THE EFFECTS OF FEDERAL AND STATE DEATH AND GIFT TAXES ON NONINDUSTRIAL PRIVATE FOREST LANDS IN THE MIDWESTERN STATES

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ABSTRACT

This paper summarizes federal estate taxes and the death taxes of the 14 Midwestern states, with attention given to special provisions that apply to forestry and related land uses. Additionally, changes imposed by the 1997 Taxpayer Relief Act that must be considered in estate planning are introduced. A hypothetical family with a $3.5 million gross estate is followed through the death of both spouses, to show the effect of basic and advanced estate planning techniques in states selected to represent three different tax systems. Basic estate planning techniques can reduce or eliminate federal and state death taxes on estates of $1.2 million or less in taxable value. Advanced estate planning techniques, i.e., gifting, minority discounts, special use valuation, and deferral and extension, can further reduce the death tax burden for larger estates. Use of advanced techniques reduced the present value of federal and state death taxes on the hypothetical family by over 75 percent compared with basic techniques. In cases where an estate cannot meet the requirements for use of advanced techniques, donation of conservation easements can be used to reduce the death tax burden. A conservation easement donation combined with gifting reduced the present value of death taxes on the hypothetical family by approximately 60 percent over basic planning techniques.

An important component of the nation's future timber supply is located on private nonindustrial forest lands. Such holdings represent 59 percent of the commercial forest resource in the United States (8). They comprise approximately 8 million individual ownerships, including a large number of retired owners. An estimated 65 percent of these ownerships are within 15 years of a death-related transfer (4).

The families of forest landowners, especially retired owners, face potentially serious death tax problems. Demand for timber and for alternative non-forest land uses has caused stumpage and land prices to steadily increase. Coupled with sharply progressive federal and state death tax rates, these higher values can create a heavy tax burden for heirs.

It is commonly held that federal and state death tax burdens cause disruptions in forest management, abandonment of timber production by heirs, and fragmentation of ownerships. Many estates are forced to harvest timber prematurely in order to pay death taxes, particularly where owners have failed to plan for their death (9). These premature sales cause interruptions in the continuity of timber management and impair forest sustainability (3). In an effort to relieve death tax burdens, major revisions were made in the federal estate and gift tax provisions by the Economic Recovery Tax Act of 1981 (ERTA). Paradoxically, the combination of lowering the tax rate and increasing the unified estate and gift tax credit may have led to complacency on the part of forest landowners who still need effective estate planning.

Death tax systems differ considerably among the states, according to the type of tax used and each state's unique provisions. As a result, the relative effectiveness of the available estate planning techniques varies from one state to another. Forest landowners need information on the interaction between federal and state death taxes in order to make prudent estate planning decisions (11).

The purpose of this paper is to report the important state tax provisions in the states of the Midwestern region and to show their effects on estate planning. First, the federal estate and gift tax provisions are reviewed. Next, the statutes in each of the 14 Midwestern states are summarized, with attention given to provisions specifically directed to forestry and related land uses. A hypothetical family is followed through the death of

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both spouses, to show the effect of basic and advanced estate planning techniques in three states selected to represent differing state tax systems. Finally, donation of conservation easements is discussed as an estate planning tool.

Since this study was completed, the 1997 Taxpayer Relief Act was passed and signed into law (See sidebar). As they are phased in over the next several years, the provisions of the Act will change the amounts of estate tax due from those shown in the hypothetical example; however, they will not change the conclusions of the original research with respect to the need for proactive estate planning or the effectiveness of the techniques used.

FEDERAL ESTATE AND GIFT TAX PROVISIONS

BASIC PROVISIONS

The federal government imposes an estate tax on the assets of taxable estates transferred at death. It is an excise tax on wealth with progressive rates that increase with the value of the taxable estate. The rates vary from 18 percent on the first $10,000 of taxable estate value to 55 percent on taxable values in excess of $3 million. Generally, all assets are valued at fair market value. Deductions are allowed, however, for reasonable funeral and administrative expenses, and for all debts. An unlimited deduction usually is allowed for transfers to a surviving spouse, but gifts of future interests to a spouse are not deductible. In addition to the deductions, a unified estate and gift tax credit of $192,800 is allowed for each decedent. This credit offsets taxes on the first $600,000 of taxable estate value. In addition, credits are allowed for state death taxes, foreign death taxes, gift taxes paid or payable, and estate taxes attributable to recent transfers of property to the decedent.

In addition to these basic provisions, the federal tax code contains several considerations that can be extremely beneficial to forest landowners, including tax-free gifting, special use valuation, and deferral and extension.

ADVANCED PROVISIONS

Gifting. — One of the most effective methods of reducing the size of an estate is to give away assets prior to death. Large transfers are taxable at the federal level and sometimes at the state level. However, an individual or couple can transfer many assets tax-free, by making gifts valued at or below the federal and state annual exclusions. Over a period of years, the gross estate, and the estate tax burden, can be significantly reduced.

The federal tax code allows each individual to exclude from gift tax considerations gifts of up to $10,000 per year to any other person. When combined with a spouse's exclusion, in a split gift, a husband and wife can together transfer a total of $20,000 per year to any person. Gifts over the annual exclusion are offset against the donor's $192,800 unified transfer credit. Once the credit is exhausted, taxes become due on any additional transfers, whether by gift or inheritance. The federal gift tax is imposed at the same tax rates as the estate tax, and transfers are cumulative.

Another important gifting technique is the donation of assets to qualified charities. Generally, gifts to governmental, educational, or religious institutions will remove assets from an estate, regardless of the timing of the transfer. If a gift is made prior to death, an income tax deduction also may be allowed for the charitable contribution.

