

Leasing Farm Equipment

Equipment leasing permits control, without ownership, of productive assets. Control, not ownership, is the critical issue in efficient production. Farmers concerned with profitability should consider leasing as an option offering control of farm equipment. Whether or not leasing offers more profit than ownership depends on several financial factors discussed in this guide.

For many farms, equipment expense is the largest single production expense. As the purchase price of power equipment such as tractors and combines increases, the need for alternative financing systems also increases. Financial institutions and equipment manufacturers are supplying additional financing in the form of equipment leases.

Equipment manufacturers use leasing to move equipment. Their leasing programs change over time to reflect the extent of their desire to move more equipment. For this reason it is imperative that farmers continually evaluate whether a lease or a purchase would be a better financial decision. Deciding that one option was better than another last year does not mean it will be so this year or next year.

Several types of leasing arrangements exist to meet specific needs of farmers seeking control of equipment. Typically, new equipment leases are used for more expensive items such as tractors and combines, although less expensive items such as drills and grain carts can also be leased. Most leases are for new equipment, but leases are also available for used equipment. Whereas national financial institutions lease primarily new equipment, local financial institutions such as banks are also willing to lease used equipment.

Leasing basics

The person who owns equipment being leased to another is called the lessor. The lessee is the person who actually has possession and control of the equipment for the duration of the lease. In an equipment lease, the farmer is the lessee.

An equipment lease contract specifies the following points:

- The customer and dealer names and information
- The exact piece of equipment being leased

- The beginning and ending dates of the lease
- The base hours (defined as the annual number of hours the equipment is expected to be used)
- The payment due the lessor for use in excess of the base hours
- The dollar amount the farmer must pay to purchase the equipment at the end of the lease if the purchase option is exercised
- The advance payment required
- The periodic payment (monthly, quarterly, semiannually or annually)
- Miscellaneous terms of the agreement, including such things as charges for excess wear and tear and evidence of insurance on the equipment

Most businesses distinguish a lease from a rental agreement by the duration of control. Equipment leases typically provide control of the equipment for one or more years; rental agreements typically for less than year.

Under a typical rental agreement, the farmer agrees to pay a specified rate for every hour registered on the hour meter of the tractor. Frequently a minimum number of hours is also specified. The beginning and ending dates of the rent restrict the duration of the rental period.

Some farmers mistake a rollover purchase for a lease. In a rollover purchase, a farmer enters into an arrangement with the equipment dealer to purchase a piece of equipment with the expectation of trading it in after one year for another, newer piece of equipment. Under these arrangements a farmer pays a specified dollar amount each year for the right to “upgrade” each year. The farmer is not obligated to upgrade each year and can decide at any time to keep the current piece of equipment and stop the rollover arrangement.

Leasing background

An understanding of what occurs with a lease helps a farmer understand how to negotiate and enter into a lease. Because different financial institutions enter into different contracts with equipment dealers, not every lease will be the same. However, the basics discussed below cover the majority of the leases a farmer will encounter.

When a farmer enters into a lease for a specific piece of equipment, a sale occurs behind the scenes. The equipment dealer sells the machine to a financing company. The financing company (lessor) then leases the equipment to the farmer (lessee) signing the lease agreement. The farmer signs the lease agreement in the equipment dealer’s office

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and may not fully realize that the lessor is someone other than the dealer who finalized the deal. The dealer, in effect, is an intermediary for the financial institution (Figure 1).

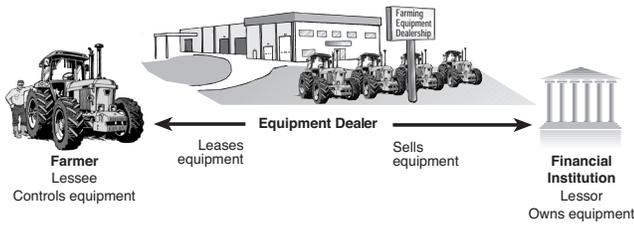


Figure 1. In a farm equipment lease, the equipment dealer is an intermediary between the farmer, or lessee, and a financial institution, the lessor.

Because the dealer is actually selling the equipment to a financial institution, the dealer must have an agreed upon method of pricing the equipment at the time of the lease. This behind-the-scenes pricing of the equipment reduces, but does not eliminate, the amount of room for negotiating leases. The dealer can usually mark up the “selling price” by various percentages. The dealer markup determines which table of lease factors is used to calculate the periodic lease payment.

