

AgVentures

Business Arrangements & Farm Transfers

Facilitator's Notes

FBA Case Farm Study

LEARNER OBJECTIVE(S):

- *Learner will explore, form opinions and produce a SWOT analysis for three phases of Farm Business Arrangement (Beginning, Transitional, & Permanent)*

TEACHING STEPS:

1. All three examples use the same family in an attempt to minimize the time needed for participants and instructors to become familiar with the farm family. Details such as family member ages change from one example to another to present different situations to the participants.
2. Although there are common threads between all three examples, the case farm is not designed to force participants' discussion into a predetermined sequence of decisions for a farm family progressing from one phase of farm business arrangement (FBA) to another during a period of time. While considerable effort was taken to make each farm financial document realistic for an isolated point in time, it would be difficult to show, mathematically, exactly how the farm finances moved from one example to another.
3. Because each case represents a possible decision point the family could encounter (with or without encountering the other two cases), the most effective use of the cases will likely occur if participants evaluate, discuss, and recommend an FBA based on the information provided in each case independent of information provided in previous examples.
4. The case farms illustrate three phases which include:
 - ✓ A Beginning Phase with key players aged 43 and 20.
 - ✓ A Transitional Phase with key players aged 45 and 22.
 - ✓ A Permanent Phase with key players aged 50, 27 and 22.

5. Each case farm description consists of three items:
 - a brief narrative description of the farm and family
 - a bare bones balance sheet for each owner
 - a cash income and expense summary for each key player for the year leading to a discussion about a new arrangement
6. These financial documents may not perfectly dovetail with documents used in other *AgVentures* units. These documents are offered in simplified form because:
 - The amount of time allocated to the case farm example during the FBA unit is fairly short.
 - The teaching philosophy of *AgVentures* is for most of the learning to occur as participants discuss ideas and issues that are at least somewhat open ended.
 - The objective of teaching detailed financial analysis resides in another *AgVentures* unit - not this one.
7. Below the balance sheets in each case is a listing of the cash available for family living from operations. The dollar amount listed includes some return to labor, management, and equity. In Cases two and three, total dollars of labor paid are listed too. Especially in Case three, the amount of dollars obtained by adding cash available for family living to wages paid can be used to project if the operation can generate enough income to add another person who has some ownership interest.
8. The cash income and expense summaries are designed more to illustrate the cash flow characteristics of the FBA, even though the rate of return on assets (ROROA) and rate of return on equity (ROROE) are the most useful and important measures of farm financial performance. This is done for two reasons. First, most farm families use cash flow (cash available for family living) as the basis for deciding if they are satisfied with the financial performance of an FBA. Secondly, given the orientation and a limited amount of time to review case farm examples, it is easier for participants to evaluate financial performance of an FBA if its analysis is designed this way.
9. The cash income and expense summaries are organized in a specific fashion which, although atypical, can make them especially useful for this purpose. The cash income and expense summaries are set up with several parts designed to make it easy to see the financial impact of minor adjustments to an illustrated arrangement. The parts of the cash income and expense summaries are:

Operating Income

Cash Operating Expenses

Selected Fixed Costs

Interest and Principal Payments

Cash for Family Living from Operations

Cash Inflow from Interest, Principal, Rent, and Wages

Total Cash for Family Living from the Business Operation and Assets

For anyone wanting to know more about why the cash income and expense summaries have been prepared in an atypical fashion, read the following information.

- All *Operating Income* is lumped together. It amounts to about \$2700 per cow for the number of cows listed at the top for one year. If we assume 15% of the gross income comes from the sale of cull cows and other livestock and a milk price of \$12.50/cwt, annual pounds of milk sold per cow would be 18,360 lbs.
- The *Cash Operating Expense* category includes most of the variable or operating expenses for a dairy farm. The costs included here are those that are most likely to be split in the same proportion in a livestock share lease (equally, for example in a traditional 50-50 livestock share lease). In all three herd sizes, these costs represent \$1,234 per cow or \$0.46 per dollar of operating income.
- The *Selected Fixed Cost* category includes several costs directly associated with a specific asset. Depending on the time frame of the analysis, one could correctly argue that some of these costs are variable. These costs are often paid by the owner of the asset that the cost is connected to. In most FBAs, these costs are split in different proportions compared to those included in the cash operating expense category and even compared to each other.
- *Interest and Principal Payments* are in their own category because there can be a great deal of variation in the amount of debt involved in any given FBA. By categorizing these two cash flows separately, we can illustrate the impact that debt can have on the feasibility of a FBA. Technically, principal is a cash outflow instead of an expense. However, the expense version of principal is depreciation. As a non-cash cost, depreciation can make the analysis much more difficult to understand unless the depreciation is designed to equal principal. That's why principal is illustrated instead of depreciation. The case farms use 9% interest for all borrowed money and the following amortization periods:

