

FLEXIBLE RENT OF SWINE BUILDINGS

Introduction

With the recent volatility of the market hog prices and the growing turnover of producers, there is renewed interest in the leasing of swine production facilities. One method of renting swine facilities is to develop a flexible rent schedule that is favorable to both parties. The advantage of this innovative rental arrangement is that the rental fee rises and falls with changes in the local monthly hog price. Allowing building rents to fluctuate with the price of hogs reduces risks for producers who need to keep their production costs low to remain competitive. Also, the flexible rent schedule provides an income for former swine producers who still have value left in their facilities.

Establishing a base rent

A base rent for the swine facilities can be established based on depreciation, repairs, utilities, taxes, insurance, etc. (Refer to ISU Extension publication FM-1798, revised Nov. 1990) The determined base rent would relate to a standard market hog price that would be equitable to both parties, such as \$42.00 per hundred weight. As a general rule, the facilities cost are in the range of 10 to 12 percent of the cost of production.

Developing an agreement

Once the base rent and a standardized hog market price are determined, the rental payments can be paid on a monthly, quarterly, or semi-annual basis. The renter pays a portion of the total rent at the beginning of the rental period to the building owner. Then the actual hog market prices during the rental period determine the remaining rent.

The average price can be determined several ways. One method is to take the quoted cash price from a local hog buying station at the middle and end of each month, or take a quoted radio or newspaper market price on a specific date. At the end of the rental period, the actual average hog market price is calculated and compared to the predetermined base market price. The advance rental payment is then adjusted higher or lower, depending on the relationship of the actual market price to the base market price. For example, assume the base market price was \$42.00 per cwt. and the actual live market average price was \$39.50 per cwt. Therefore, the actual rent would be $39.50/42.00$ or 94 percent of the base rental rate that was paid in advance.

In order to reduce extreme changes in rent due to large fluctuations of the market hog price, a minimum and a maximum rental price (rental window) may need to be established for the protection of both parties. The rental window can be established by determining a percentage relationship to the base rental price. An example, with a base rental rate of \$10,000 and a rental window percentage established at 25 percent, the rental rate would be allowed to fluctuate between \$7,500 to \$12,500.

Executing the agreement

A legal written lease agreement needs to be formalized between the owner and renter. The base rent compensation, the base market price, the rental payment period, and the rental window need to be agreed upon by both parties. The agreement could provide an extended lease period with a yearly review of the lease. The lease should be very explicit in how the average payment period price is to be determined and who will be collecting and establishing this price.

Example

Given: A 3-year old (A), 1,000-head confinement finishing building has a replacement cost (RC) of \$175,000. Owner will pay for repairs, insurance, and taxes. Renter will pay the utilities and provide labor for minor repairs. Total useful life (UL) of the building is 15 years. Assume 2.5 turns of pigs can be finished each year.

Calculations:

- $RC = \$175,000$
- Current value (CV) = $RC \times (UL - A) / UL$, or $175,000 \times (15-3)/15 = \$140,000$
- Ownership costs:
- Depreciation = $1/(UL-A)$ or $1/(15-3) = 8.3\%$
- Taxes, insurance rate = 1.5%
- Current interest rate = 8.0%
- Total (%) ownership cost = 17.8%
- Annual ownership cost = current value (CV) x annual % ownership cost, or $\$140,000 \times 17.8\% = \$24,920$
- Repairs are 2% of replacement cost (RC), or $\$175,000 \times 2\% = \$3,500$ annually
- Total base rental payment per year = $(\$24,920 + \$3,500) = \$28,420$

Flexible rent: Rental will be from January 1 to December 31 with rental payments due January 1 and July 1. The annual base rental payment will be \$28,420 and the base market price is \$42 per cwt. (live.)

- Renter pays owner on January 1 one-half of the annual base rental payment, or \$14,210
- The cash live market at a local buying station on the closest date to the 15th and 31st of each month is used to derive the monthly market averages. Assume the average market price from January to June was determined to be \$43.67 per cwt. (live).
- Average market price divided by base market price = % rental adjustment = $\$43.67/\$42 = 1.0398\%$
- $\$14,210 \times 1.0398\% = \$14,775.56$
- $\$14,775 - \$14,210 = \$565.56$ additional rent due to owner for the first six months.
- On July 1, the renter pays owner the additional rent (\$565.56) plus \$14,210 for the last six months
- Assume the last six months had an actual average market price of \$35.60 per cwt. (live)
- Adjustment = $\$35.60 / \$42 = 84.76\%$
- $\$14,210 \times 84.76\% = \$12,044.40$ rental for the second six months
- $\$14,210 - \$12,044.40 = \$2,165.60$ deduction in rent to the owner for the last six months.
- The total rent for one year would be: $\$14,210 (+ \$565.56 \text{ rental adjustment}) + \$14,210 (- \$2,165.60 \text{ rental adjustment}) = \$26,819.96$
- $2.5 \text{ turns} \times 1,000 \text{ head} = 2,500 \text{ head marketed per year}$
- $\$26,819.96 \text{ rent} / 2,500 \text{ head} = \$10.73 \text{ rent per pig marketed.}$

Summary

This method of renting swine facilities requires great attention to market prices as well as coordination and communication between the rental parties. But it offers a fair and equitable arrangement to both parties in times of highly volatile market hog prices.

FLEXIBLE RENT OF SWINE BUILDINGS WORKSHEET

A. Established rental agreement

1. Established base market price of hogs \$ _____ / cwt. (live or meat)
2. Number of months in the rental payment period _____ (3, 6, 9, 12 months)
3. Base rental rate of unit per rental payment period \$ _____ / _____ mo. (number of months)
4. Initial payment due \$ _____
5. Rental window adjustment percentage _____ (0 to 25 percent)
6. Rental window = maximum rent \$ _____ and minimum rent \$ _____

B. Determining average market price during the rental period

Month	Date	\$/Cwt	Date	\$/Cwt.
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Total		(A) _____	+	(B) _____

A _____ + B _____ = _____ total, divided by _____ number of observations =
\$ _____ average market price per rental payment period

C. Rental adjustment

1. Average price per payment period \$ _____ /cwt. divided by base market price \$ _____ /cwt. = percent rental adjustment _____ %
2. Percent rental adjustment _____ % times base rental rate \$ _____ =
adjusted payment for rental period \$ _____
3. Base rental rate \$ _____ minus adjusted payment for rental period \$ _____ =
rental adjustment for payment period \$ _____

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