



Five Questions to Ask Before Joining A New Processing Cooperative

New venture processing cooperatives are structured differently than traditional farm supply and commodity marketing cooperatives. These new co-ops focus on processing and marketing processed products rather than input supply and marketing of raw agricultural commodities. They require members to deliver commodities through marketing contracts, tie delivery rights to the purchase of equity stock in the co-op, and limit the amount of equity stock to a level which is sufficient to ensure peak use of its facilities.

A combination of factors make a new venture processing co-op membership decision complex. The following questions should help you make an informed decision.

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I. What are the potential returns from cooperative membership?

This question is more difficult to answer than it first appears. New venture cooperatives typically return financial benefits to members in the form of net returns from operations (cash and retained refunds) and equity stock appreciation. These benefits are received at different times in the future. The difference in time from the initial investment until the receipt of returns should be accounted for by using a net present value analysis. This process accounts for the time value of money which reduces the value of future cash inflows because they are not available for use today. An example of a net present value analysis is included.

The cooperative's prospectus, which is a summary of the business plan, should provide most of the information needed for a net present value analysis. However, an appropriate discount rate must be selected. There are two common approaches used to do this. The first is to select a discount rate which is equal to the next best use of money, usually equal to the highest interest rate that you are paying on debt capital. The second is to select a discount rate which represents a desired rate of return. This second approach has advantages because it allows you to include the risks surrounding the cooperative business and your equity investment. The rule is, the greater the risk, the higher the discount rate.

II. What risks are the cooperative business exposed to?

Risks are commonly divided into two broad categories. The first category is business risks. These include construction and operating risk, market and price risk, technological risk, legal and social risk, and human risk. Most of these business risks have straight-forward explanations. However, human risk is commonly underemphasized. Human risk relates to selecting and maintaining high quality labor, management and board of directors. The people who are involved with the co-op are the ones who make it successful.

The second category is financial risk. Financial risk is the increase in business risk caused by debt financing. These include the availability of borrowed capital, credit terms, and changing interest rates. Financial risk may not seem as large as business risk, but the ability to adjust to business risk by using borrowed capital can have a great impact on the co-op's ability to succeed.

Both business and financial risks should be incorporated into the selection of an appropriate discount rate, and be included in your co-op membership decision.

III. How will cooperative membership influence your farm/ranch operation?

Cooperative membership can influence your farm/ranch production, marketing and finance. Many new venture co-ops develop recommended production practices for their members so that the co-op will have a consistent, high quality supply of commodities. Some of these are mandatory; while others are voluntary. Some practices are very simple to implement and relatively low cost; others are more complex and costly. It is important to consider both direct costs and indirect costs to your other farm/ranch enterprises before making changes in production practices.

In most cases, the responsibility for profitably marketing the commodity is turned over to the co-op though its processing activities. It is important to understand how and when you will be paid for the commodity you deliver. It may be necessary to adjust the marketing of your other commodities or short term borrowing to adapt to the co-op's payment schedule. You should also understand what will happen if you cannot deliver the quantity or quality of product which is listed in the co-op's marketing agreement. Some co-ops have developed marketing pools which can be used to fill shortfalls. Other co-ops require that you purchase the commodity from alternative sources.

There are both long-term and short-term financial impacts on your farm/ranch from co-op membership. The long-term impacts can be captured by preparing two whole farm budgets. The first budget should represent business as usual, without co-op membership. A second budget should include co-op membership. A comparison of the two budgets will show the projected long-term impact on net farm income, change in net worth, and long-term cash flow. These are three of the most important measures of the farm/ranch financial health.

It is not unusual for a new venture co-op to take several years of operation before positive net returns are realized and returned to its member/patrons. It is critical that the farm/ranch be able to meet all of its financial obligations during this time. A short-term cash flow projection will show if this is possible.

IV. How will my lender view the cooperative investment?

It is important to discuss co-op membership with your lender regardless of whether your membership investment is self-financed or debt-financed. Any significant change in your farm/ranch operation should be reviewed with your lender to maintain good working relations.

Your lender will have many of the same questions about co-op membership that have already been discussed. However, your lender may also want to know how possible co-op losses will be distributed and how easily membership stock can be transferred.

These additional questions will help your lender determine the maximum loss potential and co-op stock liquidity. The answers may influence loan terms, as well as collateral levels and sources.

Some lenders have developed special loan programs which meet the unique needs of new venture co-op membership, while others rely on traditional lending practices. In either case, loan terms and collateral sources and amounts should be thoroughly discussed to reduce the potential for future financial problems.

V. How will cooperative membership impact my personal and business goals?

One of the most commonly cited personal benefits of co-op membership is the ability to have a voice in the operation of the business. Some farmers and ranchers list this as one of the main reasons they became a member in a co-op.

