Farmland Rent Considerations

How Much is Too Much for Your Farm?

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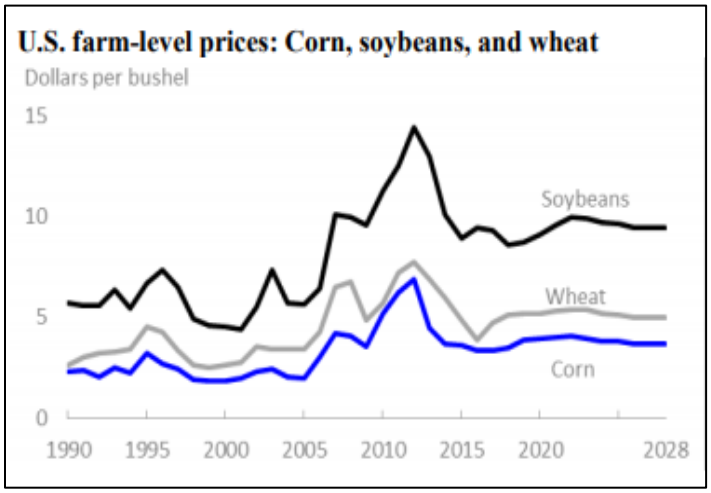
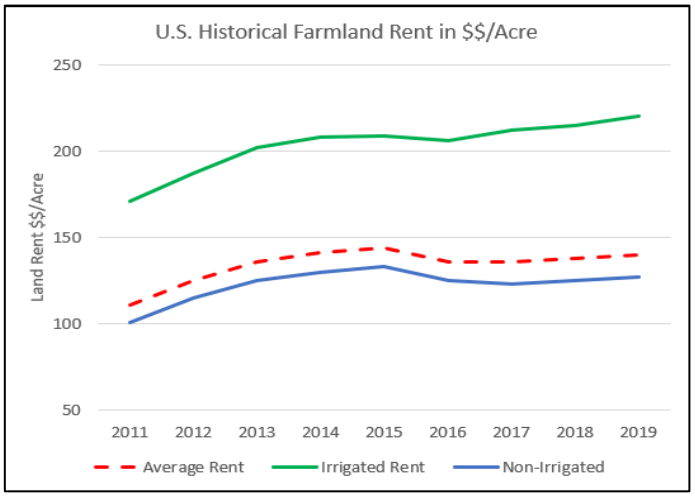
Almost ten years have passed since the record high prices in commodities helped drive farmland rental rates to their own record highs. In recent years, those same commodities have receded to pre-2009 prices with net farm income (NFI) falling to or below where they were during that same period in time. Despite the reduced income, the rents being paid have remained steady, with an upward trend still being seen in irrigated acres.



U.S. Grain Prices Projected to 2028 (USDA ERS)



Farmland Rent Paid from 2011-2019

Farm economists are expecting only moderate price increases in the next five to six years, which indicates that there will continue to be lower amounts of income to support the rents being paid. This makes understanding the impacts that rental prices have on cost of production even more vital to a farm's overall success.

It is important to remember that land rent prices vary tremendously not only from state to state, but also from county to county. In Michigan, the higher productivity soils that are tile drained in areas where specialty crops are grown (such as sugar beets and vegetables) tend to command a higher price. Other factors such as field size, access, soil type, soil fertility, previous cropping history, fencerows, telephone poles, wet spots, and proximity to their farm operation all impact the price that farmers are willing and able to pay for land rent. Looking at data like this will give you a place to start, but may not reflect the true value of the farmland.

One place that both landowners and producers like to use as a starting point is the USDA's National Agriculture Statistics Service (NASS). It reports information based on surveys sent to and returned by producers across the nation. For the state of Michigan, the average land rent price according to these surveys was $127 per acre in 2019. Non-irrigated farms averaged $120 while irrigated lands were upwards of $220 per acre. The same database contains county level data, which would more accurately reflect rental rates in your area. Michigan is very diverse from north to south, with land rent in southern Michigan often much higher than in the Upper Peninsula.

