

Operating Lease vs. Financial Lease



Brent Ladd
OSU Extension Assistant
Brent.ladd@okstate.edu
405-744-6159



Today I will discuss operating and financial leases and show an example that compares leasing versus purchasing a small tractor.

Operating Lease

- Short-term rental arrangement
- Farmer pays for fuel and labor
- Can deduct cost of leasing equipment



An operating lease offers an alternative for acquiring the use of machinery without owning it. An operating lease is often a short-term rental arrangement. The rental charge is usually based on units of work such as dollars per acre or dollars per hour. The leasing company owns the machinery and usually pays for all repairs and maintenance. The farmer leasing the equipment usually pays for fuel and provides all labor. For tax purposes you can deduct the cost of leasing equipment, but you cannot deduct depreciation expenses since you do not own the equipment.

Operating leases are common on general purpose items, such as tractors, which are used many times during the year. Seasonal operating leases for tractors and combines are quite common. In some areas, short-term leases are only available on excess inventory. Machinery availability may be an added risk for these types of agreements.

Financial Lease

- Long-term contract
- Similar to an outright purchase
- Several options at the end of the contract including purchase or return equipment.



A financial lease is a long-term contract, usually for the useful life of the machinery. The farmer has exclusive rights to use the equipment or machinery. Because the lease is a long-term agreement, it may be costly to end the lease agreement early. A financial lease is quite similar to an outright purchase. Under a financial lease, the farmer pays all repair, maintenance and operating costs.

Options at the end of the lease period can include: purchase of the asset for an amount specified at the time the lease is signed, purchase at fair market value, renew the lease, or return the equipment to the lessor.

Lease Example – Small Tractor

- 5100E Utility Tractor (100 Engine hp, 85 PTO hp), \$52,100
- 10% down payment (\$5,210), Loan amount: \$46,890, interest rate: 6.48%, Term: 7 years
- 10% down payment (\$5,210), Lease amount: \$46,890, interest rate: 6.48%, Term: 7 years, Residual Value: \$26,000
- Annual Loan Payment: \$8,544.61
- Annual Lease Payment: \$5,219.80



In this example, we compare the annual payments of a lease and a loan. If someone were considering buying a small utility tractor that cost \$52,100, they can either lease it or purchase it outright with a loan. Both options require a 10% down payment and a loan amount of \$46,890. Both options have an interest rate of 6.48% and last for 7 years. When comparing the two options, the annual loan payment is over \$3300 more than the annual lease payment. When looking at financing options, producers may want to consider both leasing and purchasing. The lease option reduces annual cash outflows, but leaves the producer without owning any equipment at the end of the lease. If regularly replacing equipment, this may be a useful option for gaining the use of a tractor.

Equipment manufacturers and dealers may have calculators on their websites to calculate and compare lease payments and loan payments.

<http://quikcalc.deere.com/JDCQuikCalc/QuikCalcServlet?businessline=agricultural>
https://www.kansascityfed.org/~//media/files/publicat/research/indicatorsdata/agcredit/data/fixedinterestrates_kc.xls

1 Big Deduction vs. Multiple Years of Small Deductions

| Year | Straight Line | Sec. 179 Bonus Depreciation |
|-------|---------------|-----------------------------|
| 1 | 7,443 | 52,100 |
| 2 | 7,443 | 0 |
| 3 | 7,443 | 0 |
| 4 | 7,443 | 0 |
| 5 | 7,443 | 0 |
| 6 | 7,443 | 0 |
| 7 | 7,443 | 0 |
| Total | 52,100 | 52,100 |



Here we are using our previous example of a small utility tractor purchased for \$52,100 with a 7 year loan. This example compares deductions under two different depreciation options. The producer could depreciate and take the deduction over 7 years giving them multiple, smaller, annual deductions. Or they could take one large deduction by depreciating 100% of the tractor purchase in the first year.

If this tractor were purchased in a year when commodity prices, revenue, and taxable income are high, it might be desirable to depreciate all of the purchase the 1st year to reduce high taxable income. If it were purchased in a time of challenging commodity prices, farm revenue, and farm income, it might make sense to stretch out the depreciation and deductions over a longer time to get the benefit both now and in the future when taxable income increases.

As a reminder, always consult with your tax professional before deciding on deduction, depreciation, and tax strategies.

Custom Rate Data

- Custom work
- Data gathered in a Survey
- Found at:
<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-8064/CR-205%202015-2016web.pdf>



Another option is custom hiring work when a piece of equipment is needed, but not owned.

Custom work is defined as machine operations performed for the customer with the custom operator furnishing the machine, fuel, labor and other inputs directly associated with the machine. Custom operators do not usually furnish materials such as seed or fertilizer unless it is explicitly stated.

