certificate before 8 1/2 months after the close of the tax year to deduct the certificate from its taxable income.

If the recipient agrees to include a per-unit retain certificate in taxable income, the certificate is a *qualified per-unit retain certificate* and the cooperative deducts the amount of the certificate from its income in determining taxable income. The principal difference between tax treatment of qualified per-unit retain certificates and qualified written notices of allocation (patronage refunds) is that the Internal Revenue Code recognizes **per-unit** capital retains as fundamentally different in concept and therefore does not require that 20 percent be paid back to patrons in cash.

If the patron does not agree to take a perunit retain certificate into account but the certificate otherwise meets the requirements of the code, it is a nonqualified per-unit retain certificate. The cooperative cannot deduct the value of the certificate in determining taxable income. However, cooperatives redeeming nonqualified per-unit retain certificates can deduct the amount of the redemptions in a manner similar to the redemption of nonqualified written notices of allocation.

Numerical Comparison

The differences between qualified and nonqualified written notices of allocation are demonstrated in table 1. This table was constructed specifically to show potential benefits from using nonqualified notices, and its results depend on two important assumptions. First, there is a decrease in the marginal tax rate of patrons between the years the notices are issued and redeemed. This could occur if a substantial number of patrons retire before redemption or if there is a reduction in Federal income tax rates. Second, the cooperative has \$125,000 in other taxable income in the year of redemption. Equally valid comparisons under different

assumptions could yield much different results.

In this example, the cooperative earns \$100,000 in net margins the year the allocations are made. If the cooperative chooses to distribute its net margins in qualified form, it must pay at least 20 percent in cash. All net margins are deductible from Federal taxable income, and the cooperative pays no tax. If the cooperative pays 20 percent cash patronage refunds, its net cash flow is \$80,000.

On the other hand, patrons who receive qualified distributions include the entire amount in their taxable incomes. If they are in the 28-percent marginal tax bracket, they collectively pay \$28,000 in income tax on the distributions. This exceeds the \$20,000 they receive in cash patronage refunds. Thus, they incur a negative cash flow of \$8,000 due to the qualified written notices of allocation.

In the year the cooperative redeems the qualified written notices of allocation, it incurs a cash drain of \$80,000, and patrons receive an \$80,000 cash flow. There are no tax consequences to either the cooperative or patrons.

If the cooperative chooses to distribute its net income as nonqualified written notices of allocation, it does not pay cash patronage refunds. However, it includes the notices in its taxable income and pays \$22,250 in corporate income tax. The cooperative's cash drain is \$2,250 greater than it would have been if the cooperative had distributed its net income in qualified form and paid 20 percent in cash.

Patrons who receive the nonqualified written notices do not include the allocations in their taxable incomes. They pay *no* Federal income tax on the allocations and do not incur the negative cash flow that results from qualified distributions. Because patrons' marginal tax rates in this example are higher than the cooperative's, nonqualified written notices of allocation result in a lower total cash drain on the cooperative and its patrons than do qualified distributions.

When the cooperative redeems the nonqualified written notices of allocation, it earns an income tax deduction. The cooperative would save \$22,500 in tax by recomputing its tax for the year in which the allocations were made as if it

originally had distributed them in qualified form. The cooperative currently has \$125,000 in taxable income and ordinarily would pay \$30,750 in income tax. If it deducts the redemption of nonqualified written notices from its current taxable income, it would reduce its tax by \$27,000. This method results in the greatest tax

savings to the cooperative. Therefore, it is the method used, and cash drain from the redemption is \$73,000.

Patrons who receive the redemptions must include the amounts in their taxable incomes. Because patrons now are in the 15-percent tax bracket, their income tax on the redemptions is

ltem	Qualified written notices of allocation	Nonqualified writte notices of allocation
Year of allocation		
	Dol	lars
Cooperative:		
Net margins	100,000	100,000
Cash patronage refunds (20%)	(20,000)	0
Federal income tax (22.25%)	0	(22,250)
Cash flow	80,000	77,750
Patrons:		
Cash patronage refunds (20%)	20,000	0
Federal income tax (28%)	(28,000)	0
Cash flow	(8,000)	0
Year of redemption		
Cooperative:		
Equity redemption	(80,000)	(100,000)
Income tax refund (27%)	0	27,000
Cash flow	(80,000)	(73,000)
Patrons:		
Equity redemption	80,000	100,000
Federal income tax (15%)	0	(15,000)
Cash flow	80,000	85,000
Net cash flow - both years		
Cooperative:	0	4,750
Patrons:	72,000	85,000
Total	72,000	89,750

only about half what it would have been if they had been taxed in the year of allocation. Their net cash flow is \$85,000.

In this example, total cooperative and patron cash flow for the two years is greatest for nonqualified written notices of allocation. This results from the ability of patrons to defer tax on their allocations until they are in a lower tax bracket and to the cooperative's ability to reduce income that would have been taxed at a higher rate. Not all situations would produce this result.

Choosing Allocation Method

The effective tax rates of both cooperatives and patrons may vary from year to year, depending on business success and investment decisions, among other factors. To minimize taxes, both cooperatives and patrons should attempt to recognize income in years in which their effective tax rates are lowest. Patrons with low tax rates may prefer receiving qualified distributions because they are paid in part in cash.

Some patrons, particularly those with high tax rates, may wish to delay receiving income and therefore would prefer receiving nonqualified notices. Cooperatives also can use nonqualified allocations to avoid negative patron cash flows to these patrons due to tax on qualified distributions.

Cooperatives have some flexibility in using nonqualified notices to manage their taxes. Nonqualified notices are more attractive to cooperatives during years in which other taxable income is low. A decision to issue nonqualified notices when taxable income is great would result in a larger cash drain due to tax. Likewise, the amount of other taxable income can influence the decision on when to redeem nonqualified notices. The deduction for redeeming nonqualified notices is most useful in conserving cash flow during years when taxable income is high. Once a cooperative begins redeeming nonqualified notices issued earlier, this deduction can be used to reduce the cooperative's current tax liability based on the current year's allocations of nonqualified notices.

Extent of Use

Data on the 100 largest U.S. farmer cooperatives³ suggest that there has been an increase in the use of nonqualified notices in recent years although they still account for a small proportion of total patronage distributions. Figure 1 shows the proportion of patronage distributions the 100 largest cooperatives reported making in nonqualified form between 1976 and 1987. Figure 2 shows the number of the 100 largest cooperatives that reported making nonqualified distributions.

Examination of these cooperatives' annual reports indicates these figures overstate the importance of nonqualified written notices of allocation. The reports showed some large cooperatives distribute nonpatronage income to members on a patronage basis and consider these distributions to be "nonqualified" because they do not qualify for deduction from the cooperative's taxable income. Most of the distributions represented in figures 1 and 2 are nonqualified written notices of allocation although it is impossible to determine the precise amounts from the annual reports.

Figures 1 and 2 indicate there generally has been an increase in the use of nonqualified notices although there also has been considerable variation in the number and proportion from year to year.4 The increase can be attributed to a number of factors. Some cooperatives with large numbers of high-income patrons have changed to nonqualified notices to shift taxable income away from members. Other cooperatives have issued nonqualified notices only in certain years as a means of best managing the tax consequences of

³ Donald R. Davidson and Michael D. Kane, Top 100 *Cooperatives, 1986 Financial Profile* (Washington, D.C.: USDA ACS Res. Rep. 71, Apr. 1988), p. 20, and *Farmer Cooperatives*, selected monthly issues. The 100 largest cooperatives generally account for over 50 percent of total sales and assets.

⁴ The large decrease in the proportion of patronage distributions made in nonqualified form in 1987 is due in part to the fact that the three cooperatives that made the largest nonqualified distributions in 1986 made no nonqualified distributions in 1987.

Figure I-Proportion of Patronage Distributions Made in Nonqualified Form by 100 Largest U.S. Farmer Cooperatives, 1976-87

Percent

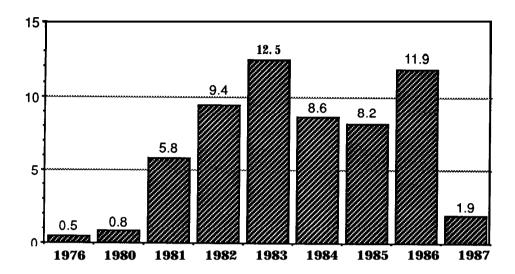
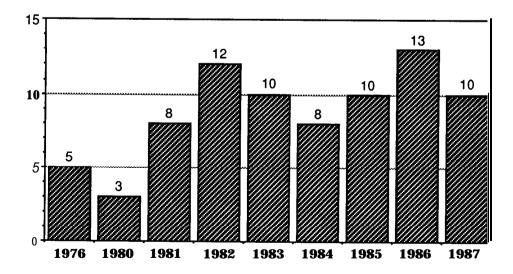


Figure 2-Number of Cooperatives Among 100 Largest U.S. Farmer Cooperatives Making Nonqualified Distributions, 1976-87

Number



unusual investment or income situations. These include cooperatives that made extraordinarily large capital investments in a particular year and used nonqualified notices to increase taxable income for absorbing investment tax credit. They also include cooperatives that have used strategies centered on nonqualified notices to conserve cash flow during loss years.

Large cooperatives probably have used nonqualified notices more than small cooperatives because they have had greater resources and better access to information about them. However, data comparisons are inconclusive. The most recent data on nonqualified notices to include small cooperatives came from the 1976 Agricultural Cooperative Service financial profile study.5 This study reported financial and operating data for 5,795 U.S. farmer marketing and supply cooperatives of all sizes.

It showed that 166, or 3 percent, of the 5,127 cooperatives reporting net margins in fiscal years ending in 1976 allocated patronage refunds in nonqualified form. Only 0.5 percent of net margins were distributed in nonqualified form. In contrast, 83 percent of net margins were distributed as cash or qualified notices. A total of 538 of 5,795 cooperatives had equity on their balance sheets from nonqualified allocations at the close of fiscal 1976.

A total of 115 of the 166 cooperatives issuing nonqualified notices held section 521 Federal income tax status. Ninety-four of these cooperatives reported substantial farm supply activities. These 94 cooperatives represented 57 percent of all cooperatives issuing nonqualified notices. Of the cooperatives with net margins, they represented only 3 percent of those with substantial farm supply activities and 4 percent with section 521 status.

These data suggest many nonqualified notices resulted from failure of section 521 farm supply cooperatives to acquire nonmember consent to include patronage refund allocations in

their taxable incomes. Cooperatives wishing to qualify for section 521 tax status must distribute patronage refunds to nonmember patrons in the same manner as members. To treat patronage refund distributions as qualified, they also must acquire consent of both members and nonmembers to include the allocations in their current ordinary gross incomes. A cooperative may acquire this consent from members by including in its bylaws a provision stating that membership constitutes such consent. The cooperative must rely on nonmembers to agree to this consent in writing or by endorsing and cashing a qualified check. If the cooperative does not receive such consent from a nonmember for an allocation that otherwise meets the conditions for a treatment as a qualified written notice of allocation, it is treated as a nonqualified written notice of allocation.

This situation is less common among cooperatives without section 521 tax status because many of them do not distribute patronage refunds to nonmembers. It also is less common among marketing cooperatives because marketing rights often are tied to membership.

Summary

Nonqualified written notices of allocation and per-unit retain certificates offer farmer cooperatives alternative means for distributing cooperative earnings and allocating patron equity that may have advantages over qualified written notices and retain certificates in some situations. Some patrons, particularly those with high tax rates, may wish to delay receiving income and therefore would prefer receiving nonqualified notices. Cooperatives can use nonqualified notices to avoid negative cash flows to patrons due to tax on qualified distributions. Nonqualified notices also offer cooperatives an additional tool for managing taxes and handling losses.

Although this tool has been available to cooperatives since enactment of subchapter T of the Internal Revenue Code in 1962, nonqualified notices account for a small proportion of total patronage distributions. Data on the 100 largest

⁵ Nelda Griffin et al., The Changing *Financial Structure of Farmer Cooperatives* (Washington, D.C.: USDA ESCS Farm. Coop. Res. Rep. 17, Mar. 1980).

U.S. farmer cooperatives suggest there has been an increase in the use of nonqualified notices in recent years. However, large cooperatives probably have used nonqualified notices more than small cooperatives because they have had better access to information about them.

In the following chapter, the results of a comparative analysis of patron cash flows from qualified and nonqualified distributions of patronage refunds are reported. Throughout this discussion, characteristics of cooperatives and patrons that would benefit from using nonqualified notices are identified. Among other results, it is concluded that the benefits from using nonqualified notices may be at least as great for small cooperatives as they are for large cooperatives.

III. CASH FLOW COMPARISONS OF QUALIFIED AND NONQUALIFIED PATRONAGE REFUND DISTRIBUTIONS

The principal objective of this chapter is to identify characteristics of cooperatives and patrons that affect the benefit received from using nonqualified written notices of allocation. This is accomplished by comparing patron cash flows from qualified and nonqualified patronage refund distributions for different size cooperatives and under different rates of return, growth, and taxes. These cash flows are generated by a computer simulation model built to represent the cash flow and tax relationships of a cooperative and its patrons.

First, results of a base simulation are used to demonstrate the differences between qualified and nonqualified notices and the cash flow relationships between the cooperative and its patrons. Second, information from this simulation is used to focus on the relationship between the cooperative and an individual patron. Third, cooperative size and the rates of return, growth, and taxes are changed one at a time to isolate the effects of each of these factors. Finally, the effects of the Tax Reform Act of 1986 on patron distribution choices are summarized.

Because cooperatives are financially diverse, no attempt was made in this analysis to choose values representative of a specific type of cooperative. Instead, reasonable values clearly demonstrating important concepts and relationships were chosen. This analysis is not intended to apply specifically to individual cooperatives. Results for an individual cooperative will depend on the variables for that firm. This chapter also does not analyze the differences between qualified and nonqualified per-unit retain certificates. However, an analysis of per-unit capital retains would be similar, and many of the conclusions derived here are applicable to them.

This chapter includes a detailed discussion of the cash flow and tax relationships of cooperatives and their patrons. Although readers interested in understanding these relationships will find this material useful, others may wish to move directly to the summary section of the chapter.

Method of Analysis

This analysis uses a computer simulation model that generates annual cash flow and tax data for a cooperative and its patrons, given preselected values of six important factors: (1) percentage qualified patronage refund distributions paid in cash, (2) average patron marginal personal income tax rate, (3) rate of return to cooperative equity, (4) rate of growth in cooperative equity, (5) average patron discount rate, and (6) cooperative's initial equity.

The model is based on a first-in/first-out revolving fund plan6 and focuses on the internal financing decisions of the cooperative. No attention is given to debt financing, and the cooperative is assumed to maintain a fixed debt/equity ratio and rate of return to equity. In the model, each year equity allocated during the year is added to the revolving fund to be redeemed in turn. Equity redeemed during the year is the residual of net margins less cash patronage refunds, income tax, and planned equity growth. Nonqualified notices redeemed are determined according to the corporate tax rate schedule and the tax deduction for redemptions.7

The model assumes the revolving fund is fully operational at the start of a simulation. The initial revolving period and prior years' retained patronage refund allocations are based on the values selected for the percentage cash patronage refunds, rate of return to equity, and rate of growth in equity. Once the simulation begins, subsequent operation of the revolving fund is determined according to the cooperative's ability to redeem equity given current net margins and cash flows.

The simulation model generates data for two practices: (1) distributing cooperative net margins to patrons in the form of cash and qualified written notices of allocation and (2) distributing cooperative net margins to patrons in the form of nonqualified written notices of allocation. In analyzing the nonqualified practice, it is assumed the cooperative previously has distributed patronage refunds in cash and qualified written notices and is switching to issuing nonqualified notices.

This is done for two reasons. First, this situation is the most relevant because most cooperatives currently distribute patronage refunds in cash and qualified notices. Use of nonqualified notices would require a switch from qualified notices. Second, this situation is useful in analyzing an important stage in implementing a practice of distributing nonqualified notices. That is the period during which the cooperative is issuing nonqualified notices while retiring previous allocations of qualified notices. This period could cause financial strain on a cooperative because the cooperative must pay tax on nonqualified notices it issues but does not yet receive tax benefits from redeeming nonqualified notices.

Impacts on Cooperative and Patrons

Table 2 presents results of the base simulation for a 50-year period in both nominal and present values. These values were used in generating the simulation: (1) percentage qualified patronage refund distributions paid in cash, 20 percent; (2) average patron marginal tax rate, 28 percent; (3) rate of return to cooperative equity, 15 percent; (4) rate of growth in cooperative equity, 7.5 percent; (5) average patron discount rate, 10 percent; and (6) initial cooperative equity capital, \$100,000. Corporate tax rates are those currently effective since the

⁶ According to Phillip F. Brown and David Volkin, *Equity Redemption Practices of Agricultural Cooperatives* (Washington, D.C.: USDA FCS Res. Rep. 41, Apr. 1977), p. 8, 90 percent of all cooperatives with systematic plans for redeeming equity used the revolving fund plan.

⁷ Because net margins are strictly increasing in this model, deducting the redemption of nonqualified notices from current taxable income always results in the greatest tax savings and therefore is the method used. Existence of two methods of calculating tax savings implies flexibility in tax management that is not explored here but discussed in the next chapter.

Tax Reform Act of 1986.8

The cooperative earned a total of \$7.2 million in net margins during the simulation period under both plans. Twenty percent of net margins in the qualified plan were distributed to patrons as cash patronage refunds. Remaining net margins were allocated as qualified written notices and placed into the revolving fund. In the nonqualified plan, all net margins were allocated as nonqualified written notices.

One-half of net margins went into equity growth in both plans. Net margins remaining after paying income tax and cash patronage refunds were used to retire patron equity. The cooperative retired approximately \$2.2 million of patron equity in both plans. The cooperative with the nonqualified plan redeemed \$100,000 of qualified notices (its initial equity) issued prior to the switch to nonqualified notices.

