AGRICULTURAL LEASING 2003

Livestock Leases

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Background

Modern full time farming requires control of large amounts of capital. There are three principal ways that the services of capital assets can be acquired: 1) through ownership, 2) by renting (leasing, or borrowing), and 3) by hiring (custom work). This series is focused on the second method, renting or leasing. Leasing livestock is a form of borrowing capital. Rather than borrowing from a bank, the operator borrows from another individual or firm. The purpose of this bulletin is to assist tenants and livestock owners in evaluating livestock lease arrangements. The majority of the discussion will focus on the increasingly popular "share rental" arrangements commonly used for breeding stock such as beef cows. However, some discussion will be provided regarding "cash renting" of breeding livestock.

Before getting into any specifics of livestock leasing, there are several factors to initially explore as you consider whether or not a leasing arrangement might be beneficial in a particular situation. The following is a partial list:

* Is a breeding livestock enterprise consistent with the overall vision, and mission of the farm operator and the breeding livestock owner? Have both parties agreed on long term objectives, and short term goals that the enterprise will help achieve? Make sure that the venture has the potential to be advantageous to all parties, and the goals and objectives are clearly established.

* Is the farm suited for the type of livestock production being considered? Do the resources match up with the production plan, and if not is there a plan for re-arranging the resource base of the farm? Additional buildings and equipment, or pasture may be required. Be sure that labor resources are not over-committed during critical time periods. Will the agreement encourage the most profitable use of the business resources and assets?

* Managing a livestock operation can introduce complications that are not involved in cropping decisions. Have all parties considered the organizational structure of the venture – who will make management decisions, what is the chain of command, and who will take responsibility?

* The "size of the enterprise" consideration is important, and has two primary dimensions: First, is the venture large enough to capture economies of scale? Research results regarding the degree of economies of scale in cow-calf production, for example, are not entirely unanimous. It is a general consensus, however, that the degree of per unit

cost advantage as size of operation increases is not as large as in many other farming endeavors. There appear to be fairly significant economies of size up to about a 50 cow herd, however, beyond that the advantages of scale are not as obvious (there are, however, huge differences in unit cost of production between farms, and many smaller scale operations exhibit fairly high costs). The second dimension regarding the question of size is one of providing enough income to meet the goals (or needs) of all parties involved. This issue should not be confused with the economies of size (profitability) issue, though it often is. Once it has been determined that the enterprise has the potential to be profitable (included economies of size considerations), meeting income needs or goals is simply a scale of operation issue that needs to be considered up front.

* Accurate evaluation of, and compensation distributions associated with leasing arrangements depend on the ability to accurately monitor production, costs, and other management information. What type of management information system will be used, and who will be responsible for record keeping and reporting? Production cycles for breeding livestock programs typically span more than one fiscal year, enhancing the need for sound implementation of accrual accounting procedures.

* Will the leasing arrangement have implications for income taxes, social security taxes or credits, and/or earnings counted against social security payments for any party to the lease? These factors need to be considered in the context of overall tax management and retirement planning.

As with any other business arrangement, livestock leasing can bring both advantages and disadvantages to both parties. Some potential advantages for the owner of breeding livestock under lease include: The opportunity to reduce labor requirements but still maintain a business interest in an asset that they may have spent a lifetime building; the ability to utilize past capital investments as a source of rental income, while still sharing management responsibilities; the opportunity to help a beginning operator; and the opportunity to more fully utilize other resources (cropland and crop residue, or small pastures). In addition, the labor and management contributions that the owner wishes to make can be spread out over the entire year, and the leasing arrangement may provide the ability to transfer ownership of the breeding livestock asset over a period of years. Potential disadvantages to the breeding livestock owner include the fact that capital is tied up in the long term investment of breeding livestock that could otherwise be used for other income earning investments or for living expenses, the information requirements associated with making informed marketing decisions (particularly in a share lease), the high variability of the return stream (again particularly in a share lease), and the complex record keeping requirements associated with the leasing arrangement. An additional consideration for the owner is managing the social security earnings due to the difficulty in justifying the non-material participation requirement in a share leasing arrangement.

The most obvious advantage to the lessee is the ability to gain control of additional capital (free up other working capital) in order to more fully utilize other available resources including labor. Essentially the leasing arrangement permits a larger overall scale of operation that might otherwise be possible. In addition, production and price risk can be shared with another party, and a younger operator may have the opportunity to gain management skills from a seasoned and experienced operator. Concerns for the tenant include the sharing of decision making and control, and the extensive record keeping requirements. In addition there is the burden of calculating the appropriate rental rate or share.

