



IMPLICATIONS OF DEPRECIATION TAXATION CHANGES FOR FARMS IN 2009

There are changes implemented in 2009 that affect the calculation of depreciation for farmers and ranchers. Unless these depreciation changes are extended by legislation for the 2010 year, some will expire after December 31, 2009 and others will have a change in the amount allowed.

As in past years, to claim depreciation, equipment and buildings must be “placed in service” before the end of tax year. This means that the building is completed and the equipment is available and ready for service. *If not placed in service in 2009, then depreciation is not allowed until placed into service in 2010, implementing the depreciation rules that exist in 2010.*

Five Year Recovery Period for New Farm Machinery

Within the provisions of the Financial Bailout Legislation, that was enacted on October 3, 2008, Congress has added a *new five-year recovery period* for new farm machinery and equipment (referred to as Qualifying Farm Property) rather than the *normal seven years*. To qualify for a five year recovery period the following restrictions must be met:

- 1) The original use of the asset must be placed in service after December 31, 2008 and before January 1, 2010 for the taxpayer.
- 2) The farm machinery and equipment is not a grain bin, cotton ginning asset, fence or other land improvement.

The result of this legislation is that “new” farm machinery and equipment (but not used equipment) placed in service during 2009 qualifies for a 5-year recovery period, whereas used machinery and equipment continues to be 7-year recovery assets.

For fiscal year C-corporations and other fiscal year taxpayers engaged in a farming business, the date the asset is placed in service determines whether it is Qualifying Farm Property eligible for the 5-year recovery period. For fiscal year 2008 and 2009 tax returns, only assets placed in service within calendar year 2009 will receive the 5-year recovery period.

The five-year life is a class life specifically assigned by Congress. Thus, taxpayers are allowed only to use the 5-year life and not the 7-year recovery period for new farm machinery and equipment for the 2009 year.

Extension and Expansion of Section 179 Expense Deduction

On February 17, 2009, the President signed The American Recovery and Reinvestment Act of 2009, with one of those provisions impacting

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farmers and ranchers. The Economic Stimulus legislation expanded the Section 179 first year deduction to \$250,000 effective for the tax year beginning in 2009. This deduction is reduced by \$1 for each \$1 of purchases over \$800,000 and phases out completely at \$1,050,000.

Taxpayers who are in a trade or business will be allowed to claim first year tax depreciation up to \$250,000. This deduction reduces the basis in the asset for purposes of regular depreciation. The taxpayer may not expense an amount greater than the net income from their business plus any earned income from other sources. In addition to individuals, entities are also allowed the Section 179 deduction. The dollar amount is determined at the entity level. Therefore, a partnership, LLC or S-corporation is limited to a \$250,000 deduction, regardless of the number of partners, members or shareholders involved. Since these three entities do not pay income tax, the deduction passes to the partner, member or shareholder, where it is limited based on their individual aggregate taxable income derived from active businesses and their individual \$250,000 limit. An Estate or Trust may not claim a Section 179 deduction.

In order to qualify for a 2009 deduction, the property must be available for service before the end of the 2009 tax year, which would include fiscal year corporations. Both new and used equipment qualify for the Section 179

deduction. Agricultural single purpose structures, storage facilities and purchased breeding livestock also qualify. Equipment and breeding livestock purchased from a related party does not qualify for the deduction. If the property is acquired as part of the trade, only the cash difference (boot) is eligible for the deduction. There are lower limits on Section 179 deduction for certain vehicles that are rated at 6000 pounds or less gross vehicle weight rating (GVWR). SUV's with a GVWR over 6000 lbs. have a Section 179 limit of \$25,000. The maximum Section 179 deduction would be \$25,000, assuming 100% business use. If business use is 50% or less, then Section 179 is not allowed.

The above general educational information is only intended for the farmer and rancher to be aware of the possible options that exist for tax planning. From a tax planning standpoint, many variables should be considered in determining if the election of the Section 179 deduction is appropriate.

The chart below summarizes the most recent Section 179 amounts. Careful planning with a KFMA Economist or tax advisor will insure proper utilization of the Section 179 expense deduction. There are caveats that could exist and prohibit the use of Section 179. Thus do not assume that you qualify automatically for this special election.