It's important to keep in mind that while those surveys are a helpful starting point, they should not be used as the final determination of rent. As outlined previously, there are a lot of differences that exist from one field to another. These differences can be significant in determining the value of land. For example, individual fields can vary on soil type and field quality, making the potential yield and productivity a significant factor in determining value. Quality land with good fertility, well-spaced tile, a good Farm Service Agency base (i.e. base acres for government programs) are all plus factors toward stronger rental rates. Those fields that are capable of producing a higher yield often warrant a higher land rent payment. Exactly how high needs to be reasonable for both the landowner and producer.

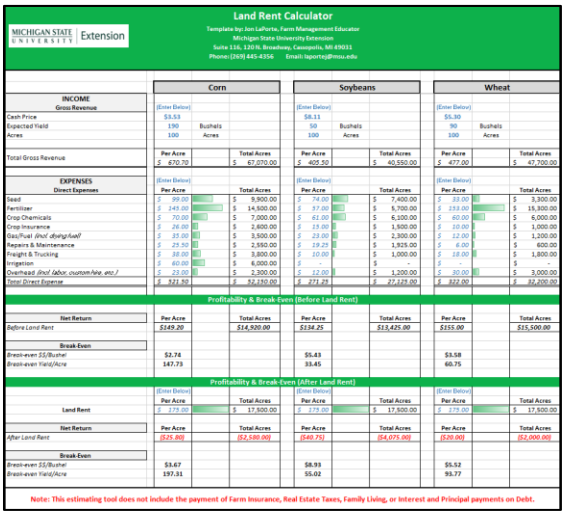
The definition of reasonable is often helped by understanding what efforts are made to increase or maintain productivity by all parties. Over the past decade, many farmers have made improvements to the land including installation of tile drainage, removing fencerows and installing irrigation systems. All of these improvements lead to higher long-term yields, which tend to help support higher land rental rates. However, with lower commodity prices, you can expect that the amount of money invested in these improvements paid for by the farm producer will continue to taper off.

Landowners that are looking to maintain their current land rental rates and the yields that supply them may want to consider taking on these investments. Historically, landowners that have not made efforts to assist in maintaining their farmland or invest in improvements generally receive lower farmland rental rates. On average, the rental rates received on these farms are 25 to 30 percent lower than other properties in the same area. This presents an opportunity to discuss what improvements are needed and how they will be implemented to maintain yields and profitability for both parties. Having good communication between the landowner and the farmer-tenant is one of the most important first steps in establishing a win-win farmland rental agreement.

Another consideration on reasonable land rent is what producers can afford to pay. To assist in comparing the impact of land rent payments against the farm's net farm income, MSU Extension offers a land rent calculator. By inputting estimated income and expenses, a producer can determine whether the land rent being paid is reasonable or if a discussion, or even a possible re-negotiation, of the land rent agreement should take place.

If a discussion with the landowner is needed, producers can use the calculator to discuss rental values as well as the challenges and potential impacts to the farm's production and profitability.

This tool is available on the MSU Extension Farm Management website: https://www.canr.msu.edu/resources/land-rent-calculator