An important aspect of gifting is deciding what to give. Assets such as real estate and life insurance are difficult to give in $10,000 or $20,000 increments. Substantial fees may be incurred to retitle real property yearly. By utilizing family limited partnerships, limited liability companies, or trusts, however, donors can transfer yearly interests with minimal administrative cost.

Life insurance policies should be owned by someone other than the insured. In a transfer before death, a policy

PROVISIONS OF THE 1997 TAXPAYER RELIEF ACT THAT AFFECT FEDERAL ESTATE AND GIFT TAXES.

Changes in existing estate planning provisions:

- The applicable credit, that is, the amount of estate and gift transfers excluded from tax, will increase in irregular steps from $600,000 to $1 million by the year 2006;
- The $10,000 per year exclusion for gifts ($20,000 per year for split gifts by couples), the $750,000 maximum reduction in the fair market value of an estate available through special use valuation, and the $1 million exclusion from GST taxes in a generation-skipping transfer will be indexed to the cost of living after 1998;
- Effective after 1997, the interest rate charged on estate tax payments deferred because the estate consists largely of interest in a closely-held business is reduced from 4 percent to 2 percent, and the amount subject to the reduced rate is increased from $400,000 to $1 million; interest rates on deferred payments over $1 million also are reduced, but by lesser amounts.

New provisions:

- Effective after 1997, if interest in a family-owned business accounts for half or more of a decedent's estate, up to $1.3 million of the interest can be excluded from the estate for tax purposes (a family member must continue to own and materially participate in the business for at least 10 years after the death or the tax saved is subject to recapture);
- Effective after 1997, an executor can exclude from an estate up to 40 percent of the value of land in a qualified conservation easement (there is no step-up in the basis of excluded land; the exclusion is capped at $100,000 for 1998, but increases in steps to $500,000 by 2002; and to qualify the land must be within 25 miles of a metropolitan area, national park, or wilderness area, or within 10 miles of an urban national forest).

TABLE 1. — State death tax systems in the Midwestern region, as of May 1996.

State	Piggy-back tax	Inheritance tax	Estate tax	Pick-up tax
Illinois	P-B			
Indiana		I		P-U
Iowa		I		P-U
Kansas		I		P-U
Kentucky		I		P-U
Michigan	P-B			
Minnesota	P-B			
Missouri	P-B			
Nebraska		I		P-U
North Dakota	P-B			
Ohio			E	P-U
South Dakota		I		P-U
West Virginia	P-B			
Wisconsin	P-B			

will be valued at its cash value, which usually is substantially less than its face value (term policies are valued using a technique involving premium payments). If the insured owns the policy, the total proceeds (face value) will be included in his or her estate. If a gift of insurance is made within 3 years of death, the face value is pulled back into the decedent's estate. This federal rule is not applicable in most states.

A testamentary transfer of property will receive a stepped-up basis equal to the fair-market value of the asset on the date of death (or as of the alternative valuation date). Specially valued property, which is discussed in the next section, receives a step-up to its special use value. A gift of property simply transfers the donor's basis to the donee, plus adjustments for any gift taxes paid. Because estate tax rates are much higher than income tax rates, the stepped-up basis resulting from a testamentary transfer generally is more advantageous for property that has a basis substantially lower than its fair-market value.

Special use valuation. — Perhaps the most important federal estate tax provision available to owners of farms and closely-held businesses, including woodland owners, is the allowance of current use valuation instead of valuation based on the highest and best use of the property. This "special use valuation" is provided under Section 2032(A) of the Internal Revenue Code. It is limited to a maximum reduction of $750,000 in the decedent's gross estate. At the highest marginal tax rate, a reduction of this amount would save $412,500 in federal estate taxes.

Stringent requirements must be met in order to qualify for special use valuation:

- The decedent's property must be located in the United States, the decedent must have been a U.S. citizen, and the property must be transferred to a qualified heir. Qualified heirs include the spouse of the decedent; an ancestor of the decedent; any lineal descendant of the decedent, decedent's spouse, or the decedent's parents; or the spouse of any lineal descendant just listed.
- The property must have been owned and used for farming or a closely-held business purpose by the decedent or by his or her family for 5 of the last 8 years prior to death. The decedent, or a member of the decedent's family, must have had an equity interest and materially participated in the operation of the property for 5 of the last 8 years before death. For purposes of material participation, the 8 years before the decedent became disabled or the date on which social security benefits began can be substituted for the 8 years before death, as long as the payments continued until the decedent's death.
- The total property qualifying for Section 2032(A) must constitute at least 50 percent of the decedent's adjusted gross estate, when valued at fair market value. A minimum of 25 percent of the adjusted value of the gross estate must be qualified real property, although only 25 percent of the value of the estate needs to be elected for special use valuation.
- All heirs with an interest in the qualifying property must sign and elect special use valuation on the estate tax return.
- For 10 years following the decedent's death, the decedent's family or qualified heir must retain full ownership of the property, except in the event of an involuntary conversion or like-kind exchange. One heir, at a minimum, must materially participate in management of the property in 5 out of every 8 years. At least one heir must retain an equity interest and the property must be managed and used for the qualified use. In addition, a 2-year grace period is allowable, which may extend the special use period to a total of 12 years.

If any of the qualifications are violated after special use valuation has been elected, the tax savings may be subject to recapture. This includes the severance (harvest) of special use-valued timber. In order to ensure the recapture of tax in the case that special use valuation is discontinued, the Treasury Department may impose a lien on the qualified property. The lien will apply until the qualified heir dies, the tax benefit is recaptured, or the 10-year recapture period has elapsed.