Basic Principles

Competition

In the classical sense, the breeding livestock leasing market is very competitive, meaning that there seem to be a large number of willing lessees and lessors. With that in mind, there should be no problem establishing a "market" price or share. However, another interpretation of a competitive market is one in which no participants earn an excessively large return on investment relative to other market participants. In reality, in the case of breeding cow leases we often observe the owner receiving a proportionally larger share of the calf crop than would be received if all costs were accounted for and net returns were being proportionally shared. There are several potential explanations for this observed phenomenon. First, there is considerable evidence to suggest that cow-calf operators have difficulty in estimating full costs of production. The concept of opportunity cost is not well understood in the industry, and many cow-calf producers appear willing to sell their labor and their capital assets at values far below market. Second, there may be additional benefits to the overall farming operation from running cows that are hard to quantify even if full cost accounting is accomplished. In addition, local conditions may result in relatively thin markets, either for the lessee or for the lessor, but not both, especially for short time periods. For example, drought conditions might force livestock owners to move animals to geographical areas where forages are more abundant. At least in the short run, those producers who have feed resources available may have the ability to "wield market power" and garner larger returns to their resources than at first appear "fair". Over time, these market related issues will work themselves out.

Cost equals price

Economists have this basic rule of classical economic theory so deeply imbedded in our minds that it becomes second nature for us to think in these terms. We find, however, that the premise that long-term prices for agricultural products will by nature equal the long-term cost of production is a very difficult concept for many non-economists to grasp. Of course part of the misunderstanding can be explained by the fact that economists automatically include opportunity charges for such things as operator labor and owned capital assets in the "cost" column, while others may not be quite so quick to automatically include these items as costs. The remaining explanation for the misunderstanding is likely associated with the time horizon involved. The cost equals price principle is a long-run concept. We know that in the short run commodity prices can be either above or below total costs of production, even when opportunity costs are all included in the calculation. In livestock enterprises such as cow-calf, prices can remain above or below total costs of production for several years of a 10 to 15 year cattle cycle. Therefore, when the terms of a leasing arrangement (cash or share) are based on long-term prices and costs of production there can easily be multiple year periods where it appears like one party or the other is "getting a much better deal".

Equitable Lease

Determining an equitable (fair) lease is theoretically simple. It is a matter of identifying the contributions supplied by each party, and sharing income in the same proportion as contributions. This is typically accomplished by attempting to equate long term returns on investment. Contributions can be both variable and fixed categories. The complications in the case of breeding livestock leases primarily involve the nature of the production process. First, the production cycle can span more than one fiscal year, so determining where to "start and stop" the accounting process can be difficult. Second, in many enterprises such as cow-calf, the offspring are commonly retained beyond weaning (long after the job of the initial breeding livestock is finished), making it more difficult to separated the breeding livestock enterprise from the retained ownership enterprise. In addition, resources are often drawn from other farming enterprises (hay or other feed produced on the farm, or equipment used by more than one enterprise, for example), creating accounting headaches when trying to assign costs to the breeding livestock enterprise. Finally, contributions to a breeding livestock enterprise include items for which there is legitimate debate regarding the appropriate price, such as land, labor, management, and capital.

In some situations, where the lease market is fairly well established, examining common arrangements in the region that have been in place for some time can be an indicator or equity or fairness. The intuition of course is that if both parties to a particular arrangement have been happy for a period of years, and if similar arrangements are being utilized in more than one instance in a particular region, then the parties to the arrangements must be satisfied and as such must consider the leasing arrangement equitable.

Keep It Simple

In the spirit of "keeping it simple", the breeding livestock lease should only involve only the breeding livestock. Leasing of other items (land, machinery, etc.) should be handled separately, and compensation handled outside the lease for the breeding livestock. Lease arrangements get complicated when leased livestock is mixed with owned livestock (as is often the case with cows), or when ownership is changing over time (in the case of a beginning operator buying into the operation over time, for example). Record keeping requirements increase, and the chances for disagreements increase, with increased complexity of the arrangement.
It is possible to keep the arrangement simple, even when ownership is being transferred over time. For example, replacements can be handled completely outside the lease, with the lease pertaining to a decreasing number of breeding livestock each year with the lessee over time taking outright ownership of a larger share of the breeding herd. Record

keeping requirements remain extensive, but the equitable share (or cash lease payment) remains the same for the portion of the breeding livestock that are still owned by the lessee.