TAX YEAR	SECTION 179	ASSET ADDITION
<u>Beginning In</u>	<u>Annual Limit</u>	<u>Phase-out Range</u>
2003	\$100,000	\$400,000 – 500,000
2004	\$102,000	\$410,000 – 512,000
2005	\$105,000	\$420,000 – 525,000
2006	\$108,000	\$430,000 – 538,000
2007	\$125,000	\$500,000 – 625,000
2008	\$250,000	\$800,000 – 1,050,000
2009	\$250,000	\$800,000 – 1,050,000

Extension of 50% Bonus Depreciation

Congress has extended the 50% bonus depreciation to *new qualifying property*

purchased and placed in service after December 31, 2008 and before January 1, 2010. Qualifying property includes agricultural buildings, machinery and equipment. The 50% bonus

depreciation provision generally applies to property with a recovery period not exceeding 20 years.

The 50% bonus depreciation applies to new property only. If an asset is acquired by a trade, both the boot and any remaining adjusted tax basis (remaining depreciation) of the relinquished asset qualify for the 50% bonus. Under bonus depreciation, all assets that qualify must use the election. However, the taxpayer can elect to decline the 50% bonus depreciation provision by asset class.

The 50% bonus depreciation can be combined with the Section 179 expense deduction. The taxpayer's total depreciation deduction can be flexible if the Section 179 expense deduction is claimed on used property and the 50% bonus

depreciation could be utilized on new equipment and agricultural buildings.

Fiscal year taxpayers are limited on the 50% bonus depreciation for assets placed in service after December 31, 2008 and before January 1, 2010. The state of Kansas has conformed to the federal depreciation laws, but not all states have done the same.

It is important to note that the information above is offered as educational information only and not intended to be legal or financial advice. For questions specific to your farm business, consult with your tax advisor.

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Depreciation Summary

	<u>Section 179</u>	<u>50% Bonus</u>	<u>5 Year Recovery Period</u>
New vs. Used	Both	New only	New only
Trades	Boot only	Entire basis	Entire basis
Effective for	Tax Years beginning In 2009	1-1-09 to 12-31-09	1-1-09 to 12-31-09
Maximum	\$250,000	No maximum	No maximum
Phase-out	Yes, > \$800,000	No	No

PERSISTENCE IN FINANCIAL PERFORMANCE

This article examines the persistence of financial performance measures for a sample of farms over a five-year period. Specifically, using KFMA whole-farm data, the profit margin ratio is computed for each farm and year, and for the 2004 to 2008 period. The number of years each farm was in the top and bottom performance quartiles is computed and discussed. Also, the operating profit margin ratio and corresponding farm characteristics are compared across financial performance quartiles.

The operating profit margin ratio was computed by adding interest expense and subtracting unpaid family and operator labor from net farm income and dividing the result by the value of farm production. Unpaid operator and family labor was computed using the number of operators on each farm and average family living expenditures.

Variables compared across quartiles included value of farm production, net farm income, interest, unpaid family and operator labor, total assets, total debt, total expense ratio, adjusted

total expense ratio, economic total expense ratio, operating profit margin ratio, asset turnover ratio, debt to asset ratio, percent of farms with positive cash flow, percent of farms financially stressed, percent of farms with expense ratios below 1.00, and percent of farms in four value of farm production categories (i.e., less than \$100,000 in value of farm production; value of farm production between \$100,000 and \$250,000; value of farm production between \$250,000 and \$500,000; and value of farm production greater than \$500,000). The total expense ratio was computed by adding cash costs, accrual adjustments to costs, and depreciation, and dividing the result by value of farm production. The adjusted total expense ratio was computed by adding unpaid family and operator labor to the expenses included in the total expense ratio and dividing by value of farm production. An adjusted total expense ratio below 1.00 indicates that a farm was able to cover accrual expenses, depreciation, and unpaid family and operator labor. The economic total expense ratio was computed by adding the opportunity cost of owned assets to the expenses in the adjusted total expense ratio and dividing by value of farm production. If the economic total expense ratio is below 1.00, the farm is covering all accrual and opportunity expenses, and is earning an economic profit. A farm was considered financially stressed if it had an adjusted total expense ratio above 1.00 and had a debt to asset ratio above 0.70. To determine whether specific variables were significantly different between farms in the top and bottom quartiles, t-tests and a five percent significance level were used.

