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#### Interest Costs of Storing Grain in Your Own Bin

The major cost of storing grain is the interest cost of either the money invested in the grain that could be invested elsewhere or in interest paid for the money borrowed to finance stored grain. The table below can be used to calculate that cost.

Example: If it is necessary to borrow money at 9 percent interest to store soybeans valued at \$5.00 per bushel, the interest cost is .0375 or 3 3/4 cents per bushel per month.

### INTEREST COST FOR HOLDING A GRAIN INVENTORY AT VARIOUS COMMODITY VALUES AND INTEREST RATES

	Cost in cents, per bushel per month						
Price Per Bushel	6% Int.	7% Int.	8% Int.	9% Int.	10% Int.	11% Int.	
\$1.00	.0050	.0058	.0067	.0075	.0083	.0092	
1.25	.0063	.0073	.0083	.0094	.0104	.0115	
1.50	.0075	.0088	.0117	.0112	.0125	.0138	
1.75	.0087	.0103	.0113	.0131	.0146	.0161	
2.00	.0100	.0117	.0133	.0150	.0167	.0183	
2.25	.0113	.0132	.0150	.0169	.0188	.0207	
2.50	.0125	.0146	.0167	.0188	.0208	.0229	
2.75	.0137	.0161	.0183	.0206	.0229	.0253	
3.00	.0150	.0175	.0200	.0225	.0250	.0275	
3.25	.0162	.0190	.0217	.0244	.0271	.0298	
3.50	.0175	.0204	.0233	.0262	.0292	.0321	
3.75	.0187	.0219	.0250	.0281	.0313	.0344	
4.00	.0200	.0233	.0267	.0300	.0333	.0367	
4.25	.0212	.0248	.0283	.0319	.0354	.0390	
4.50	.0225	.0263	.0300	.0338	.0375	.0413	
4.75	.0237	.0278	.0317	.0356	.0396	.0436	
5.00	.0250	.0292	.0333	.0375	.0417	.0458	
5.25	.0262	.0307	.0350	.0394	.0438	.0482	
5.50	.0275	.0321	.0367	.0413	.0458	.0504	
5.75	.0287	.0336	.0383	.0431	.0479	.0527	
6.00	.0300	.0350	.0400	.0450	.0500	.0550	
6.25	.0312	.0365	.0417	.0469	.0521	.0573	
6.50	.0325	.0379	.0433	.0488	.0542	.0596	
6.75	.0337	.0394	.0450	.0506	.0563	.0619	
7.00	.0350	.0408	.0467	.0525	.0583	.0642	
7.25	.0362	.0423	.0483	.0544	.0604	.0665	
7.50	.0375	.0438	.0500	.0563	.0625	.0688	
7.75	.0387	.0453	.0517	.0581	.0646	.0711	
8.00	.0400	.0467	.0533	.0600	.0667	.0733	
8.25	.0412	.0482	.0550	.0619	.0688	.0757	
8.50	.0425	.0496	.0567	.0638	.0708	.0779	
8.75	.0437	.0511	.0583	.0656	.0729	.0803	
9.00	.0450	.0525	.0600	.0675	.0750	.0825	
9.25	.0462	.0540	.0617	.0694	.0771	.0848	
9.50	.0475	.0554	.0633	.0713	.0792	.0875	
9.75	.0487	.0569	.0650	.0731	.0813	.0892	
10.00	.0500	.0583	.0667	.0750	.0833	.0917	

Let us consider a situation where a person did not have to borrow money to store his corn that was valued at \$2.50 Even though the grain was per bushel. stored in the producer's own bin there is a charge (opportunity cost) that must rightfully be made to the cost of storing that corn. If the money invested in the corn could be invested somewhere else at 6 percent the opportunity cost on \$2.50 per bushel corn is .0125 or  $1\frac{1}{4}$ cents per bushel per month. If one were to store the corn in this example for 10 months there would have to be a  $12\frac{1}{2}$ cents a bushel price rise just to pay for the interest cost.

Next, let us consider a situation where a person had to borrow money at 9 percent interest to put in his crop and is to pay it back from the sale of grain. If this person is storing \$5.50 soybeans the cost is .0413 or 4 and 13/100 cents per bushel per month. If these soybeans were to be stored for 10 months there would have to be a price rise of better than 41 cents just to pay for the interest cost.

There are other costs of grain storage that are not always considered in determining a net price for stored grain. For example; a shrink of 2 percent while in storage on grain valued at \$5.00 per bushel, amounts to a loss equivalent to 10 cents per bushel. Insurance costs could range from 1 to 5 cents a bushel on an annual basis; loss of quality in storage could be as high as 50 cents a bushel. Also if the grain is stored through tax assessment time, the grain is subject to property taxes. If a farmer has a facility for storing grain, the cost of owning that facility goes on whether or not it is used. Therefore these facility costs are not considered in this discussion.

Not only are these costs for storing grains very important to farmers and grain elevator operators in the day to day decisions they must make, but they are an important factor to be considered in agricultural policy. This would be especially true if some type of a grain reserve program were to be created in which the grain was stored on the farms until called for.

Art Sogn, Extension Economist - Grain Marketing

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