Taxes

Tax issues associated with livestock leases may be different than those associated with land, machinery, or other asset leases. First, breeding livestock do not typically "appreciate" like land does. Therefore, the stepped up basis issue that gives an advantage to those in high tax brackets is not as much of an issue. Similarly, raised breeding livestock are not depreciated for tax purposes, to the rapid write off advantages rarely have an impact on breeding livestock decisions.

There are, however, tax issues that need to be considered when contemplating a livestock leasing arrangement. These issues primarily focus on income tax management and social security concerns. For the livestock owner, cash rental payments are typically considered non-material participation income, and are not subject to social security taxes (and also do not count against income limits for social security benefits in the instances where those limits apply). Share rental arrangements are quite likely to be interpreted by the IRS as material participation arrangements, thus subjecting the income to social security taxes (and/or counting the income against the limits for benefits). Of course, having social security earnings is not always a "bad" thing, as future benefits depend on the amount of earnings that count for social security. All too often short- term "tax avoidance" strategies override sound long-term income management strategies. None-the-less, there are certainly instances where the breeding livestock owner will want to treat the income as true "rental" income. There may also be considerations from the standpoint of the livestock operator. It may be beneficial to have a cash lease payment that is directly tax deductible, rather than sharing a portion of the production. There is no blanket recommendation, as each situation is different. Each owner and operator will find themselves in a unique income tax and social security situation, and will want to negotiate an arrangement that captures the most appropriate mix of tax advantages for all parties involved.

Sunk Costs

In a livestock leasing situation, ether the livestock owner or the operator may find themselves in settings where certain costs are sunk or fixed. An example would be buildings or equipment that will produce no income if not used. It is quite common, for example, for the livestock owner to have facilities that may have served him or her quite well in livestock production for a number of years, but that are duplicates or for some other reason not useful or needed by the operator contemplating a lease arrangement. The owner may place considerable value on the facilities, as they were essential to the operation as it was previously run. The operator, on the other hand, is willing to give very little for access to those particular facilities as they add very little if anything to the production potential of the current operation. Negotiation and communication skills are essential to resolving such issues, and moving forward with the arrangement which may otherwise be beneficial to both parties.

Risk

As is other business situations, risk mitigation in a breeding livestock lease arrangement is on average expected to come at the price of lower expected profits. It is this "risk – reward" tradeoff that leads to the principle that the expected value of a share of production rental agreement should theoretically be higher than a straight cash lease under similar circumstances. All of the caveats discussed in the leasing principles paper certainly apply. Lower cost operators may bid cash lease rates up to the point where they are on average higher that the expected value of a share rental agreement, confounding the issues of risk – reward vs high cost – low cost.

In general, however, under a share agreement the livestock owner is sharing in both output price and production risk, whereas in a straight cash lease it is the operator that bears the bulk of price and production risk.

Motives Other than Profit

Farm business management association data, regional Standardized Performance Analysis (SPA) data, and USDA profitability estimates all reveal that there simply must be motives other than profit that appeal to some aspects of the breeding livestock industry (particularly cow-calf). While decent (whatever that means) returns on investment are certainly possible for well run (low cost) operations, average profitability estimates suggest that return on investment in cow-calf production is likely lower than in other agricultural endeavors. Simply put, there appear to be numerous individuals who just like to "run" cows. A question that is pertinent to the leasing discussion, but remains un-answered, is on of ownership vs operation. Do people, on average, derive utility from running cows, or from owning them? The answer to that question of course has implications for average observed cow lease arrangements. Of course human characteristics such as "helping the next generation get started" can also result in leasing arrangements that depart from what would be considered equitable under the profit only motive.

Information

With that background in mind, parties to a potential breeding livestock lease need to assemble a comprehensive set of information. First, a detailed history of the productivity and quality of production from the breeding livestock needs to be assembled, along with any justifications for changes in the future. In addition, long-term output price projections need to be assembled. Perhaps the most logical place to start is a long series of historical prices, taking into consideration other factors such as point the cattle cycle, etc. Price, production, and quality projections can be used to forecast the potential revenue from the enterprise.

As mentioned earlier, perhaps the most difficult information to assemble is projected costs. Livestock ownership costs include interest on the average value of the breeding livestock, and annual depreciation on the breeding livestock. In some cases (not in Kansas) there may be personal property taxes on the breeding livestock. Typically insurance and death loss of breeding livestock is considered a contribution of the owner.