The cooperative with the nonqualified plan generated a tax liability of \$1.4 million because it issued nonqualified notices for which there is no tax deduction until redemption. Tax paid by the cooperative was about the same as the cash drain that resulted from cash patronage refunds in the qualified plan.

Patron tax liability was greatest in the qualified plan. Patrons received \$7.2 million in taxable income, \$5.1 million more than in the nonqualified plan. The difference in tax liability is a result of the timing difference in tax treatment. Because cash and qualified **noncash** patronage refunds are taxed at the patron level

Table P-Comparison of qualified and nonqualified plans, IO-year simulations^a

	Nomina	Present values		
tem	Qualified plan	Nonqualified plan	Qualified plan	Nonqualified plan
		Doli	lars	
Cooperative:				
Cash patronage refunds	1,447,589.86	0	81,983.63	0
Patronage refund allocations	5,790,359.41	7,237,949.27	327,934.52	409,918.15
Net margins	7,237,949.27	7,237,949.27	409,918.15	409,918.15
Equity growth	3,618,974.70	3,618,974.70	204,959.08	204,959.08
Patron equity retired:				
Qualified notices	2,171,384.71	100,000.00	122,975.45	51,578.01
Nonqualified notices	0	2,092,430.13	0	95,221.03
Total	2,171,384.71	2,192,430.13	122,975.45	146,799.04
Taxable income	0	5,145,519.14	0	314,697.12
Tax paid	0	1,426,544.51	0	58,160.04
Patrons:				
Taxable income	7,237,949.27	2,092,430.13	409,918.15	95,221.03
Tax paid	2,026,625.80	585,880.44	104,342.80	24,238.08
After-tax cash flow	1,592,348.77	1,606,549.69	100,616.28	122,560.96

^aPercentage cash patronage refunds in qualified plan = .20; patron marginal tax rate = .28; rate of return = .15; rate of growth = ,075; discount rate = .10; initial equity = \$100,000.

⁸ For the current Federal corporate tax rates, as well as those before July 1, 1987, see table 8 in the following chapter. State tax is ignored in this analysis.

when issued, patron tax liability for the qualified plan in table 2 reflects all allocations made during the simulation. Nonqualified notices are not taxed at the patron level until redeemed. Thus, a substantial portion of the distributions made in the nonqualified plan was not recognized as taxable income during the simulation. This effect was increased by the growth in cooperative equity.

The \$1.6 million patron after-tax cash flow in the qualified plan (cash patronage refunds and patron equity retired less patron income tax paid) was \$14,201 less than in the nonqualified plan. This was due primarily to the difference in tax liability. Although under the qualified plan patrons received \$1.4 million in cash patronage refunds, they paid personal income tax on the entire distributions, including noncash patronage refund allocations. Patrons in the nonqualified plan paid tax only on equity retired by the cooperative.

Present-Value Analysis

Nominal analysis of cash flow is limited because it does not take into account timing differences. Cash received during early years of the simulation would have been more valuable to patrons than cash received later. This is because patrons could have reinvested the cash and earned a return on it while waiting for later cash receipts. Present-value analysis properly takes into account timing differences and converts nominal cash flows occurring during different years into equivalent amounts called present values. This is done by discounting future cash flows over the period patrons must wait for the cash using a rate that reflects the return they could have earned if they had received the cash during the first year of the simulation and reinvested it.

When the nominal values in this example are converted to present values, nonqualified notices compare even more favorably under the simulation conditions. Figure 3 shows the annual cash flows to patrons in the two plans. Cash flows in the nonqualified plan exceed those in the qualified plan until year 39. Because the cash flows in the nonqualified plan are greatest during

the first 38 years of the simulation, they weigh more heavily in the present-value calculations. As a result, the present value of total patron after-tax cash flow is \$21,945 more in the nonqualified plan. This amounts to a 22-percent difference, compared with a 0.9-percent difference in nominal values.

The greater cash flow in the nonqualified plan during the early years of the simulation is due primarily to timing differences in equity retirement, as shown in figure 4. Total equity retired in the nonqualified plan (both qualified and/or nonqualified notices) exceeds that in the qualified plan through year 38. After that, equity retired is greatest in the qualified plan, primarily because of a slowdown in equity retirement in the nonqualified plan due to increases in the cooperative's tax rate. (This effect is explored in more detail in the next section.) Because the cooperative with the nonqualified plan redeems more equity early in the simulation, the present value of equity retired is greater than in the qualified plan.

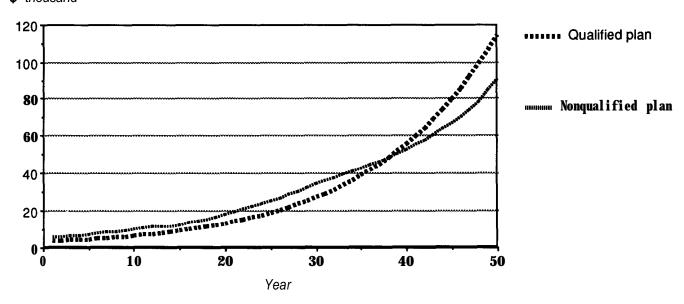
Although both the nominal and present values of patron after-tax cash flow are greatest for the nonqualified plan in this example, neither method of distributing patronage refunds is clearly superior to the other. Patron cash flows are sensitive to changes in several variables, including patron and cooperative income tax rates and the cooperative's rate of return, rate of growth, and size. Analysis reported later in this chapter measures the sensitivity of patron after-tax cash flow to changes in these parameters for both the qualified and nonqualified plans. The method of distributing patronage refunds that yields the highest cash flows depends on the levels of all parameters.

Cooperative Income Tax and Equity Retirement

An important factor in determining patron cash flow in the nonqualified plan is the cooperative marginal income tax rate. As cooperative taxable income grows, the marginal tax rate facing the cooperative usually increases according to the generally progressive corporate tax rate structure. This increases the cash drain on the cooperative and reduces funds available

Figure 3-Patron After-Tax Cash Flows

\$ thousand



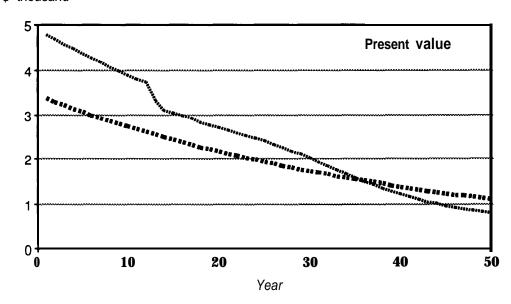
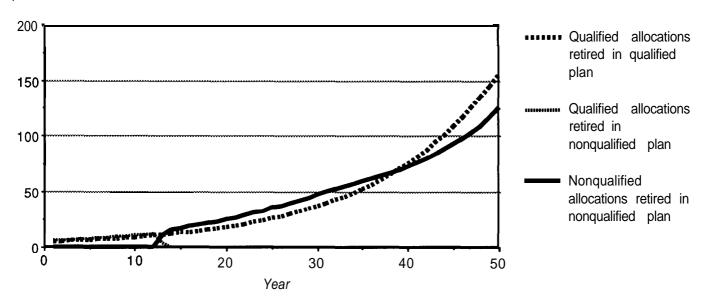
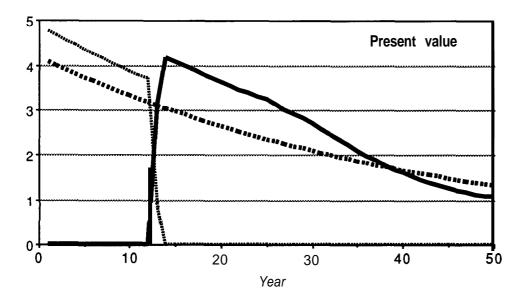


Figure 4—Equity Retirement

\$ thousand





for retiring patron equity.

Two factors directly affect cooperative taxable income in this model: cooperative net margins and nonqualified notices retired. There are several determinants of cooperative net margins, but assuming a constant rate of return, net margins increase as cooperative size increases due to growth. Thus, cooperative taxable income generally would increase as net margins grow, but this effect is mitigated by redemption of nonqualified notices deductible from taxable income.

Both factors, net margins and nonqualified notices retired, are represented in figure 5. Net margins grow at the rate of 7.5 percent per annum, the same rate as equity, given a constant 15-percent rate of return. At first, the cooperative redeems only qualified notices issued prior to year 1 (figure 4). In year 13, the cooperative begins to redeem nonqualified notices and taxable income is reduced. Both net margins and nonqualified notices retired increase through the rest of the simulation, but it is not until year 20 that taxable income exceeds its level in year 12.

Figure 6 shows the cooperative's average tax rate, which is 15 percent for the first 25 years. During this period, the cooperative faces the minimum marginal tax rate because its taxable income is less than \$50,000. The cooperative's net margins increase during the simulation, but redemption of nonqualified notices, beginning in year 13, reduces taxable income to less than \$50,000 until year 26. At that point, the cooperative faces the 25-percent marginal tax rate, and the average tax rate begins to climb. It continues climbing until year 48, when the cooperative faces a flat tax rate of 34 percent. From year 32 onward, income tax paid by the cooperative with the nonqualified plan exceeds the cash drain from cash patronage refunds in the qualified plan. Thus, the cooperative with the nonqualified plan is relatively less able to retire equity.

The ability of the cooperative to redeem equity is manifested by the length of the revolving period. The revolving period in the qualified plan is 14 years throughout the simulation. Initially, the revolving period in the nonqualified plan, shown in figure 7, also is 14

Figure 5—Cooperative Taxable Income, Nonqualified Plan

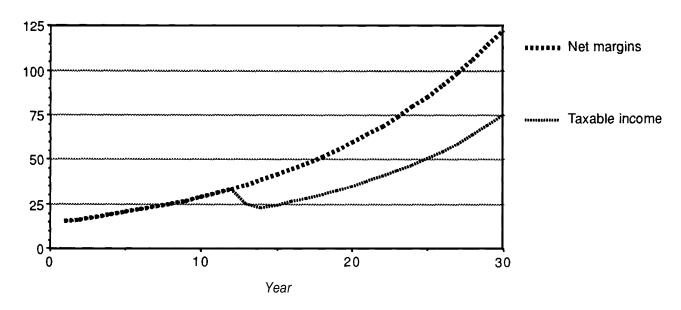


Figure 6-Cooperative Average Tax Rate, Nonqualified Plan

Percent

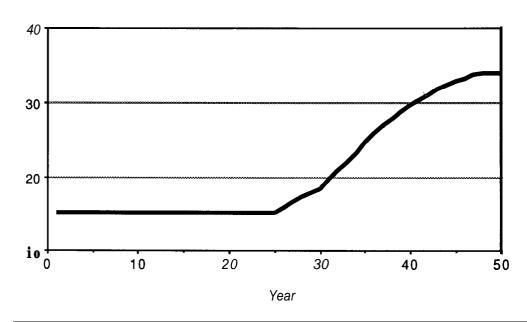
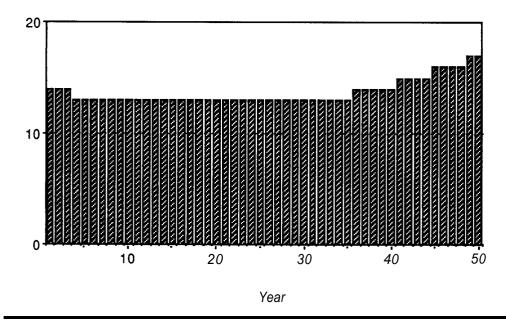


Figure 7--Revolving Period, Nonqualified Plan

Number of years



years. However, when the cooperative switches to issuing nonqualified notices, the cash drain from income tax is at first less than the drain from paying 20-percent cash patronage refunds. This allows the cooperative to accelerate equity retirement. By year 4, the revolving period falls to 13 years. It remains 13 years until year 36, when the increased cash drain due to higher average tax rates results in longer revolving periods. By year 50, the revolving period increases to 17 years.

Because of the relatively small size of the cooperative in this example, the cooperative faces a low average tax rate when it begins issuing nonqualified notices. Although the cooperative at first does not receive a deduction from redeeming nonqualified notices issued in prior years, the cash drain from taxes still is lower than from paying 20-percent cash patronage refunds, as evidenced by the decrease in the revolving period. Larger cooperatives facing higher marginal tax rates will suffer larger cash drains, as will be shown in the section of this chapter on cooperative size.

Impact on Individual Patrons

The effect of the cooperative's choice of allocation method on an individual patron's cash flow is represented by table 3. It is assumed the

patron farms for 35 years and is responsible for 1 percent of the cooperative's total patronage while farming. Although these values are somewhat arbitrary, the analysis based on them demonstrates clearly the cash flow relationships between a cooperative and a patron, and the principles demonstrated by the analysis are largely independent of the values used.

The relationship between the cooperative and patron is separated into three periods in table 3: (1) the investment period, (2) the growth period, and (3) the disinvestment period. The *investment period* starts when the patron begins doing business with the cooperative and ends when the cooperative begins redeeming the patron's equity. During this period, the patron invests equity in the cooperative but does not receive cash from the cooperative (in the nonqualified case) or may be subject to a cash drain from income tax (in the qualified case). Thus, the investment period may be a period of low or negative cash flows.

The growth *period* starts when the cooperative begins redeeming the patron's equity and ends when the patron quits doing business with the cooperative. During this period, the patron continues to invest equity in the cooperative. This investment generally increases as the patron's business with the cooperative grows. This period usually results in higher cash

Table 3-Comparison of	aualified and	haifileunnan h	nlane from	individual	natron noreno	ctiva
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Plan and period	Length of period	Cash patronage refunds	Patronage refund allocations	Patron equity retired	Patron taxable income	Patron after-tax cash flow	Present value of after-tax cash flow	Average revolving period
	Years			· · · · · · · · · · · · · · · · · · ·	ollars			Years
Qualified plan:								
Investment period	14	700.98	2,803.91	0	3,504.89	(280.39)	(90.06)	14.0
Growth period	21	3,926.57	15706.28	5,889.85	19,632.85	4,319.22	408.75	14.0
Disinvestment period	14	0	0	12,620.34	0	12,620.34	215.97	14.0
Total	49	4,627.55	18,510.19	18,510.19	23,137.74	16,659.17	534.66	14.0
Nonqualified plan:								
Investment period	13	0	3,120.83	0	0	0	0	13.2
Growth period	22	0	20,016.91	7,740.16	7,740.16	5,572.91	525.26	13.0
Disinvestment period	17	0	0	15,397.58	15,397.58	11,086.26	174.02	15.4
Total	52	0	239137.74	23,137.74	23,137.74	16,659.17	699.28	13.8

flows because equity retirement offsets the negative tax impacts.

The disinvestment period begins when the patron quits doing business with the cooperative and ends when the cooperative retires the last of the patron's equity. This period results in positive cash flows from the cooperative because tax liabilities on the redemption of qualified notices have been met previously and tax liabilities on the redemption of nonqualified notices are less than the amounts redeemed.

Figure 8 illustrates individual patron cash flows in the qualified and nonqualified plans. In the qualified plan, the patron investment period is equal to the 14-year revolving cycle. During the investment period, the patron incurs a negative cash flow from investing equity in the cooperative. Cash patronage refunds do not offset the cash drain due to patron income tax on the cash and noncash patronage refunds. This negative cash flow grows throughout the period as patronage refunds increase. Total cash drain during the investment period is \$280.

In year 15, the cooperative redeems patronage refund allocations issued to the patron in year 1, marking the start of the growth period. Redemption of prior years' equities offsets the negative cash flow from income tax on current years' allocations. Thus, cash flow is positive during the growth period.

The disinvestment period begins in year 36, after the patron quits doing business with the cooperative. During this period, redemption of the patron's equity continues, but there are no current allocations on which the patron must pay tax. Also, there are no tax consequences to the cash redemptions of equity. The disinvestment period extends for one revolving period. In year 49, the cooperative revolves the last of the patron's equity.

The patron investment period is 13 years in the nonqualified plan, during which the patron's cash flow is zero. The patron receives no cash patronage refunds or equity redemption, but neither does the patron incur a tax liability. Thus, although the patron receives no cash benefits from the cooperative, the negative cash flow arising in the qualified plan is avoided.

The growth period extends from year 14 through year 35. During this period, the patron continues to receive **noncash** patronage refund allocations as well as redemption of previous years' allocations. Although the patron must pay income tax on nonqualified notices redeemed, the cash redemptions ensure a positive cash flow.

In fact, cash flow during the growth period generally is greater than in the qualified plan due to a shorter revolving period. The average revolving cycle during the growth period is 13 years in the nonqualified plan and 14 years in the qualified plan. Total equity retirement during the patron's active farming career is \$7,740 in the nonqualified plan and \$5,890 in the qualified plan.

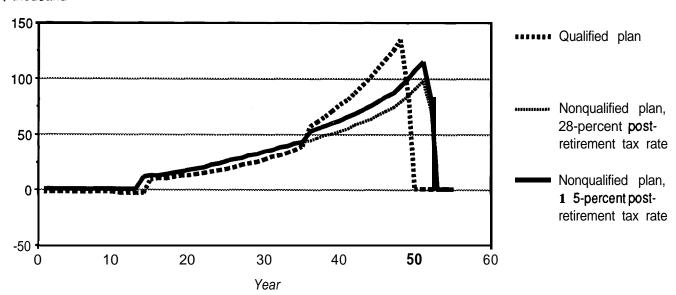
The disinvestment period in the nonqualified plan begins in year 36 and lasts for 17 years, 3 years longer than in the qualified plan. This is because of the longer revolving period in the nonqualified plan due to the high marginal tax rates faced by the cooperative. The cooperative retires \$15,398 patron equity during this period, \$2,777 more than in the qualified plan. However, average annual patron cash flow is less than in the qualified plan due to the longer revolving period and the patron tax liability on the retirement of nonqualified notices.