Cattle and Machinery - 7 years

Buildings - 10 years

Land - 20 years

- The *Cash for Family Living from Operations* category shows the amount of cash provided to each party in the FBA from its operation. It's the amount of income left after subtracting cash operating expenses, selected fixed costs, and principal and interest from operating income.
- *Cash Inflow from interest, Principal, Rent and Wages* are all in a category created to make it easier to see the financial impact caused by changing asset ownership, especially between members of the FBA. For example, if we took the base farm and said that John would sell some cows to Pete and finance the sale, Pete's interest and principal payments would appear as cash outflows in his principal and interest column. Pete's payments to John in his column would

appear as cash inflows to John in this category. Even if Pete borrowed the money from a conventional lender, it would be useful to show John's reimbursement from the sale as if he were financing the sale. If Pete rented an asset from John, it would be handled in a similar way. These sales and renting of assets represent cash flows that are not technically part of the

- operation of the farm. Therefore these flows need to be kept separate from the operating functions.

Use of this category in the case farm example helps students see the impact of the FBA on the amount of money available to each party for family living from the operation and investment changes without making assumptions about what John would do with money made available as the result of the sale of some assets.

- The *total cash for family living* category merely combines the net cash flow impact of the farming operation with the net cash flows of changes in controlling assets. It is the financial number that most farm families will be most sensitive to. Most farm families do not consciously think available cash consisting of an operating and an asset component. Being able to separate the components can be useful.

Case Farm Narratives

Narratives were written in an intentionally vague way to encourage discussion.

Case Farm # 1 - Beginning Phase

This is a typical single family farm at the point where a son is being brought into the operation in a testing stage.

The cash income and expense summary can illustrate the impact of trying to support two families on a family sized farm. As a single family relying on some part time unpaid help from teen aged children, the family had \$26,345 available for one year's family living. While this isn't a get rich quick amount for a family of six, it's a much more comfortable amount than \$11,345 for a family of five. \$11,345 is the amount that would be left if Pete's annual compensation cost \$15,000.

Prior to hiring Pete, the rate of return on assets (ROROA) was estimated to be about 4.8%. After hiring Pete, the (ROROA) fell to less than one percent. Because the case farm records are not detailed enough to show all changes in value to assets and liabilities each year, one cannot calculate the exact ROROA, but one can come close enough for the purposes of this example. This is how the ROROA was calculated above. Add interest paid plus cash available from operations minus \$20,000 for family labor and management. Then divide this number by the average investment.

It's unlikely that either party would be satisfied with that level of compensation for long. Therefore, if both parties like each other and their occupation, they will likely consider expanding.

Case Farm # 2 - Beginning Phase

Everyone is two years older. After more than a year of the wage arrangement, both generations agreed that expansion was needed to support two families. John and Jill retained full ownership of the operation and full financial responsibility for the expansion. They doubled the herd size to accommodate a more "permanent" future arrangement. Because cash was tight before and during expansion, and because both generations shared the goal of keeping the farm in the family, Pete acquired ownership of some heifer calves in lieu of some cash wages during this period. As is typical (unfortunately), the expansion was completed before the FBA was modified to fit the new operation.

John and Pete agree that a profit sharing arrangement will meet their needs, and that Pete's compensation will be a percent of the returns to labor, management, and equity. They decide on 25%. They further agree that the compensation will be made primarily in the form of commodities (milk and heifer calves). Five percent of the milk produced belongs to Pete who is paid for it by the dairy plant. Pete also receives one of the every four heifers born (not survive). The cost of raising the heifers is also part of the compensation. At the end of the year, John and Pete make a cash settlement for the difference between the amount of compensation and 25% of the farm's total returns to labor, management, and equity. Pete doesn't directly pay any of the farm's expenses.

Of the \$47,563 available to compensate John and Pete, John ends up with \$27,563 while Pete receives the equivalent of \$20,000.

John's ROROA is 5.1% in the current year.

This arrangement serves several objectives.

- ✓ It reduces cash flow problems. Since Pete is still relatively young with a short credit history and a growing family, borrowing a large amount of money to buy assets could severely restrict his cash flow so that not only would his family have to rely primarily on Peggy's earnings to live on, they may also need to use some of her earnings to pay principal and interest.
- ✓ Its still a little too early in John or Pete's life for John to want to transfer as much responsibility, control and ownership of the operation to Pete as would be involved in something like a 50-50 livestock share lease.
- ✓ Both Pete and John are able to do some asset transfers, etc. while minimizing payments for taxes and social security. While minimizing social security contributions isn't always beneficial in the long run, the opportunity appeals to them at this time.
- ✓ Connecting Pete's compensation to the profitability of the farm puts Pete in touch with the financial realities of the operation and cause both to share the motivation to make a profit. It provides them with a common, important objective on which to base their business decisions.