When considering this option or negotiating for custom work to be done, a good source of information for determining farm and ranch custom rates in Oklahoma is Current Report 205. It summarizes data based on a survey of farmers, ranchers, and custom operators done every two years. This data can provide a starting point for determining costs and rates in a lease arrangement.

| OPERATION | OKLAHOMA* | | | | WEST | | | | CENTRAL | | | | EAST | | | | |
|--|-----------|------|-------|-------|--------|------|-------|-------|---------|------|-------|-------|-------|------|-------|-------|-------|
| | No. | Avg. | Low | High | No. | Avg. | Low | High | No. | Avg. | Low | High | No. | Avg. | Low | High | |
| TILLAGE | | | | | | | | | | | | | | | | | |
| Moldboard plowing | Slack | 14 | 17.26 | 10.00 | 30.00 | | | | | 9 | 19.00 | 10.00 | 30.00 | | | | |
| Chisel plowing | Slack | 27 | 13.50 | 8.00 | 25.00 | 12 | 13.79 | 8.50 | 22.00 | 8 | 15.88 | 8.00 | 25.00 | | | | |
| Surface chisel | Slack | 9 | 9.78 | 6.00 | 12.00 | | | | | | | | | | | | |
| Discing - Offset | Slack | 33 | 13.55 | 9.00 | 24.00 | 12 | 12.13 | 8.00 | 15.00 | 10 | 12.40 | 10.00 | 18.00 | | | | |
| Discing - tandem | Slack | 31 | 13.37 | 8.00 | 20.00 | 11 | 11.50 | 8.00 | 15.00 | 11 | 13.09 | 10.00 | 20.00 | | | | |
| Blade or wide sweeps | Slack | 17 | 11.06 | 5.00 | 15.00 | 8 | 11.31 | 7.50 | 15.00 | 4 | 13.75 | 10.00 | 15.00 | 4 | 13.75 | 10.00 | 20.00 |
| Strip tillage | Slack | 5 | 13.11 | 6.00 | 21.00 | | | | | | | | | | | | |
| Vertical/Rubber Tillage | Slack | 7 | 14.43 | 12.00 | 18.00 | | | | | | | | | | | | |
| Spike tooth harrow | Slack | 17 | 7.21 | 3.00 | 12.00 | 5 | 6.80 | 4.00 | 12.00 | 8 | 6.88 | 3.00 | 10.00 | | | | |
| Spring tooth harrow | Slack | 9 | 8.11 | 3.00 | 13.50 | | | | | | | | | | | | |
| Row cultivating | Slack | 6 | 8.52 | 3.00 | 15.00 | | | | | | | | | | | | |
| Field cultivating | Slack | 11 | 9.77 | 6.00 | 14.00 | 6 | 10.58 | 7.00 | 14.00 | | | | | | | | |
| Subsoiling | Slack | 10 | 16.90 | 15.00 | 20.00 | 6 | 16.67 | 15.00 | 18.00 | | | | | | | | |
| FERTILIZER AND CHEMICAL APPLICATION | | | | | | | | | | | | | | | | | |
| Applying bulk dry fertilizer | Slack | 136 | 5.41 | 2.25 | 17.80 | 31 | 5.09 | 3.00 | 12.00 | 38 | 5.69 | 2.00 | 17.80 | 26 | 5.83 | 3.00 | 15.00 |
| Spreading bulk dry applicator | Slack | 17 | 3.82 | 0.50 | 11.50 | | | | | | | | | | | | |
| Applying liquid fertilizer | Slack | 62 | 5.37 | 2.25 | 11.50 | 31 | 5.20 | 3.00 | 8.00 | 16 | 5.41 | 2.25 | 10.00 | | | | |
| Applying anhydrous | Slack | 8 | 13.75 | 10.50 | 17.00 | | | | | | | | | | | | |
| Lime application | Slack | 15 | 6.23 | 4.00 | 9.00 | 4 | 5.75 | 4.00 | 9.00 | | | | | 5 | 6.80 | 5.00 | 9.00 |
| Lime application | Slack | 11 | 9.95 | 7.00 | 20.00 | | | | | | | | | | | | |
| Ground appl. - insect, fung. | Slack | 34 | 5.49 | 4.00 | 8.00 | 9 | 5.28 | 4.50 | 6.00 | 12 | 5.19 | 4.00 | 6.00 | 4 | 5.85 | 4.00 | 7.50 |
| Aircraft appl. - insect, fung. | Slack | 16 | 6.15 | 4.00 | 10.50 | 8 | 5.86 | 4.00 | 10.50 | | | | | | | | |
| Ground appl. - herbicides - boom | Slack | 81 | 5.96 | 3.50 | 10.00 | 25 | 5.43 | 4.00 | 10.00 | 21 | 5.82 | 3.50 | 10.00 | 19 | 6.39 | 5.00 | 9.50 |
