FACTORS IN ESTATES' UTILIZATION OF SPECIAL TAX PROVISIONS FOR FAMILY-OWNED FARMS AND CLOSELY HELD BUSINESSES

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INTRODUCTION

With the enactment of several legislative provisions, the U.S. Congress has sought to protect family-owned farms and closely held businesses by lessening the burden of the federal estate tax, a progressive tax on the transfer of wealth at death. These provisions have included: special use valuation—the valuation of property at its actual use in a family enterprise rather than its full market value; the qualified family-owned business deduction; and the deferral of federal estate tax liabilities.[1] Special use valuation and the qualified family-owned business deduction each reduce the taxable estate, the amount to which graduated estate tax rates are applied, and, ultimately, an estate's tax liability. The deferral provision allows an estate to defer the portion of estate tax that is attributable to the decedent's closely held business and pay the balance in installments.

In this paper, we present a brief description of federal estate tax law in effect for the estates of 2001 decedents, as well as an examination of the three business provisions available to these estates. In addition, we present logistic regression models that examine the relationship between usage of one business provision and other estate characteristics. We also discuss the potential for future research. This paper is an extension of our earlier research that examined the subpopulations of estates that utilize each of the three business provisions and compared them to the subpopulations of estates that do not utilize the provisions.[2] This earlier research also includes a detailed examination of asset composition of estates in each of the subpopulations, as well as an examination of estates' liquidity, the financial capacity of estates to meet federal estate tax responsibilities and other debts, including mortgages and liens, with only accumulated liquid assets.

For decedents who died in 2001, about 1,800 estates, or 1.7 percent of the estate tax decedent population, elected to use at least one of the three special business provisions. A total of 831 estates elected special use valuation, alone or in combination with the business deduction or deferral of estate taxes; 1,114 estates claimed the qualified family-owned business deduction, alone or in combination with special use or deferral of taxes; and 382 estates elected to defer estate taxes, alone or in combination with the other two business provisions.

Figure 1 shows the elections and combinations of elections employed by estates of 2001 decedents. Of the estates that elected at least one provision, the predominant election was the qualified family-owned business deduction alone, with 656 estates that claimed the deduction. The second largest election was special use valuation alone, with 425 estates that elected the provision. Estates elected both special use and the qualified family-owned business deduction in 332 cases. Rarely, estates elected all three provisions, only in 21 cases. Some differences by size of gross estate are notable. Of those estates that utilized a special business provision, smaller estates tended to elect only the qualified family-owned business deduction, while larger estates tended to elect only the deferral of taxes.

FEDERAL ESTATE TAX LAW AND THE DECEDENT POPULATION

The estate of a decedent who, at death, owns assets valued in excess of the estate tax applicable exclusion amount, or filing threshold, must file a federal estate tax return, Form 706, U.S. Estate (and Generation-Skipping Transfer) Tax Return. For decedents who died in 2001, the exclusion amount was $675,000. For estate tax purposes, the value of property included in gross estate is fair market value (FMV), defined as "the price at which the property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or to sell and both having reasonable knowledge of all relevant facts," according to Regulation 20.2031-1(b) of the Internal Revenue Code (IRC).[3] The gross estate consists of all property, whether real or personal, tangible

Figure 1: **Election of Special Business Provisions[1], by Size of Total Gross Estate**

Size of total gross estate	Total number of estates	Election of business provisions							
		No elections	SUV only	QFOBI only	DOT only	SUV & QFOBI	SUV & DOT	QFOBI & DOT	SUV, QFOBI & DOT
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
All estates	**108,331**	**106,519**	**425**	**656**	**221**	**332**	**52**	**105**	**21**
Small ($675,000 under $2.5 million)	93,322	91,892	385	578	99	303	28	25	12
Medium ($2.5 million under $5 million)	9,977	9,769	28	52	39	25	14	44	6
Large ($5 million under $10 million)	3,454	3,329	**12	21	55	**4	**10	20	**3
Very Large ($10 million or more)	1,578	1,529	**	5	28	**	**	16	**

[1]Special use valuation is abbreviated as SUV, the qualified family-owned business interest deduction is abbreviated as QFOBI, and the deferral of taxes is abbreviated as DOT.
**Data combined to prevent disclosure of individual taxpayer data.

or intangible, including "all property in which the decedent had an interest at the time of his death and certain property transferred during the lifetime of the decedent without adequate consideration; certain property held jointly by the decedent with others; property over which the decedent had a general power of appointment; proceeds of certain insurance policies on the decedent's life; dower or curtesy of a surviving spouse; and certain life estate property for which the marital deduction was previously allowed."[4] Specific items of gross estate include real estate, cash, stocks, bonds, businesses, and decedent-owned life insurance policies, among others. Assets of gross estate are valued at a decedent's date of death, unless the estate's executor or administrator elects to value assets at an alternate valuation date, six months from the date of death, described in IRC section 2032. Alternate valuation may be elected only if the value of the estate, as well as the estate tax, is reduced between the date of death and the alternate date. The estate tax return is due nine months from the date of the decedent's death, although a 6-month filing extension is allowed.