The table of lease factors is provided by the financial institution to the equipment dealer conducting the lease. Once the equipment dealer has determined the selling price to the financial institution, that price is multiplied by a lease factor dependent upon the number of hours the equipment will be used in a year and the duration of the lease. There is no negotiation of the lease factors — only the hours and duration.

Many equipment dealers standardize the leases they offer to farmers. The dealer is given flexibility by the financial institution to enter into leases of different duration and annual hours of use. However, the dealer might offer a leasing plan in which all of these issues are presented as fixed. Knowing that the dealer has flexibility allows a farmer to inquire about other plans that the dealers may not have initially offered.

Most of the time, equipment dealers offer leases backed by the credit company of the equipment manufacturer. However, local and national financial institutions also offer equipment leases. If a financial institution other than the equipment manufacturer’s credit company is the one purchasing the equipment and leasing it to the farmer, the behind-the-scenes activity may not occur. Rather the farmer would make the best deal possible for the purchase of the equipment, take that price to the alternative financial institution and negotiate a lease. The dealer does not act as the intermediary in this situation.

Points of negotiation

When considering an equipment lease, several points can be negotiated. First, the farmer can attempt to lower the sales price of the equipment being sold to the financial institution. Lowering the sales price will affect the annual lease payment and the end-of-lease purchase option price.

Additionally, the farmer can negotiate the duration of the lease, in years, and the number of hours of use per year.

Select the lease duration that fits your farming plans for the next several years. Some farmers choose a lease duration based on some planned change in their business, such as retirement, an expansion, or a change in loan obligations. If there is no known need to change equipment in 3 or 4 years and if controlling an asset outside of its warranty period is no problem, consider a longer lease. Ask the dealer to give the financial particulars of different lease durations for your financial evaluation.

Select the number of hours that minimizes the total equipment cost over the life of the lease. Because the farmer (lessee) will not be reimbursed for “unused” hours, it is best not to overestimate the hours of use. However, if you underestimate the hours, an hourly charge is assessed for every hour in excess of the agreed upon annual use. Because leases have limited hourly choices (e.g., 400, 600 and 800 hours per year), it is important to evaluate which option is least expensive.

The hourly charge for exceeding the expected annual hours of use is relatively high. For example, if a farmer needs a tractor for 475 hours per year, it might be cheaper to pay for a 600-hour lease than to choose the 400-hour lease and pay the extra charge for the additional 75 hours (Figure 2). An automated spreadsheet is available to assist a farmer in choosing an optimum lease annual number of hours option if the expected use is not one of the options offered in a lease agreement. (See *Decision-making aids* section.)

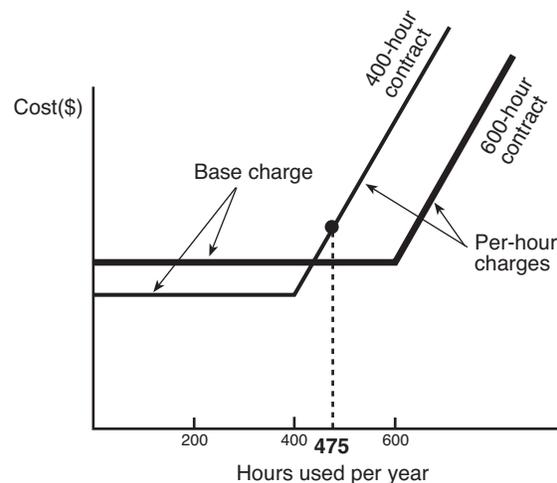


Figure 2. Here, 475 hours of equipment use costs less with a 600-hour lease than with a 400-hour lease plus per-hour charges.

Note that the combination of the years of lease and the annual hours of use will affect the end-of-lease purchase option price. If the equipment is purchased at the end of the lease, the excess hour charges are frequently waived.

The option price can be an important factor influencing the lease/purchase option. It is more desirable if the end-of-lease purchase price is less than the projected fair market value of the equipment at the end of the lease.