| Ground appl. - herbicides - pipe wick | Slack | 6 | 8.42 | 4.50 | 12.00 | | | | | | | | | | | | |
| Aircraft appl. herbicides | Slack | 30 | 8.06 | 4.00 | 14.50 | | | | | | | | | | | | |
| Ground appl. growth regulators & debilitants | Slack | 12 | 5.50 | 4.50 | 8.00 | 11 | 8.36 | 4.00 | 14.50 | 10 | 8.43 | 5.00 | 13.00 | 4 | 8.25 | 7.00 | 10.00 |
| Aircraft appl. growth regulators & debilitants | Slack | 7 | 7.00 | 5.00 | 11.00 | 5 | 6.00 | 5.00 | 7.00 | | | | | | | | |
| PLANTING | | | | | | | | | | | | | | | | | |
| Air seeder w/fertilizer | Slack | 16 | 16.14 | 12.00 | 20.00 | 5 | 14.84 | 13.20 | 17.00 | 9 | 16.78 | 12.00 | 20.00 | | | | |
| Air seeder w/o fertilizer | Slack | 15 | 15.80 | 12.00 | 21.00 | 4 | 15.13 | 12.50 | 19.00 | 7 | 15.21 | 12.00 | 19.00 | | | | |
| Drill small grains, conventional | Slack | 43 | 11.27 | 6.00 | 16.88 | 13 | 11.88 | 6.00 | 16.00 | 15 | 10.73 | 6.00 | 16.00 | 4 | 9.75 | 6.00 | 15.00 |
| Drill small grains, no-ill | Slack | 41 | 13.80 | 10.00 | 18.00 | 14 | 13.50 | 10.00 | 18.00 | 16 | 14.63 | 10.00 | 18.00 | | | | |
| Sod drill sm grains into bermuda | Slack | 12 | 12.71 | 9.00 | 15.00 | | | | | | | | | 5 | 12.20 | 9.00 | 15.00 |
| Drill alfalfa and other legumes | Slack | 12 | 12.79 | 6.50 | 20.00 | | | | | | | | | 6 | 13.83 | 8.00 | 20.00 |
| Broadcasting seed | Slack | 16 | 6.90 | 4.50 | 10.20 | | | | | | | | | | | | |
| Drill canola | Slack | 5 | 16.44 | 10.20 | 20.00 | | | | | | | | | | | | |
| Plant cotton, conventional | Slack | 5 | 13.00 | 10.00 | 15.00 | | | | | | | | | | | | |
| Plant cotton, no-ill | Slack | 9 | 13.17 | 10.00 | 17.00 | | | | | | | | | | | | |
| Plant corn, conventional | Slack | 7 | 15.18 | 11.25 | 18.00 | | | | | | | | | | | | |
| Plant corn, no-ill | Slack | 15 | 16.47 | 14.00 | 20.00 | | | | | 10 | 17.10 | 14.00 | 20.00 | | | | |
| Plant milo, conventional | Slack | 6 | 16.33 | 14.00 | 18.00 | | | | | 5 | 16.80 | 15.00 | 18.00 | | | | |
| Plant milo, no-ill | Slack | 22 | 17.27 | 14.00 | 20.00 | 10 | 17.60 | 14.00 | 20.00 | 11 | 17.09 | 14.00 | 20.00 | | | | |
| Plant soybeans, conventional | Slack | 10 | 16.40 | 9.00 | 20.00 | | | | | 7 | 16.43 | 9.00 | 20.00 | | | | |
| Plant soybeans, no-ill | Slack | 21 | 16.62 | 12.00 | 20.00 | 4 | 17.75 | 14.00 | 20.00 | 14 | 16.71 | 12.00 | 20.00 | | | | |
| Springing bermuda grass | Slack | 10 | 41.60 | 12.00 | 100.00 | | | | | 5 | 44.00 | 20.00 | 80.00 | | | | |



Here is an example of some of the information found in the Custom Rate current report. It contains both state and regional average prices for tillage operations, chemical applications, planting, and more.

For More Information:

- <http://agecon.okstate.edu/efarmmanagement/index.asp>
- <https://www.facebook.com/OSUFarmManagement/>
- <http://factsheets.okstate.edu/>



For additional information on this and other farm management topics, visit the e-farm management website. Timely information may also be found on the OSU Farm Management Facebook page.

Publications from the Oklahoma Cooperative Extension Service are another source of information. These publications may be found at factsheets.okstate.edu