In 2001, an estimated 108,330 individuals died with gross estates above the estate tax exclusion amount. These decedents owned more than $198.8 billion in total assets and reported almost $20.8 billion in net estate tax liability. Decedents for whom an estate tax return was filed represented 4.6 percent of all deaths that occurred for Americans during 2001, according to vital statistics data collected by the U.S. National Center for Health Statistics. Estate tax decedents for whom a tax liability was reported, 49,845, represented 2.1 percent of the American decedent population for 2001.[5]

DATA SOURCES AND LIMITATIONS

The Statistics of Income Division (SOI) of the Internal Revenue Service (IRS) collects and publishes data from samples of administrative tax and information records. With its annual Estate Tax Study, SOI extracts demographic, financial, and asset data from federal estate tax returns. These annual studies allow production of a data file for each filing, or calendar, year. By focusing on a single year of death for a period of three filing years, the study allows production of periodic year-of-death estimates. A single year of death is examined for three years, as 99 percent of all returns for decedents who die in a given year are

filed by the end of the second calendar year following the year of death.[6] The Estate Tax Study for the period 2001-2003 concentrates on year-of-death 2001, the year of death for which weighted estimates are presented in this paper.[7] Unweighted year-of-death records for decedents who died in 1998, collected during filing years 1998-2000, are also included in logistic regression modeling in the seventh section of the paper.

SPECIAL USE VALUATION

With the Tax Reform Act of 1976, Congress protected U.S. farms and closely held businesses by providing for special use valuation of decedents' interests in real property devoted to such businesses. For estate tax purposes, the value of property included in gross estate, including real property, is generally the fair market value based on property's potential "highest and best use." However, for real property that is used by a decedent or family member in a farm or other business as of the decedent's date of death, as well as in five of eight years preceding death, the executor may elect to value such property at its "qualified," or actual, use in the business, if certain requirements are met. According to the IRC, the term "family member" may include any ancestor of the decedent; the spouse of the decedent; a lineal descendant of the decedent, decedent's spouse or parent; or the spouse of any lineal descendant.

In order for an estate to elect special use valuation (SUV), several other conditions must be met: real property must be transferred from the decedent to a qualified family member of the decedent; at least 25 percent of the adjusted value of the gross estate must consist of real property, where adjusted value is defined as fair market value of real property less any debts against the property; at least 50 percent of the adjusted value of the gross estate must consist of real and other business property; and the estate must consent to payment of additional estate tax—"recapture tax"—if within 10 years of death the property is sold to an unqualified heir, if the property is no longer used for qualified purpose, or if the qualified heir ceases to fully participate for more than three years in any 8-year period. For estates of decedents who died in 2001, the allowed maximum reduction in value between fair market value and special use value was $800,000.[8]

For 2001, an estimated 831 estates elected SUV for real property (see Figure 2). Although

Figure 2: **Number of Estates, Estates with Potentially Qualifying Assets, and Number That Elected SUV, by Size of Total Gross Estate**

Size of total gross estate	Total number of estates	Estates with potentially qualifying assets	Estates that elected SUV	CV [1]
	(1)	(2)	(3)	(4)
All estates	**108,330**	**15,612**	**831**	**12.6%**
Small ($675,000 under $2.5 million)	93,321	11,711	728	14.1%
Medium ($2.5 million under $5 million)	9,977	2,219	74	27.1%
Large ($5 million under $10 million)	3,449	1,056	23	28.1%
Very Large ($10 million or more)	1,583	626	5	8.3%

[1] Coefficient of variation (CV), the ratio of an estimate's standard error to the estimate, is used to measure the magnitude of potential sampling error. The CVs shown refer to the number of estates that elected SUV.

this accounted for only 0.8 percent of all estates, it represented about 5.3 percent of estates that reported closely held or agribusiness assets (i.e., those estates that were potentially qualified to elect special use). Of those 831 estates, about half—405 estates—made protective elections of special use. An estate's executor may make a protective election if he must file a federal estate tax return prior to final determination of real property's qualification as special use property. As such, the election is contingent upon property's value as finally determined. Estates with protective elections do not separately report fair market and qualified use values for real property.

Smaller estates were more likely to claim this provision than their larger counterparts. As shown in Figure 2, about 0.8 percent of small estates (those with less than $2.5 million in total gross estate) claimed SUV, while only 0.3 percent of their very large counterparts used the provision. Reported fair market value for qualifying property was $377.2 million, and the property value decreased to $189.0 million for qualifying purposes.

QUALIFIED FAMILY-OWNED BUSINESS DEDUCTION

With the Taxpayer Relief Act (TRA) of 1997, Congress sought to safeguard family-run businesses and provided an estate tax deduction for "qualifying" family-owned business interests included in gross estate and transferred to qualified heirs. