Impact of Tax Reform on Agricultural Cooperatives

Special Edition ACCC Fact Sheet Series
Collaborative Research KSU/OSU

January 10, 2018

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*The authors would like to acknowledge the helpful review and comments from Dr. Michael Boland in the Department of Applied Economics at the University of Minnesota

It should be noted that this is an initial examination of the Tax Cuts and Jobs Act of 2017 as of 1-10-2018. At the time of writing this fact sheet, the tax reform plan had just recently been passed into law. The final tax rules are still being considered and debated. As such, the purpose of this analysis is to start a discussion on how tax reform could impact a cooperative's distribution of member profits. Individual cooperative directors and managers should consider their own situation before altering their distribution decisions.

The Tax Cuts and Jobs Act of 2017 could have significant implications for how agricultural cooperatives distribute patronage back to their members. Under the tax reform plan, there are four key changes for cooperatives – (1) elimination of the domestic production activities deduction or Section 199; (2) lower corporate tax rates; (3) lower member taxes on qualified patronage distributions; and (4) a new tax deduction tentatively labeled Section 199A which provides a deduction at the cooperative level as well as a deduction at the member level. Many cooperative directors, managers, farmer-owners, and policymakers are trying to figure out how all of this will impact taxes in rural America.

The purpose of this fact sheet is to examine the implications of the Tax Cuts and Jobs Act of 2017 for agricultural cooperatives. A simulation model of a hypothetical grain marketing cooperative is applied to the previous tax situation and the new tax plan. Results show that members of cooperatives will very likely benefit from the tax reform package. Cooperative boards of directors also have the opportunity to re-examine profit distribution decisions, both to maximize member return and to manage the cooperative's equity structure. Our analysis shows a slight advantage of distributing equity in patronage in a nonqualified (not immediately taxable) form.

Brief Explanation of Tax Changes for Agricultural Cooperatives

Cooperative directors and managers are able to respond to changes in the tax code in unique ways. Under the Sub-Chapter T of the IRS code, cooperatives can deduct certain distributions of profits to their patrons. While certain deductions have been removed under the new tax reform plan, other aspects should benefit the cooperative and its members. The ability of cooperatives to manage their taxes via different distribution strategies could mitigate the impact of the proposed tax reform changes.

The tax treatment of member-based profits is important to this discussion. In order for a cooperative to maintain single taxation, all member-based profits must be allocated and distributed to the members in the form of patronage distributions. Patronage distributions can be qualified or nonqualified. Qualified distributions are tax deductible to the cooperative and taxable to the member. Cash patronage is one form of qualified distribution. The cooperative can also distribute profits in the form of qualified equity. When profits are distributed in a combination of cash and qualified equity the patron pays the tax on the entire amount received. The IRS requires cooperatives to pay at least 20% of the entire qualified, patronage distribution in cash.

While qualified cash and equity patronage distributions have been the historical choice of agricultural cooperatives, the firm can also distribute profits as nonqualified equity. For nonqualified distributions, the cooperative pays tax on the profits in the current year and receives a deduction in a future year when the nonqualified equity is redeemed. When the member receives the nonqualified equity in cash, they will then pay the tax. Both qualified and nonqualified equity are eventually redeemed according to the cooperative's equity retirement plan.

Cooperatives can also retain both member-based and non-member based profits as unallocated retained earnings. These profits are taxed at the regular corporate rate, and the cooperative pays the tax. Cooperatives typically retain non-member profits as unallocated equity since those profits cannot be distributed as patronage. Retaining member based profits as unallocated retained earnings does not achieve pass through taxation and, in the absence of a tax credit, increases taxes at the cooperative level. Unallocated retained earnings are only realized by the member if the cooperative is liquidated.