Case Farm # 3 - Permanent Phase

Everyone is five years older and satisfied that adding Pete to the operation and expanding from 50 to 100 cows was a correct decision. John and Jill are still very interested in having their sons in the operation so they just expanded the farm again from 100 to 200 cows during the current phase. As with the first expansion, John and Jill assumed the full financial responsibility for the expansion from 100 to 200 cows.

Pete now owns 25% of the dairy herd (50 cows plus youngstock) as a result of receiving one of four heifers born during the last several years. In this way, Pete has been able to acquire cattle without incurring debt. In the process of expanding and to reflect the fact that Pete now owns a significant number of lactating animals (five years ago, none of Pete's cattle were lactating yet), John and Pete modified their arrangement from one where Pete earned 25% of the profit (much of it in the form of commodities) to one which is based on sharing gross income and expenses.

In the traditional 50-50 livestock share lease, one party owns the field equipment, half of the livestock and feed and provides all of the labor. The other party provides the other inputs. Most of the income and expenses are shared 50-50.

In this case Pete supplies 25% of the cows and his labor. John and Pete agree that Pete will receive 25% of the income and pay 25% of the cash operating expenses. They further agree to share several "fixed" costs on a 50-50 basis. These fixed costs include building, fence and equipment repairs, property insurance, additional hired labor and rent for additional cropland. John pays all of the property tax and principal and interest on borrowed money.

Pete receives one out of four calves (all calves, not just heifers as before), however ownership of the calves is not part of his wages. They are a result of his owning one out of four of the cows in the herd.

The arrangement is fairly atypical yet reasonably fair, providing \$56,621 for family living to John and \$21,045 to Pete. John's ROROA is 7.6%. If the arrangement didn't require Pete to pay a substantial portion of the "fix costs" he would benefit far out of proportion to his contributions to the operation. In fact if he paid no fixed costs, he would receive \$73,295 of cash for family from operations while leaving John with only \$4,371 of cash for family living from operations.

Such an arrangement for Pete would be like operating a 50 cow dairy farm without having to pay anything to buy or rent land, buildings, or equipment. A lot more people would be milking cows if such deals were available.

After a little bit of trial and error, they determined that the 50-50 split of selected fixed costs would result in a division of compensation that would be reasonably fair in reflecting each of their contributions.

They've been operating like this for several months and now Bob, the younger brother, wishes to join the operation.

Under these circumstances, employees seldom are considered for ownership positions in a family farm. However when the employee gets engaged to the owner's son or daughter it changes several "equations."

Barb grew up on a small family farm in a nearby community. She was hired by John and Pete as a full time equivalent milker when they expanded to 200 cows. This is where she met Bob and "things" developed from there.

As time goes on Pete, Bob and Barb will want more equity, responsibility and control than they now have.

At this point, Bob's circumstances, interest and experience mimics that of Pete at about the same age. Still there are lots of issues to deal with for the families to be successful in the next step and beyond.

There are also significant differences from 7 years ago. These include:

1. The family is now experienced at bringing a son into the operation.
2. The operation is now more than big enough to accommodate 3 owner/operator families. The operation now pays \$40,000 a year for 2 full time equivalent helpers. The operation certainly could afford replacing one of those positions with Bob.
3. Bob's future wife already has an active role in the operation as a hired milker and wishes to remain actively involved in contrast to Jill and Peggy.

The following are a series of questions that the instructor can toss out to participants to stimulate discussion.

1. Was it wise for John to expand the farm so early in the process before it was clear that Pete and/or Bob would "work out?"
2. Should Bob and Barb be added at this time? (One probably can't be added without the other).
3. If so, what will be the relative roles of Bob, Barb, Pete and John in terms of authority and responsibility? How does Barb fit in with Jill, Peggy and Bob's two sisters?
4. What opportunities will Bob and Barb have for acquiring equity in the business now or in the future?
 - a. Obviously Bob cannot expect to be on par with his older brother in terms of authority and equity for the first several years. Is it reasonable for him to expect to "become equal" at

some future date? If so, how and how soon? Does Barb's direct involvement in the farm accelerate his opportunity fit into this issue of equity?

- b. How likely is it that being married and working together will cause friction between Bob and Barb that will spill over to other family members?
- c. What provisions should John and Jill take in estate planning to help Pete acquire ownership interest in the farm in the event of their untimely deaths? Should they make similar provisions for Bob? How should their estate plans deal with their daughters? What additional provisions should John and Jill make to insure themselves with a comfortable retirement?
- d. In about a dozen years, the next generation will be old enough to be significantly involved. How soon should plans be made for that possibility?