

# **Title - Using Land Equity to Provide a Retirement Income**

Authors:

Gregory Ibendahl - contact person

University of Kentucky  
Agricultural Economics  
316 Agricultural Engineering Building #2  
Lexington, KY 40546-0276

606/257-3616  
606/257-7290 fax (for both authors)

Steve Isaacs  
University of Kentucky  
Agricultural Economics  
400 Agricultural Engineering Building  
Lexington, KY 40546-0276

606/257-7255

Presented at 1999 American Agricultural Economics Association meeting in Nashville, TN.

## Abstract:

Many retiring farmers will need to use their land equity to provide a retirement income. Based on a present value analysis, retiring farmers may either decide to sell or lease their land. The analysis is needed because taxes, liability issues, and goals of the farmer complicate the decision.

Copyright 1998 by Gregory Ibendahl and Steve Isaacs. All rights reserved.

## **Using Land Equity to Provide a Retirement Income**

### **Introduction**

Many farmers will likely be retiring during the next decade. According to the latest survey data, the average age of farm owners in the U.S. is over 56 years (US Department of Commerce 1994). Many of these potential retirees need to consider how they will finance their retirement income. Because land makes up such a large part of farmer equity, many of these retiring farmers will need to use their land to provide a source of retirement income. These farmers will face the problem of how to best utilize their land for retirement. The difficulty with land utilization occurs because farmers must convert an illiquid asset into liquid retirement resources. Without proper planning, farmers may pay too much in taxes or not maximize their after tax income. This paper will compare various land use alternatives and develop a decision framework for farmers to examine these various alternatives.

Farmers face two main alternatives for handling their land in retirement: selling or renting. Selling may involve receiving the entire purchase price at once through third party financing. The selling farmer can also provide financing and receive the proceeds over a period of years by using a contract for deed. Farmers renting out their land can use either a cash or crop-share arrangement. Farmers need to carefully consider the advantages and disadvantages of each method. These decisions must be made on an individual basis because circumstances are different for each farmer.

### **Selling with third party financing**

Selling farmland and receiving the entire purchase price at once is the typical method for transferring land. The selling farmer receives all the proceeds immediately since a bank or other

third party is providing the financing. With this type of sale, calculating a net present value is straightforward. The problem can be written as:

$$(1) PV_a = S_a - [S_a - B] \cdot T_c$$

where  $PV_a$  is the present value,  $S_a$  is the selling price,  $B$  is the basis and  $T_c$  is the capital gains tax rate.

The selling price is the total of all payments received by the seller. It includes any money and the fair market value of any property the seller receives. The selling price also includes any debt the buyer pays or assumes as well as any expenses paid by the buyer which would normally be paid by the seller. The basis is used to measure the seller's investment in the property. Typically, the basis is the original cost or value of the property when first acquired by the seller. The original basis is adjusted to include any depreciation of buildings, any improvements to the property, and any selling expenses (Internal Revenue Service).

Tax consequences can be a major consideration when selling and receiving all the proceeds at once. Many farmers may be unaware they face a large contingent tax liability due to land value appreciation. Therefore, capital gains taxes may consume a large portion of the selling price. This tax liability is reflected in the last part of equation (1). While the capital gains tax rate is less than the ordinary income rate, the cost can still be significant.

There are some tax strategies that can help reduce the tax consequences. A recent change to the tax code can help shield some of the gain from a farm sale. Farmers can shield capital gains from the sale of their personal residence up to \$500,000. The \$500,000 limit applies for married couples filing a joint return and who own and live in the house for two years. Otherwise, gains up to \$250,000 can be excluded. This exclusion applies to any sales after May 6, 1997 and can be used every two years.

This change is important to farmers because they may be able to claim property around the residence as part of the residence rather than part of the farm. In many instances, the gain on the personal residence alone is well under the maximum exclusion of \$500,000. By claiming more of the land is part of the residence rather than the farm allows the farmer to shield more of the gain on the sale of a farm.

Farmers need to be careful in claiming property is residential rather than part of the farm business. There are several factors that the IRS may use to determine if a property is residential or not. The first and most important factor is the use of the property. To show the property is residential, it should not be used for purposes that benefit the farm business. Activities such as hiking, hunting, fishing, horseback riding, or scenic enjoyment help to convince the IRS that the property is for a residential use. Therefore, land that is growing commercial crops probably cannot be claimed as residential. Woods or maybe pasture land is more likely to convince the IRS that the land is part of the personal residence.

The second factor determining if land is part of the residence or is part of the farm business is the reporting of mortgage interest and real estate taxes. Reporting these expenses on Schedule F indicates the land is used in the farm business. Also, reporting these expenses on Schedule E or Form 4835 indicates the land is used for income rather than residential use. Reporting mortgage interest and real estate taxes on Schedule A helps to show the property is for residential use.