Land Rent Calculator

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	Corn		Soybeans		Wheat	
INCOME						
Gross Revenue	(Enter Below)		(Enter Below)		(Enter Below)	
Cash Price	$3.53		$8.11		$5.30	
Expected Yield	190 Bushels		50 Bushels		90 Bushels	
Acres	100 Acres		100 Acres		100 Acres	
	Per Acre	Total Acres	Per Acre	Total Acres	Per Acre	Total Acres
Total Gross Revenue	$ 670.70	$ 67,070.00	$ 405.50	$ 40,550.00	$ 477.00	$ 47,700.00
EXPENSES	(Enter Below)		(Enter Below)		(Enter Below)	
Direct Expenses	Per Acre	Total Acres	Per Acre	Total Acres	Per Acre	Total Acres
Seed	$ 99.00	$ 9,900.00	$ 74.00	$ 7,400.00	$ 33.00	$ 3,300.00
Fertilizer	$ 145.00	$ 14,500.00	$ 57.00	$ 5,700.00	$ 153.00	$ 15,300.00
Crop Chemicals	$ 70.00	$ 7,000.00	$ 61.00	$ 6,100.00	$ 60.00	$ 6,000.00
Crop Insurance	$ 26.00	$ 2,600.00	$ 15.00	$ 1,500.00	$ 10.00	$ 1,000.00
Gas/Fuel (Incl. drying fuel)	$ 35.00	$ 3,500.00	$ 23.00	$ 2,300.00	$ 12.00	$ 1,200.00
Repairs & Maintenance	$ 29.50	$ 2,950.00	$ 19.25	$ 1,925.00	$ 6.00	$ 600.00
Freight & Trucking	$ 38.00	$ 3,800.00	$ 10.00	$ 1,000.00	$ 18.00	$ 1,800.00
Irrigation	$ 60.00	$ 6,000.00	$ -	$ -	$ -	$ -
Overhead (Incl. labor, custom hire, etc.)	$ 23.00	$ 2,300.00	$ 12.00	$ 1,200.00	$ 30.00	$ 3,000.00
Total Direct Expense	$ 521.50	$ 52,150.00	$ 271.25	$ 27,125.00	$ 322.00	$ 32,200.00
Profitability & Break-Even (Before Land Rent)						
Net Return	Per Acre	Total Acres	Per Acre	Total Acres	Per Acre	Total Acres
Before Land Rent	$149.20	$14,920.00	$134.25	$13,425.00	$155.00	$15,500.00
Break-Even						
Break-even $$/Bushel	$2.74		$5.43		$3.58	
Break-even Yield/Acre	147.73		33.45		60.75	
Profitability & Break-Even (After Land Rent)						
	(Enter Below)		(Enter Below)		(Enter Below)	
Land Rent	Per Acre $ 175.00	Total Acres $ 17,500.00	Per Acre $ 175.00	Total Acres $ 17,500.00	Per Acre $ 175.00	Total Acres $ 17,500.00
Net Return	Per Acre	Total Acres	Per Acre	Total Acres	Per Acre	Total Acres
After Land Rent	($25.80)	($2,580.00)	($40.75)	($4,075.00)	($20.00)	($2,000.00)
Break-Even						
Break-even $$/Bushel	$3.47		$8.93		$5.52	
Break-even Yield/Acre	197.31		55.02		93.77	

Note: This estimating tool does not include the payment of Farm Insurance, Real Estate Taxes, Family Living, or Interest and Principal payments on Debt.

MSU Extension Land Rent Calculator

So what does the future hold for land rent? Farmers will want to hold onto the land they farm as long as possible. It is hard to make a living if you don't have any land to farm. If the prices hold for the next year or two, Michigan State University Extension would expect that farmers will need to re-negotiate with landowners about their price and type of rental contract being used. The recent commodity prices and lowered net farm income generates an additional risk to farms as they look to move their businesses forward. Farmers may want to share some of that risk with landowners, so that when crop prices are good, rental prices reflect that, but when prices are down, rental prices go down.

Tips for negotiating farmland rent

Negotiating farmland rental rates can be challenging

Negotiating farmland rental rates can be challenging. Generally, landowners and tenants want to be fair with each other and don't want to be taken advantage of. Landowners need to cover the costs associated with owning land, such as a mortgage payment, insurance and taxes. Farmer-tenants need land in order to grow a crop and generate income. Most landowners and farmers alike want an easy way to determine fair rent prices. However, if market prices become volatile it can complicate the situation. When prices and yields are good, farmers can afford to pay more for rent but, when commodity price recede, like they have recently, their ability to make higher rent commitments are eroded. Michigan State University Extension has resources for landowners and farmers in determining how to set rental rates, like the *landlord checklist* (https://www.canr.msu.edu/farm_management/land-energy-leasing-contracts),.

What factors affect the value?

There are a number of factors that affect the value of land for rent and lease purposes including productive capacity of the field, accessibility and local farmer competition for land. Below is a list of ten items to consider when evaluating the amount that should or could be charged for cash rent:

1. Nutrient content of soil – do you have a recent soil test?
2. Crop productive index – from USDA NRCS soil survey tells how productive the soil is compared to other soil types
3. Cropping history – what has been planted on the field during the last 10 years? What are the base acres and yields are as reported to the USDA Farm Service Agency?
4. Crop production level (yields) – can you document what actual yields have been over the last 10 years?
5. Herbicide application history – this can affect future crop rotation
6. Drainage tile – in good working condition? What spacing? What type? When was it installed? Do you have a map of the lines and outlets?