Deferral and extension. — Deferral and extension on the federal level has several components. The estate tax is payable at the same time the estate tax return is required to be filed, 9 months after the decedent's date of death. The federal tax code provides for a single filing extension of 6 months. Payment of the federal estate tax also can be deferred for up to 10 years. Interest is charged to deferred and extended payments.

A provision that is helpful for farming businesses, including forest lands, is the deferral and extension of federal estate tax payments on an installment basis, available under Section 6166. If a closely-held business comprises more than 35 percent of the adjusted gross estate, the federal estate tax on the closely-held business portion of the tax can be deferred for 5 years, and then paid in 2 to 10 equal annual installments. The special use valuation must be used, if elected, in meeting the 35 percent test. Interest is charged at 4 percent on the first $1 million of closely-held business property, minus the $600,000 exemption equivalent; amounts above the $1 million limit are subject to interest at the federal short-term rate plus 3 percent. Additionally, the closely-held business must be an active business, and a disposal of more than one-half of the qualified business interest will accelerate the payment schedule. If a

family plans to use Section 6166, the members should organize themselves as an active business that also meets the qualifications of special use valuation under Section 2032(A).

The ability to defer taxes is quite helpful, especially for forested estates. The extra time allows the estate to arrange its affairs and improve liquidity (7). Additionally, the deferral permits some forest stands to reach economic maturity, helping to prevent disruptions in forest continuity.

Minority discounts. — The last forestry consideration deals with the fair market valuation of minority ownerships. Although there is no federal authority for discounting fractional or minority ownerships, experts agree that the value of a minority interest in an asset often is less than its percentage of the total ownership value. A minority discount can be given due to diminished control in the asset or to a reduction in the asset's marketability. The average discounts are 30 percent for lack of control and 42 percent for lack of marketability (5). None of the Midwestern states have provisions for minority discounts, but expert valuation of fair market value should reduce the estate value at both the federal and state levels.

Estate planners must be cautious because a minority discount may render property unable to meet the percentage tests for special use valuation, deferred and extended payments, or other tax provisions. The interaction of all these provisions must be carefully considered. For a more detailed discussion of the special provisions and their requirements, see Haney and Siegel (4) or Kess (6).

Death Tax Provisions in Midwest Region States

There are three basic state death tax systems currently in use: 1) piggy-back tax; 2) inheritance tax; and 3) estate tax. Nationally, 29 states have adopted the so-called piggy-back tax. Under this method, a state takes the proportion of federal estate tax allowable as a state tax credit, thus causing no net increase in the taxpayer's overall tax burden. The maximum state tax credit is progressive, and ranges from 0.8 percent on taxable estates in excess of $100,000 to 16 percent

TABLE 2. — State death tax rates and deductions for the Midwestern states, as of May 1996.

State	Due date (after date of death)	Marital deduction	Class	Exemption/(credit)	Rate Min.	Rate Max.
				($)	(%)	
Illinois (P-B)	9 months	Unlimited	N/A	60,000 total	0.8	16
Indiana (I)	12 months	Unlimited	Class 1	10,000; 5,000; or 2,000 each[a]	1	10
			Class 2	500 each	7	15
			Class 3	100 each	10	20
Iowa (I)	End of 9th month	Unlimited	Class 1	50,000 or 15,000 each[b]	1	8
			Class 2	None	5	10
			Class 3	None	10	15
			Class 4	None	15	15
			Class 5	None	10	10
			Class 6	None	5	5
Kansas (I)	9 months	Unlimited	Class 1	30,000 each	1	5
			Class 2	5,000 each	3	12.5
			Class 3	None	10	15
Kentucky (I)	18 months	Unlimited	Class 1	20,000; 5,000; or 1,000 each[c]	2	10
			Class 2	1,000 each	4	16
			Class 3	500 each	6	16
Michigan (P-B)	9 months	Unlimited	N/A	60,000 total	0.8	16
Minnesota (P-B)	9 months	Unlimited	N/A	60,000 total	0.8	16
Missouri (P-B)	9 months	Unlimited	N/A	60,000 total	0.8	16
Nebraska (I)	12 months	Unlimited	Class 1	10,000 each	1	1
			Class 2	2,000 each	6	9
			Class 3	500 each	6	18
North Dakota (P-B)	15 months	Unlimited	N/A	60,000 total	0.8	16
Ohio (E)	9 months	Unlimited	N/A	500 total (credit)	2	7
South Dakota (I)	9 months	Unlimited	Class 1	30,000 each	3.75	7.5
			Class 2	3,000 each	3	15
			Class 3	500 each	4	20
			Class 4	200 each	5	25
			Class 5	100 each	6	30
			Class 6	500 each	3	15
West Virginia (P-B)	9 months	Unlimited	N/A	60,000 total	0.8	16
Wisconsin (P-B)	9 months	Unlimited	N/A	60,000 total	0.8	16

[a] $10,000 each for children under age 21; $5,000 each for parents and children age 21 or older; $2,000 each for other Class 1 beneficiaries.
[b] $50,000 each for children; $15,000 each for parents and other lineal descendants.
[c] $20,000 each for children declared mentally disabled; $5,000 each for parents, children, and grandchildren; $1,000 each for other Class 1 beneficiaries. These figures applied until July 1, 1995; after a transition period extending through June 30, 1998, all Class 1 beneficiaries are exempt from inheritance tax.

on taxable estates in excess of $1.1 million. Of the remaining 21 states, 16 use an inheritance tax, which is a levy on the right of heirs to receive property, and 5 states use an estate tax, which is a levy on the right of the decedent's estate to transfer property. All states with inheritance or estate taxes impose an additional tax called a pick-up tax that absorbs any difference between the state death tax and the maximum credit allowed on the federal estate tax return. Six states also levy a gift tax, usually on gifts to non-spouses over a specified value.