Interest, depreciation, taxes, insurance, and repairs on buildings, machinery, and facilities is a contribution of whichever party owns the buildings or equipment. Pasture can also be contributed by either party, with local rental rates being the simplest annual valuation method. All hay, silage, concentrate feed ingredients, protein, and mineral should be valued at market value (typically several year average prices), and credited in the lease calculation to whichever party supplies the feed ingredient. This valuation and crediting process should be applied whether or not the feed is raised on the farm, and regardless of any cropland rental arrangements for land upon which feed is raised.

Other costs include veterinary and drugs, fuel and oil, hauling expenses, utilities, and miscellaneous costs. Labor and management are contributions of whichever party provides them. All of these costs need to be credited to the appropriate party in the lease calculation.

Information regarding income tax considerations, and social security considerations for both parties should also be brought to the table and discussed as the leasing arrangement is being considered.

Analysis

The first step in evaluating a breeding livestock lease arrangement is to determine how replacements will be handled (within the lease, or as recommended outside the lease), and to determine the ownership costs associated with the breeding livestock and any machinery and equipment associated with the livestock enterprise. Operating cost items can then be listed, along with the associated contributor. The final step is to sum up the total expected annual costs associated with the enterprise, and calculate the portion contributed by each party to the agreement. Theoretically, revenues (production shares) should be shared in the same proportion as costs. However, the results from the aforementioned calculations often serve as only a starting point for negotiation, as situation specific factors nearly always come into play. Numerous computer spreadsheet templates are available to assist in the calculations. An example is the “Cowlease” spreadsheet available on the agmanager.info website.

Under certain conditions a cash rental arrangement might be preferable to a share leasing arrangement. The same information, and analysis process used to determine an equitable share arrangement is used to determine an equitable cash rental arrangement. Long run average expected revenues are calculated based on average expected production and prices. Total expected revenue is then multiplied by the share of total costs born by the livestock owner in the previous calculation. Often the resulting net cash rent equivalent is adjusted downward somewhat to account for the fact that the operator is now bearing a larger share of price and production risk. Again, the results of the analysis are to be considered a "starting place" for negotiation, as each individual situation brings unique factors into consideration.

Summary

Process of developing a breeding livestock lease is a process of negotiation. Remember, no one will receive everything they want, however, the arrangement can still be beneficial to all parties involved. The important thing to remember in that communication and people skills are essential, and all information and concerns need to be discussed openly. As always, written leases are strongly promoted. Written leases encourage detailed thought, and joint decision making and understanding. In addition, written leases serve as a reminder of the terms originally agree upon, and provide a valuable guide to heirs if either party dies. Obviously, a written lease should include the names of parties involved, and a comprehensive description of the property involved. The beginning and ending dates of the agreement, as well as provisions for review and/or renewal should be clearly spelled out. The amount of rent, or share of production to be paid, and a statement regarding when it will be paid also needs to be included. The lease itself should outline the way the enterprise is to be operated, and what type of livestock system will be employed. Clearly state what each party is to furnish, how expenses will be shared, minimum production practice expectations, and how problems will be resolved. What type of management information system will be employed, and who will be responsible for the various record keeping duties. Where appropriate it is important to include incentives to make efficient use of all party's contributions. It should be obvious that it is in both parties best interest to optimize weaning percentages when in a share leasing arrangement, for example, as both parties economically gain from the increased production. It may not be as easy to assure that there is an incentive to maintain superior genetics, or to implement efficiency improving practices and technologies.

Include provisions for long term improvements. If the tenant shares in the cost of these improvements, the lease should include provisions for reimbursing the tenant for the portion left behind upon termination. Finally, how will extenuating circumstances (such as drought, major health problems, natural disasters, etc.) that are not the fault of either party be handled. Related to that issue, who (if anyone) will be responsible for insurance. Finally, it almost goes without saying, but valid written leases require appropriate signatures representing all parties involved.

Calculation of equitable livestock leasing shares, or equitable cash lease payments, provides both parties to the potential lease a place to start negotiating. Basic leasing principles should guide to asking the right questions. Recognizing that different owners and operators have different costs, different income tax rates, different social security goals, and different non-profit motivations will help various stakeholders understand why different situations might warrant significantly different leasing arrangements. Owners and operators are encouraged to use computer decision aids to fine tune agreements to fit the individual situation, and hopefully arrive at an arrangement that is beneficial to all involved.