7. Surface drainage – do you have grass waterways where needed? Are they in good repair? Are there any washouts?
8. Field size – How many tillable acres? Small fields (less than 40 acres) are generally discounted
9. Access/obstructions – telephone poles, stone piles, narrow drive, buildings, near school, fences, on busy road or rural area?
10. Proximity to wildlife cover – Do you have potential deer or other wildlife damage?

Not all of this information is easy to obtain but there are several resources are available to help you including *Computing a Cropland Cash Rental Rate* (http://www.extension.iastate.edu/Publications/FM1801.pdf) from Iowa State University. Communication between the landowner and farmer- tenant is key to a successful "win-win" agreement.

How to look up land rental rates for your county

The National Agriculture Statistics Service has county level data for cash rental values. This is a county average so this might not be a perfect fit for your farmland, but it can give you a good place to start. It can also be helpful to see what rental rates in neighboring counties are. The data can be accessed on the *USDA NASS website* (http://quickstats.nass.usda.gov/).

Another resource is the Michigan Farm Land Values and Rental Rates Survey. This is an annual survey conducted by Michigan State University that asks producers to share the rent values being paid on their farm. Based on the responses within a specific area, a "district average" for both land values and rents paid is collected. The most recent survey report, as well as past surveys, can be found here: *Michigan Farm Land Values and Rental Rates Survey* - https://www.canr.msu.edu/telfarm/land-value-reports/

Return on Investment Method

Another method of determining rental rates uses return on investment. Anyone would expect to receive a return on their investment. Land is no different. It might be simpler for the landowner to use this method to get a ballpark price to use when negotiating with a tenant (farmer). This doesn't take soil productivity and land improvements into account, but it can be a place to start. To use this method, you simply determine an estimate of the desired return from the land; determine a fair annual return rate, then multiply. Some people use the 20 year U.S. Treasury Bond rate that can be accessed at the *U.S. Treasury Department Resource Center* (http://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yield) On December 2, 2019, the 20-year yield rate was 2.15 percent.

Land value ($/acre)	$3,000	$6,000
Rate of Return	3-4 percent	3-4 percent
Rental Rate ($/acre)	$90-120	$180-240

Impressions vs. reality

Land rent should be based on real numbers, not coffee shop talk. The fact is that land rent prices are highly variable and depend on many factors. Just because a neighbor has one field renting at a high price doesn't mean that all of his or your land is worth the same value. Make sure you do your homework.

The basic rule is that over time the cropping system that is put in place on a farm must generate the net revenue above cash costs to cover all land costs. Many farms are now looking at total land cost across all acres and using that calculation to determine the cash rents that can be paid and the land values that the farm can support if land is being purchased. The bottom line is as a farm income decreases, farmers will have to carefully evaluate their cost of production and may have to renegotiate land rents that are affordable to them.

If re-negotiation is needed on your farm, there are some options for different types of agreements that allow some flexibility in pricing land rent. It is expected that in the future the number of these types of agreements will increase.

Farmland Rental Agreements and Arrangements

Over the years, producers have rented farmland to each other, also known as "swapping ground", for a wide variety of reasons using a wide range of different types of arrangements. The type of agreement usually has a lot to do with how involved a landowner wants to be in the crop production activities on their land. Some landowners don't want any production or market risk or to be involved in making production decisions. Some want to own part of the crop. Some might want to be able to market their share of the crop. There is great flexibility in agreements based on what fits the landowner needs and the tenant needs. Here is a basic summary of farmland rental agreements.