STATE DEATH TAX PROVISIONS

Fourteen states comprise the Midwestern region: Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, West Virginia, and Wisconsin. Seven states in the region impose the piggyback tax, and levy a death tax equal to the state tax credit allowable on the federal estate tax (**Table 1**). Six states use an inheritance tax. Only one state, Ohio, uses an estate tax. No Midwestern states impose a gift tax, but all the inheritance and estate tax states have pick-up tax provisions.

The piggy-back states follow federal rates and deductions. The federal allowable state credit has an exemption of $60,000, and the tax rates range from 0.8 to 16 percent (**Table 2**). A net taxable estate below $600,000 is not taxed at either the state or federal level. If the estate exceeds $600,000, however, the state credit disallowed by the exemption equivalent becomes due. For a net taxable estate of $642,424, the federal tax of $15,697 exactly equals the allowable state credit. Thus, net taxable estates between $600,000 and $642,424 in value owe only state tax, while estates exceeding $624,424 in value also pay taxes to the federal government.

Each of the inheritance and estate tax states has its own individual schedule of tax rates that differs from the federal allowable state credit. State due dates for filing and payment of taxes range from 9 to 18 months after the date of death. All of the states, however, allow unlimited direct transfers to a surviving spouse.

Inheritance tax states have a wide range of rates and exemptions. Each state imposes increasing tax rate schedules on heirs who are less closely related to the decedent. Tax classes differ from state to state in terms of number, the heirs included in each, and rates. The number of classes ranges from three in Indiana, Kansas, Kentucky, and Nebraska to six in Iowa and South Dakota. All Class 1 schedules include distributions to children, but otherwise the composition of classes varies. Maximum marginal tax rates range from 1 percent for Class 1 heirs in Indiana, Iowa, Kansas, and Nebraska to 30 percent for Class 5 heirs in South Dakota.

Note that an inheritance tax may be very sensitive to the number of heirs. In the southern state of North Carolina, for example, in a situation that is unique to inheritance tax states, the federal estate tax on a $3,000,000 net estate is $1,098,000, and the maximum allowable as a state tax credit is $182,000. For this example, a family with one child in North Carolina who receives a $3,000,000 taxable distribution will pay $225,000 (or $43,000 more than the allowable state tax credit) to the state. If, however, the family has three children, who each receive a $1,000,000 taxable distribution, the total inheritance tax payable amounts to $157,300 in North Carolina (or $24,700 less than the allowable state tax credit). Because the inheritance tax on three heirs is actually less than the allowable state tax credit, the $24,700 pick-up tax will be paid to the state in addition to the inheritance tax. For a specific estate size, the more heirs, the lower the inheritance tax because each individual heir's tax rate schedule is progressive. Generally, assets located in states that impose an estate tax are not affected by the number of heirs.

It should be noted that Kentucky is in the process of substantially changing its inheritance tax system. Prior to July 1, 1995, the following exemptions were allowed for Class 1 beneficiaries: $20,000 for dependent children or mentally disabled adult children; $5,000 for parents, adult children, step-children, and grandchildren; and $1,000 for brothers and sisters. After July 1, 1995, a 25 percent exemption was allowed for distributive shares to all Class 1 beneficiaries until June 30, 1996. The exemption would then be increased by 25 percent each year until June 1998, after which a 100 percent exemption will be allowed for the distributive shares of all Class 1 beneficiaries.

Ohio is the only estate tax state in the Midwest region. Tax rates range from 2 to 7 percent, and a $500 credit is allowed.

The special provisions permitted under federal law, i.e., gifting, special use valuation, and deferral and extension, frequently receive different treatment at the state level. Treatment differs by the death tax system used and by individual

TABLE 3. — Special death tax provisions for the Midwestern states, as of May 1996.

State	Gift treatment	Special use valuation
Illinois (P-B)	Piggy-back tax follows federal provisions	Piggy-back tax follows federal provisions
Indiana (I)	Gifts within 1 year of death are pulled back into the estate	Not allowed
Iowa (I)	Gifts within 3 years of death are pulled back into the estate	Similar to federal
Kansas (I)	Gifts within 1 year of death are pulled back into the estate	Similar to federal
Kentucky (I)	Gifts within 3 years of death are pulled back into the estate	Maximum reduction of $500,000; 5-year recapture period
Michigan (P-B)	Piggy-back tax follows federal provisions	Piggy-back tax follows federal provisions
Minnesota (P-B)	Piggy-back tax follows federal provisions	Piggy-back tax follows federal provisions
Missouri (P-B)	Piggy-back tax follows federal provisions	Piggy-back tax follows federal provisions
Nebraska (I)	None	Maximum reduction of $500,000; 4-year recapture period
North Dakota (P-B)	Piggy-back tax follows federal provisions	Piggy-back tax follows federal provisions
Ohio (E)	Gifts within 3 years of death are pulled back into the estate	3-year prior use
South Dakota (I)	Gifts within 1 year of death are pulled back into the estate	Separate tax schedule
West Virginia (P-B)	Piggy-back tax follows federal provisions	Piggy-back tax follows federal provisions
Wisconsin (P-B)	Piggy-back tax follows federal provisions	Piggy-back tax follows federal provisions

TABLE 4. — Deferral and extension of death taxes for the Midwestern states, as of May 1996.

State	Extension for time to file	Extension for time to pay	Interest rate on extensions	Important provisions
			(%)	
Illinois (P-B)	Yes	Yes	10	Installment payments allowed; i = 6%
Indiana (I)	Yes	No	10[a]	No installment payments; 5% discount for payment within 1 year of death
Iowa (I)	Yes	Yes[b]	0.95 per month	No installment payments
Kansas (I)	Yes	No	12[c]	Installment payments allowed with no delay period; i = 12%
Kentucky (I)	No	No	9[d]	10 or 5 equal annual installment payments allowed if tax is > $5,000; i = 9%; 5% discount for payment of inheritance tax within 9 months of death
Michigan (P-B)	Yes	Yes	9.9	No installment payments
Minnesota (P-B)	Yes	Yes	9	Installment payments allowed if tax is > $5,000; i = 9%
Missouri (P-B)	Yes	Yes	AFR[e]	Installment payments allowed; i = 4%
Nebraska (I)	Yes[f]	No	9	No installment payments
North Dakota (P-B)	Yes	Yes	1 per month	No installment payments
Ohio (E)	Yes	Yes	AFR	Installment payments allowed; payment period cannot exceed 14 years; i = AFR
South Dakota (I)	Yes	No	10[g]	No installment payments
West Virginia (P-B)	Yes	Yes	12	Installment payments allowed; i = 12%
Wisconsin (P-B)	Yes	No	12[h]	Installment payments allowed; i = 12%

[a] The state court can reduce the interest rate to 6 percent for unavoidable cause or delay. Interest does not begin to accrue until 18 months after the decedent's date of death.
[b] An extension is granted only if 80 percent of the tax due is paid.
[c] Interest may be abated for inability to determine heirs or shares due to litigation.
[d] The interest rate is reduced to 9 percent for unavoidable delay.
[e] The interest rate is reduced to 9 percent for state-granted extensions to pay.
[f] An extension to file or pay tax is allowed only for delay to come into possession.
[g] Interest does not begin to accrue until 1 year after the decedent's date of death.
[h] Interest is charged if the tax due is not paid within 9 months of the decedent's date of death.

TABLE 5. — Inventory of assets for the hypothetical family.

	Acres	Current value in 1996	Fair market value in 1996	Miscellaneous
		($)	($ at death)	
Home	20	250,000	250,000	$50,000 basis
Land	1,000	300,000	900,000	$60,000 basis
Timber	1,000	1,400,000	1,400,000	No basis
Life insurance				
Husband on self		160,000	400,000	
Husband on wife		75,000	75,000	
Stock		350,000	350,000	$100,000 basis
Increase in wife's estate due to insurance at second death			125,000	
Total assets			3,500,000	

states' unique provisions. Federal treatment of gifts flows through to the piggy-back states (**Table 3**). With the exception of Nebraska, however, all the inheritance and estate tax states deem gifts within 1 to 3 years of death as made in contemplation of death. Unless a gifting program was established well before that time, such gifts may be pulled back into the decedent's estate. Additionally, many states do not include the federal annual gift exclusions in the estate.

The piggy-back states also follow federal provisions regarding special use valuation, but several inheritance and estate tax states have unique qualifications. Indiana disallows special use valuation. Kentucky and Nebraska limit the reduction in gross estate value through special use valuation to $500,000 and have recapture periods of 5 and 4 years, respectively. In contrast, South Dakota has a special tax class for farm and forest heirs. Inheritance Class 6, with lower marginal rates, applies to heirs not in Classes 1 or 2 who engaged in business or farming with the decedent for at least 10 of the 15 years prior to death. Federal special use provisions flow through unabated in the remaining Midwestern states.

State provisions for deferral and extension of death taxes rarely follow the federal lead. States may limit total extensions, give additional extensions, or apply their own interest rates. All the states except Kentucky permit filing of extensions, but five states disallow extensions for death tax payments (**Table 4**). Missouri and Ohio follow the applicable federal rate (AFR) of interest for extensions, but other states charge rates ranging from 6 to 12 percent. Note that many states have variable interest rates; the rates shown in **Table 4** are current as of May 1996.

Six states disallow installment payments. Only Missouri allows installments at 4 percent interest. Illinois charges a slightly reduced rate of 6 percent on installments, but no other states give a special interest rate for installment payments as compared to extensions. Further, Indiana and Kentucky allow a 5 percent discount on state death taxes if they are paid within 1 year or 9 months, respectively, of the decedent's date of death.

EFFECT OF FEDERAL AND STATE DEATH TAXES IN THE MIDWESTERN REGION

A hypothetical example will be used to show the effect of basic and advanced estate planning provisions. The federal

provisions just summarized will be illustrated, and their effect on the three different state death tax systems compared. For each case considered, total federal and state death taxes to family members are calculated over the deaths of both spouses. Comparisons are made in terms of the present value of taxes due. A discount rate of 7.6 percent is used to calculate the present value of future taxes, based on the average monthly federal rate for valuation of gifts and estates from January 1992 to December 1995 (2).

The hypothetical family includes a husband and wife, two daughters, one son, and three grandchildren. The husband is 59 years old, holds fee simple title to all property and earns a salary adequate to cover living expenses, but is in poor health. The wife is 56 years old, healthy, and earns no salary. The family works together harmoniously. The husband is assumed to die in May 1996, and the wife in May 2006. Family assets at the time of the husband's death consist of a house and land, 1,000 acres of forested land, life insurance policies, and stock. The forest is not fully regulated, but contains stands representing a range of age classes. The gross estate value is $3.5 million (**Table 5**). It is further assumed that $20,000 in funeral expenses are incurred at each death and a total of $60,000 of debt carries from one estate to the other.

A primary family goal is to minimize the total amount of death taxes paid. The family also wishes to maintain financial security and protect the continuity of management on its forest land. For this paper, Kentucky will be used to represent Midwestern states with an inheritance tax system, Minnesota to represent states with a piggy-back tax system, and Ohio to represent the estate tax system.

TABLE 6. — Present value of federal and state death taxes in selected Midwestern states using basic estate planning techniques, i = 7.6 percent.

	Kentucky (I)	Minnesota (P-B)	Ohio (E)
First death		($)	
Gross estate	1,750,000	1,750,000	1,750,000
Expenses	-50,000	-50,000	-50,000
Adjusted gross estate	1,700,000	1,700,000	1,700,000
Marital deduction	-1,100,000	-1,100,000	-1,100,000
Tentative tax base	600,000	600,000	600,000
Federal estate tax on tax base	192,800	192,800	192,800
Unified transfer credit	-192,800	-192,800	-192,800
Federal estate tax payable	0	0	0
State death tax	28,215	0	30,100
Total death taxes payable	28,215	0	30,100
Second death			
Gross estate	2,831,743	2,850,000	2,830,524
Expenses	-50,000	-50,000	-50,000
Adjusted gross estate	2,781,743	2,800,000	2,780,524
Tentative tax base	2,781,743	2,800,000	2,780,524
Federal estate tax on tax base	1,175,124	1,184,800	1,174,477
Unified transfer credit	-192,800	-192,800	-192,800
Federal estate tax	982,324	992,000	981,677
Credit for state death tax	-162,793	-164,400	-162,686
Federal estate tax payable	819,531	827,600	818,991
State death tax	162,793	164,400	182,737
Total death taxes payable	982,324	992,000	1,001,728
Present value of death taxes (1996)			
Federal	393,952	397,830	393,692
State	106,470	79,028	117,942
Total	500,422	476,858	511,634

BASIC ESTATE PLANNING TECHNIQUES

In an unplanned estate without a will, all assets are distributed according to the state law on intestate succession. Peters et al. (7) showed that the total tax burden for a $3.5 million gross estate can be significantly higher if assets are distributed by intestate succession than if the family takes advantage of basic estate planning. They determined that, in intestate transfers, residents of North Carolina, Virginia, and Mississippi, the sample states used, would incur combined federal and state death tax burdens with present values some $270,000, $157,000, and $364,000, respectively, higher than if they used basic planning techniques.

Basic estate planning is relatively straightforward. Ownership of family assets should be equalized between the spouses. At the first death, the $192,800 unified transfer credit should be used to the greatest extent possible, to transfer up to $600,000 of estate assets to heirs other than the surviving spouse. Estate assets in excess of $600,000 should be transferred to the surviving spouse, taking advantage of the marital deduction to defer taxes. At the second death, the unified transfer credit should be used once more. In this manner, estates up to $1.2 million in net value can be transferred to heirs without incurring federal or state death taxes in piggyback states. In inheritance and estate tax states, death taxes will frequently be due on estates of this size.

An estate plan should be prepared to ensure that both spouses make maximum use of the unified transfer credit, regardless of the timing or order of death. A will with a marital deduction formula enables the decedent's estate to take advantage of all basic planning techniques. It also ensures that estate assets are distributed according to the decedent's wishes.

If the hypothetical family uses the basic estate planning techniques to the fullest extent possible (i.e., ownership of family assets is equalized between the spouses before the first death, assets in excess of $600,000 are transferred to the wife as the surviving spouse, and full use is made of the unified transfer credit at both deaths) family members will experience a combined federal-state death tax burden with a present value equal to approximately 14 percent of the gross estate value (**Table 6**). The tax burden is highest in Ohio, the estate tax state, at $511,634 present value, and lowest in Minnesota, the piggy-back tax state, at $476,858 present value. Kentucky, the inheritance tax state, is between the extremes, at $500,422 present value when the 5-percent prompt payment discount is applied. Such a heavy estate tax is likely to cause disruption in the forest

management plan and require premature liquidation of merchantable growing stock. Additionally, a considerable amount of capital will be required to reforest harvested stands in order to maintain productive levels of growing stock.

ADVANCED ESTATE PLANNING TECHNIQUES

Basic planning techniques are effective at reducing or eliminating federal and state death taxes for estates with a net value under $1.2 million. Larger estates, however, still will experience a considerable tax burden. In such cases, use should be made of special considerations and other advanced estate planning techniques, to help reduce the tax burden. Incorporation of these techniques must be balanced against possible loss of control or financial security.

The advanced techniques that will be analyzed are gifting, minority discounts, special use valuation, and deferral and extension. Other estate planning techniques exist that could be used to reduce death taxes even further, but they are beyond the scope of this paper.

To illustrate the effect of advanced estate planning techniques, assume that ownership of family assets is equalized between the spouses. The husband has title to $300,000 of the couple's stock holdings, and the wife has title to the house and $50,000 of the stock. The $60,000 of debt is likewise divided between the spouses. Prior to the first death, a family limited partnership is formed containing the timber and timberland assets. The husband and wife are both limited and general partners; the children become limited partners as interest in the parents' partnership is transferred to them.

Assume further that 6 years prior to the husband's death, the couple places his life insurance policy in an irrevocable life insurance trust (ILIT), with the three children named as beneficiaries. From the policy's $160,000 cash value, $60,000 is transferred to the children as tax-free split gifts in the year the ILIT is created, another $60,000 in the second year, and the remaining $40,000 in the third year. Also in the third year, $20,000 of the cash value of the wife's life insurance policy is placed in the ILIT and divided among the children, so that full use is made of the federal gift tax exclusion.

