

RIGHT RISK NEWS

Depreciable vs. Non-depreciable Assets: Where Should I Invest?

DATES TO REMEMBER

(Spring-planted crops)
- county specific deadlines

Spring crop acreage
reporting deadline
- July 15

For more information see:
<https://www.rma.usda.gov>
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We commonly assume rational decision-makers make investment decisions based on projected impacts on wealth. However, people often decide based on the implied cash flow trajectory and perceived changes in risk.

Farmers and ranchers are in the business of using assets to generate income while hopefully maintaining or increasing equity. Assets come in two different forms: depreciable assets and non-depreciable assets. The Internal Revenue Code has specific guidelines regarding what factors make an asset depreciable and the process for “re-

covering the costs” of depreciable assets. This article does not address those guidelines nor does it imply any impacts to the tax consequences of any investments. When deciding which to invest in, the decision is not always easy.



Depreciable Assets

Depreciable assets lose value, wear out, decay, get used up, or become obsolete as they are used in the business to generate income.

An example would be a piece of equipment that is purchased and then used in the business over a period of years. There is an initial cash outflow to purchase the equipment. Cash outflows to purchase assets are not expenses. These cash outflows are a transaction that exchange one asset (cash) for another asset (equipment). Total assets, liabilities, and equity on the balance sheet remain unchanged. However, the book value of the equipment would be reduced over subsequent years as it is used to generate income. This reduction in book value is recorded by the business as *depreciation expense* over the useful life of the equipment.

For example, consider a \$140,000 tractor purchased for use on the farm with an expected useful life of 12 years and an expected remaining (salvage) value of \$20,000 at the end of those 12 years. The tractor book value would be reduced by \$120,000 over those 12 years. Using straight-line depreciation, this results in depreciation expense of \$10,000 per year for the tractor over its useful life. If you paid cash for this tractor, \$140,000 would flow out of the business at the time of purchase and \$20,000 would flow back into the business upon its sale at the end of 12 years. Neither of these transactions would affect the totals on the balance sheet and neither would represent an expense or income. Expense transactions would occur annually in form of non-cash depreciation expense. These depreciation expenses would reduce the asset book value of the equipment and, thus, have a negative impact on equity.

Non-depreciable Assets

Non-depreciable assets do not lose value as they generate income for the business over time. The primary example of this in farming and ranching is land. Excluding arguments that the land is being depleted (i.e. resources are being mined

or extracted from it), land does not depreciate in value over time. In fact, agricultural land is generally viewed as a safe investment with a long track record of modest *appreciation* in value over time. Other examples of non-depreciable assets in agriculture include things like grazing permits and water rights.



If the same \$140,000 in cash were invested in land, the initial transaction would look very similar to buying a tractor. One asset (cash) is exchanged for another asset

(land). Total assets, liabilities, and equity on the balance sheet would remain the same. However, as the land is used over time to generate income, it maintains its value at \$140,000, or possibly increases in *market* value (*appreciates*) as mentioned above. No depreciation expenses would accumulate. If the return on equity for the business is 7 percent, the \$140,000 land investment and the \$140,000 tractor investment would seemingly provide similar benefits, except where the tractor investment includes the burden of depreciation expense. Choosing between which investment to make, if you could only afford one, might seem like a no brainer. Of course, life is not that simple. There is a lot to consider. In the following example, we will highlight a few things to think about.

It is often not an either/or decision in terms of acquiring the right to use an asset. For example, farmers and ranchers generally need both land and equipment in order to produce outputs. The decision usually boils down to how to acquire access to the needed resources (assets) or, in the case of expansion, acquiring more of one of them in order to make more efficient use of the existing quantity of the other.

Leasing Assets

Rights to use equipment or use land can be acquired through leasing arrangements instead of purchase. In the case of equipment, an equipment lease would trade off a large initial cash outflow and the associated depreciation expense for an annual cash lease payment. Leased equipment has no effect on the balance sheet as it is not an asset owned by the business. Similarly, leased land would not affect the balance sheet and a large initial cash outflow and the associated potential appreciation in investment value is traded off for an annual lease payments. In terms of risk and uncertainty, without a multi-year written agreement, lease agreements are subject to change annually and are more subject to inflation risk. However, asset ownership also comes with full responsibility for property tax, repair, and maintenance expenses. These trade-offs should be evaluated on a case by case basis when making decisions about which assets to purchase and which assets to acquire the right to use by some other arrangement.



Borrowed Capital

Another factor to consider is that large asset purchases are often financed with borrowed capital. When that is the case, the initial exchange of cash and asset book value is smaller than an outright purchase (no debt). The remaining book value is offset by an increase in *liability* (loan). As loan *principal payments* are made, cash is exchanged for an increased portion of the asset book value that in turn increases the *equity* or owned portion of the asset. An additional portion of the cash outflow is paid to cover the *interest expense*. In essence, the large initial investment is traded off for the opportunity to spread out the cash outflow over multiple years and cost of doing this is captured by the interest expense.

For non-depreciable assets like land, this is straight forward. For depreciable assets like equipment it is complicated by depreciation and the risk that depreciation expense will exceed the exchange of cash for asset book value. This risk is very real, especially early in the life of the asset when principal payments are at their lowest and reductions in asset market value is at its highest. It is not uncommon for a highly leveraged purchase of a depreciable asset to be *under water* early in the ownership period; where the *liability balance* of the loan exceeds the *market value* of the asset. Non-depreciable land purchases are rarely subject to this risk, unless little or no down payment is made. Normally, the value of land purchased is above its market value or the agricultural economy is in severe decline and land values are declining with it.

Unequal Value, Unequal Implications

Another complicating element is the fact that often these investments are not equal in value. Comparing the purchase of a \$140,000 tractor to the purchase of a \$750,000 piece of land is much more difficult than the above example of equal initial investments illustrates. The initial cash outflow looks different, the impact of a two percent decrease in value looks different, and property taxes are also significant. However, a \$140,000 cash purchase of a depreciable tractor and \$140,000 down payment on a \$750,000 land purchase can be analyzed quite clearly. Care should be taken to make sure the comparison is fair and the decision is not biased toward the purchase of the lower priced asset. It may look like a smaller commitment with lower risk but it is also a commitment to depreciation expense that introduces risk to the operation.



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