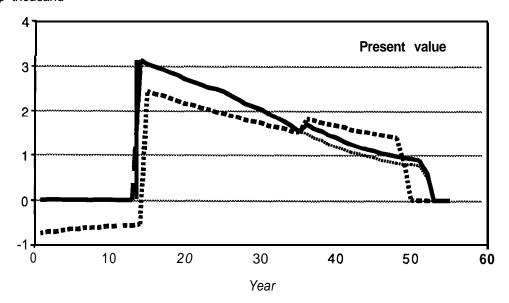
Overall patron cash flow is the same for both plans. The nonqualified plan yields the highest cash flow during the patron's active farming career, both during the investment and growth periods, but the qualified plan provides the greatest cash flow during the disinvestment period.

Results of the nonqualified plan are superior from a present-value perspective. Present value of total patron cash flow is \$699, about 31 percent greater than in the qualified plan. This is because the nonqualified plan yields higher present values early in the patron's career, during the investment period, when the qualified plan yields negative cash flows, and during the growth period. Thus, in this case, the nonqualified plan is superior from the individual patron perspective. It avoids negative cash flows during the investment period and yields a higher overall present value of after-tax cash flow.

Figure 8—Individual Patron After-Tax Cash Flows

\$ thousand





The nonqualified plan performs even better if an adjustment is made to the postretirement patron tax rate to reflect lower taxable income common to many retirees. If the 28-percent patron marginal tax rate is replaced by a 15-percent rate during the disinvestment period, the after-tax cash flow for the period increases \$2,002 to \$13,088. Total patron cash flow increases 12 percent to \$18,661. The present value of total patron cash flow increases to \$727, about 36 percent greater than in the qualified plan.

Effect of Parameter Changes

Effects of parameter changes on patron aftertax cash flow are summarized in table 4 for selected values of several important parameters. Unless otherwise indicated, the following discussion is written exclusively in terms of present-value analysis although table 4 also presents nominal results.

Patron Marginal Tax Rate

The effect of changes in the average patron marginal tax rate is shown in figure 9. At low patron tax rates, qualified distributions provide patrons higher present values of after-tax cash flow than nonqualified notices. Nonqualified notices provide the highest present values at high patron rates. Increases in the patron marginal income tax rate reduce the present value of patron after-tax cash flows in both the qualified and nonqualified plans but generally affect the qualified plan more. Because qualified patronage refund distributions are taxed at the patron level when allocated, the cash drain occurs early and weighs heavily in present-value computations. Because nonqualified notices are taxed when redeemed, the tax consequences occur later and weigh less in present values.

Discount Rate

Increasing the patron discount rate decreases the present value of patron after-tax cash flows in both the qualified and nonqualified plans, as shown in figure 10. At first, increases in the discount rate improve the relative attractiveness of nonqualified notices. The nominal value of patron after-tax cash flow (equivalent to present value at a zero discount rate) in the nonqualified plan is 0.9 percent greater than in the qualified plan. When the discount rate is 10 percent, the present value of patron after-tax cash flow in the nonqualified plan is 22 percent greater than in the qualified plan.

This effect is due to the timing of cash flows. The nonqualified plan provides patrons greater nominal cash flows in early years of the simulation (years 1 through 38) due to earlier equity retirement and avoidance of negative cash flows from patron income tax on qualified distributions. The qualified plan results in greater cash flows in later years (year 39 onward) because of a slowdown in equity retirement in the nonqualified plan due to the increased cash drain from higher cooperative tax rates. As the discount rate is increased, later cash flows weigh increasingly less in the present-value calculation.

As discount rates are increased beyond 20 percent in this example, the relative attractiveness of nonqualified notices diminishes somewhat. However, only at extremely high discount rates do qualified distributions provide the greatest present value of patron after-tax cash flow.9

Because of the timing of cash flows, the present value of patron after-tax cash flow in the nonqualified plan is comparatively greater than the nominal value. Generally, whichever allocation method provides patrons the earliest cash flows will result in the greatest present value. In some cases, qualified distributions may provide patrons greater cash flows during early years. This may be due to high cooperative marginal tax rates, a situation that will be discussed in later sections of this chapter.

⁹ This is because the patron tax liability due to receipt of a qualified patronage refund distribution is met within the following year and thus is discounted over one year more than the cash portion of the patronage refund. At very high discount rates (above 86 percent), only the first several years weigh significantly in the present-value calculation and the positive cash flow from cash patronage refunds outweighs the tax liability.

Table 4-Effects of parameter changes on patron after-tax cash flows, 50-year simulations

	Noni na l	l values	Present values		
Item	Qual i fi ed pl an	Nonqual i fi ed pl an	Qualified plan	Nonqual i fi ed plan	
		1,000 c	lollars		
Base simulation ^a	1592. 35	1,606.55	100. 62	122. 56	
Patron marginal tax rate:					
0	3,618.97	2,192.43	204. 96	146. 80	
.15	2,533.28	1,878.57	149. 06	133. 81	
.28	1592. 35	1,606.55	100. 62	122. 56	
.33	1,230.45	1,501.93	81. 98	118. 23	
.50	0	1,146.22	18. 63	103. 52	
Discount rate:					
.05	1,592.35	1,606.55	314. 03	348. 71	
.10	1,592.35	1,606.55	100. 62	122. 56	
.15	1,592.35	1,606.55	49. 54	62. 89	
.20	1,592.35	1,606.55	31. 87	40. 47	
.25	1,592.35	1,606.55	23. 64	29. 51	
Cooperative Size:b					
. 5x	796. 17	950.60	50. 31	64. 41	
lx	1,592.35	1,606.55	100. 62	122. 56	
1. 5x	2,388.52	2,233.58	150. 92	176. 90	
2x	3,184.70	2,856.97	201. 23	227. 17	
4x	6,369.40	5,286.06	402. 47	380. 40	
6x	9,554.09	7,696.38	603. 70	499. 15	
8x	12,738.79	10,137.22	804. 93	615. 90	
10x	15,923.49	12. 611. 13	1,006.16	738. 77	
late of return:					
.10	c	С	С	С	
.15	1592. 35	1,606.55	100. 62	122. 56	
.20	3,329.45	3,343.66	202. 47	225. 97	
.25	5,066.56	5,080.77	304. 33	328.68	
.30	6,803.67	6,817.87	406. 19	431. 06	
.35	8,540.78	8,554.98	508. 05	533. 30	
.40	10,277.89	10,292.09	609. 91	635. 41	
ate of growth:					
0	540. 00	632. 35	110. 87	119. 12	
.01	631. 74	656. 89	111. 54	120. 98	
.02	744. 30	785. 46	112. 14	123. 04	
.03	879. 82	946. 86	112. 52	125. 30	
.04	1,038.14	1,146.83	112. 45	127. 61	
.05	1,214.22	1,385.53	111. 56	129. 82	
.06	1,393.61	1,592.80	109. 22	130. 60	
.07	17544. 81	1,652.07	104. 42	127. 00	
.08	1,606.56	1,511.09	95. 53	115. 91	
.09	1,467.15	1,086.81	79. 98	93. 90	
.10	c	c	c	c	

^aParameter values presented in table 2.

^bExpressed **as proportion of** initial equity in **base** simulation.

 $^{^{\}circ}$ Comparisons are not presented because nonqualified method is Infeasible at this level given other parameter values.

Figure 9-Comparison of Patron After-Tax Cash Flows for Selected Patron Marginal Tax Rates

Present value (\$ thousand)

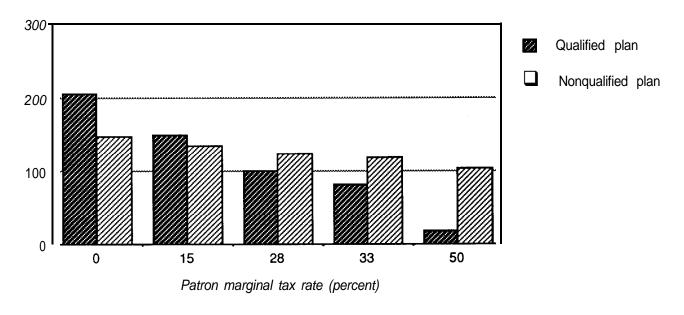
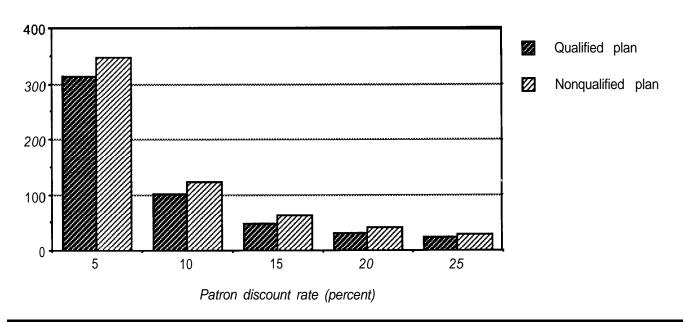


Figure 1 O-Comparison of Patron After-Tax Cash Flows for Selected Patron Discount Rates

Present value (\$ thousand)



Percentage Cash Patronage Refunds

The percentage patronage refunds paid in cash affects the length of the revolving period in the qualified plan, as shown in figure 11. However, it does not affect the present value of total patron after-tax cash flow. Thus, it does not affect the relative attractiveness of the qualified and nonqualified methods to patrons as a group. This is because increasing cash patronage refunds decreases funds available for equity retirement by the same amount. Neither affects the cash drain due to patron income tax.

This is illustrated in table 5. Cash patronage refunds and patron equity retired sum to \$3,619 regardless of the percentage patronage refunds paid in cash. Patron tax paid also is constant. Thus, both the nominal and present values of total after-tax cash flow are the same across all levels.

This does not imply that individual patrons will not have preferences with regard to patronage refund distributions. Furthermore, an individual patron's preferences may change over time. For example, young patrons in the investment stage of their careers may prefer to receive high cash patronage refunds at the

expense of a long revolving cycle. This preference may be supportable from both a cash flow and present-value point of view. However, once these patrons retire from farming and enter the disinvestment period, they may prefer rapid revolvement of equity. It may be difficult for a cooperative to define the best policy for dealing with two groups with such opposing interests. Nonetheless, both the nominal and present values of total cash flow to patrons will be the same regardless of the level of cash patronage refunds the cooperative chooses.

Cooperative Size

In this analysis, cooperative size, as measured by initial equity, has a significant effect on whether qualified or nonqualified distributions provide patrons with the largest present value. As shown in figure 12, nonqualified notices provide the greatest patron after-tax present value for small cooperatives. At greater amounts of initial equity, qualified distributions provide the largest present values. The improved relative performance of qualified distributions as size increases is due to the higher marginal tax rates faced by the cooperative with

Table 5—Cash flows corresponding to selected levels of cash patronage refunds, qualified plan, 50-year simulations

Percentage cash patronage refunds	Cash patronage refunds	Patron equity retired	Patron tax paid	Patron after-tax cash flow
		Nominal values	s (1,000 dollars)	
2 0	1,447.59	2,171.39	2,026.63	1,592.35
2 5	1,809.49	1,809.49	2,026.63	1,592.35
3 0	2,171.39	1,447.59	2,026.63	1592.35
3 5	2,533.29	1,085.69	2,026.63	1,592.35
4 0	2,895.19	723.79	2,026.63	1,592.35
4 5	3,257.08	361.90	2,026.63	1592.35
		Present <i>value</i> .	s (1,000 dollars)	
2 0	81.98	122.98	104.34	100.62
2 5	102.48	102.48	104.34	100.62
3 0	122.98	81.98	104.34	100.62
3 5	143.47	61.49	104.34	100.62
4 0	163.97	40.99	104.34	100.62
4 5	184.46	20.50	104.34	100.62

Figure II--Revolving Period for Selected Levels of Cash Patronage Refunds

Number of years

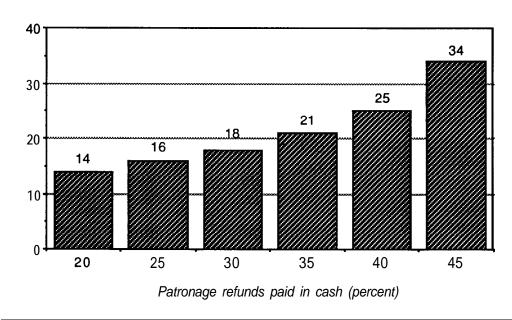
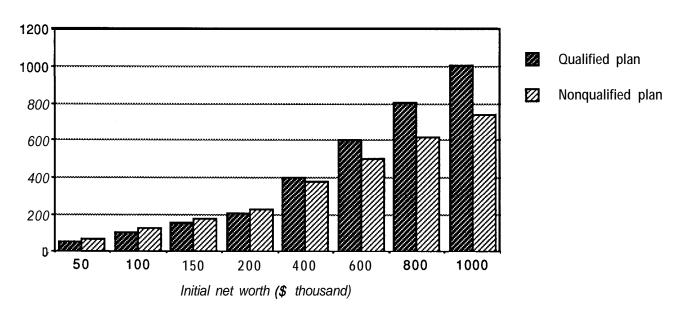


Figure 1 P-Comparison of Patron After-Tax Cash Flows for Selected Cooperative Sizes

Present value (\$ thousand)



the nonqualified plan. By assuming a constant rate of return to equity, taxable income and the marginal tax rate increase as size is increased. As the marginal tax rate increases, revolvement of equity is retarded and cash flow to patrons decreases.

A comparison of the average tax rates of two cooperatives distributing patronage refunds in nonqualified form is shown in figure 13. The smaller cooperative, which has \$100,000 initial equity, is able to keep its average tax rate at 15 percent during the first 25 years of the simulation. Then growth in taxable income gradually increases the average tax rate until it reaches 34 percent in year 48. The larger cooperative, which has \$1 million initial equity, is unable to take advantage of low tax rates because of its larger taxable income. Its average tax rate begins at 27.8 percent and climbs to 34 percent by year 12. As a result, the average length of its revolving period is 18.8 years, compared with 13.7 years for the smaller cooperative.

Cooperative Marginal Tax Rate

Analysis of cooperative size yields interesting results regarding the cooperative tax rate. However, that analysis does not look specifically at the impact of the cooperative tax rate. The effects of the cooperative tax rate are obscured by the fact that the simulations may involve several marginal tax rates as the cooperative's taxable income progresses up the corporate tax rate structure.

Table 6 presents results of an analysis of the effect of the cooperative's marginal tax rate. This analysis was conducted by assuming that for each simulation there was only one marginal tax rate and bracket. Thus, the analysis is a simplification of the tax situation facing a cooperative because it ignores the progressivity of the corporate tax rate structure and does not distinguish between marginal and average tax rates. Nevertheless, it provides useful information on the relationship between the cooperative tax rate and patron aftertax cash flows.

Figure 13—Comparison of Average Tax Rates for Small and Large Cooperatives

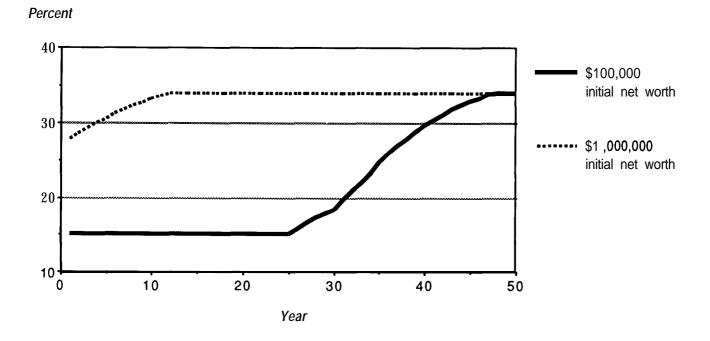


Table 6 shows the nominal and present values of patron after-tax cash flows for both qualified and nonqualified plans under five patron and four cooperative tax rates. Because the cooperative with the qualified plan does not pay corporate income tax, performance of that plan is independent of the cooperative tax rate.

When the cooperative and patron tax rates are the same, the cash drains on the cooperative system are equal and patrons receive the same annual cash flow from both plans. The nonqualified plan yields a smaller nominal patron after-tax cash flow than the qualified plan whenever the marginal tax rate of the cooperative exceeds the patron rate and provides a higher nominal value whenever the cooperative tax rate is less than the patron rate. Thus, in nominal terms, qualified distributions provide patrons with the highest after-tax cash flows when the cooperative tax rate is high and the patron tax rate is low. Nonqualified notices provide patrons with the highest nominal cash flows when the cooperative tax rate is low and the patron rate is high. The same result holds for present values although present values for the nonqualified plan are comparatively lower than nominal values.10

Figure 14 shows the present value of patron after-tax cash flows for both the qualified and nonqualified plans for four cooperative tax rates, assuming a patron tax rate of 28 percent. The present value of cash flow in the qualified plan is independent of the cooperative tax rate. At 0-and 15-percent cooperative tax rates, the present value of cash flow in the nonqualified plan is higher. At 34- and 39-percent cooperative tax rates, it is lower.

Rate of Return

Increasing the cooperative's rate of return to equity appears to be relatively neutral in its effect on the present values from qualified and nonqualified distributions, as shown in figure 15.

10 The present values of cash flows from qualified distributions are greater than those from nonqualified distributions because the patron tax liability from receipt of a qualified patronage refund distribution is met within the following year and is discounted over one year more than the cooperative tax liability due to allocation of nonqualified notices.