In the fourth year, the remaining $55,000 of cash value in the wife's insurance policy is placed in the ILIT and transferred to the children. As well, $7,143 of the family partnership is divided among the children in the form of a limited interest. Applying a 30 percent minority discount to this gift brings its value to the children to $5,000, so that full use is again made of the federal gift tax exclusion. In each of the next 2 years, the couple gives each child a limited interest of $28,571 in the family partnership. Applying a 30 percent minority discount brings the value of each gift to $20,000, but collectively they reduce the value of the gross estate by $171,426.

By the time of the husband's death in the sixth year, the couple's gifting program has reduced the value of the gross estate by $653,569. In addition, naming the children as beneficiaries to the husband's life insurance policy prevents a $125,000 increase in the value of the wife's estate, bringing the total reduction in estate values attributable to gifting to $778,569. A more aggressive use of gifting is available to the couple, in the form of annual minority interest gifts to their grandchildren (subject to the generation-skipping provisions) and in-laws.

At the husband's death, each spouse's general partnership interest in the family limited partnership is $1,029,204 at fair market value. From the husband's share, $857,142 is divided equally among the children. Applying the 30 percent minority discount brings the value of this transfer to $600,000, the exemption equivalent for the unified estate tax credit. The wife inherits the remaining $172,062 of the husband's share, bringing her interest in the partnership to $1,201,266. Special use valuation is not elected because no federal estate tax is payable. Deferral and extension is unnecessary because all taxes are deferred.

At the wife's death, her estate is divided equally among the children. If she has successfully given away 5 percent or more of her interest in the family limited partnership, the children can apply the 30 percent minority discount to the value of

TABLE 7. — Present value of federal and state death taxes in selected Midwestern states using advanced estate planning techniques, i = 7.6 percent.

	Kentucky (I)	Minnesota (P-B)	Ohio (E)
First death		($)	
Gross estate	1,360,714	1,360,714	1,360,714
Expenses	-50,000	-50,000	-50,000
Adjusted gross estate	1,310,714	1,310,714	1,310,714
Marital deduction	-710,714	-710,714	-710,714
Tentative tax base	600,000	600,000	600,000
Federal estate tax on tax base	192,800	192,800	192,800
Unified transfer credit	-192,800	-192,800	-192,800
Federal estate tax payable	0	0	0
State death tax	28,215	0	30,100
Total death taxes payable	28,215	0	30,100
Second death			
Gross estate	1,339,700	1,355,000	1,338,678
Expenses	-50,000	-50,000	-50,000
Reduction from Section 2032A	-210,000	-210,000	-210,000
Adjusted gross estate	1,079,700	1,095,000	1,078,678
Tentative tax base	1,079,700	1,095,000	1,078,678
Federal estate tax on tax base	378,477	384,750	378,058
Unified transfer credit	-192,800	-192,800	-192,800
Federal estate tax	185,677	191,950	185,258
Credit for state death tax	-37,663	-38,520	-37,606
Federal estate tax payable	148,014	153,430	147,652
State death tax	37,663	38,520	63,607
Total death taxes payable	185,677	191,950	211,260
Present value of death taxes (1996)			
Federal	71,151	73,754	70,977
State	46,320	18,517	60,676
Total	117,471	92,271	131,653

their shares. This interest of the original gross estate is valued at $114,286 and can readily be given away under the annual gift tax exclusion. Special use valuation is elected on the timberland. Deferral and extension of installment payments under Section 6166 is precluded because the forestry assets do not exceed the exemption equivalent.

The advanced estate planning techniques provide a substantial tax saving at the federal level and in each of the three states (**Table 7**). The combined federal-state death tax burden ranges between 3 and 4 percent of the original gross estate value. It is highest in Ohio and Kentucky, at $131,653 and $117,471 present value, respectively. It is lowest in Minnesota, the piggy-back state, at $92,271 present value. The tax burdens are higher in Ohio and Kentucky primarily because of the relatively high rates imposed under state inheritance and estate tax laws.

Use of advanced estate planning techniques provides substantial savings over basic techniques. The present value of federal estate taxes saved averages over $323,000 (**Tables 6** and **7**). The present value of state death taxes saved averages over $59,000; savings are highest in Minnesota and Kentucky, at $60,511 and $60,150, respectively, and lowest in Ohio, at $57,266. These savings show the benefit to forest landholders of using the full range of estate planning tools available to them.

Implications of Advanced Estate Planning Techniques

As the hypothetical example illustrates, use of the special provisions available under federal law reduces the amount of taxes due at both the federal and state levels. The combined federal-state death taxes due at the time of the second death average roughly $200,000 (**Table 7**), representing one-fifth of the almost $1 million amount due under basic planning (**Table 6**). In some respects, the hypothetical estate is exceptional: it has an evenly-stocked forest, low debt, and both spouses are insured. Not all estates have the resources available to completely cover death taxes, but the threat taxes pose to continuity of ownership and management clearly is decreased by adequate estate planning.

Except in the cases of the equalizing of gross estate value between spouses and the gifting of assets prior to death, use of the special provisions has little effect on a family's control of its assets. Where trust and control are a concern, gifted property can be placed in a trust to ensure that family resources are not diminished or misused. Additionally, a qualified terminal interest trust allows the decedent to dictate the distribution of assets following the surviving spouse's death, as long as the surviving spouse is entitled to all annual income from the trust.

Conservation Easement Donations

Another method available to ensure control and reduce the death tax burden is donation of conservation easements. Conservation easements hold potential for estates that are unable to meet the pre- and post-death qualifications for special use valuation or deferral and extension, that are unable to manage their forest operation as an active, closely-held business, that seek to protect the natural or environmental values of their property against pressures to develop it, or that are looking for a means to further reduce their death tax burden.