Table 1 presents the summary statistics for the 1,062 farms with continuous data from 2004 to 2008. Value of farm production averaged \$355,001. The average profit margin was 0.1604 or 16.04 percent while the average asset turnover ratio was 0.3305. The average total expense ratio, adjusted total expense ratio, and economic total expense ratio were 0.760, 0.893, and 1.065, respectively. As indicated by the percent of farms with an adjusted total expense

ratio below 1.00, approximately 65 percent of the farms covered accrual expenses, depreciation, and unpaid family and operator labor. Approximately 28 percent of the farms covered all accrual and opportunity costs and thus were earning an economic profit. Approximately 5.6 percent of the farms were financially stressed.

Table 2 presents the number of farms and percent of farms by profit margin category. Farms in the first category were in the top or bottom quartile for all five years. Only 26 farms, or 2.45 percent of the farms, were in the top profit margin quartile for all five years. Approximately 18 percent of the farms were in the top profit margin category for three, four, or five years (i.e., in the first, second, or third profit margin categories). Conversely, approximately 20 percent of the farms were in the bottom profit margin category for three or more years. It is important to note that approximately 46 percent of the farms were never in the bottom profit margin category.

Variable comparisons among the profit margin quartiles can be found below. Before discussing this information, some of the characteristics of the 26 farms that were consistently in the top profit margin quartile will be discussed. These farms had five-year average profit margins ranging from 0.2839 to 0.4586, and an average asset turnover ratio of 0.3991. The average value of farm production for this group of farms was \$656,860 or approximately \$302,000 higher than the average value of farm production for the entire sample of farms. All of these farms were covering accrual expenses, depreciation, and unpaid family and operator labor. Moreover, approximately 81 percent of the farms in this group were earning an economic profit.

Table 3 presents the summary statistics for the profit margin ratio quartiles and asset turnover ratio quartiles. These tables were created using five-year average data for each farm. Statistical differences for all of the variables except the

percentage variables were computed using information from the top and bottom profit margin ratio and asset turnover ratio quartiles. Though not denoted in the tables, all of the variables were significantly different when comparing the top and bottom quartiles for each financial performance measure. The farms in the top profit margin quartile had an average operating profit margin ratio of 0.2804 or 28.04 percent (Table 3). In contrast, the farms in the bottom profit margin quartile had an average operating profit margin ratio of -0.1419. The farms in the bottom profit margin quartile also had a relatively low asset turnover ratio and relatively high expense ratios. In fact, none of farms in the bottom profit margin quartile earned an economic profit and only 70 percent of the farms covered accrual expenses and depreciation (i.e., had a total expense ratio below 1.00). Over two-thirds of the farms in the top profit quartile earned an economic profit.

The farms in the top profit margin ratio tended to be larger than the farms in the bottom quartile. In fact, none of the farms with a value of farm production above \$500,000 were in the bottom profit margin ratio quartile.

In summary, this paper examined the persistence of financial performance for a sample of farms over a five-year period.

Results suggest that weather and other external factors made it difficult for a farm to consistently be in the top profit margin ratio or top asset turnover ratio quartiles over time. However, using five-year average data there was a substantial difference in financial performance between farms in the top and bottom quartiles. For example, farms in the top profit margin ratio quartile had an average operating profit margin ratio of 0.2804 and an average asset turnover ratio of 0.3409. In contrast, farms in the bottom profit margin ratio quartile had an average operating profit margin ratio of -0.1419 and an average asset turnover ratio of 0.2313.

Results also stress the importance of using several years of data to benchmark financial performance and suggest that it is possible for farms to have a sustained competitive advantage. Given the wide variability of financial performance documented in this study, a further examination of the characteristics of the farms in the top quartiles, including obtaining information pertaining to management styles, experience, and decision making abilities, would be a fruitful area for further research.