The domestic production activities deduction (DPAD) allowed cooperatives to offset some of their taxable income or their members' taxable income. Without getting into details, the amount of DPAD is often limited to 50 percent of the cooperative's W2 wages. DPAD became available at a time when many cooperatives needed to retain funds to replace infrastructure. Many cooperatives used DPAD to retain member based profits without creating taxable income to the members. This increased the member's after tax cash flows since they did not have to pay taxes on qualified equity patronage. DPAD was not commonly interpreted as allowing a cooperative to offset the profits on non-member based profits. In addition to using the deduction at the cooperative level, cooperatives had the ability to pass through all or part of this deduction to its members.

The Tax Cuts and Jobs Act of 2017 eliminated DPAD for domestic manufacturing firms, and as such, eliminated it for agricultural cooperatives. Fortunately, the new tax bill also created a new tax deduction akin to DPAD for agricultural cooperatives. In this case, the tax deduction exclusively for cooperatives is referred to as Section 199A. Corporate tax rates, which are paid by cooperatives, were reduced from 35 percent to 21 percent. Additionally, cooperative members have the ability to deduct 20 percent on qualified distributions from a cooperative. The tax reform act highlights the value of agricultural cooperatives because farmers conducting business with non-cooperatives cannot benefit from the new Section 199A.

Examining the Tax Reform Package for Agricultural Cooperatives

In order to estimate the effect of the tax reform package, a simulation model of a hypothetical grain marketing cooperative was constructed. The case study cooperative had $280 million total sales, which are primarily from grain; 85 percent member business; 5 percent annual asset growth; 24 percent debt-to-asset ratio; 15 year revolving equity retirement plan; and 44 percent of total equity is allocated.

Four tax scenarios are applied to the simulation model. The first is the "Baseline" tax scenario prior to the availability of DPAD. Here the cooperative does not use DPAD, assumed to have a 41 percent corporate tax rate (federal and state), and its membership has a tax rate equal to 35 percent (federal, state, and self-employment). The next scenario is similar to the Baseline, except the cooperative utilizes DPAD. The third scenario shows the outcome under tax reform if the cooperative does not choose to use the cooperative level Section 199A deduction. Finally, the last scenario shows the impact of a cooperative using Section 199A deduction, an assumed 27 corporate tax rate, a 35 percent member tax rate, and a 20 percent deduction on qualified patronage distributions.

In order to provide a fair comparison, the cash patronage distributions were adjusted to keep the cooperative's cash flow constant across the profit distribution choices and between the scenarios. This is an important assumption because the analysis aims to capture the ability of a cooperative to adjust to changes within the tax code. Doing so will provide cooperative directors and managers an indication of how they could respond to tax reform. The impact of tax reform will vary across cooperatives so this analysis provides insights into how a cooperative might adjust their current patronage distributions.

Prior to DPAD, members received the highest return when the cooperative distributed qualified patronage. Table 1 shows that the baseline scenario of 50% cash and 50% qualified equity provides the cooperative with just over $4.5M in cash flow and only paying taxes on its non-member income. Members receive cash patronage of about $3.7M with an after tax annual cash flow of nearly $1.4M. This results in an internal rate of return for the members of 23.5% over the simulated 30-year lifespan of cooperative usage. Because the cooperative is issuing allocated qualified equity, the ratio of allocated equity to total equity increases from the beginning level of 44% to 69% by year 10. Alternative profit distribution choices resulted in lower returns to members because the cooperative must reduce cash patronage to 15% keep its cash flow constant.

Table 1: Baseline 41% corporate tax rate 35% member tax rate

Patronage Income Distribution	Cooperative's Year 1 Cash flow	Cooperative's Year 1 Tax	Member Year 1 Cash Patronage	Member Year 1 After Tax Cash Flow	Member IRR	Allocated Equity to Total Equity in Year 10
50% Cash 50% Qualified	$4,523,660	$532,960	$3,683,057	$1,379,041	23.5%	68.9%
15% Cash 85% Nonqualified	$4,523,660	$3,092,501	$1,123,333	$1,004,290	20.2%	78.4%
15% Cash 85% Unallocated	$4,523,660	$3,092,501	$1,123,333	$1,004,290	16.3%	5.3%

