

Transferring Farm Assets to a Younger Generation



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Abstract

This paper explores options pertaining to the transfer of farm assets from an older generation to a younger generation. After discussing key tax issues, such as the basis of assets and the disposition of assets used in farming, the paper uses a case farm example to discuss various methods that can be used to transfer assets. For the case farm illustrated in this paper, leasing the land was found to be an attractive option for farmland; leasing with an option to buy and gradual sale of items were found to be attractive options for machinery and equipment.

INTRODUCTION

One of the most difficult decisions for a farmer who is transferring their operation to a younger generation relates to the transfer of farm assets in a way that provides retirement income to the generation that is retiring or reducing their time spent in the business, while still making sure the transfer is financially feasible for the younger generation. Using the latest U.S. farm balance sheet numbers (USDA ERS, 2020), machinery and motor vehicles account for approximately 9.2% of all farm assets, and real estate accounts for approximately 82.8% of all farm assets. Due to the thinness of markets for these assets and the tax consequences associated with selling farm machinery, buildings, and land, devising a strategy that is beneficial to both generations can be quite complex.

This paper explores options pertaining to the transfer of farm assets from an older generation to a younger generation. In addition to discussing the advantages and disadvantages of various methods that can be used to transfer assets, we provide a case farm example of how the methods impact the cash flow of the older and younger generations.

KEY TAX ISSUES

This section discusses key tax provisions associated with the basis of farm assets and the disposition of assets used in farming. More information pertaining to these topics can be found in IRS (2019, 2020) and LGUTEF (2019a, 2019b).

Basis of Farm Assets

Given that the focus of this article is transferring machinery and farmland, we will focus on the basis for these assets in the following sections. A distinction is made between depreciable personal property (e.g., machinery and equipment), depreciable real property (e.g., buildings), and non-depreciable real property (e.g., farmland).

When examining the basis of property, it is important to distinguish between cost basis and adjusted basis. The basis of property is usually its cost, which is defined as the amount an individual pays in cash, debt obligations, other property, or services. Cost also includes the amount paid for sales tax, freight, installation, and testing. Adjusted basis incorporates increases and decreases to cost basis. Increases to basis include extending utility lines through real property, legal fees associated with the property's title or assessment, and improvements. The most common decreases to basis involve depreciation but also include casualty and theft losses, as well as cancelled debt excluded from income.

For property to be depreciated, it must be property that is owned, it must be used in a trade or business, it must have a determinable useful life, and it must have a useful life that extends beyond the year the asset is placed in service. Depreciation begins when a depreciable asset (e.g., a tractor) is placed in service for use in the trade or business and stops either when the cost of basis has been fully recovered or when the asset is retired from service.

The Modified Accelerated Cost Recovery System (MACRS) is used to recover the basis of depreciable property placed in service after 1986. Depreciable assets in production agriculture are placed in asset classes, which are used to determine the recovery period. For example, new farm machinery placed in service after December 31, 2017, is classified as five-year MACRS property and is thus depreciated over this time period. MACRS depreciation is typically more accelerated than economic depreciation. MACRS depreciation measures the allocation of cost of an asset over its useful life, whereas economic depreciation measures the actual change in value over time. As discussed below, the features of MACRS depreciation have important implications for the disposition of depreciable property.

In addition to MACRS, capital recovery methods such as Section 179 deduction and bonus depreciation (often referred to as the special depreciation allowance) are also available to farms. Bonus depreciation, as the name implies, enables a farm to make an extra depreciation deduction for qualified property in the first year the depreciable asset is used. For qualified property placed in service in 2019, bonus depreciation was 100%. The Section 179 deduction allows a farm to recover all or part of the cost of qualified depreciable property, up to a limit, by deducting it in the year the asset is placed in service. The Section 179 limit for 2019 was \$1.02 million. The deduction was reduced dollar

for dollar for investments over \$2.55 million. Section 179 has been commonly used by farms historically (Williamson and Bawa, 2018). Obviously, using either Section 179 or bonus depreciation creates situations in which an asset's adjusted basis is much smaller than its value based on economic depreciation and its market value, creating tax issues when the assets are sold.

The cost basis of real property includes certain fees and other expenses related to the purchase of the property. Before selling real property, the cost basis may be increased or decreased for items such as improvements or easements. Basis considerations are important when farmland is exchanged. A taxable exchange occurs when an individual receives cash or obtains property that is not similar or related in use to the property exchanged. If real property is received in exchange for another property in a taxable exchange, the basis of the property received is usually its fair market value at the time of the exchange.