Plan for negotiation

A plan for negotiation might include the following steps:

- Make your best deal on the purchase of the piece of equipment you are interested in controlling.
- Ask dealers about equipment leases they offer. Obtain copies of their lease contracts along with quotes of annual lease payments for various lease durations and annual use. Note that the best purchase deal might include trade-in of used equipment, whereas a lease may not allow trade-ins.
- Ask dealers about options for financing purchases, including interest rate and length of loan.
- Ask your local banker how the purchase would affect your financial status and what interest rate would be charged for a loan, if needed.
- Ask your local banker or a national finance company if they are interested in purchasing the equipment and leasing it to you. If so, obtain their lease contract and annual payment estimates for various lease durations and annual use.
- Analyze the alternatives (purchase financed by either the dealer or a financial institution or lease financed by either the dealer or a financial institution) for cash flow and profitability.
- Before signing any lease, discuss the terms of the arrangement with your banker and tax adviser and ask how the lease will affect your financial and tax situation.

Other concerns

A farmer needs to consider the following additional concerns when entering into a lease:

- Trade-in of used equipment
- Cash flow
- Property tax on leased equipment
- Early termination of lease
- Financial statement impact
- Income tax implications

Trade-in

Although a trade-in is often accepted as a down payment on purchases, some equipment dealers do not allow trade-ins when leasing equipment. Having to sell, rather than trade, used equipment may have adverse effects on tax liabilities. Equipment no longer needed should be traded or sold rather than left to further depreciate on the farm.

Cash flow

Leases may offer some cash flow relief by not requiring a down payment. However, recognize that the first lease payment is due up front, when a down payment is usually due. Because many leases do not allow trade-ins, cash flow for leases may be no better than for purchases.

Property tax

In most leases the financial institution pays the property tax on the lease. If so, the tax is included in the lease

factor used to determine the lease payment. For cash flow reasons, the farmer should clarify who is responsible for paying property tax. When evaluating leases from different companies, make sure they are treating payment of property tax similarly so that a fair comparison can be made.

Early termination

If the farmer (lessee) terminates the lease before the end of the contract, miscellaneous expenses will be incurred. Basically, the financial institution that owns the leased equipment will repossess and dispose of it by sale or another lease and charge the original lessee with any financial loss and costs incurred. In some instances, the end-of-lease purchase price is sufficiently below expected market value that other farmers would be interested in taking over the lease for the privilege of purchasing the equipment at the end of the lease.

Impact on financial statement

Equipment leases affect a business's balance sheet differently than ownership does. The purchase of expensive items such as tractors and combines can significantly affect a farmer's borrowing capacity. A purchase may adversely affect a farmer's debt-to-asset ratio, whereas a lease does not. However, annual lease payments are financial obligations and should be disclosed to your banker when evaluating your financial condition. Many bankers ask borrowers to reveal lease obligations and use them to evaluate the borrowers' short-term financial strength.

Income tax

Lease payments are deductible on IRS Form 1040 Schedule F. With a purchase, a farmer deducts depreciation on Form 4567 and interest on Schedule F. Purchasing allows the option of Section 179 expensing, which puts much of the tax depreciation deduction at the beginning of the asset life.

Decision-making aids

A decision-making aid (Microsoft Excel spreadsheet titled "Equipment Lease Analyzer") has been developed to help evaluate the economic differences between leasing and purchasing equipment. The Excel spreadsheet allows a farmer to enter pertinent information on a purchase and a lease. The computer numerically and graphically compares the alternatives on the criteria of cash flow and profitability. Usually a lease is better or worse than a purchase on both criteria, but occasionally one option offers better cash flow while the other offers lower cost.

The same spreadsheet has an optimization section that allows a farmer to decide what annual hour election to choose. It determines the break-even number of hours for different elections. If you think you will use fewer than the break-even hours, choose the lesser election; if more, the greater election.

The "Equipment Lease Analyzer" spreadsheet can be obtained by

- Downloading <http://crops.missouri.edu/machinery/EquipmentLeaseAnalyzer.xls>, an automated Microsoft Excel spreadsheet
- Contacting:
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200 Mumford Hall
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Conclusion

Although leasing of land has been well accepted in agriculture for generations, leasing of equipment has

become widespread only in the last few decades. The cost equipment, together with the cost of land, has become a significant barrier to entry and longevity in farming. Leasing allows farmers to control productive assets without owning them.

Leases fit into the business activity of some farmers and not others. The many decisions that go into evaluating a lease versus a purchase are difficult. But to maximize profit, the time and effort spent in comparing the two options is worthwhile.

Understanding the points of negotiation and potential effects of each decision along the way will allow farmers to make the decisions that best fit their situation.

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- G426 *Farm Lease Agreement*
- G427 *2011 Cash Rental Rates in Missouri*
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