Cash rent

The most popular and most frequently used farmland rental arrangement is fixed cash rent agreement. The landowner receives a predetermined fee to be paid by the tenant regardless of crop price or yield. The landowner is not usually involved in making any of the management decisions nor pays for any of the inputs. Normally these agreements are ongoing for multiple years based on a simple written agreement. A cash rent arrangement could be as short as one growing season in length which then requires renewal each year. Every cash rent agreement can have different terms and conditions depending on the situation but needs to establish the rental rate, payment schedule, length of agreement (beginning and ending date), and any crop or other restrictions. Putting agreements into a document that both landowner and renter sign is always the recommended practice. This option is good for landowners who want to eliminate uncertainty and risk, which a set, flat rate provides. Additional resources on cash rent:

Cash Rent Short Form - https://www.extension.iastate.edu/agdm/wholefarm/pdf/c2-16.pdf

Cash Farm Lease - https://aglease101.org/DocLib/docs/NCFMEC-01A.pdf

Rental Issues Renters Checklist - https://www.canr.msu.edu/farm_management/uploads/files/1%20Rental%20Issues%20Landlord%20Checklist.pdf

Landlord Rental Worksheet - https://www.canr.msu.edu/farm_management/uploads/files/1_Rental_Landlord_wks.pdf

Crop share

Crop share is considered a flexible farmland rental agreement where the landowner and tenant split the income from crops being grown on the farm in a pre-established ratio or percentage. A common share agreement would be 25 percent to landowner and 75 percent to tenant of the harvested grain crop when the landowner does not share in any production costs. In some cases a 1/3 to the landowner and 2/3 to the tenant agreement is used but in this this case the landowner would be expected to pay for 1/3 of the seed, fertilizer and chemicals cost for producing the crops. With input and overhead costs increasing over the past 10 years tenants can no longer afford the historical shares where 1/3 to the landowner with 2/3 going to the tenant with no cost share. This is different from the fixed cash rent agreement in that the price paid to the landowner is based on income, not a fixed amount. The dollar amount will be impacted by crop yields and prices. When yields and prices are up – rent amount will be up and vice versa. Additional resources on crop share:

North Central Farm Management Extension Committee - https://aglease101.org/DocLib/docs/NCFMEC-02.pdf

Crop Share Cash Farm Lease (Illinois) - https://farmdoc.illinois.edu/publications/crop-share-lease-form-pdf

Flex rent/Cash plus bonus

A flex rent agreement is a way to share the risks and rewards of a crop production system. Often the formula can promise a base cash rent price, which is often paid in advance, with a possible bonus at harvest, which is based on the gross value (yield times price) of the crop flex rent. Flex rent landlords may receive much higher rents, possibly better than some of the highest cash rents in the area. In the case of a revenue disaster, the tenant, are only obligated to pay the base cash rate. This option has become very popular across much of Michigan over the past few years as commodity prices rallied much higher than most expected. The use of this type of agreement provided the landowner with large bonus payments. The comfort level of accepting risk impacts the flex rent decision, as some landlords prefer guaranteed, set cash rent. Additional resources on flex rent/cash plus bonus:

Cash Rent With Bonus Leasing Agreement (Iowa State) - https://www.extension.iastate.edu/agdm/wholefarm/pdf/c2-12.pdf

Flexible Farm Lease Agreements Guide (Iowa State) - https://www.extension.iastate.edu/agdm/wholefarm/pdf/c2-21.pdf

Fixed bushel rent

As an alternative to the share crop arrangement is a fixed bushel agreement with landlords. The rent payment is a set number of bushels of grain per acre to the landlord. (For example, a corn rent might be 40 bushels of corn per acre) The bushel rent is delivered to the local elevator in the landlord's name, which means the landowner has the opportunity and responsibility to market the grain. When the corn sales price is high, rental income to the landowner increases, while in lower price years the rental income goes down. The marketing ability of the landowner could significantly affect his income. The tenant and landowner will need to establish a schedule of the crops to be grown and the bushels that will be considered as the rental payment for each of these crops. In this agreement, the landowner does not have production risk, but does have marketing risk.

Multiple choice flex leases

Some flex agreements offer a fixed price per bushel multiplied by the average corn yield for that field. (Corn example: $1 times the average yield, i.e. 150 bushels per acre, produces cash rent of $150 per acre.) This relieves the landowner of marketing and production risk and ties the rent price to the productive capacity of each field, which is good for the tenant.

For information on average rental rates in your county, visit the following report based on survey data from the USDA's National Agricultural Statistics Service for Michigan counties:
https://www.canr.msu.edu/resources/usda-farmland-cash-rent-2019