Conservation easement donations can be used to ensure that forest land is valued at its current use rather than fair market value, which includes all potential development pressures. Easements can be sold or donated to governmental or non-profit organizations. Selling an easement can provide an estate the funds to pay death taxes, although it often is difficult to sell an easement unless the property has high amenity values. Conversely, many non-profit organizations accept donation of conservation easements. In addition to reducing the gross estate value, a conservation easement donated prior to death can be deducted as a charitable contribution for income tax purposes. The deduction is allowed, however, only if the donation is in perpetuity (1,4,10). Families that plan to eventually subdivide and develop their property should take great care before granting a conservation easement. It should be recognized that a conservation easement will permanently restrict the family's ability to develop the property. A properly designed conservation ease-

TABLE 8. — Present value of federal and state death taxes in selected Midwestern states using a conservation easement donation in combination with gifting, i = 7.6 percent.

	Kentucky (I)	Minnesota (P-B)	Ohio (E)
First death		($)	
Gross estate	1,087,500	1,087,500	1,087,500
Expenses	-50,000	-50,000	-50,000
Adjusted gross estate	1,037,500	1,037,500	1,037,500
Marital deduction	-437,500	-437,500	-437,500
Tentative tax base	600,000	600,000	600,000
Federal estate tax on tax base	192,800	192,800	192,800
Unified transfer credit	-192,800	-192,800	-192,800
Federal estate tax payable	0	0	0
State death tax	28,215	0	30,100
Total death taxes payable	28,215	0	30,100
Second death			
Gross estate	1,513,102	1,525,000	1,512,307
Expenses	-50,000	-50,000	-50,000
Adjusted gross estate	1,463,102	1,475,000	1,462,307
Tentative tax base	1,463,102	1,475,000	1,462,307
Federal estate tax on tax base	539,934	545,050	539,592
Unified transfer credit	-192,800	-192,800	-192,800
Federal estate tax	347,134	352,250	346,792
Credit for state death tax	-62,039	-62,800	-61,988
Federal estate tax payable	285,095	289,450	284,804
State death tax	62,039	62,800	90,462
Total death taxes payable	347,134	352,250	375,266
Present value of death taxes (1996)			
Federal	137,046	139,140	136,906
State	58,037	30,188	73,586
Total	195,083	169,328	210,492

ment, however, will permit continued management of the property for forestry, wildlife, and related purposes (1,10).

To illustrate the effect of a conservation easement donation, assume a situation identical to that in the hypothetical example, except that the forest land does not qualify for special use valuation. In order to ensure the land is valued at its current use, and to protect it from development pressures, the spouses make a conservation easement donation valued at $600,000. In this situation, the combined federal-state death tax burden in this case ranges between 5 and 6 percent of the original gross estate value. It is highest in Ohio and Kentucky, at $210,492 and $195,083 present value, respectively, and lowest in Minnesota, at $169,328 present value (**Table 8**). These figures are higher than for the advanced-techniques example, but represent a substantial savings over the basic-techniques example. They represent the potential tax savings that remain available to family estates that cannot qualify for all the advanced planning provisions.

Conclusions

Effective planning for forest landowners requires more than simply writing a will. Prior to passage of the 1997 Taxpayer Relief Act, basic estate planning techniques could eliminate the federal estate tax due, and reduce or even eliminate state death taxes on estates under $1.2 million in taxable value. These include equalizing the gross estate between spouses, maximizing the unified transfer credit, and tax deferral by using the marital deduction.

As the applicable credit phases in through 2006, the applicable exclusion increases to $1 million for estates of decedents dying, and gifts made. Thus, basic planning will permit forest landowners to effectively shield up to $2 million in asset value from estate and gift tax transfers when fully implemented. In contrast, estates of forest landowners meeting the qualifications of a family-owned business can immediately shield $2.6 million in taxable estate transfers from parents to the children.

For larger estates, the use of advanced estate planning techniques, i.e., gifting, minority discounts, special use valuation, and deferral and extension of estate tax payments on an installment basis, can further ease the financial burden of estate taxes and help avoid disruptions in the continuity of forest management and ownership. In the hypothetical example developed for this paper, use of these techniques reduced the present value of the combined federal-state death tax burden by roughly $380,000 over the basic techniques. This represents a 77 percent reduction in the present value of taxes paid.

While asset adjustments between spouses and gifting involve transfers of ownership of family assets, substantial tax savings can be achieved without loss of control. Use of family limited partnerships and trusts allows the original owners to control the disposition and management of assets even after they are given away. The qualifications for these special considerations are very restrictive, and careful planning is needed to avoid severe financial burdens.

Donation of conservation easements provides an additional estate planning tool to ensure that forest land is valued at its current use value and to shield it from development pressures. It can be applied where estates are: 1) unable to meet the qualifications for special use valuation or deferral and extension; 2) unable to manage their forest as a closely-held business; or 3) seeking ways to further reduce their death tax burden. Adaptation of the example to show the effect of a conservation easement donation combined with gifting resulted in tax savings of over $300,000, in present value terms, compared with basic planning techniques. Conservation easements run with the land and permanently restrict a family's ability to develop a property, but properly designed easements are compatible with continued production of forest products, including timber and wildlife.

Changes under the 1997 Act allow an executor to elect to exclude from a gross estate up to 40 percent of the value of qualifying land subject to a conservation easement. The amount of the exclusion is limited to $100,000 in 1998 and $500,000 when fully implemented by 2002 and thereafter. This is in addition to the qualified exclusion for family-owned businesses.

Estate planning should be undertaken with a thorough knowledge of both federal and the applicable state death and gift tax laws. Although most piggy-back states closely follow federal provisions, there are exceptions that should not be ignored. Both federal and state provisions change frequently, so they must be monitored. Estate planning should be a continual process that is kept up to date to achieve the family's goals.

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