Examples of nontaxable exchanges include involuntary conversions due to casualty, theft, or condemnation and like-kind exchanges, which involve the exchange of real property. Like-kind exchanges will be discussed in more detail in the next section.

Real property may also be inherited or received as a gift. When receiving property as a gift, an individual will need the donor's basis and fair market value of the property to compute the property's basis. If a federal estate tax return does not have to be filed, the basis of inherited property is its appraised value at the date of death.

Disposition of Property Used in Farming

When property is sold or exchanged, an individual receives a gain or a loss. If the amount realized from a sale or exchange of property is more than its adjusted basis, there is a gain. Conversely, if the adjusted basis of the property is more than the amount realized, there is a loss.

The gains and losses resulting from dispositions of property used in a farm business are typically treated as ordinary income or capital gain. When an individual disposes of depreciable property at a gain, they may need to recognize all or part of the gain as ordinary income under the depreciation recapture rules. Any gain remaining after applying the depreciation recapture rules is a Section 1231 gain, which is taxed using capital gains tax rates. The capital gains tax rate is typically lower than the income tax rate. In 2019, the

capital gains tax rate ranged from 0% to 20% (LGUTEF, 2019b). The 0% rate applies when taxable income does not exceed \$78,750 (married filing jointly). Taxable incomes between \$78,750 and \$488,750 correspond to a capital tax rate of 15%, and those with a taxable income above \$488,750 have a capital gains tax rate of 20%. Married individuals filing joint returns faced tax rates from 0% to 37%. For all income brackets, the income tax rate is higher than the capital gains tax rate. Thus, farmers would rather have income taxed as a capital gain than as ordinary income.

When discussing depreciation recapture, it is important to note that the Internal Revenue Service (IRS) distinguishes depreciable property using code sections. These code sections determine how depreciation recapture is computed. Examples of Section 1245 property for production agriculture include farm machinery and equipment, grain bins, single-purpose livestock buildings, irrigation equipment, tile drainage, and fences. For Section 1245 property, gain is taxed as ordinary income to the extent of allowed or allowable depreciation. An example of Section 1250 property would be a general-purpose building. Gain for Section 1250 property is treated as ordinary income to the extent that allowed or allowable depreciation exceeds the otherwise allowable straight-line depreciation. Given these definitions of Section 1245 and 1250 property, it should be evident that depreciation recapture is often a much worse problem for Section 1245 property.

Like-kind exchanges represent a nontaxable exchange. The gain or loss on these exchanges is not recognized until the new property received in the exchange is sold or otherwise disposed of. As the name implies, the exchange of property has to be like-kind. There are special rules or restrictions involving like-kind exchanges between related parties. Because of this, these transactions are not the focus in the case farm example described below.

Self-Employment and Employment Taxes

The self-employment tax is currently 15.3%, 12.4% for Social Security and 2.9% for Medicare (LGUTEF, 2019b). Landlord participation in farming impacts self-employment income. As a general rule, income and deductions from rentals (e.g., farmland) and from personal property leased with real estate (e.g., grain bins) aren't included in determining self-employment earnings. However, if the landlord materially participates, income from rent is included in self-employment income. Additional information

pertaining to material participation can be found in the 2019 Farmer's Tax Guide (IRS, 2019). The important point here is to note the self-employment tax consequences of renting farmland.

CASE FARM EXAMPLE

The following five transfer methods can be used to transfer farm assets from an older generation to a younger generation: outright sale, gradual sale over a period of years, installment sale, leasing, and gift (Edwards and Hofstrand, 2013). In addition to discussing the merits of each transfer method, each method is examined in the context of a case farm example. The case farm is located in west central Indiana. The farm has 3,000 crop acres, of which 480 acres are owned. John Smith (the older generation) plans on farming a few more years after Adam Smith (the younger generation) returns to the farm.

Table 1 contains an abbreviated list of the farm assets that are being considered for transfer or sale by John Smith. Asset categories include grain in inventory, livestock held for sale, machinery and equipment, and farmland. The machinery and farmland are listed in multiple lines to reflect differences in vintage and purchase dates and to increase the flexibility with regard to selling these assets over time. The "Character" column in Table 1 indicates whether the sale of the assets in each category will involve ordinary income, depreciation recapture, or capital gains tax treatment.