Potential community economic benefits and increased job prospects are also reasons for becoming a co-op member/investor. Even though these are important reasons, you should consider whether the co-op will locate within your community. It is also important to

understand that not all of the economic impacts on a community are positive. Some communities have found that increased populations have put a strain on existing water, sewage, fire fighting, police, medical services, and schools. An expanded job market may also increase competition for labor and put additional financial pressure on existing businesses.

The desire to assist the next farming/ranching generation is another factor which is commonly given for new venture co-op membership.

Summary

This has been a very brief review of some of the many issues which can play a role in a new venture cooperative membership decision. An expanded discussion of these and other related topics are available through NDSU Extension Service publication #67, Should I Join A New Processing Cooperative?

A Net Present Value Example

A new venture processing co-op is requesting a \$200 common stock, or membership fee, plus a minimum purchase of 500 shares of preferred stock, at \$20 per share. Each share of stock allows for the delivery of one unit of commodity to the co-op for processing. This results in a minimum total investment of \$10,200.

Table 1 lists the projected per-unit net return and percent cash patronage refund for the first five years of the cooperative's operation.

Table 1. Projected per-unit co-op net returns and cash patronage refund.					
	Year 1	Year 2	Year 3	Year 4	Year 5
Per unit net return	\$-1.50	\$-0.50	\$1.00	\$2.00	\$3.25
Cash patronage refund			20%	40%	60%

OTHER KEY ASSUMPTIONS:

Planned length of investment: 20 years

Retained refund redemption: 10 year revolving basis, with balance redeemed when membership ends (death or stock transferred to another producer)

Estimated sales value of stock in year 20: \$32,500

Marginal income tax rate: 30%

Discount Rate: 8%

The insert provides a net present value analysis of this example. A brief discussion of the calculation process and results are included on the back.

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Per-unit patronage refund (Column A)

Lists the projected annual per-unit patronage refund from the co-op's operations. We assumed the per-unit refund for years 6 through 20 are the same as year 5. Please note that the first two years have no patronage refund because of projected losses.

Total patronage refund (Column B)

Lists the per-unit refund from Column A times the 500 shares of preferred stock purchased.

Percent cash refund (Column C)

Lists the estimated annual percent cash refund. The remaining percentage is retained by the cooperative and returned 10 years later.

Cash patronage refund (Column D)

Lists the annual patronage refund that is paid in cash. It is calculated by multiplying Column B and Column C together.

Estimated tax (Column E)

Lists the estimated annual tax liability. This is calculated by multiplying Column B by the 30% marginal income tax rate. We must use the total patronage refund (column B) to calculate the estimated tax because most co-ops use allocated refunds, allowing for taxable income to be passed through to the member/patrons. Therefore, the total amount must be claimed as taxable income, even though only a percentage is received in cash. Please note that the estimated tax is greater than the cash patronage refund in year 3.

Redeemed retained refunds (Column F)

Lists the annual redeemed retained refunds. The amount of annual retained refunds is calculated by subtracting the cash refund (column D) from the total refund (column B). In this example, the retained refund is redeemed on a 10 year revolving basis. This means that the retained refund earned in year 3 will be returned in year 13. We also assume that all remaining retained refunds will be redeemed when the stock is transferred, in this case when it is sold in year 20. NOTE: This practice is not commonly used by co-ops, but was used in this example for its simplicity.

Net cash flow (Column G)

Lists the annual net cash flow. This column is calculated by subtracting the estimated tax (column E) from the cash refund (column D) and then adding the redeemed refund (column F).

Discount factor (Column H)

Lists the annual discount factor. This can either be calculated by using the formula; $1/(1+i)^n$, where "i" is the discount rate (8% in this example) and "n" is the number of years in the future (1 to 20), or obtained from a table of discount factors.

Present Value (Column I)

Lists the annual present value of the net cash flow. This is calculated by multiplying the net cash flow (column G) by the discount factor (column H).

The stock sale (last row)

There are some special considerations when calculating the present value of the stock sale. The estimated tax is calculated by subtracting the initial investment (\$10,200) from the sale amount (\$32,500) and multiplying the difference (capital gains of \$22,300) by the marginal tax rate (32%). This assumes that the capital gain will be taxed at the same rate as ordinary income, but that the additional income will move you from the 15% to the 28% marginal federal income tax rate. Also note that the remaining retained refund, of \$6,500, is redeemed at the time of the sale. Therefore, the net cash flow is the sale amount (\$32,500) less the estimated tax (\$7,136) plus the remaining retained patronage (\$6,500).

The Answer = The Net Present Value

The net present value is the sum of all the annual present values. In this example, the net present value is a positive \$1,214.67. Because the net present value is positive, this co-op stock investment will return more than the minimum 8% after-tax return, and should be considered as a profitable investment. However, if the net present value was negative, the investment would return something less than the desired 8% after-tax return, and your money may be used better in other ways.