Table 2: 41% corporate tax rate and 35% member tax rate with DPAD

Patronage Income Distribution	Cooperative's Year 1 Cash flow	Cooperative's Year 1 Tax	Member Year 1 Cash Patronage	Member Year 1 After Tax Cash Flow	Member IRR	Allocated Equity to Total Equity in Year 10
50% Cash 50% Qualified	$4,523,660	$532,960	$3,683,057	$1,379,041	23.5%	68.9%
50% Cash 50% Nonqualified	$4,523,660	$532,960	$3,683,057	$2,668,111	37.5%	64.5%
50% Cash 50% Unallocated	$4,523,660	$532,960	$3,683,057	$2,668,111	37.2%	5.3%

Table 3: 27% corporate tax rate, 35% member tax rate, 20% deduction on qualified patronage, no Section 199A

Patronage Income Distribution	Cooperative's Year 1 Cash flow	Cooperative's Year 1 Tax	Member Year 1 Cash Patronage	Member Year 1 After Tax Cash Flow	Member IRR	Allocated Equity to Total Equity in Year 10
54% Cash 46% Qualified	$4,523,660	$350,974	$3,865,000	$2,076,612	30.8%	65.8%
35% Cash 65% Nonqualified	$4,523,660	$1,645,915	$2,570,037	$2,124,551	31.3%	72.0%
35% Cash 65% Unallocated	$4,523,660	$1,645,915	$2,570,037	$2,124,551	30.4%	5.3%

Table 4: 27% corporate tax rate, 35% member tax rate, 20% deduction on qualified patronage, with Section 199A

Patronage Income Distribution	Cooperative's Year 1 Cash flow	Cooperative's Year 1 Tax	Member Year 1 Cash Patronage	Member Year 1 After Tax Cash Flow	Member IRR	Allocated Equity to Total Equity in Year 10
57% Cash 43% Qualified	$4,523,660	$0	$4,216,033	$2,427,645	34.8%	59.7%
57% Cash 43% Nonqualified	$4,523,660	$0	$4,216,033	$3,309,668	45.4%	59.7%
57% Cash 43% Unallocated	$4,523,660	$0	$4,142,372	$3,256,632	44.6%	5.3%

Now considering a cooperative's ability to use DPAD, cooperatives had a strong incentive to retain taxable income at the cooperative level to take advantage of the deduction. Comparing the results in Table 2 to those in Table 1, shows that DPAD essentially removed the tax impact on the cooperative when the cooperative retained member profits as nonqualified equity or unallocated retained earnings. As such, using DPAD allowed a cooperative to keep its cash patronage payments at the baseline level of 50% while retaining funds. Because members no longer had a tax obligation from qualified equity, they realized a higher after-tax cash flow of $2.7 million and higher member return of 41%. Note that the cooperative still had a small tax liability from non-member income.

As mentioned, the Tax Cuts and Jobs Act of 2017 eliminated DPAD and created a new Section 199A deduction. Without going into details of the bill's language, Section 199A applies to most agricultural marketing and farm supply cooperatives. Under Section 199A a cooperative's potential deduction is calculated as the lesser of 20% of gross income less distributions to patrons, or 50% of the cooperative's W-2 wages but cannot exceed taxable income. The tax reform act also reduced the cooperative's corporate income tax to 21%. Section 199A also created a separate deduction for cooperative members that provides a 20 percent deduction for qualified distributions received from a cooperative. In order to prevent confusion, we will simply refer to that deduction as the members' 20 percent deduction.

The effect of the change in the corporate tax rate and Section 199A can be seen by comparing Table 3 to our baseline results in Table 1. Due to lower taxes on non-member business the cooperative is able to increase the cash patronage percentage while maintaining the same cash flow. The cooperative can also provide a higher cash patronage percentage (35 percent instead of 15 percent) when retaining funds as nonqualified equity or unallocated retained earnings for the same reason. Because of the increased cash patronage, the members' return is higher relative to the baseline across all profit distribution choices. Even with the member's 20% deduction on a qualified equity distribution, the preferred profit distribution choice, in terms of member return, shifts to a combination of cash and non-qualified equity.