John Smith's assets include stored grain, livestock held for sale, machinery, and farmland. The stored grain and livestock held for sale are listed as assets because the timing of their sale impacts taxes in the next several years. If John continues to farm with Adam (younger generation), he will incur expenses that can offset the income from the sale of stored grain and the livestock. Having said that, Adam has indicated that he is not interested in continuing the livestock enterprise. This means that John may need to sell the livestock this year. The corn planter, tractor, and sprayer are listed separately because these pieces were purchased recently using Section 179 deductions. The machinery items included in "other machinery" have been fully depreciated. Sale of any of the machinery items listed in Table 1 will result in at least some depreciation recapture. John owns three tracts of land, each containing 160 acres. Tract A was purchased in 1990, Tract B was purchased in 2000, and Tract C was purchased in 2005. John is still making payments on Tract C.

Outright Sale

Outright sale occurs when assets are sold immediately or in year one. This method would create immediate cash flow for John but would not be feasible for Adam. Even excluding the stored grain, John has \$5,382,600 in assets. Because Adam is not interested in the livestock enterprise, John would likely sell the livestock in year one. As noted below, the estimated taxes resulting from the sale of all the assets in year one would be substantial for John.

Table 2 reports the tax consequences of selling the livestock for sale, machinery and equipment, and farmland in the first year. Tax rates in 2019 were used for the computations in Table 2. Selling all of these assets in the first year has enormous tax consequences due to the large dollar value of assets sold and the tax rates John faces in this scenario. John would be in the highest income tax bracket and be facing the highest capital tax rate if he sold all the assets listed in Table 1 in the first year.

Gradual Sale Over Several Years

Instead of selling all of the machinery and farmland to Adam in one year, John could sell the assets over several years. Such an arrangement spreads out the tax consequences for John and the cash flow requirements for Adam. Even with this arrangement, it would likely not be prudent for Adam to purchase the farmland. A gradual sale of the machinery will spread out both depreciation recapture and capital gains. Selling machinery with the highest adjusted basis (i.e., planter, tractor, and sprayer) last allows John to continue to depreciate these items. Another advantage of a gradual sale over an outright sale is that the items transferred or sold to Adam can be adjusted each year to fit cash flow needs, particularly those of Adam. If Adam has a low-income year, the number of items purchased could be adjusted downward. On the other hand, if Adam has a relatively good income year, he could purchase more items that year.

If John and Adam farm together, a gradual sale of the machinery may impact how farm income is divided each year. Adam will own more of the machinery over time, and thus his share of income would need to increase over time. More information on dividing income can be found in Langemeier (2017a).

The tax consequences of selling the livestock held for sale, machinery and equipment, and farmland over several years are reported in Table 3. Tax rates in 2019 were used for the computations in Table 3. Present

value was used to discount the estimated annual taxes back to the current year. A discount rate of 6% was used in these computations. Land values were assumed to increase by 6% per year, offsetting the present value discounting. Economic depreciation on machinery and equipment was assumed to be 10% per year. Although the tax obligation is still rather large (\$744,807), it is approximately 30% lower than the estimated taxes resulting from selling all the assets in the first year. Despite the reduction in taxes for John and cash flow requirements for Adam, this option is still not very attractive to either party.

Installment Sale

An installment sale is a sale of property in which you receive at least one payment after the year of sale. If an individual realizes a gain on an installment sale, they may be able to report part of the gain when the payment is received rather than in the first year. Installment sales cannot be used to report a loss.

Installment sales are commonly used when a farm operator retires, particularly if they were a sole proprietor. The installment sale of a farm for one overall price under a single contract isn't the sale of a single asset. It generally includes the sale of real property and depreciable personal property reportable on the installment method. The tax treatment of the gain on the sale of each class of assets is determined by its classification as a capital asset, as property used in the business, or as property held for sale and by the length of time the asset was held.

Real and personal property can be included in an installment sale. However, if you report the sale of depreciable property under the installment method, any depreciation recapture is taxable as ordinary income in the year of the sale. This applies even if no payments are received in that year. If a farm disposes of more than one asset in a single transaction, the gain on each asset must be separately computed.

Each payment on an installment sale consists of three parts: interest income, return on adjusted basis in the property, and gain on the sale. As with most asset sales, capital gains (purchase price minus adjusted basis) are taxable. Thus, in each year a payment is received, income includes interest and gain on the sale. To compute installment sale income, information on adjusted basis and gross profit percentage is needed. This involves computing gross profit, which represents the total gain received. The gross profit percentage represents the percentage of each

payment (after subtracting interest) that is reported as installment sale income.