Table 6-Effects of patron and cooperative tax rates on patron after-tax cash flows, SO-year simulations

Patron		Nonqualified plan			
tax rate	Qualified	Cooperative tax rate (percent)			
(percent)	plan	0	15	34	39
			1,000 dollars		
0					
Nominal value	3,618.97	3,618.97	2,962.69	1,703.14	1,241.27
Present value	204.96	204.96	159.69	81.45	56.21
15					
Nominal value	2,533.28	3,091.13	2,533.28	1,462.67	1,070.08
Present value	149.06	185.09	144.95	75.09	52.32
28					
Nominal value	1,592.35	2,633.66	2,161.13	1,254.26	921.71
Present value	100.62	167.87	132.17	69.57	48.95
33					
Nominal value	1,230.45	2,457.71	2,018.00	1,174.10	864.65
Present value	81.98	161.25	127.25	67.45	47.66
50					
Nominal value	0	1,859.49	1,531.34	901.57	670.63
Present value	18.63	138.73	110.55	60.24	43.25

Figure **14—Comparison** of Patron After-Tax Cash Flows for Selected Cooperative Tax Rates

Present value (\$ thousand)

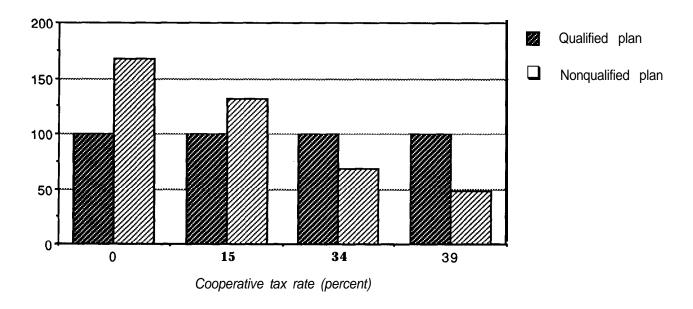
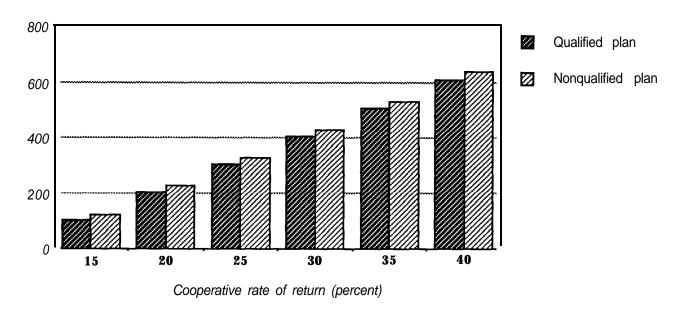


Figure 15—Comparison of Patron After-Tax Cash Flows for Selected Cooperative Rates of Return

Present value (\$ thousand)



As the rate of return increases, the present value of patron after-tax cash flow increases by about the same amount in both plans.

This differs from results for cooperative size and rate of growth. Increases in these parameters, like the rate of return, increase net margins. However, they also increase cooperative taxable income in the nonqualified plan. At some point, the increased cash drain due to the progressive corporate tax structure reduces the comparative attractiveness of nonqualified notices.

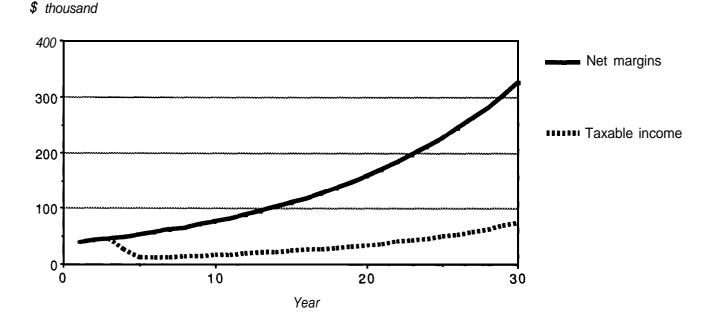
When the rate of return is increased, net margins also increase. However, an increased rate of return allows the cooperative to accelerate the redemption of nonqualified notices issued in prior years. This lowers cooperative taxable income and delays the progressive increase in marginal tax rates. Cooperatives with higher rates of return are able to deduct redemptions of nonqualified notices earlier and reduce a larger proportion of taxable income. Once the cooperative begins redeeming nonqualified notices, its average tax rates generally are less than or equal to those at lower rates of return.

Comparison of figure 16, which shows net margins and taxable income for a 40-percent rate of return, with figure 5, which is for a 15-percent rate of return, demonstrates that a cooperative with a higher return is able to reduce a greater proportion of its taxable income. A cooperative earning a 40-percent rate of return begins redeeming nonqualified notices 9 years earlier and maintains a shorter average revolving period, 4.1 years, compared with 13.7 years for a cooperative with a 15-percent return. By reducing its taxable income through redeeming a greater amount of nonqualified notices, the cooperative with the 40-percent rate of return is able to maintain the same average tax rates as the other cooperative, shown in figure 6.

Rate of Growth

The effect of the cooperative's rate of equity growth on the present values from qualified and nonqualified distributions is complex. As shown in figure 17, increases in the rate of growth first increase and then decrease the present value of patron after-tax cash flows for both qualified and

Figure 16—Cooperative Taxable Income, 40-Percent Rate of Return



nonqualified distributions. The relative attractiveness of nonqualified notices also increases and decreases as the rate of growth increases.

These results are based on a number of interrelated factors. Increases in the rate of growth have two effects on patron cash flows. One, current patron cash flow is decreased because cooperative cash flow is diverted from equity retirement to equity growth. Two, an increased growth rate increases future equity and therefore future net margins. Thus, future patron cash flows may increase because of higher cash patronage refunds and/or equity retirement.

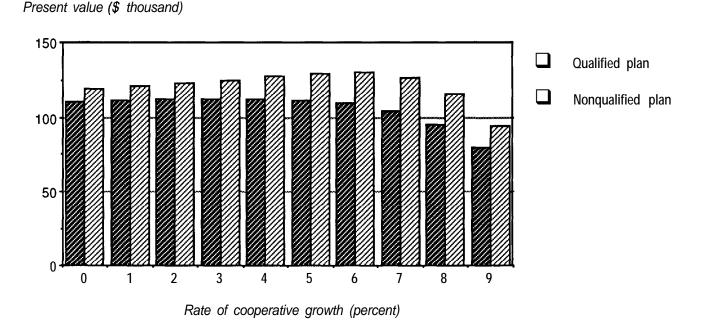
For cooperatives that issue nonqualified notices, the situation is complicated by the generally progressive corporate tax structure, which can cause a relative decline in after-tax cash flows in later years. As the rate of growth increases, equity and net margins increase. Without a corresponding increase in the rate of return to equity, cooperative taxable income and the average tax rate increase. At some point, the resulting cash drain may be so great that the

cooperative is unable to revolve equity.11

The distribution of cash flow in the qualified plan is'shown in figure 18 for three rates of growth. At a zero rate of growth, cash flow is constant throughout the simulation. Net margins do not grow, and the length of the revolving period is 9 years throughout. Thus, cash patronage refunds, income tax, and equity retirement remain the same from year to year.

If the rate of growth is increased to 7.5 percent, the revolving period increases to 14 years and proportionately less equity is retired at the start of the simulation. However, net margins and cash patronage refunds grow throughout the simulation. The net effect is that total patron cash flows are less in early years of the simulation but greater during later years. Total patron cash flow increases substantially, but

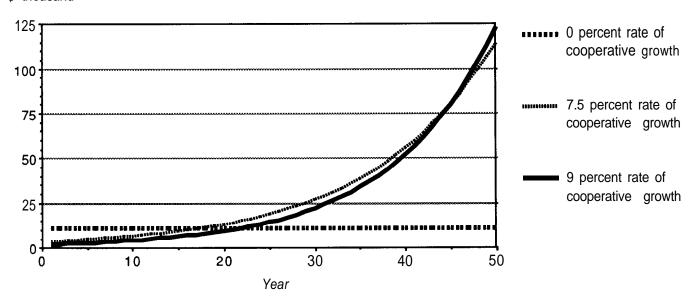
Figure 17-Comparison of Patron After-Tax Cash Flows for Selected Cooperative Rates of Growth



¹¹This analysis is sensitive to the length of the simulation period. Longer simulation periods will favor higher rates of growth because more of the deferred cash flow will fall within the simulation period.

Figure 18-Patron After-Tax Cash Flows for Three Cooperative Rates of Growth, Qualified Plan

\$ thousand



\$ thousand

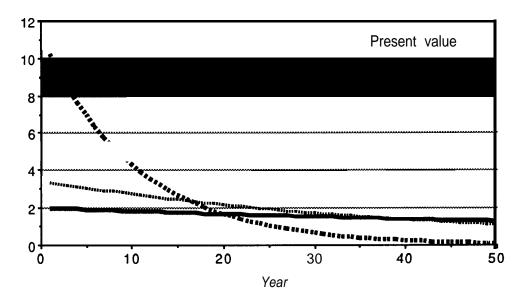
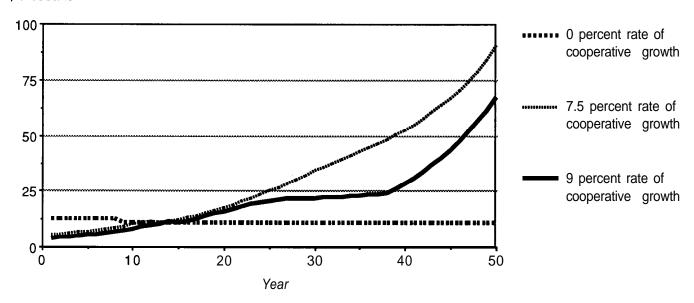
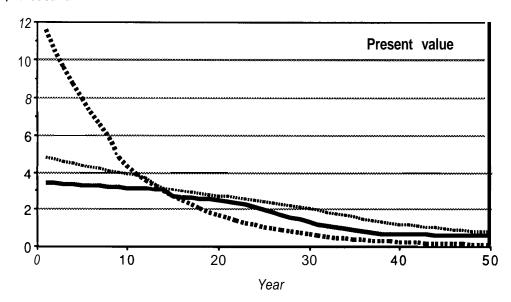


Figure 19-Patron After-Tax Cash Flows for Three Cooperative Rates of Growth, Nonqualified Plan

\$ thousand



\$ thousand



when the cash flows are discounted, the increase in later cash flows does not compensate for the decrease in early cash flows, and the present value of total patron cash flow decreases.

If the rate of growth is increased to 9 percent, the revolving period increases to 17 years. Decreased equity retirement further lowers early cash flows. Later cash flows are greater than for zero growth but not greater than for a 7.5-percent rate of growth until late in the simulation. Total patron cash flows decrease, and the present value of total patron cash flow is substantially lower.

The distribution of cash flow in the nonqualified plan is shown in figure 19 for the same rates of growth. At a zero rate of growth, the length of the revolving period falls from 9 years to 8 years in year 6. Cash flow drops slightly because of patron tax liabilities on the redemption of nonqualified notices, beginning in year 8.

When the rate of growth is increased to 7.5 percent, the average revolving period increases from 8.1 years to 13.7 years and proportionately less equity is retired in the early years of the

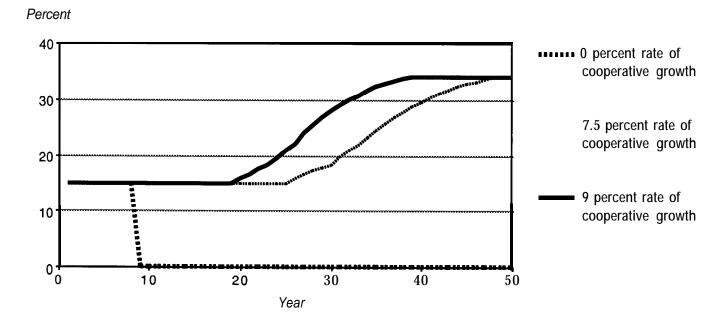
simulation. Net margins grow throughout the simulation, and both the nominal and present values of total patron cash flow increase.

If the rate of growth is increased to 9 percent, the average revolving period climbs to 17.7 years. Decreased equity retirement in the early years is not offset by increased cash flow in later years because of the increased average tax rates due to higher cooperative taxable income (figure 20). Thus, both the nominal and present values of total patron cash flow decrease. At a lo-percent rate of growth, the tax effect is important enough that the cooperative eventually cannot revolve equity.

Tax Reform Act of 1986

Recent changes in the Internal Revenue Code due to the Tax Reform Act of 1986 should be of interest to cooperatives that issue nonqualified notices or have considered issuing them. The Tax Reform Act included three changes relevant to the preceding analysis: (1) reduction of individual tax rates and number of brackets, (2)

Figure PO-Cooperative Average Tax Rate for Three Rates of Growth, Nonqualified Plan



reduction of corporate tax rates and number of brackets, and (3) elimination of investment tax credit. The effect of changing the individual marginal tax rate is discussed in an earlier section of this chapter. In general, reductions in personal tax rates make qualified patronage refund distributions relatively more attractive to patrons.

Additional analysis was conducted to demonstrate the effects of the new corporate tax rates and elimination of investment credit. Results of this analysis do not invalidate the conclusions of the analysis previously discussed. Instead, this analysis was conducted to demonstrate specific effects of the Tax Reform Act of 1986. The results are presented in table 7 for the base cooperative used in the previous simulations

and a cooperative 10 times larger. The larger cooperative was used to study the effect of lower corporate tax rates on a cooperative currently facing high marginal tax rates.

The new corporate tax rate schedule affects only the nonqualified plan. Lower rates increase cash flow available for equity retirement and, therefore, both nominal and present values of patron after-tax cash flow. The effect of reduced rates is greatest for the larger cooperative. The new rates double the nominal value of patron after-tax cash flow. The present value increases by 63 percent.

Loss of investment credit lowers patron after-tax cash flow in both plans but has a greater impact in the nonqualified plan, particularly for the larger cooperative. This is because

Table 7-Effects of Tax Reform Act of 1988 on patron after-tax cash flows, 50-year simulations

	Nominal values		Present values	
Item	Qualified plan	Nonqualified plan	Qualified plan	Nonqualified plan
		1,000	dollars	
Base cooperative?				
Before tax law changes	2,050.75	1,660.97	124.22	133.48
New corporate rates only	2,050.75	1,945.21	124.22	139.13
Elimination of investment				
credit only	1,809.49	1,349.16	111.80	118.61
New corporate rates and				
elimination of investment				
credit	1,809.49	1,669.32	111.80	125.16
Large cooperative:b				
Before tax law changes	20,507.52	7,867.43	1,242.18	554.53
New corporate rates only	20,507.52	15,836.58	1,242.18	905.52
Elimination of investment				
credit only	18,094.87	4,489.61	1,117.96	381 .00
New corporate rates and				
elimination of investment				
credit	18,094.87	13,094.93	1,117.96	751.87

^aPatronmarginal lax rate = .25; initial annual Investment and replacement of capital assets qualifying for investment tax credit = \$5,000. All other parameters equal to levels indicated in table 2. Annual investment and replacement of capital assets qualifying for investment tax credit assumed to grow at same rate as net worth.

binitial net worth and property qualifying for Investment tax credit increased to 10 times that of base cooperative.

investment credit is more valuable to a cooperative the higher its marginal tax rate.12

The combination of reduced corporate income tax rates and elimination of investment credit decreases nominal and present values of patron after-tax cash flow in the qualified plan. It increases nominal patron cash flow for both cooperatives in the nonqualified plan. It also increases the present value for the larger cooperative. However, the present value for the larger cooperative still is substantially lower than in the qualified plan.

The net effect of the Tax Reform Act of 1986 on individual cooperatives will depend on the relative importance of the decrease in tax rates and loss of investment tax credit. Lower personal tax rates will make qualified patronage refund distributions more attractive to patrons. Lower corporate tax rates generally will make nonqualified notices more attractive, but this effect will be at least partially offset by the loss of investment credit.

Summary

The preceding analysis suggests that neither the qualified nor nonqualified method of distributing patronage refunds is clearly superior to the other. Patron cash flows are sensitive to changes in several factors, and which method of distributing patronage refunds results in the greatest cash flow to patrons depends on the level of each of these parameters.

Two critical factors affecting cash flow from

¹² For an analysis of investment tax credit under the old corporate tax rates, see Jeffrey S. Royer, "Cash Flow Comparisons of Qualified and Nonqualified Allocations of Cooperative Patronage Refunds," *Agricultural Finance Review 47* (1987):1-13.

cooperative taxable income and delays the progressive increase in marginal tax rates.

The percentage patronage refunds paid in cash affects the length of the revolving period in the qualified plan. It does not affect the present value of total after-tax cash flow and the relative attractiveness of the qualified and nonqualified methods. However, this does not imply that individual patrons do not have preferences with regard to patronage refund distributions. Patrons in the early stages of their careers may prefer to receive high cash patronage refunds at the expense of a long revolving cycle. However, once these patrons retire from farming, they may prefer rapid revolvement of equity.

What type of cooperatives and patrons can benefit from using nonqualified notices? Basically, cooperatives with low tax rates and patrons with high tax rates. If patron tax rates are high relative to the cooperative rate, nonqualified notices will provide patrons greater cash flows than qualified distributions. Patrons with high tax rates are those most affected by cash drains from income tax on qualified patronage refund distributions. Therefore, they may prefer receiving nonqualified notices to receiving cash patronage refunds and paying income tax on qualified notices. Nonqualified notices also may provide these patrons with a means of deferring taxable income from patronage until after they have retired and face lower tax rates.

The comparative benefits these patrons receive from nonqualified notices may be improved if the patrons have high discount rates. Because increases in the patron discount rate favor the allocation method that provides the earliest cash flows, patrons with high discount rates may have an additional reason for preferring nonqualified notices. In particular, farmers with large incomes and high-yielding opportunities for investment outside the cooperative may find nonqualified notices attractive.

Because of the generally progressive corporate income tax rate structure, patrons of small cooperatives are more likely to benefit from the use of nonqualified notices. Large taxable incomes due to size and growth increase the marginal tax rate faced by the cooperative and reduce the cash flow to patrons from nonqualified notices. Large cooperatives probably cannot do much to reduce the corporate tax rates they face although those with high rates of return can reduce taxable income by accelerating equity retirement. Although new, lower corporate tax rates may have reduced the cash drain on many cooperatives from issuing nonqualified notices, others may be hurt by the elimination of investment tax credit. This credit was more valuable to patrons of cooperatives issuing nonqualified notices, especially those cooperatives facing high marginal tax rates.