The last factor is the classification used for local property taxes. The farmer should claim the property as residential rather than farm land. Claiming the property as a farm classification to get a lower property tax rate may convince the IRS that the property is not part of the personal residence.

Even though property around a residence is used for farming, it may be possible to convert the property to part of the personal residence. Previous court cases have determined that if the property is not used in the farm business for two years and the mortgage interest and real estate taxes are not claimed on the property for two years, then the property can be claimed as residential. Therefore, farmers thinking of retiring in a few years still have time to better utilize the \$500,000 exclusion of gains from the sale of a personal residence.

### **Selling with a contract for deed**

Selling farmland under a contract for deed allows the farmer to receive the payments over a period of years rather than all at once. Here, the farmer, rather than a third party, is providing the financing as well as bearing the financial risk,  $D$ . Because payments are spread over time, calculating a net present value is more complicated. The problem can be written as:

$$(2) \quad PV_b = \sum_{n=0}^N \frac{(I_n \cdot (1-T)) + P_n \cdot (1-GP\%) + (P_n \cdot GP\% \cdot (1-T_c))}{(1+i)^n} - E[L] - E[D]$$

where:

$$(3) \quad GP\% = \frac{(S_b - B)}{S_b}$$

Here,  $S_b$  is the sales price with a contract for deed,  $n$  is the time period,  $PV_b$  is the present value,  $T$  is the tax rate for ordinary income,  $I_n$  is the interest payment at time  $n$ ,  $P_n$  is the principal payment at time  $n$ ,  $GP\%$  is the gross profit percentage,  $T_c$  is the tax rate for capital gains,  $i$  is the discount rate,  $B$  is the basis in the property,  $L$  is the expected costs of environmental liability, and  $D$  is the expected costs should the borrower default.  $P_0$  represents any down payment.

In this model, the capital gains are spread over time. Each payment to the seller includes interest and principal. The interest income is taxed at the ordinary income tax rate. The principal

portion includes a return to the sellers adjusted basis in the property and a gain on the sale. The return to the basis is not taxed while the portion that is a gain is taxed at the capital gains rate. Equation (3) is the method the IRS uses to determine how much of each principal payment is a gain. The overall gain is compared to the sale price and this gross profit percentage is then used to calculate the capital gain each time period.

Spreading the capital gain over time is likely to result in less capital gains taxes being paid. There are several capital gain tax rates so spreading the gain over time could result in more of the capital gain being taxed at the lower rates.

Using a contract for deed also introduces other potential costs as indicated in equation (2). These potential costs include liability for environmental hazard damages and costs associated with borrower default. Under the Superfund law, cleanup costs associated with an environmental cleanup can be charged to both the buyer of the property who caused the problem and also the titleholder. Thus, under a contract for deed sale, the seller could be potentially liable for environmental problems.

To illustrate, consider the following hypothetical scenario. A retiring farmer sells his farm on contract. The new operator constructs a large confinement hog facility with a manure lagoon. Prior to the completion of the contract, the lagoon breaks, polluting a nearby stream. Under the Superfund law, the EPA can sue to recover cleanup costs and damages to natural resources. If the operator does not have sufficient funds, then the title holder, that is the retiring farmer, can be held liable for the costs.

Should farmers eliminate the consideration of a contract for deed sale and insist that buyers find other sources of financing? Not necessarily. A contract for deed can still be a useful tool for selling property if certain precautions are followed. First, write separate land contracts for

farmland and building sites. If a hazard is created, it is most likely to occur at the building site where fuel, farm chemicals and animal wastes are concentrated. Title to the building site should transfer at the time of sale.

Next, the farmland contract should specify activities that are forbidden or restricted until the contract is paid in full. As an example, the seller might want to restrict the size and number of livestock operations. The contracts should allow for foreclosure if these restrictions are violated. Finally, the seller may want the buyer to purchase environmental insurance which would protect the parties from lawsuits. Following all these restrictions should minimize the expected value of  $L$  in equation (2).

The other potential cost in equation (2) is the expected costs associated with borrower default. These costs can be fairly small if land prices remain firm and the property—which is itself the security for the loan—can be quickly resold. In this situation, the only costs are selling expenses. However, if property values have declined, then there could be significant costs if the property is resold at a price less than the original selling price. The best method for a farmer to minimize costs associated with borrower default is to carefully screen borrowers for the ability to pay a loan. Like a commercial lender, sellers would ask for and examine financial statements and income and cash flow projections.

### **Cash renting**

Cash renting provides a farmer a steady supply of funds without giving up title to the property. Because renting can be assumed to continue for infinity, this present value can be modeled as:

$$(4) PV_c = \frac{R_c \cdot (1+g) \cdot (1-T)}{(i-g)} - E[L]$$

where  $PV_c$  is the present value,  $R_c$  is the current net cash rental rate,  $i$  is the discount rate,  $g$  is the growth rate of cash rents, and  $T$  is the tax rate for ordinary income. The cash renting model also includes allowances for environmental liabilities. This allowance is needed because the title holder may be held liable for environmental damages under the Superfund Law.