The impact of cooperatives utilizing the Section 199A deduction can be clearly seen by comparing the Table 4 results with the previous 3 tables. The cash patronage percentage is again adjusted to keep cooperative's cash flow constant relative to the baseline scenario. Because there is sufficient Section 199A deduction to offset the tax on both member and non-member income, the cash patronage percentage of the cash/qualified equity option increases. The deduction also allows the cooperative to maintain that cash patronage percentage for the other two distribution options. The preferred choice, in terms of member return is again a combination of cash and nonqualified equity. Retaining profit as unallocated retained earnings is a close second choice, but drastically decreases the portion of allocated equity on the cooperative's balance sheet.

A caveat to these conclusions is that the amount of Section 199A deduction will be subject both to the final tax rules and the cooperative's structure of member payments for commodities. If the cooperative did not generate sufficient Section 199A deduction to offset all potential taxes (as might be the case in farm supply only cooperatives) their potential cash patronage proportions and member returns would end up somewhere between the results of our Table 3 and Table 4.

In our analysis we have assumed that the cooperative purchases the members' commodities. Cooperatives can also structure member commodity payments as per unit retains. That structure could create a member level deduction significantly higher than what we have modeled. Until the tax rules are finalized it is uncertain how structuring commodity payments as per unit retains would impact the cooperative level deduction. For that reason we have limited our analysis to modeling the cooperative purchasing commodities from members and distributing patronage.

The largest impact of the profit distribution choice is on the cooperative's balance sheet. Retaining funds as unallocated retained earnings rapidly creates a balance sheet with a small portion of revolving equity and a high portion of retained earnings. Our analysis suggests that if a cooperative retaining funds in the form of unallocated retained earnings the ratio of allocated equity to total equity may fall below 5% in as little as 10 years. Cooperative directors and managers need to be aware of balance sheet implications as they consider the best way to distribute member profits.

Conclusions

There are several conclusions from our analysis. First, all cooperative members stand to benefit from the Tax Cuts and Jobs Act of 2017. Members of cooperatives that have not historically used DPAD and choose not to use the e new Section 199A cooperative level deduction should still benefit indirectly from the lower corporate tax rate and directly from the 20% deduction on qualified distributions. As we interpret it, members of cooperatives previously using DPAD should still see a slight additional cooperative level benefits under Section 199A due to a greater ability to offset non-member based taxable income. The largest cooperative level benefit will accrue to members in a cooperative which has not historically used DPA and now chooses to use the new Section 199A to retain profits as nonqualified equity. As mentioned, cooperative members have the potential for a separately calculated Section 199A deduction at the farm level which we did not consider in this analysis since it does not impact the cooperatives profit distribution choices.

The second conclusion is that the Tax Cuts and Jobs Act of 2017 provide boards of directors another opportunity to consider their profit distribution choices. Our analysis indicates a slight advantage of retaining profits as nonqualified rather than qualified equity for cooperatives not pursuing the Section 199A cooperative level deduction and a significant advantage of nonqualified retained equity for cooperatives fully utilizing Section 199A.

Finally, we conclude that cooperatives that use Section 199A deduction to retain funds as unallocated retained earnings are restructured their balance sheets toward a predominance of unallocated equity. 'Cooperative purest' view allocated equity as highly desirable, giving members a tangible and personal measure of ownership. If a cooperative board concludes that allocated equity is under emphasized on their balance sheet, tax reform provides a good opportunity to return to retaining profits as allocated equity. Our results favor nonqualified equity but both qualified and nonqualified equity are forms of allocated equity and address the balance sheet issue.

In summary, the recent tax reform package will have implications for agricultural cooperatives. Individual cooperatives and individual producers have different tax situations so the conclusions of the above analysis will likely not hold in every situation .A Cooperative directors and managers should view tax reform as an opportunity to reconsider how they distribute patronage income and the resulting impacts on member's return, the cooperative's cash flow, and the cooperative's balance sheet. Cooperatives continue to enjoy a great business model and it appears that the value was not lost on the designers of this tax reform package.