Because of timing differences in the tax treatment of patronage refunds, nonqualified notices may provide higher present values of patron after-tax cash flow in many situations where qualified distributions result in higher nominal values. One reason cooperatives have used nonqualified notices so little may be that managers and boards of directors have not considered present values in making distribution decisions.

IV. TAX MANAGEMENT CONSIDERATIONS

The previous chapter identified characteristics of cooperatives and patrons that could benefit from using nonqualified notices. That analysis was based on the values of several important factors, including cooperative and patron tax rates. Although these factors were varied to examine patron benefits from qualified and nonqualified patronage refund distributions under a broad range of parameter values, the results cannot be used to determine whether a specific cooperative should use nonqualified notices.

Whether an individual cooperative and its patrons can benefit from issuing nonqualified notices depends on the unique environment faced by the cooperative and on situations that change from year to year. In reality, no cooperative operates under stable income relationships and uniform patron characteristics such as those assumed in the preceding analysis. Net margins generally vary from year to year, and cooperative patrons face various income and tax situations. Even tax laws and other institutional factors are subject to frequent change.

This chapter discusses more thoroughly the factors that should be taken into account by cooperatives considering use of nonqualified notices. In doing so, it focuses on some unique situations in which nonqualified notices can be used for the benefit of a cooperative and its patrons. The chapter begins with a discussion of the use of nonqualified notices in managing cooperative and patron taxes. It ends with a discussion of some factors that may limit the use of nonqualified notices in managing taxes. Other factors that may discourage the use of nonqualified notices are discussed in the next chapter.

Comparative Cooperative and Patron Tax Rates

Generally, if a cooperative's income tax rate is lower than its patrons' tax rates, the cooperative can reduce the tax paid on a patronage refund distribution by issuing nonqualified notices and paying the tax itself. Conversely, if patrons' tax rates are lower, the

combined taxes of the cooperative and patrons will be lowest if the cooperative distributes the patronage refunds in qualified form and patrons pay the tax.

Table 8 summarizes the major features of the Federal income tax laws before and after passage of the Tax Reform Act of 1986.13 The act lowered tax rates and reduced the number of tax brackets for both cooperatives and patrons. It also eliminated investment tax credit. Prior to 1986, businesses could earn tax credits on investments in certain depreciable or amortizable property. Such credits not used by a cooperative in the year earned were allocated to patrons in a manner similar to patronage refunds.

Under the current tax law, there may not be much difference between cooperative and patron income tax rates. The current corporate tax rate for incomes above \$75,000 is 34 percent. For incomes between \$100,000 and \$335,000, there is a 5-percent surcharge, which is intended to phase out the benefit of the 15-percent rate applied to the first \$75,000 of income. Thus, nonqualified notices issued by most cooperatives would be taxed at a 34-percent rate. Only small cooperatives with less than \$75,000 annual earnings would be taxed at the 15-percent rate.

Meanwhile, the current (1989) income tax rate for single individuals with incomes of over \$18,550 is 28 percent. For incomes between \$44,900 and \$93,130, single individuals must pay a 5-percent surcharge designed to phase out the benefit of the 15-percent rate applied to the first \$18,550 income. The surcharge is extended to additional income up to \$11,200 to reduce the benefit of the \$2,000 personal exemption. The 28-percent income tax rate applies to incomes above \$30,950 for married couples filing jointly. The 5-

¹³ Although most of the basic features of the old tax law still existed in 1986, 1985 is used in table 8 to

Table 8-Major features of Federal tax laws before and after lax Reform Act of 1988

Tax on —	Tax year			
Tax OII —	1985	1988		
Corporations	Tax rates: 15% to \$25,000,	Tax rates: 15% to \$50,000, 25% to \$75,000, 34% thereafter; 5% surcharge on income between \$100,000 and \$335,000.		
	between \$1,000,000 and \$1,405,000.	\$ 000,000.		
	Investment credit: Up to 10% credit on qualifying property; maximum allowable credit in any year was \$25,000 plus 90% of tax liability over \$25,000; credit not used by cooperatives in year earned was allocated to patrons.	No investment credit.		
Single individuals	15 tax brackets with 50% maximum rate on income over 585,130.	Tax rates: 15% to 517,850, 28% thereafter; 5% surcharge on income between 543,150 and 589,560; 5% surcharge on additional income up to 510,920 for personal exemption.		
Married couples filing jointly	15 tax brackets with 50% maximum rate on income over 5169,020.	Tax rates: 15% to \$29,750, 28% thereafter; 5% surcharge on income between 571,900 and 5149,250; 5% surcharge on additional income up to \$10,920 for each personal exemption.		
Self-employment income	Net rate of 11.8% for income to \$39,600.	Net rate of 13.02% for income to 545,000.		

percent surcharge for married couples filing jointly applies to incomes between \$74,850 and \$155,320 plus additional income of up to \$11,200 for each personal exemption claimed. Thus, cooperative patrons can have marginal income

tax rates of 15, 28, or 33 percent.

Farmer patrons also are subject to Federal self-employment tax if they operate their own farms, whether on land they own or lease from someone else, or are sharefarmers who produce

agricultural or horticultural commodities for the owner or tenant of land in exchange for a share of the commodities. Ordinarily, a farmer's income subject to self-employment tax is equal to net farm profit adjusted for certain income items and deductions. Taxable patronage refunds from cooperatives are among those items usually included in farmers' self-employment income. Currently, the first \$48,000 of a farmer's self-employment income is subject to tax at a net rate of 13.02 percent.

Thus, most patrons are subject to combined income and self-employment taxes on qualified patronage refund distributions and redemptions of nonqualified notices at effective rates from 28 to 41 percent, compared with the 34-percent rate cooperatives would pay on most nonqualified patronage refund distributions. Whether a cooperative or its patrons will have the lowest effective tax rate will depend on specific circumstances, including current income and other temporal influences.14

Certainly, there are situations in which patrons can benefit most often from their cooperatives' issuing nonqualified notices. Take, for example, a group of farmers who usually are in the highest individual or corporate tax bracket and form a small cooperative to provide themselves specialized services. If the cooperative's income is taxed at the lower corporate rate, its rate will be lower than its members' rates and nonqualified notices will produce the lowest overall taxes.

Of course, this is a special situation. In most cases, cooperative patrons will have a range of incomes, not all in the highest or lowest tax brackets. In addition, most patrons belong to cooperatives that are large enough to have their incomes taxed at the 34-percent corporate tax rate. In general, current tax rates do not favor one allocation method over the other.

Flexibility in Issuing and Redeeming Nonqualified Notices

The preceding discussion of comparative cooperative and patron tax rates ignores the flexibility cooperatives have in issuing and redeeming nonqualified notices. The choice to issue nonqualified notices is not a once-and-for-all decision. A cooperative can include authorization for issuing both qualified and nonqualified notices in its bylaws with the idea each may be useful under certain conditions. Then it can make the choice whether to issue nonqualified notices on a yearly basis according to the situation it and its patrons face each year. If conditions in a given year are such that patrons have high tax rates relative to the cooperative, it may choose to issue nonqualified notices that year. A cooperative also can choose to issue both qualified and nonqualified notices in the same year.

A cooperative likewise may time the redemption of nonqualified notices according to income and tax considerations. The rules for computing the tax deduction for redemption of nonqualified notices can contribute to this flexibility. Generally, redemption of prior years' nonqualified notices is most valuable to a cooperative in years when its tax rate is high because the current tax rate can be used to determine the deduction. However, even if the current tax rate is not high, the cooperative's deduction will equal, at a minimum, the difference between the tax it paid in the year the notices were issued and what it would have paid if it had issued them in qualified form. Of course, the cooperative should take its patrons' current tax rates into consideration also.

Cooperatives with stable tax rates may not find the flexibility in issuing and redeeming nonqualified notices very valuable. Because the Tax Reform Act of 1986 reduced tax rates and the number of brackets, changes in a cooperative's income from one year to another may not result in a change in its tax rate. Thus, this flexibility may not be as valuable as it was prior to the act. However, cooperatives may find they can use nonqualified notices effectively in responding to extraordinary occurrences such as losses or changes in the tax law itself.

¹⁴ Because of the diversity of State income tax rates, they are ignored in this discussion. However, they should be taken into consideration in tax management decisions.

Tax Planning After Financial Losses

A cooperative that suffers an operating loss may be able to benefit from issuing nonqualified notices to absorb some of the loss. Under section 172 of the Internal Revenue Code, most corporations can elect to carry an operating loss backward 3 years or forward 15 years to deduct it from taxable income earned during those years. If the loss is carried back, the corporation can request a refund for tax already paid. If the loss exceeds total taxable income for the 3 years, the balance of the loss can be carried forward 15 years.15

If a cooperative has issued nonqualified notices in prior years, it already may have taxable income available for absorbing the loss and generating an income tax refund. However, even if a cooperative previously has issued qualified notices and has no past taxable income for absorbing the loss, it may be able to begin issuing nonqualified notices to increase taxable income for absorbing the loss in the future. Although the cooperative would not receive a tax refund, there would be no income tax on the taxable income from nonqualified notices offset by the loss carried forward. Thus, the cooperative would conserve cash flow by issuing nonqualified notices and avoiding the cash drain that would have occurred if it had distributed net margins to patrons in qualified form and paid a portion of them in cash.

A similar technique was applied during the loss year itself by a cooperative that determines patronage refunds on a departmental basis and suffered an operating loss in one department while earning net margins in another. The cooperative distributed nonqualified notices to the patrons who were allocated patronage

refunds. The losses in the other department were used to offset the taxable income resulting from the notices, thus freeing the cooperative of any tax liability. As a result, the cooperative had a lower cash drain than if it had distributed qualified notices and paid 20 percent of patronage refunds in cash.

In both situations, patrons who earn net margins still would receive their full share of patronage refunds. Each year's or department's accounting would be maintained separately, and only the tax responsibilities would be combined. Thus, the principal impact on patrons would be that patronage refunds that otherwise would have been distributed in qualified form would be distributed as nonqualified notices.

These strategies may require conceptual definition to reconcile the cooperative's tax accounting methods with the methods used to calculate patronage refunds. If the application of one department's loss against another department's taxable income (created because patronage refunds based on the department's net margins are distributed as nonqualified written notices of allocation) is viewed as only a year-end calculation to determine the cooperative's total taxable income, it will not affect the allocation of losses and net margins to patrons of the respective departments. The nonqualified notices represent patronage refunds based on the net margins generated by the department with margins.

However, if the loss application to the margin generating department affects the net margins available for allocation to patrons (if methods used to determine patronage refunds follow tax accounting calculations), the patronage refunds upon which the nonqualified notices are based are reduced. Cooperatives that issue nonqualified notices for patronage refunds based on net margins unreduced by the loss application could face difficulties upon redemption.

Responding to Tax Law Changes

Cooperatives have been able to use nonqualified notices to produce positive benefits from tax law changes. Within the past several

¹⁵ Loss treatment under section 172 of the Internal Revenue Code currently is under challenge by the Internal Revenue Service (IRS) for cooperatives operating without section 521 tax status. The IRS contends that these cooperatives are subject to the loss handling rules in section 277, which applies to certain membership organizations. Under section 277, organizations cannot carry losses backward but may carry them forward to other tax years.

years, two revisions of the Internal Revenue Code have had important impacts on the tax management strategies available to cooperatives. The Revenue Act of 1978 changed investment tax credit rules for cooperatives, allowing many cooperatives to use this credit effectively for the first time. The Tax Reform Act of 1986 substantially revised the Internal Revenue Code, reducing tax rates and eliminating investment credit for all businesses, among other things.16

Prior to the Revenue Act of 1978, for a cooperative, the value of an investment in property qualifying for investment credit and the amount of credit allowable in a given year, were reduced by multiplying them by the ratio of the cooperative's taxable income to its total income, including deductions from taxable income allowed under the Internal Revenue Code. Because most cooperatives generally distributed nearly all their income in deductible form, this rule substantively excluded them from effectively using investment credit.

The Revenue Act of 1978 eliminated this rule and specified that credits not used by a cooperative in the year earned were to be allocated to patrons in a manner similar to patronage refunds. Although cooperatives issuing nonqualified notices could have benefited from investment credit under the old rules,¹⁷ the increased availability of investment credit for cooperatives drew new attention to the usefulness of nonqualified written notices as a tax

planning tool.18

Although many cooperatives decided to pass the credit they earned through to patrons, some cooperatives used nonqualified notices to increase taxable income with which to absorb the credit at the cooperative level. This may have been a desirable strategy for several reasons. First, investment credit was more valuable when applied at the cooperative level and at high tax rates.19 Second, this strategy avoided the increased administrative costs of allocating the credit and applying it to individual tax forms as well as potential problems from recapture.20 Finally, in cases of unusually large investments in property with long useful lives, cooperatives that did not allocate the credit to current patrons could pass the benefit to those who financed the property through decreased borrowing costs made possible by absorption of the credit.

More recently, the lower corporate tax rates resulting from the Tax Reform Act of 1986 reduced the possibility of cooperatives' benefiting from redeeming nonqualified notices at a higher tax rate than that at which they were issued. However, lower patron tax rates still provided some cooperatives that had issued nonqualified notices in prior years a chance to reduce patron taxes, as illustrated in the following example.

The use of nonqualified notices by a grocery wholesaling cooperative²¹ demonstrates several important tax considerations. The membership of this cooperative is composed of independently

¹⁶ One author suggests that a cooperative anticipating an alternative minimum tax liability under the new tax rules may be able to reduce or avoid the tax by issuing nonqualified written notices. See Barry E. Jencik, "Tax Reform and Cooperatives: Selected Issues-Part II," *Cooperative Accountant*, Fall 1987, pp. 41-42.

¹⁷ Because nonqualified written notices of allocation are included in taxable income, some cooperatives issued them to increase their allowable investment credit according to William E. Lazzeri, "New Tax Law Gives Coops and Their Patrons Full Benefit of Investment Tax Credits," *Cooperative Accountant*, Winter 1978, p. 52.

¹⁸ Fred E. Beaver and Myron J. Fleck, "The New Tax Planning Environment for Cooperative Organizations under the Revenue Act of 1978," *Cooperative Accountant*, Winter 1978, pp. 28-49.

¹⁹ See Royer, "Cash Flow Comparisons," 11.

²⁰ If a business disposed of property qualifying for investment tax credit before the end of the property's useful life, the credit had to be recomputed according to how long the property was held. If the recomputed credit was less than the original, the business incurred a tax liability equal to the difference. According to the investment credit rules for cooperatives, a cooperative had to pay back this recaptured credit even if the credit had been allocated to patrons.

²¹ Walter L. Grant, "Nonqualified Notices of Allocation and the Tax Reform Act of 1986," *Cooperative Accountant*, Summer 1987, pp. 58-62.

owned and operated grocery stores, substantially all of which are corporations. The cooperative was formed more than 40 years ago to use the combined purchasing power of the stores to obtain volume discounts similar to those of chain stores and avoid duplication of effort in certain business activities.

Member stores provided equity capital through retained patronage refunds. The cooperative paid 25 percent of patronage refunds in cash and issued 75 percent as qualified written notices of allocation. As the member stores grew, most began reaching the 46-percent maximum corporate income tax rate. As a result, they were experiencing substantial cash drains from tax on qualified patronage refund distributions.

To alleviate this problem, in 1981 the cooperative began issuing part of patronage refunds in nonqualified form. The members still received 25 percent in cash, but the remainder was issued as nonqualified written notices of allocation. Thus, the members were relieved from paying tax on all but the cash portion of refunds. The cooperative assumed the tax responsibility for the noncash portion, but this allowed it to effectively utilize tax credits, much of which was lost previously.

This policy was used for 5 years. During that period, members amassed a substantial amount of equity in the cooperative. The cooperative paid tax on nonqualified notices at the 46-percent rate. Income tax, which the cooperative expected to have refunded when it redeemed the nonqualified notices, was recorded on the balance sheet in an asset account called deferred income tax benefits.

When the Tax Reform Act of 1986 reduced the top corporate income tax rate from 46 percent to 34 percent, the cooperative at first thought it faced a significant write-down of a large asset account. However, after reviewing the tax rules for redemption of nonqualified notices, it discovered it still was entitled to a tax benefit equal to the tax paid on the notices in the years they were issued.

Review of the tax rules also clarified the fact that members would be taxed at their current rates when they received cash redemption of the nonqualified notices. The cooperative recognized that if it redeemed the nonqualified notices, members could benefit from the newly reduced tax rates. Investigation into the income situation of its members revealed many members had effective tax rates considerably lower than the maximum and some members had losses.

After careful consideration, the cooperative decided to redeem the nonqualified notices, financing this action with a line of credit and the tax refund. Its principal purpose was to allow its members to benefit from the reduction in tax rates in case tax rates might be increased again in the future. It also wanted to provide members cash flow for expansion, reduce its large deferred tax benefit asset, and substantially lower the amount of equity held by members.

Because of the elimination of investment credit and reduction of the tax rates faced by members, the cooperative no longer viewed nonqualified notices as attractive as in the past. It also was concerned that members might lose from deferring tax liability on patronage refunds if tax rates were increased in the future.

Therefore, the members agreed to accept patronage refunds 25 percent in cash and 75 percent in qualified written notices of allocation until the line of credit was retired in 2 years. At that point, the cooperative planned on increasing cash patronage refunds to 40 percent to ensure members a positive cash flow.

Although the cooperative in this example acted to avoid loss of the patron tax benefit from any future increase in tax rates, such an increase would bring about new opportunities for tax savings by cooperatives currently issuing nonqualified notices. Because of the rules for computing the tax deduction for redemption of nonqualified notices, an increase in corporate tax rates, for example, would allow cooperatives having issued nonqualified notices under the current low rates to deduct redemptions at the higher rates.