### **Share leasing**

Share leasing is modelled almost identically to the cash renting model. This model can be written as:

$$(5) \quad PV_d = \frac{R_d \cdot (1 + g) \cdot (1 - T)}{(i - g)} - E[L].$$

The variable here are all similar to equation (4).

### **Comparison of models**

Table 1 summarizes the advantages and disadvantages of each of the methods to use land to provide a retirement income. Retiring farmers who are simply interested in maximizing their net present value from the land need only compare equations one through five. However, these equations do not fully account for all the goals of the seller and all the risk consequences.

As the table shows, the first major decision is whether to sell or rent the land. Selling is probably the better choice for farmers who need more funds right away. Selling with third party financing provides all the funds immediately. Selling with a contract for deed provides some immediate funds through the down payment. The contract for deed should also provide more yearly funds than either rental method since the payment includes a principal component. Renting is a better choice for farmers who do not need to deplete their land equity and who may be interested in passing their land to their heirs.

Those farmers who decide to sell their property have two choices based on the financing given to the borrower. Using a contract for deed is likely to result in a higher sale price than when third party financing is used. This higher price can result because some interested buyers may have trouble qualifying for bank financing. The other reason for the higher price is because the seller is absorbing some of the financial costs normally associated with a bank loan. The contract for deed also has tax advantages since the contingent tax liability is paid over several years rather than all at once.

The biggest disadvantages with a contract for deed are the costs. Environmental liability is a big issue that sellers contemplating a contract for deed should not overlook. Banks and other third party financiers have protection from Superfund liability. This protection does not extend to sellers using a contract for deed. The other potential cost results from borrower default. However, the seller probably accounts for this by either the sale price or the interest rate charged to the borrower. The main risk to the seller occurs because of unsystematic risk. Banks and insurance companies can diversify this away by holding several portfolios. A seller using a contract for deed probably only has one buyer.

Farmers deciding to rent their land can use either a cash lease or a share lease arrangement. The crop share lease may provide more overall income but the yearly income is likely to be more variable. Both of the rental arrangements place the retiring farmer at some level of risk from environmental liability. Long-term leases may encourage tenants to minimize environmental problems since future production may be jeopardized otherwise. Crop share leases may take more management time since the landlord shares in the costs and production.

From a safety and risk perspective, the four options for land use are listed in Table 1 in order starting with the safest option. Selling with third party financing has no risk for receiving

future payments. There is also no risk from environmental liability or borrower default. Providing all the proceeds at once is ideal to those farmers who have a strong safety first preference for funds. Financing with a contracting for deed is likely to provide a more stable yearly income than either of the two rental strategies. The contract for deed specifies a yearly payment which is unlikely to vary from year to year. The contract for deed may also require a down payment which should be beneficial to those who have some type of safety first goal.

Yearly income from a crop share lease is likely to be riskier than from a cash lease. Environmental liability is a concern with the rental arrangements as well as the contract for deed option.

This paper presents some ideas for using land equity to provide a retirement income. The best choice for an individual depends on the goals and objects of the farmer. As discussed above there are serious considerations to use of these methods but the shortcomings can be at least partly minimized

Table 1. Summary of Land Use Choices for Retirement

	Sell		Rent	
Option	3rd party financing	Seller financing - contract for deed	Cash	Crop share
Advantages	<ul style="list-style-type: none"> <li>• Receive entire amount of money at once.</li> </ul>	<ul style="list-style-type: none"> <li>• Possible greater sale price.</li> <li>• Possible lower taxes</li> </ul>	<ul style="list-style-type: none"> <li>• Fairly consistent income from year to year.</li> <li>• Less variation in yearly income than from crop-share leases.</li> <li>• Retaining ownership of land than can be sold later or left as an estate.</li> </ul>	<ul style="list-style-type: none"> <li>• Retaining ownership of land than can be sold later or left as an estate.</li> <li>• Possible greater returns each year.</li> </ul>
Disadvantages	<ul style="list-style-type: none"> <li>• Contingent tax liability</li> </ul>	<ul style="list-style-type: none"> <li>• Money received over time rather than all at once.</li> <li>• Liability for environmental damages.</li> <li>• May not receive all payments if the buyer defaults.</li> </ul>	<ul style="list-style-type: none"> <li>• More variation in yearly income than seller financing.</li> <li>• Liability for environmental damages.</li> </ul>	<ul style="list-style-type: none"> <li>• Most year to year variation in income.</li> <li>• Liability for environmental damages.</li> </ul>

## References

- USDA. National Agricultural Statistics Service. <http://www.nass.usda.gov/census/census97/volume1/us-51/toc97.htm>
- Internal Revenue Service. 1998. Farmer's Tax Guide. Publication 225. U.S. Government Printing Office. 1998 435-506.