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Table 1. Summary Statistics for 1,062 KFMA Farms with Continuous Data from 2004-2008.

Item	Average
Value of Farm Production (VFP)	\$355,001
Net Farm Income	\$85,239
Interest	\$19,074
Unpaid Family and Operator Labor	\$47,370
Total Assets	\$1,074,187
Total Debt	\$312,954
Total Expense Ratio (TER)	0.760
Adjusted Total Expense Ratio (ATER)	0.893
Economic Total Expense Ratio (ETER)	1.065
Operating Profit Margin Ratio	0.1604
Asset Turnover Ratio	0.3305
Debt to Asset Ratio	0.2913
Percent of Farms with Positive Net Cash Flow	93.79%
Percent of Farms Financially Stressed	5.56%
Percent of Farms with TER less than 1.000	92.28%
Percent of Farms with ATER less than 1.000	65.07%
Percent of Farms with ETER less than 1.000	28.34%
Percent of Farms with VFP less than \$100,000	13.47%
Percent of Farms with VFP between \$100,000 and \$250,000	34.18%
Percent of Farms with VFP between \$250,000 and \$500,000	32.11%
Percent of Farms with VFP greater than \$500,000	20.24%

Source: Kansas Farm Management Association 2008 Databank.

Table 2. Number of Farms and Percent of Farms by Profit Margin Categories.^a

Item	Number of Farms	Percent of Farms
<u>Top Profit Margin Category</u>		
First Category	26	2.45%
Second Category	57	5.37%
Third Category	111	10.45%
Fourth Category	187	17.61%
Fifth Category	260	24.48%
Sixth Category	421	39.64%
<u>Bottom Profit Margin Category</u>		
First Category	63	5.93%
Second Category	61	5.74%
Third Category	85	8.00%
Fourth Category	142	13.37%
Fifth Category	227	21.37%
Sixth Category	484	45.57%

^a Farms in the first category were in the top or bottom quartile for all five years. Farms in the second category were in the top or bottom quartile for four of the five years. Farms in the third category were in the top or bottom quartile for three of the five years. Farms in the fourth category were in the top or bottom quartile for two of the five years. Farms in the fifth category were in the top or bottom quartile for one of the five years. Farms in the sixth category were not in the top or bottom quartile during the five year period.

Table 3. Summary Statistics for Operating Profit Margin Ratio Quartiles.^a

Item	Profit Margin Quartile			
	First	Second	Third	Fourth
Value of Farm Production (VFP)	\$128,531	\$310,053	\$452,291	\$528,932
Net Farm Income	\$8,371	\$49,930	\$102,486	\$180,237
Interest	\$8,664	\$19,502	\$24,049	\$24,058
Unpaid Family and Operator Labor	\$35,270	\$45,559	\$52,645	\$55,993
Total Assets	\$625,226	\$906,357	\$1,213,741	\$1,551,531
Total Debt	\$144,629	\$301,857	\$391,714	\$413,362
Total Expense Ratio (TER)	0.935	0.839	0.773	0.659
Adjusted Total Expense Ratio (ATER)	1.209	0.986	0.890	0.765
Economic Total Expense Ratio (ETER)	1.508	1.142	1.035	0.937
Operating Profit Margin Ratio	-0.1419	0.0770	0.1634	0.2804
Asset Turnover Ratio	0.2056	0.3421	0.3726	0.3409
Debt to Asset Ratio	0.2313	0.3330	0.3227	0.2664
Percent of Farms with Positive Net Cash Flow	80.75%	96.24%	98.87%	99.25%
Percent of Farms Financially Stressed	11.70%	9.40%	0.75%	0.38%
Percent of Farms with TER less than 1.000	70.94%	98.12%	100.00%	100.00%
Percent of Farms with ATER less than 1.000	0.38%	61.65%	98.50%	99.62%
Percent of Farms with ETER less than 1.000	0.00%	5.26%	39.47%	68.68%
Percent of Farms with VFP less than \$100,000	44.53%	6.02%	1.50%	1.89%
Percent of Farms with VFP between \$100,000 and \$250,000	44.53%	48.50%	26.69%	16.98%
Percent of Farms with VFP between \$250,000 and \$500,000	10.94%	33.08%	46.24%	38.11%
Percent of Farms with VFP greater than \$500,000	0.00%	12.41%	25.57%	43.02%

^a The first quartile is represented by farms with the lowest operating profit margin ratio. The fourth quartile is represented by farms with the highest operating profit margin ratio.