Individual Choice of Allocation Method

As an alternative to planning for its patrons' taxes, a cooperative might consider allowing patrons each year to choose individually which type of allocation they are to receive. Such a plan

takes into consideration the differences in income and tax situations among patrons and allows them to choose the allocation form that best suits their needs. This plan could substantially complicate financial planning if patron preferences change considerably from year to year because cooperative cash flow would depend on the relative amounts of cash patronage refunds and income tax paid. The marginal tax rate faced by the cooperative could vary from year to year depending on the amount of nonqualified notices chosen by patrons but could be low if enough patrons accepted patronage refunds as qualified.

One fruit processing cooperative has had such a plan for several years. Each year members individually specify which type of allocation they are to receive. Although the cooperative places no restrictions on the members' choices and does not know what type of allocations it is to make until after members have made their choices, the plan has operated smoothly and the mix of allocations issued by the cooperative has remained fairly constant through the years.

Although the cooperative has members with a variety of sizes and incomes, there does not appear to be a strong relationship between these factors and the type of allocation chosen by members. A more important factor seems to be a member's plans for retirement. Members often begin choosing to receive allocations in nonqualified form within a few years of retirement.

Patron tax savings could be an important incentive for a cooperative to adopt such a plan. To do so, however, the cooperative must have flexibility to accommodate patron choices. In addition, it should set the level of cash patronage refunds for qualified distributions so the choices offered patrons are roughly equivalent in terms of their cash flow impact on the cooperative.

Limits to Tax Management Flexibility

Financial needs, the limited occurrence of specific tax situations, and the requirements of a cooperative's equity capitalization and retirement program can restrict the tax management flexibility from issuing and redeeming nonqualified written notices of allocation. Equity

retirement depends on the financial plans and operating results of the cooperative. Tax considerations may influence equity retirement decisions but probably will play a secondary role to other financial factors.

Patrons will understand the cooperative's equity program better if it is operated in a systematic and consistent manner. They also will place a greater value on their equities and membership in the cooperative if they have accurate expectations of when the cooperative will redeem their equities. A cooperative policy designed to minimize income tax can disrupt the smooth operation of an equity program. Sudden changes made to meet special circumstances can create costs in terms of patron understanding and good will. Redeeming one type of equity allocation in preference over the other for tax purposes also can benefit one group of patrons over others, causing discord and problems of fairness. Thus, concerns about maintaining equitable treatment of patrons may impose limits on tax management practices.

If a cooperative is in a difficult financial situation, disruption of the existing financing system and implementation of a temporary system may be an acceptable means of obtaining tax benefits. The board of directors should consider all alternatives in situations that threaten the existence of the cooperative. In these cases, nonqualified notices may provide some options qualified distributions do not.

Equity Retirement Plans

The equity retirement plan a cooperative uses can limit its tax management flexibility and complicate its tax calculations for years it redeems nonqualified written notices of allocation. When nonqualified notices are redeemed, the cooperative's tax is based on a comparison of the benefits from deducting the notices from the current year's income and those from recomputing prior years' taxes as if the notices originally had been distributed in qualified form. Under some equity retirement plans, the cooperative frequently will redeem equities issued in more than one year. Thus, recomputation of prior years' taxes can be complex.

Tax management flexibility may be limited because the cooperative cannot recompute prior years' taxes based on a single tax rate. If prior years' taxes were based on a single rate, the rate might be expected to be higher than the current year's rate from time to time. Thus, recomputation of prior years' taxes occasionally would result in a greater tax savings than deducting the redeemed nonqualified notices from current taxable income. However, if prior years' taxes are based on a variety of rates, some high and some low, the benefit resulting from this blend may more frequently be less than that from deducting the redeemed notices from current income. Thus, the cooperative may lose some of the benefit of basing its tax on recomputation of prior years' taxes.

Under the revolving fund plan, which is the most common systematic equity retirement plan, equities are redeemed in the order in which they are issued. Usually in a given year, only notices issued in one or two previous years are redeemed. Thus, the prior years' tax recomputation is relatively simple, and the cooperative often can base its tax management decisions on knowledge of a single prior year's tax rate.

Other equity retirement plans frequently redeem allocations issued over a number of years. For example, cooperatives that settle estates could redeem many years' allocations in a year, depending on the number of deaths and the number of years the deceased members were active patrons. Obviously, recomputation of prior years' taxes would be complex and the cooperative would not have an opportunity for an active tax management policy under this type of program. Base capital and percentage-of-all-equities plans also could involve redemptions of allocations made over several years.

If a cooperative's tax rate is constant from year to year, the two alternative methods of determining the tax benefit would yield similar results. Thus, the loss in tax management flexibility would not be important.

State Taxes

States with income taxes generally follow the basic provisions of Federal tax rules with respect to issuing and redeeming qualified written notices of allocation. However, not all States have included provisions for treating nonqualified notices. Thus, cooperatives must review how nonqualified notices are treated in their individual States. If a cooperative's State does not have provisions for nonqualified notices, the cooperative may not be able to take a tax deduction for redemption of nonqualified notices in computing its State income tax.

Summary

Whether an individual cooperative and its patrons can benefit from issuing nonquaiified notices depends on the unique environment faced by the cooperative and on situations that change from year to year. Generally, if a cooperative's income tax rate is lower than its patrons' rates, it can reduce the tax paid on a patronage refund distribution by issuing nonqualified notices and paying the tax. Conversely, if patrons' tax rates are lower, the combined taxes of the cooperative and patrons will be lowest if the cooperative distributes patronage refunds in qualified form.

Under the current tax law, there may not be much difference between cooperative and patron income tax rates. Most patrons are subject to combined Federal income and self-employment taxes on qualified patronage refund distributions and redemptions of nonqualified notices at effective rates from 28 to 41 percent, compared with the 34-percent rate cooperatives would pay on most nonqualified notices. Whether a cooperative or its patrons will have the lowest effective tax rate will depend on specific circumstances. In general, current tax rates do not favor one allocation method over the other. Nevertheless, cooperatives may find they can use nonqualified notices effectively in responding to various income and tax situations, including extraordinary occurrences such as losses or changes in the tax law.

Cooperatives have flexibility in issuing and redeeming nonqualified notices. A cooperative can include authorization for issuing both qualified and nonqualified notices in its bylaws. Then it can make the choice whether or not to

issue nonqualified notices on a yearly basis according to the situation it faces each year. If conditions are such that patrons have high tax rates relative to the cooperative, it may choose to issue nonqualified notices that year. A cooperative also can choose to issue both qualified and nonqualified notices in the same year.

A cooperative likewise may time the redemption of nonqualified notices according to income and tax considerations. The rules for computing the tax deduction for redemption of nonqualified notices can contribute to this flexibility. Generally, redemption of prior years' nonqualified notices is most valuable to a cooperative in years when its tax rate is high because the current tax rate can be used to determine the deduction.

As an alternative to planning for its patrons' taxes, a cooperative might consider allowing patrons each year to choose individually which type of allocation they are to receive. Such a plan takes into consideration the differences in income and tax situations among patrons and allows patrons to choose the allocation form that best suits their needs. This plan could substantially complicate financial planning if patron preferences change considerably from year to year.

Financial needs, the limited occurrence of specific tax situations, and the requirements of a cooperative's equity capitalization and retirement program can restrict the tax management flexibility from issuing and redeeming nonqualified written notices of allocation. A cooperative policy designed to minimize income tax can disrupt the smooth operation of an equity program. Sudden changes made to meet special circumstances can create costs in terms of patron understanding and good will. However, if a cooperative is in a difficult financial situation, disruption of the existing financing system and implementation of a temporary system may be an acceptable means of obtaining tax benefits.

V. SPECIAL PROBLEMS ASSOCIATED WITH NONQUALIFIED NOTICES

Cooperatives that issue nonqualified notices may face some unique problems because of the notices' tax treatment. This chapter discusses some of these problems. First, it discusses accounting for nonqualified notices in financial statements and distributing income in a federated system using nonqualified notices. Next, it explores some issues of equitable treatment of patrons that may arise among cooperatives using nonqualified notices. Then it discusses how the financial relationships between cooperatives and their patrons may change due to a switch to nonqualified notices. Finally, it explores some of the factors that may limit use of nonqualified notices.

Accounting for Nonqualified **Notices** In **Financial** Statements

Cooperatives use a number of financing methods, and the net worth sections of cooperative balance sheets contain various classes of stock, other types of allocated equity, and unallocated equity. The use of nonqualified written notices of allocation adds another element to cooperative financial statements and may make it more difficult for patrons to understand how their cooperative is financed. Patron understanding and acceptance is essential to the success of any financing method.

Classification of Equity Types

The information about nonqualified notices contained in financial statements varies and probably is still evolving. Cooperatives that issue both qualified and nonqualified notices usually use different terms for them. In some cases, the terms "qualified" and "nonqualified" are used, as in "qualified" and "nonqualified capital credits." Other cooperatives use different terms for each but do not use the adjectives "qualified" and "nonqualified."

More than a casual glance at a cooperative's equity accounts is needed to determine if

nonqualified notices are present. The financial statements reviewed in this study did not always identify nonqualified notices, especially in years in which nonqualified notices were neither issued nor redeemed. In one case, a cooperative included nonqualified notices in "retained earnings" with funds from other sources. Notes to the financial statements explained nonqualified notices, but the allocations were not identified separately.

The term "nonqualified" is used in some financial reports to refer generally to distributions of net margins that do not qualify for deduction from the cooperative's taxable income under subchapter T of the Internal Revenue Code. An example is the distribution of nonpatronage income to members by a cooperative that does not hold section 521 tax status. Such distributions "do not qualify" for deduction from the cooperative's taxable income, but they do not meet the restrictive use of the term "nonqualified" used in the Internal Revenue Code and in this report to mean "nonqualified written notices of allocation." The loose use of the word "nonqualified" to indicate something other than nonqualified written notices of allocation can be confusing.

Equity Accounts of Issuing Cooperative

The income reporting and tax recapture characteristics of nonqualified notices necessitate unique accounting methods for both cooperatives issuing nonqualified notices and recipients. Cooperatives issuing nonqualified notices account for the tax recapture feature in different ways. The following examples are based on annual reports of cooperatives that have issued nonqualified notices. They assume a cooperative with \$100,000 in net margins.

Method 1: Net margins before tax are allocated to patrons as nonqualified written notices. This amount appears in the net worth section of the balance sheet. Income tax paid on the notices is listed as a noncurrent asset because the cooperative expects the tax to be refunded when the notices are redeemed.

Balance Sheet 1

Assets

Cash Future tax benefit	\$77,750 22,250	
Total Assets	\$100,000	
Liabilities and Net Worth		
Nonqualified equity allocations	\$100,000	
Total Liabilities and Net Worth	\$100,000	

In an informal survey of accountants serving cooperatives who had issued or had considered issuing nonqualified notices, the consensus was that this method should be used.22 It shows explicitly the amount of nonqualified notices and the tax benefit that will occur when the notices are redeemed. However, some analysts consider this method to overstate the value of assets and net worth. They think the tax refund from redemption of nonqualified notices should be discounted to reflect the restrictions on its realization?

²² John J. Blair, "Issuance and Redemption of Nonqualified Written Notices of Allocation," paper presented at tax seminar, 44th annual meeting of the National Society of Accountants for Cooperatives, Norfolk, Va., Aug. 13, 1979.

²³ New accounting standards could prohibit cooperatives from using this method. Statement of Financial Accounting Standards No. 96, "Accounting for Income Taxes," which is effective for fiscal years beginning after December 15, 1988, stipulates that tax benefits arising from an event are not included in financial statements until the event itself is recognized. See Financial Standards Accounting Board, Original Pronouncements: July 1973-June 1, 1988 (Homewood, Ill.: Irwin, 1988), pp. 1089-1159. A strong argument exists for allowing cooperatives to continue recognizing the tax benefit from redemption of nonqualified written notices as an asset according to "1988 Subcommittee Report on Effective Use and Problems of Nonqualified Patronage Dividends and/or Per-Unit Retains, Reports of Subcommittees of the Legal, Tax, and Accounting Committee (Washington, D.C.: National Council of Farmer Cooperatives), p. 23. The audit and accounting guide for agricultural producers and cooperatives issued Oct. 9, 1987, by the American Institute of Certified Public Accountants also contains provisions for deferred income tax accounting.

Method 2: Net margins before tax are allocated as nonqualified written notices. However, the future tax benefit from redeeming the notices is not listed as an asset. Nonqualified notices are listed at face value, but tax paid on them is subtracted from them in listing total net worth. Thus, this method is more conservative than the first because assets and net worth are reduced by the amount of tax paid.

Balance Sheet 2

Assets	
Cash	\$77,750
Total Assets	\$77,750
Liabilities and Net Worth	
Nonqualified equity allocations Less: Tax paid	\$100,000 (22,250)
Total Liabilities and Net Worth	\$77,750

Method 3: Net margins after tax are allocated as nonqualified written notices. This is the simplest method of accounting for nonqualified notices, and it has some intuitive appeal because tax is paid on net margins and the residual is allocated to patrons. This method does not take tax recapture into consideration. Assets and net worth are valued at the same amount as under the second method.

Balance Sheet 3

Assets	
Cash	\$77,750
Total Assets	\$77.750
Liabilities and Net Worth	
Nonqualified equity allocations	\$77,750
Total Liabilities and Net Worth	\$77,750

The biggest drawback of this method is that not all of available net margins are allocated to patrons. Thus, when the nonqualified notices are redeemed, only the taxes applicable to them can be recaptured. In this example, tax recapture is \$14,685, which is \$7,565 less than in the other two

examples. This \$7,565 represents an important cost to the cooperative from using this method.

Income Reporting by Recipients

The required method of reporting income for Federal income tax returns will not necessarily be the same as prescribed by standard accounting practices. Federal income tax rules and standard accounting practices have different purposes and have different methods of reporting for some transactions. Federal tax rules specify the deductions allowable from income and by their nature do not allow flexibility. Under the tax return reporting method, patrons receiving nonqualified notices do not recognize them as income until they are redeemed in cash. Under this method, a nonqualified notice is not recorded as an asset on the patron's balance sheet.

An alternative accounting view includes nonqualified notices as income. This income is included with income from all other sources, and the notices are included on the balance sheet with other investments. Under this method, income reported on Federal tax returns is lower than income reported on the cooperative's financial statements because the tax return income does not include the nonqualified notices received. Examples can be found of cooperatives using each of these accounting methods for their financial statements.

The purpose of the accounting statements of cooperatives and their patrons is to provide useful information to management, membership, and financial institutions. To effectively provide information, statements should be prepared consistently from year to year. Within the range of acceptable accounting practices, business organizations have some discretion in the practices they follow. The expected time of redemption of nonqualified notices could influence a cooperative in its choice of a reporting method. If the cooperative expects to redeem nonqualified notices within a short time period, it may choose to recognize the expected tax benefit from the redemption. If it does not expect to redeem the notices within a short time, it may decide to report income and equity on a net basis. The size of nonqualified allocations also may

influence the amount of information that users of the financial statements need.

Financial statements are accompanied by notes that explain the accounting practices used and provide other information. Because of the characteristics and limited use of nonqualified notices, these notes can be an important device in explaining nonqualified notices.

Use of Nonqualified Notices in Federated Systems

Some cooperatives, particularly farm supply and grain cooperatives, are organized into multilevel federated structures. Large federated cooperatives generally have many member cooperatives. Their members can cover several States and include cooperatives with memberships in other federated cooperatives.

Most federated cooperatives distribute patronage refunds in the form of cash and qualified written notices of allocation. Member cooperatives that receive qualified patronage refund distributions from their federated cooperative take them into their incomes and, in turn, can reallocate them as patronage refunds to their producer patrons.

Cooperatives usually pay patronage refunds according to a bylaw agreement that requires the organization to distribute its net margins on a patronage basis. These agreements are central to the cooperative method of operation. The bylaws usually allow the board of directors the power to determine annual patronage refund distributions according to the cooperative's operating results.

Cooperatives usually follow accounting practices that keep their financial statement income and tax return income before patronage refund deductions close together. Most cooperatives base patronage refunds on the amount available for distribution from their tax return. Some bylaws specifically state that patronage refunds will be determined according to the same accounting procedures used in preparing the Federal tax return.

The following schedule summarizes the flow of income in a federated system when qualified written notices of allocation are issued by the federated cooperative.

Schedule 1: Flow of Qualified Income in a Federated System

Year 1: Earnings occur at federated cooperative. Cooperative distributes earnings as cash and qualified written notices of allocation after close of its tax year.

Year 2: Member cooperative receives qualified distribution and includes it in income. After close of tax year, member cooperative allocates cash and qualified notices to its producer patrons based on local earnings and qualified distribution received from federated cooperative.

Year 3: Producer patrons receive qualified distributions and include them in their taxable income.

The final recipients, producer members, bear the final income tax responsibility. The noncash allocations of the federated cooperative are included in its net worth, are held as an investment in the federated cooperative by the member cooperative and included in its net worth, and are represented by equity certificates in the member cooperative held by producer members. In the complete system, there is a pyramid effect as the federated cooperative's earnings are reported at each subsequent level.

Differences in associations' accounting years and the time between the end of the accounting year and issuance of patronage refunds increase the time between when earnings occur and when patronage refunds are issued to the final recipient. Cooperatives have 8 1/2 months after the end of their accounting year to issue patronage refunds. Therefore, qualified notices from one year's earnings probably will be included in the cooperative's members' income for the following year. The federated system has been criticized for this time lag, especially when several levels of federation exist. However, this delay is generally accepted as reasonable, a position that has been supported by court decisions.