The installment method would give Adam immediate control of the assets included in the sale and would ease his cash flow requirements. Because depreciation recapture needs to be recognized in the first year, the tax consequences to John would be worse under this method compared to a gradual sale. Although an installment sale could be used to transfer one or more farmland tracts, this option still may not be affordable to Adam. Rather than owning the farmland, Adam may be more interested in ensuring that he can farm the land owned by John. This control of the land can be accomplished through leasing and/or gifts, which are described below.

The installment sale payment for the case farm in the first year was computed for Tract C using a sale price of \$1,299,200, a capital gain of \$803,200, and a gross profit percentage of 61.82%. Assuming a 20-year installment sale and a 5% interest rate, Adam's payment in the first year would be \$104,251, of which \$64,960 represents interest expense and \$39,291 represents the principal payment in the first year. The reportable income for John would be \$24,291. Adam's principal and interest payment of \$104,251 can be compared to a cash rental payment for these same acres of \$38,560. Although Adam would need to determine how the installment payment fits into his cash flow and determine whether the difference in cash flow would be better spent on paying other bills or expansion plans, his installment payment is substantially larger than the potential cash rental payment for Tract C.

Leasing

Leasing can be used for both the farmland and machinery. John could lease the farmland to Adam using various leasing arrangements such as crop share, fixed cash rent, or flexible rent. These arrangements would provide cash flow for John and make the transfer of the control of land more affordable for Adam. Lease payments are tax deductible to Adam, and leasing land would likely reduce John's self-employment taxes. Even if Adam could afford to purchase one or more tracts of John's farmland through an outright purchase or installment sale, it may be prudent for Adam to use funds that would be used to purchase the farmland to rent or purchase farmland that is not family owned or controlled. This of course assumes that he will continue to have access to the family owned or controlled farmland.

Leasing can also be an attractive option when transferring machinery and equipment from an older generation to a younger generation. Lease agreements can include an option to buy or a gradual sale. Lease agreements often lower the cash flow requirements of the younger generation. Lease payments for machinery and equipment are taxed as they are received by the older generation and are a deductible expense to the younger generation. To meet IRS guidelines, lease payments must reasonably reflect the value of the machinery and equipment.

Langemeier (2017b) describes a conceptual framework that can be used to transfer farm machinery through a lease agreement and provides an illustration of how this approach could be used in practice. Here, we will briefly discuss key elements of a lease agreement for John and Adam Smith. As a starting point, John and Adam would list the annual value of their contributions, which are computed by multiplying each party's investment in machinery and equipment by a fixed percentage that accounts for depreciation and interest on each machine. As Adam purchases machinery from John and outside parties, his annual contribution would increase and thus the lease terms would change. The lease agreement between John and Adam may also include an option to buy machinery and equipment. A lease with an option to buy must allow for the purchase at the end of the lease to be optional, and the purchase price at the end of the lease needs to reflect the fair market value of the machinery and equipment at the time of purchase. Failure to meet these IRS conditions may result in the lease being taxed as an installment sale instead of a long-term lease.

Using 2019 market rates for west central Indiana, Adam would need to pay \$241 per acre to cash rent the ground from John. Using the machinery and equipment information in Table 1, Adam's lease payment for machinery and equipment in the first year would be \$204,000 (machinery investment multiplied by 15%). Granted this is not a small amount. However, it is much smaller than the amount reported for the first year in Table 1 or Table 2. As Adam purchases machinery and equipment from John and others, this lease payment would decline. It is common to create a contingency plan for a scenario in which Adam has a low-income year and has trouble making the lease payments in a particular year, particularly the lease payment on machinery and equipment.

Gift and Inheritance

Farmland and machinery can also be transferred to the younger generation through a gift or inheritance. With a gift or inheritance, Adam would not have to pay for the assets. Obviously, this may cause cash flow problems for John and his heirs (e.g., spouse). There are also issues related to off-farm heirs. Gifting and inheritance of machinery can be particularly problematic. First, how do the off-farm heirs fit into the gifting of the machinery? Second, off-farm heirs are typically not interested in inheriting machinery, particularly if it is tied to a working operation. To discuss gifting and inheritance of the farmland, assume that there are two off-farm heirs. With three tracts of farmland, John's farmland could be evenly divided in his estate. Adam would receive one of the tracts of farmland in John's estate. Adam will also want some assurance that he will be able to rent the other two tracts of land. This assurance could be done through an operating agreement or similar legal document. Until the estate is settled, Adam would continue to rent ground from John.