RECOMMENDATIONS FOR FURTHER READING

The purpose of this section of the newsletter is to briefly discuss articles and web sites that may be of interest to readers. In general, the articles discussed will not report on original research. Rather, the articles will contain citations to web sites and articles that discuss topics of general interest.

A recent issue of the *Animal Science Monitor* (Issue 92), written by Felix Soriano, discusses the importance of communication with employees. He notes that good managers excel at communicating with their employees and suggests several tips including the following: if it's important, say it twice; listen actively; read the impact you have on others; communicate purpose and meaning; have a meeting with your employees to share good news; give and be receptive to feedback; and be specific. Most of these tips are self-explanatory. However, I will elaborate on three of the tips. Active listening entails paying attention to body language as someone is talking and asking questions. In terms of the impact you have on others, how does your employees respond to you? Are they tense or relaxed during your conversations? Do your discussions with your employees energize them? Next, I will further elaborate on feedback. If you need to give feedback that is negative, it is often a good idea to start the conversation on a positive note. Also, be sure you are to the point and specific with regard to negative feedback. Negative feedback should be given in private. In contrast, it is a good idea to give positive feedback in public. Issues of the *Animal Science Monitor* can be accessed via the following web site:

www.animalsciencemonitor.com.

A recent article written by Brian Briggeman and Jason Henderson of the Federal Reserve Bank of Kansas City discusses demand weakness and lack of profitability in the U.S. livestock industry. The authors note that red meat and poultry production, and milk production rose by

10 percent and 11 percent, respectively, from 2004 to 2008. This increase along with sharply higher feed costs squeezed margins. As indicated by the authors, renewed prosperity in the livestock industry is dependent on a rebound in protein demand. Domestic protein consumption is typically sluggish following recessions. Thus, most potential gains in protein may come from developing countries. Developing countries are projected to post strong economic gains following the global recession. This could boost incomes for the rising middle class in these countries and subsequently boost protein demand. For those wanting more information on this topic, I have posted this article to my contributor site under "Recommendations for Further Reading".

Jason Henderson and Maria Akers discuss demographic shifts in the Federal Reserve Bank of Kansas City region which includes Wyoming, Colorado, New Mexico, Nebraska, Kansas, Oklahoma, and Missouri. Demographic trends in the rural regions include the retirement of the baby boomers, the exodus of young adults, and a shrinking work force, but also include, at least in some regions, a return of middle-aged adults. As indicated by the authors, the region's economic growth potential hinges on three components: population growth, changing labor force participation, and productivity growth. Slower population growth is expected to trim economic growth in the region by 0.7 percent. Lower labor force participation is expected to trim another 0.4 percent from economic growth in the region. Labor force productivity is difficult to predict, but is expected to remain similar to that in recent years. Combining these three forces results in an expected decline in economic growth from the 3 percent rate experienced prior to 2008 to 2 percent. As noted by the authors, policy makers in the region may want to focus at least part of their attention on attracting incoming middle-aged adults. For those wanting

further information, I have posted this article on my contributor site under “Recommendations for Further Reading”.

The Food and Agricultural Policy Research Institute (FAPRI) prepares baseline projections for the U.S. and world agricultural sectors for all major grains, oilseeds, and livestock, commodities. This institute is a very important

source for long-term price projections. Their price and yield projections for the U.S. typically go out 5 to 10 years. FAPRI can be accessed using the following web site:

www.fapri.missouri.edu.

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The Kansas Farm Management Association (KFMA) Newsletter is distributed monthly to provide farm management information to farm decision makers. Further farm management information can be found on the KFMA program website: www.agmanager.info/kfma; and, on the Extension Agricultural Economics website: www.agmanager.info. The Newsletter is edited by Michael Langemeier, Professor, Department of Agricultural Economics, Kansas State University.



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