A transfer of earnings through a federated system to producer patrons generally cannot be made as easily using nonqualified written notices of allocation. A cooperative that receives nonqualified written notices of allocation from another cooperative faces both theoretical and practical questions concerning how the notices should be reported and handled. The recipient cooperative must decide how and when to acknowledge the nonqualified notices as income and how to account for these notices in a manner that provides information understandable by its members and others. A cooperative receiving nonqualified notices also must decide how to transfer this income to its members in a manner that is acceptable to them and that satisfies its patronage agreements and the Federal income tax rules that determine whether single-tax treatment of the patronage distributions is allowed.

The following schedule summarizes the flow of income in a federated system when nonqualified written notices of allocation are issued according to the federated cooperative's tax return.

Schedule 2: Flow of Nonqualified Income in **a** Federated System (Tax Return Method)

Year 1: Earnings occur at federated cooperative. Cooperative issues nonqualified written notices of allocation after close of its tax year.

Year 2: Member cooperative receives nonqualified notice but does not include it in income.

Year Federated Cooperative Redeems Notices:

Member cooperative receives cash redemption of notice and includes it in current year's income. After close of year, member cooperative distributes income to producer patrons based on current patronage.

Under this method, accounting practices follow the tax treatment of the notices. Member cooperatives do not include nonqualified notices

in their income or in distributions to producer members when they receive the notices. Instead, this is done when the notices are later redeemed by the federated cooperative. Tax responsibility for the nonqualified notices is met by the federated cooperative until the notices are redeemed.

Because nonqualified notices are not taken into income for tax purposes by the recipient until they are redeemed, a notice received by a member cooperative from a federated cooperative cannot simply be reissued as another patronage refund. The receipt of nonqualified notices does not produce tax return income from which patronage refunds can be issued. The net margins of the federated cooperative distributed as nonqualified notices are shown only in the financial statements of the federated cooperative. Thus, repeated accounting for the net margins of the federated cooperative does not occur.

Treating nonqualified notices in the same manner on tax returns and the financial statements provided to members makes the allocation process straightforward and easy to understand. However, there can be difficulties with this practice. Because patronage refunds are based on current patronage, income received from the redemption of nonqualified notices and distributed as patronage refunds will not necessarily be distributed to the patrons who were responsible for the patronage upon which the original income was based. This can create an inequitable situation, particularly when considerable time has elapsed between issuing and redeeming the nonqualified notices. In addition, strict interpretation of the definition of patronage refunds, which are based on net earnings done with or for patrons, may imply that these distributions do not qualify for singletax treatment under the Internal Revenue Code.

Accountants following standard accounting procedures also could question why nonqualified notices are not included in the member cooperatives' income. It may seem inconsistent from an accountant's view to include qualified notices but exclude nonqualified notices. Some cooperative accountants maintain that patronage refunds are not necessarily tied to the conventions established by Federal tax rules.

As an alternative approach, a member cooperative could take nonqualified notices into income reported on its financial statements when they are received. Under this method, nonqualified notices would be included as investments on the member cooperative's balance sheet and as income in determining its net margins. Federal income tax still would be based on net margins determined according to tax rules.

The following schedule summarizes the flow of income in a federated system when the member cooperative includes the receipt of nonqualified written notices of allocation in the income it reports on its financial statements. Two alternatives are examined. Under the first, the member cooperative allocates the income from nonqualified notices to patrons according to their patronage during the year the federated cooperative redeems the notices. Under the second alternative, the member cooperative allocates this income to the patrons upon whose patronage the original income was based.

Schedule 3: Flow of Nonqualified Income in a Federated System (Financial Statement Method)

Year 1: Earnings occur at federated cooperative. Cooperative issues nonqualified written notices of allocation after close of its tax year.

Year 2: Member cooperative receives nonqualified notice and excludes it from income on tax return but includes it in income on financial statement.

Alternative A: Member cooperative does not allocate income from nonqualified notice from federated cooperative but includes income on financial statement as retained earnings.

Alternative B: Member cooperative allocates book credits to producer patrons for income from nonqualified notice from federated cooperative based on current year's patronage.

Year Federated Cooperative Redeems Notices: Redemption of notices is included in member cooperative's tax return income.

Alternative A: Retained earnings account is reduced as funds from redemption are allocated to producer patrons according to current year's patronage.

Alternative B: Funds from redemption are allocated to producer patrons according to patronage in year 2.

Under alternative A, the member cooperative includes the nonqualified notice received from the federated cooperative in the income it reports on its financial statements. Otherwise, there are no differences between this alternative and the tax return method summarized in schedule 2. The member cooperative does not allocate income to its patrons until the federated cooperative redeems the notice. Then the allocations are made to producer patrons according to current year's patronage, as under the tax return method.

Alternative B differs in that the member cooperative assigns the nonqualified notice it receives to its producer patrons on its records. This allocation process matches the federated cooperative's allocation to the patronage of producer patrons in the member cooperative in a manner similar to what would have occurred if qualified notices had been issued. Because the member cooperative allocates its federa ted earnings to producer patrons in proportion to patronage in the year it receives the nonqualified notice, this allocation process appears to follow the traditional intent of cooperative practices and is consistent with income tracing for federated cooperatives suggested by the Internal Revenue Service (IRS) under some circumstances. However, it also may not fit the precise wording of patronage refunds included in the tax code because it does not assign earnings reported on the tax return to current patrons.

The size of the nonqualified notice and the expected equity redemption practices of the federated cooperative issuing nonqualified notices may influence member cooperatives'

decisions. If the patronage refund from the federated cooperative is large relative to a member cooperative's net margins from its own operations, how the nonqualified notice is handled has an important effect on the member cooperative's reported net margins. For many grain and farm supply cooperatives, patronage refunds from their federated cooperatives can be as large as the net margins earned locally.

Member cooperatives have individual financing plans that may not work well with nonqualified notices issued by the federated cooperative. If close ties exist between the federated cooperative and its members, the federated financing plan can be coordinated with that of members. However, because of the number of organizations and variety of financing systems involved, the federated cooperative may be limited in how programs can be coordinated.

Some member cooperatives receive a major portion of their net margins from patronage refunds distributed by the federated cooperative. A shift to nonqualified notices by the federated cooperative could require major adjustments in member operations and expectations. Because issuing and redeeming nonqualified notices can be complicated within a federated system and most member cooperatives may not have experience with them, the member cooperatives may resist the introduction of a major change in the federated cooperative's practices. Thus, from a member relations perspective, federated cooperatives could find it easier to use a financing plan that matches the plans of their members.

Base Capital Plans

A base capital plan may provide member cooperatives a method for matching nonqualified patronage refund distributions from a federated cooperative to the patronage attributable to their producer patrons in the year the refunds were earned. This use of a base capital plan is based on the long-term stable relationships federated cooperatives usually share with their member cooperatives. Because of these relationships, a federated cooperative may be able to use a base capital plan to make most adjustments to the equity accounts of its member cooperatives by

varying cash patronage refunds and without redeeming equities. By not redeeming the nonqualified notices allocated to member cooperatives, the federated cooperative can benefit from using nonqualified notices while sparing member cooperatives the difficulties of allocating income from the notices to their patrons.

Generally, a member cooperative's patronage and share of the responsibility for financing a federated cooperative do not change greatly from year to year. In addition, federated cooperatives do not need to redeem the equities of retired patrons and estates as do cooperatives that directly serve producers. However, to ensure each member is financing its fair share, a federated cooperative needs some method for adjusting the equity accounts of its member cooperatives. Equity adjustments also are needed for when member cooperatives go out of business or merge. The generally stable relationships between a federated cooperative and its members make the base capital plan a good choice for an equity redemption plan.

Under a base capital plan, each member's equity requirement is readjusted annually according to the cooperative's capital needs and the proportion of the cooperative's total patronage attributable to the member during a moving base period, usually the last 3 to 10 years. Underinvested members, or members whose capital investments are less than their equity requirements, continue to provide direct investments, retained patronage refunds, or perunit capital retains. Overinvested members may begin to receive at least partial redemption of excess investments. For these members, additional investment either is no longer required or is reduced.24

Total equity redeemed in a base capital plan may be substantially less than in other financing plans because the base capital plan is based on adjustments to individual members' equity accounts instead of redemption of equity

²⁴ For a detailed description of the base capital plan, as well as other equity retirement plans, see David W. Cobia et al., *Equity Redemption: Issues and Alternatives for Farmer Cooperatives* (Washington, D.C.: USDA ACS Res. Rep. 23, Oct. 1982), pp. 16-41.

allocations. In other plans, equity is redeemed regardless of the investment status of individual members. In a base capital plan, equity allocated to a member generally is not redeemed if the member does not meet its equity requirement. As a result, lower levels of equity redemption generally occur and adjustments among members can be made largely by varying individual levels of cash patronage refunds.

If a federated cooperative issues nonqualified written notices and operates a base capital plan, nonqualified notices can be used to build up an underinvested member cooperative's equity investment. No cash would flow from the federated cooperative through the underinvested member to its patrons.

The federated cooperative would have two choices for paying cash benefits to member cooperatives that meet their equity requirements. It could redeem nonqualified notices held by them, or it could pay current patronage refunds in cash. Because both redemptions of nonqualified notices and cash payments of patronage refunds are deducted from the federa ted cooperative's taxable income, these options generally would be identical with respect to the tax and cash flow burdens on the cooperative.

Both options also would result in the same cash flow to member cooperatives. In both cases, the income would be taken into member cooperatives' current taxable incomes. The difference is that income passed to member cooperatives as cash patronage refunds is based on current business whereas income from the redemption of nonqualified notices is based on business conducted earlier. Because cash patronage refunds are based on current business, this method would avoid the difficulties of allocating income from earlier business to current producers.

By paying cash patronage refunds, the federated cooperative would not receive the tax benefits from redemption of nonqualified notices. As a consequence, there would be a buildup of unused tax benefits as the amount of nonqualified allocations grows. However, the tax burden on the federated cooperative and its

members would not necessarily be greater than from making qualified patronage refund distributions. The federated cooperative can issue nonqualified notices to its members and pay the tax on the equity it retains or make qualified distributions and pass cash through to its members that they can use to pay the tax. Because both the federated cooperative and its members are taxed at the corporate rate, the cash drain due to tax would be about the same regardless of which cooperative pays the tax.25

Other Methods

A member cooperative could explore other methods of matching nonqualified patronage refund distributions from a federated cooperative to its producer patrons. Nonqualified per-unit retain certificates might be used to make such an assignment. If the member cooperative could construct an agreement for retaining an amount equal to the nonqualified notice it receives from the federated cooperative, the income from the nonqualified notice could be used to meet the retain requirements of individual producers and the allocations could be passed through the member cooperative to the producers. However, it would be important for the cooperative to conduct a careful review of the relevant tax rules and accompanying risks before attempting to implement any unusual allocation method such as this.

Equitable Treatment of Members

Ideally, the burden of financing a cooperative should be borne equitably among members so the equity each member provides is proportionate to that member's use of the

²⁵ See Cobia et al., *Equity Redemption*, pp. 199-200, for an example of a federated cooperative with a base capital plan that generally does not redeem equity but pays varying levels of cash patronage refunds according to the proportion of the equity base each member cooperative has met. Although this plan uses qualified notices, it demonstrates how a base capital plan can operate without redeeming equity.

cooperative. Cooperative equity progrdms generally are designed with this in mind, but in practice this goal is difficult to achieve, partly because cooperative net margins and investment outlays vary from year to year. Nonetheless, operating on a cooperative basis implies that, at a minimum, members should be treated in an equal manner with respect to allocation and redemption of patronage refunds and per-unit capital retains.

Maintaining equitable financing becomes more difficult as cooperatives adopt more complex financing plans and members become more diverse in character. This difficulty is compounded if a cooperative uses two methods for allocating and redeeming equity. Although either qualified or nonqualified notices can provide the basis for an equitable financing system, use of both allocation methods can introduce inequities if there are inconsistencies in how individual members or allocations are treated.

Inconsistencies in treatment can occur if the proportion of allocations held in nonqualified form varies among members and qualified and nonqualified notices are redeemed according to different schedules. Members will hold varying proportions of their allocations as nonqualified notices if the cooperative allows them to individually select the type of allocation they receive. Because individual members generally are not responsible for the same share of the cooperative's business from year to year, this situation also may occur if the cooperative varies the type of allocations it issues based on its current income and tax situation.

When members hold varying proportions of nonqualified notices, the cooperative can avoid inequities by redeeming qualified and nonqualified notices according to the same schedule. It is particularly important that this be done if members are allowed to choose individually the form of their allocations, unless an understanding to the contrary exists before they make their choices. When the cooperative redeems both types of allocations according to the same schedule, it forgoes the ability to time the redemption of nonqualified notices to maximize tax savings. There also is no guarantee that the

fairness of the plan will not change because of delays or suspensions in the redemption schedule brought about by financial reverses or changes in condition.

If a cooperative issues the same proportion of nonqualified notices year after year, all members will have similar holdings of qualified and nonqualified notices. The cooperative loses flexibility in adjusting the proportion to meet its current situation. However, it is able to choose whether to redeem qualified or nonqualified notices according to current conditions without creating serious equity problems.

An examination of cooperatives that have issued nonqualified notices generally did not reveal instances in which there were differences between the type of allocations received by different member groups. Only when members were allowed to choose the type of allocation they received were there differences. The review did indicate that in cooperatives having issued both qualified and nonqualified notices, nonqualified notices frequently were treated differently in the cooperatives' financing plans.

Although there were examples in which qualified and nonqualified notices played similar roles, qualified notices were more likely than nonqualified notices to be revolved by cooperatives operating revolving fund plans. In some examples, nonqualified notices were assigned to nonrevolving reserve funds. In these cases, both cooperatives and members may have had different expectations about the revolvement of nonqualified notices because of the different tax treatment these allocations receive.

Two cooperatives had issued nonqualified notices because of special situations and established a revolving period for nonqualified notices shorter than that for qualified notices. Use of nonqualified notices was considered temporary and not expected to become an ongoing part of the cooperatives' financing plans.

Several cooperatives that issued nonqualified notices operated base capital plans. In some cases, nonqualified notices were included in members' equity bases. However, there were other cases in which these allocations were not included. Such treatment would detract from the purpose of the base capital plan if the role of nonqualified notices were to grow.

Cooperatives may be able to use nonqualified notices to improve the fairness of their financing plans in some situations. For instance, in the past when a cooperative earned investment tax credit from an unusually large investment in property with a long useful life, use of nonqualified notices to absorb the credit may have been a more equitable alternative than allocating it to current members. By using the credit, the cooperative might have been able to reduce borrowing necessary for the investment. Reduced future borrowing costs would have more directly benefited those members burdened with financing the investment.

Distributing patronage refunds as nonqualified written notices could help eliminate an equity problem common to many cooperatives making qualified distributions of patronage refunds. In these cooperatives, there often are conflicts between active members who prefer to have the cooperative pay a high percentage of patronage refunds in cash and former members who prefer rapid revolvement of equity. These conflicts may be difficult to reconcile because there may be frequent shifts in consensus as active members retire and individual preferences change.

Exclusive use of nonqualified notices to distribute patronage refunds could eliminate the need for a cooperative to pay cash patronage refunds and allow its management to focus on effectively achieving a single equity objective all members could support throughout their careers-timely revolvement of equities. Although this strategy might not remove all pressures for high cash patronage refunds, it could reduce them by eliminating the need of patrons for cash to meet their tax liabilities.

Potential for Changing Financing Relationships

Nonqualified notices have potential for altering the financial relationships between cooperatives and their patrons. The relationship between a cooperative and its patrons can range from close and almost interdependent to distant and more like that between a supplier and customer. Because the overall relationship between a cooperative and its patrons depends on many factors, including financing methods, marketing contracts, member relations programs, and personal contacts between patrons and employees, the use of nonqualified notices will not by itself define the nature of this relationship. However, use of nonqualified notices may change patron involvement in providing the cooperative equity capital, thereby contributing to change in the overall relationship.

If a cooperative is financed through operations with noncash patronage refund allocations, patrons have an important role in providing equity capital. However, when patronage refunds are distributed in qualified form, patrons play a more active role than when nonqualified notices are used. By agreeing to accept qualified notices in their taxable incomes, patrons finance their cooperative in a manner similar to direct equity investment. They also make an important contribution by paying the tax, reducing their cooperative's tax liability, and allowing the cooperative to retain more equity.

When nonqualified notices are used, patrons provide equity to the cooperative, but in a passive manner. Patrons receive written notices of allocation, but no action is required and the cooperative pays the income tax. Management and patrons may regard nonqualified notices less like an investment by patrons and more like retained earnings. In the cooperatives examined in this study, nonqualified notices were less likely than qualified allocations to be revolved or be included in patron equity bases.

Factors Limiting Use

Although nonqualified notices were created by the same Federal legislation as qualified notices, relatively few cooperatives currently use them and the proportion of patronage refunds and per-unit capital retains issued in nonqualified form is small. Two factors that limit the use of nonqualified notices are a general lack of experience with them and the delayed tax consequences of their redemption.

Lack of Experience

Qualified notices have been used widely for more than 25 years. Prior to 1962, when enactment of subchapter T of the Internal Revenue Code created the requirements for both qualified and nonqualified notices, cooperatives generally followed tax procedures similar to current procedures for qualified notices except for the cash distribution requirement. Since then, cooperatives and their patrons have incorporated the cash patronage refund and patron income reporting requirements into their operating routines. In addition, cooperative literature and legal precedents have firmly established the procedures for issuing and redeeming qualified written notices of allocation and per-unit retain certificates.

Cooperatives and their patrons have not had as much experience with nonqualified notices, and only limited literature and legal precedents relating to them exist. This lack of experience discourages their use because uncertainties about their characteristics or the procedures for their use make planning for them more difficult.

Federal tax forms and instructions for reporting farm income recognize the existence of nonqualified notices and discuss reporting qualified notices as current income and excluding nonqualified notices. However, if patrons do not understand the differences between qualified and nonqualified notices, they may incorrectly report nonqualified notices as income, thereby losing tax benefits, or later neglect to report the redemptions as income.