Combination of Methods

It should be obvious from the discussion of the case farm that it is possible to use different methods when transferring different asset classes. With respect to the grain in storage, if John is going to continue to farm, there is no reason to liquidate the grain in the immediate future. Crop expenses in the current year and perhaps upcoming years will offset the potential income resulting from the sale of grain in storage. Since Adam is not interested in the livestock enterprise, John will likely need to sell the livestock in the current year. With respect to the farmland, Adam's main interest is control of the land. Given this, even if he had the money to purchase one or more tracts of farmland, Adam may be more interested in leasing the land than in purchasing the land. If he leases the land, Adam needs to know how the farmland will be handled in John's estate. With respect to the machinery and equipment, a gradual sale or leasing with an option to buy are attractive options. Both of these strategies will spread out Adam's cash flow requirements and spread out the tax consequences associated with John's liquidation of the machinery and equipment.

CONCLUDING COMMENTS

This paper explores options pertaining to the transfer of farm assets from an older generation to a younger generation. There are numerous methods that can be used to transfer farm assets, including outright sale, installment sale, gradual sale over a period of years, lease agreement, and gift or inheritance. In addition to discussing the relative merits of these methods, this paper uses a case farm example to illustrate how these methods impact the cash flow of the older and younger generations. Because the tax treatment across asset classes varies, it is often important to use different methods when transferring depreciable assets and farmland. For the case farm illustrated in this study, leasing the farmland from the older generation is an attractive option. In terms of the machinery and equipment, a gradual sale or leasing with an option to buy are attractive options.

It is important to note that the case farm example discussed in this article is highly stylized. Each farm is unique, and thus the options chosen to transfer assets from an older generation to a younger generation will be farm specific. Also, it is imperative to discuss how management will be transferred and how income will be divided before transferring assets. Many farms implement a "trial period" during which the younger generation receives a salary before transferring management, dividing income, or transferring assets. It is important to note that the division of income will have an impact on how machinery and equipment is transferred to the younger generation.

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Table 1. John Smith's Farm Assets

Asset	Fair Market Value	Basis	Gain or Loss (-)	Character
Stored Grain	\$505,000	0	\$505,000	Ordinary
Livestock Held for Sale	\$125,000	\$25,000	\$100,000	Ordinary
Corn Planter	\$105,000	\$20,000	\$85,000	Section 1245
Tractor	\$178,500	\$40,000	\$138,500	Section 1245
Sprayer	\$281,500	\$60,000	\$221,500	Section 1245
Other Machinery	\$795,000	0	\$795,000	Section 1245
Farmland A	\$1,299,200	\$214,400	\$1,084,800	Section 1231
Farmland B	\$1,299,200	\$366,400	\$932,800	Section 1231
Farmland C	\$1,299,200	\$496,000	\$803,200	Section 1231
Total	\$5,887,600	\$1,221,800	\$4,665,800	

Table 2. John Smith's Tax Liability: Selling Assets in First Year

Asset	Fair Market Value	Basis	Gain or Loss (-)	Taxes
Livestock Held for Sale	\$125,000	\$25,000	\$100,000	\$37,000
Corn Planter	\$105,000	\$20,000	\$85,000	\$31,450
Tractor	\$178,500	\$40,000	\$138,500	\$51,245
Sprayer	\$281,500	\$60,000	\$221,500	\$81,955
Other Machinery	\$795,000	0	\$795,000	\$294,150
Farmland A	\$1,299,200	\$214,400	\$1,084,800	\$216,960
Farmland B	\$1,299,200	\$366,400	\$932,800	\$186,560
Farmland C	\$1,299,200	\$496,000	\$803,200	\$160,640
Total	\$5,382,600	\$1,221,800	\$4,160,800	\$1,059,960

Table 3. John Smith's Tax Liability: Selling Assets Over Several Years

Asset	Gain or Loss (-)	Year 1	Year 2	Year 3	Year 4
Livestock Held for Sale	\$100,000	\$100,000	0	0	0
Corn Planter	\$105,000	0	\$80,236	0	0
Tractor	\$153,500	0	0	\$115,812	0
Sprayer	\$231,500	0	0	0	\$155,071
Other Machinery	\$795,000	\$795,000	0	0	0
Farmland A	\$1,084,800	0	0	0	\$1,084,800
Farmland B	\$932,800	0	0	\$932,800	0
Farmland C	\$803,200	0	\$803,200	0	0
Annual Estimated Taxes		\$269,290	\$129,849	\$157,116	\$188,553
Total Estimated Taxes	\$744,807				