Because members, managers, cooperative lenders, and advisors are familiar with qualified notices, organizers of new cooperatives probably consider this allocation method first when planning an equity capitalization program. Accounting and legal advisors may not present cooperative organizers with the alternative of using nonqualified notices at all. Establishing a new organization involves so many uncertainties that those involved may resist exploring the advantages and disadvantages of a financing method with which they are unfamiliar.

Once a cooperative is established, changing financing practices can cause disruptions and

issuing nonqualified notices would be a new experience for most patrons. Thus, unless there are compelling reasons for changing the present system, existing procedures probably will continue to be used.

Delayed Consequences of Redemption

Cooperatives may be discouraged from issuing nonqualified notices because the final tax consequences to the cooperative and its patrons are not determined until the notices are redeemed in cash, perhaps many years after they are issued, Calculation of the tax benefit from redeeming nonqualified notices depends in part on the cooperative's operating results and the applicable tax rates in the year of the redemption, factors that are far from certain when the notices are issued. Similarly, tax paid by patrons on the redemptions depends on their incomes and tax rates, factors that also are indeterminate.

Between when a nonqualified notice is issued and redeemed, the business environment of a cooperative can change. Patronage and membership change, and the cooperative may reorganize or merge with other cooperatives. Financing methods may have changed to accommodate other factors without thought to redeeming nonqualified notices. Thus, redemption of nonqualified notices may occur under circumstances unanticipated when the notices were issued. For example, after the merger of two cooperatives, one of which uses nonqualified notices, the new organization may adopt financing methods different from the two original organizations. Priority may be given to redeeming patronage refund allocations in a manner equitable to members of both of the original cooperatives without regard to maximizing the benefits from redeeming nonqualified notices.

Legislative changes also can affect the benefits from redeeming nonqualified notices. Tax legislation can affect the consequences of redeeming nonqualified notices directly, but even tax changes not directly aimed at cooperatives or allocation methods can have important impacts on the benefits from redeeming nonqualified notices.

Changes included in the Tax Reform Act of 1986 are an example. Although the act did not affect the redemption of nonqualified notices directly, the elimination of investment tax credit and reduction of corporate and individual tax rates included in this act did affect the consequences of redeeming nonqualified notices. Under the Federal tax rates in effect before July 1, 1987, redemption of \$1 of nonqualified paper could produce a maximum benefit of 51 cents. With new tax rates, the maximum benefit from redeeming nonqualified notices was reduced to 39 cents. Although, at a minimum, a cooperative can recover the tax it paid on an allocation, uncertainties make aggressive tax planning difficult.

Another example of an uncertainty that affects the decision to issue nonqualified notices occurred after passage of the Revenue Act of 1978. That act changed investment tax credit rules for cooperatives, allowing many to use this credit effectively for the first time. Cooperatives with taxable income could use investment credit they earned to pay Federal income tax. Some cooperatives saw the existence of the credit as a windfall that could be captured by issuing nonqualified written notices of allocation. Much of what was written about this strategy focused on the cash flow situation of a cooperative and its patrons in the year the notices were issued, and little was said about the consequences of redemption. This may have been because tax advisors were unsure of these consequences or had not thought about them.

Technically, cooperatives redeeming nonqualified notices on which tax was paid using investment credit could receive a cash refund on their redemptions. Whether the IRS would, without challenge, allow a cooperative a cash refund for the reversal of a tax transaction for which a credit, and no cash, was used to pay tax was not known. Nor is it likely to be known until the situation begins to arise with some frequency, perhaps years from **now**. Meanwhile, cooperatives considering the benefits of this strategy did not have the benefit of regulations or tax court rulings on which to base their decisions.

Legislative change affecting cooperative

equity allocations always is a possibility. However, qualified and nonqualified notices differ because redemption of qualified notices produces no tax consequences to either the cooperative or its patrons. Redemption of nonqualified notices yields tax consequences to both the cooperative and patrons, and any legislative change occurring before the notices are redeemed can affect these consequences. In many cases, the period during which changes that affect redemption of nonqualified notices could occur may extend for many years.

Summary

Cooperatives that issue nonqualified notices may face unique problems because of the notices' tax treatment. The income reporting and tax recapture characteristics of nonqualified notices necessitate unique accounting methods for both cooperatives issuing nonqualified notices and recipients. Within the range of acceptable accounting practices, business organizations have some discretion in the practices they follow. Considerations such as the expected time of redemption and the size of nonqualified allocations may influence a cooperative in its choice of a reporting method and the information presented in its financial statements.

A transfer of earnings through a federated system to producer patrons generally cannot be made as easily with nonqualified notices as with qualified notices. A cooperative that receives nonqualified written notices of allocation from another cooperative faces both theoretical and practical questions concerning how the notices should be reported and handled. The recipient cooperative must decide how and when to acknowledge the nonqualified notices as income and how to account for these notices in a manner that provides information understandable by its members and others. A cooperative receiving nonqualified notices also must decide how to transfer this income to its members in a manner that is acceptable to them and that satisfies its patronage agreements and Federal income tax rules.

Member cooperatives have individual

financing plans that may not work well with nonqualified notices issued by the federated cooperative. If close ties exist between the federated cooperative and its members, the federated financing plan can be coordinated with that of members. However, because of the number of organizations and variety of financing systems involved, the federated cooperative may be limited in how programs can be coordinated.

Simple methods of transferring nonqualified patronage refund distributions between cooperative levels may be possible, but lack of experience in this area is an impediment. For cooperatives that transfer patronage refunds between cooperative levels and want secure procedures for preserving single-tax treatment, qualified written notices of allocation, and not nonqualified notices, appear to be the more conservative choice.

Maintaining equitable financing becomes more difficult as cooperatives adopt more complex financing plans and members become more diverse in character. This difficulty is compounded if a cooperative uses two methods for allocating and redeeming equity. Although either qualified or nonqualified notices can provide the basis for an equitable financing system, use of both allocation methods can introduce inequities if there are inconsistencies in how individual members or allocations are treated. Inconsistencies in treatment can occur if the proportion of allocations held in nonqualified form varies among members and qualified and nonqualified notices are redeemed according to different schedules.

Nonqualified notices have potential for altering the financial relationships between cooperatives and their patrons. Because the overall relationship between a cooperative and its patrons depends on many factors, including financing methods, marketing contracts, member relations programs, and personal contacts between patrons and employees, the use of nonqualified notices will not by itself define the nature of this relationship. However, use of nonqualified notices may change patron involvement in providing the cooperative equity capital, thereby contributing to change in the

overall relationship. When nonqualified notices are used, patrons provide equity to the cooperative, but in a passive manner. Management and patrons may regard nonqualified notices less like an investment by patrons and more like retained earnings.

Although nonqualified notices were created by the same Federal legislation as qualified notices, relatively few cooperatives currently use them and the proportion of patronage refunds and per-unit capital retains issued in nonqualified form is small. Two factors that limit the use of nonqualified notices are a general lack of experience with them and the delayed tax consequences of their redemption.

Cooperatives and their patrons have not had as much experience with nonqualified notices, and only limited literature and legal precedents relating to them exist. This lack of experience discourages their use because uncertainties about their characteristics or the procedures for their use make planning for them more difficult.

Cooperatives may be discouraged from issuing nonqualified notices because the final tax consequences to the cooperative and its patrons are not determined until the notices are redeemed in cash, perhaps many years after they are issued. Calculation of the tax benefit from redeeming nonqualified notices depends in part on the cooperative's operating results and the applicable tax rates in the year of the redemption, factors that are far from certain when the notices are issued. Similarly, tax paid by patrons on the redemptions depends on their incomes and tax rates, factors that also are indeterminate.

VI. CONCLUSIONS

Nonqualified written notices of allocation and per-unit retain certificates offer farmer cooperatives alternative means for distributing cooperative earnings and allocating patron equity that may have advantages over qualified written notices and retain certificates in some situations. Some patrons, particularly those with high tax rates, may wish to delay receiving income and therefore would prefer receiving nonqualified distributions. Cooperatives can use nonqualified

notices to avoid negative patron cash flows to these patrons resulting from tax on qualified notices. Nonqualified notices also offer cooperatives an additional tool for managing taxes and handling losses.

Although this tool has been available to cooperatives since enactment of subchapter T of the Internal Revenue Code in 1962, nonqualified notices account for a small proportion of total patronage distributions. Data on the 100 largest U.S. farmer cooperatives suggest there has been an increase in the use of nonqualified notices in recent years, but large cooperatives probably have used these notices more than small cooperatives.

The comparative analysis of patron cash flow conducted earlier in this report suggests that neither the qualified nor the nonqualified method of distributing patronage refunds is clearly superior to the other. Patron cash flows are sensitive to changes in several factors, and which method of distributing patronage refunds results in the greatest cash flow to patrons depends on the level of each of these parameters.

In general, low individual income tax rates favor choosing the qualified method. At low individual rates, patrons avoid negative cash flows from paying tax on qualified written notices of allocation without requiring large cooperative cash drains from paying a high proportion of patronage refunds in cash. High individual tax rates and low corporate rates favor the nonqualified method. The nonqualified method also may be favored by tax incentives such as investment tax credit.

Several institutional factors unrelated to tax rates may support choice of the qualified method. The great deal of experience cooperatives and their patrons have with qualified written notices of allocation and perunit retain certificates certainly contributes to their wide current use. Qualified written notices and retain certificates have been used for more than 25 years. During that time, cooperatives and their patrons have incorporated the cash patronage refund and patron income reporting requirements into their operating routines. In addition, the accounting and legal procedures for

issuing and redeeming qualified written notices and retain certificates have been well established.

Patrons pay the income tax on qualified notices. As a result, the tax responsibility is settled simply and immediately with no long-term complications or uncertainties. By agreeing to include qualified notices in their taxable incomes, patrons also take a more active role in financing their cooperatives. In the case of perunit capital retains, patron agreement to take the allocations into account relieves the cooperative from a tax drain.

Qualified notices also work well within federated systems. There are minimal delays in the flow of patronage refunds from the federated cooperative to its member cooperatives, and there are no conflicts or uncertainties with regard to the distribution of income to current and former patrons.

In general, qualified notices work well with all types of equity accumulation and redemption plans. On the other hand, nonqualified notices require simple and flexible financial arrangements that allow adjustments in equity accumulation and redemption to be made easily. Cooperatives may find they can use nonqualified notices effectively in responding to extraordinary occurrences or large fluctuations in operating results that necessitate major adjustments in their financing methods.

Qualified and nonqualified notices should not be viewed as mutually exclusive alternatives. A cooperative can include authorization for issuing both types of allocations in its bylaws with the idea that each may be useful under certain conditions. Then it has the flexibility to choose whether or not to issue nonqualified notices on a yearly basis according to the situation each year.

Although current individual and corporate tax rates do not favor one type of allocation over the other, future changes in tax rates or credits could alter this situation. In addition, a cooperative could experience special situations such as operating losses. Thus, it may be prudent for a cooperative to review its bylaws and include nonqualified notices in its financial planning to ensure it has the flexibility to meet

future situations optimally.

However, a cooperative should take several steps before issuing nonqualified written notices of allocation. It should review its bylaws and relevant State income tax laws to determine if the use of nonqualified notices is compatible with them and if any potential tax problems may arise. It should review its financing and equity retirement methods to ensure that the use of nonqualified notices will not cause unforeseen complications. It also should review the expectations and experience of members to determine what member relations and education steps need to be taken.

Although the board of directors often is given discretion in administering a cooperative's financing plan, specific provisions may need to be added to the bylaws if the cooperative wants to begin issuing nonqualified written notices of allocation. Bylaws usually include provisions declaring the rights of different equity classes, requiring members to consent to include qualified written notices in their taxable incomes, authorizing the cooperative to issue and redeem patronage refund or per-unit capital retain allocations, and describing operation of the equity retirement or base capital plan. Amendments to the bylaws may need to specify the rights of nonqualified notices in relation to other equity classes and their role in the equity retirement or base capital plan. Nonqualified notices are not covered by the consent provisions for qualified distributions, and the amended bylaws need to be clear about which allocations are covered.

State income tax treatment generally follows Federal procedures for issuing and redeeming qualified written notices of allocation. However, not all States have included procedures for nonqualified written notices in their tax regulations. Thus, cooperatives must review how nonqualified notices are treated in their individual States. If a cooperative's State has not included procedures for nonqualified notices in its regulations, the cooperative may not be able to deduct the redemption of nonqualified written notices from its State taxable income.

Financing plans can be complicated by the

use of nonqualified written notices of allocation or the existence of two distribution methods. Similarly, the use of nonqualified notices can be complicated by certain financing plans. For example, calculation of the tax benefit from redemption of nonqualified notices can be complicated by equity retirement plans that in any tax year may redeem equity allocations issued during more than one prior year. A cooperative should review its financial plan to determine if issuing nonqualified written notices of allocation will seriously complicate operation of the plan, its tax calculations, or the equitable treatment of its patrons.

Because the income and tax situation of a cooperative's members will vary from one group to another, the expected benefits of receiving nonqualified written notices of allocation also will generally differ. The cooperative should review the expectations and experience of its members to determine what member relations and education steps need to be taken. For an allocation program to be successful, members must clearly understand the mechanics of nonqualified notices, appreciate the expected benefits to the cooperative and themselves, and perceive the program as operating in an equitable manner. Because patrons generally have not had much experience with nonqualified notices, they may require educational assistance in understanding how nonqualified written notices are issued and redeemed and how they are reported as income on tax forms. The benefits of using nonqualified notices certainly should be weighed against any loss in patron good will or understanding that may arise from a disruption of the systematic and consistent operation of the current program or an increase in its complexity.

In summary, the tax treatment of nonqualified notices is different from that of qualified notices. Under some conditions, cooperatives and patrons could benefit from considering nonqualified notices. The benefits of nonqualified notices require flexibility by cooperatives and understanding by patrons.

GLOSSARY OF COOPERATIVE TAX TERMS

Nonpatronage income: Incidental income that is not directly related to the marketing, purchasing, or service activities of a cooperative and merely enhances the cooperative's overall profitability. It may include rents received, investment revenues, gains on the sale or exchange of depreciable property and capital assets, and amounts from business done with the Federal Government. Nonpatronage income also includes income from business done with or for nonmembers but not distributed to them.

Nonqualified per-unit retain certificate: A per-unit retain certificate that the recipient does not consent to include in taxable income and thereby does not qualify for deduction from the cooperative's taxable income. Cash redemptions of nonqualified per-unit retain certificates are included in the recipient's income and are deducted from the cooperative's income.

Nonqualified written notice of allocution: A written notice of allocation that the recipient does not consent to include in taxable income and thereby does not qualify for deduction from the cooperative's taxable income. Cash redemptions of nonqualified allocations are included in the recipient's income and are deducted from the coopera live's income.

Patronage refund: An amount paid a patron from the net margins of a cooperative on the basis of quantity or value of business done with or for patrons under a preexisting legal obligation. A patronage refund does not include amounts paid a patron based on earnings from business not done with or for patrons or amounts paid a member based on earnings from business with nonmembers to whom smaller amounts are paid for substantially identical transactions. Called patronage dividend in the Internal Revenue Code.

Payment period: The period during which a patronage refund or per-unit capital retain must be distributed to be considered as such under

subchapter T of the Internal Revenue Code. The period begins the 1st day of the tax year and ends on the 15th day of the 9th month after the close of the tax year.

Per-unit capital retain: An investment in a cooperative made by a patron based on the dollar value or physical volume of products marketed through the cooperative and withheld according to a bylaw provision or membership agreement that authorizes the cooperative to make a specified deduction for capital purposes from proceeds due members or cash advances. These retains should be distinguished from deductions authorized to cover operating expenses.

Per-unit retain certificate: Any written notice that discloses to the recipient the dollar amount of a per-unit retain allocation made by the cooperative.

Qualified check: A check or other instrument that is redeemable in cash and paid as part of a patronage refund. Imprinted on the instrument is a statement that endorsing and cashing it constitutes patron consent to include in taxable income the stated dollar amount of the written notice of allocation that also is part of the patronage refund.

Qualified per-unit retain certificate: A per-unit retain certificate that the recipient consents to include in taxable income and thereby qualifies for deduction from the cooperative's taxable income under conditions specified in subchapter T of the Internal Revenue Code.

Qualified written notice of allocution: A written notice of allocation that the recipient consents to include in taxable income and thereby qualifies for deduction from the cooperative's taxable income under conditions specified in subchapter T of the Internal Revenue Code. At least 20 percent of the patronage refund of which the notice is a part must be paid in cash.

Section 521: Section of the Internal Revenue Code that exempts cooperatives that meet certain

requirements from including in taxable income dividends paid on capital stock and nonpatronage income distributed to patrons on a patronage basis.

Subchapter T: Sections 1381-88 of the Internal Revenue Code, which define the tax treatment of any corporation operating on a cooperative basis except mutual savings banks, mutual insurance companies, and cooperatives engaged in furnishing electric energy or telephone service to rural areas.

Written notice *of allocation:* Any capital stock, revolving fund certificate, retain certificate, certificate of indebtedness, letter of advice, or other written notice that discloses to the recipient the amount allocated to the patron by the cooperative and the portion of the allocation that is a patronage refund.

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Agricultural Cooperative Service (ACS) provides research, management, and educational assistance to cooperatives to strengthen the economic position of farmers and other rural residents. It works directly with cooperative leaders and Federal and State agencies to improve organization, leadership, and operation of cooperatives and to give guidance to further development.

The agency (1) helps farmers and other rural residents develop cooperatives to obtain supplies and services at lower cost and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs.

ACS publishes research and educational materials and issues Farmer Cooperatives magazine. All programs and activities are conducted on a nondiscriminatory basis, without regard to race, creed, color, sex, age, marital status, handicap, or national origin.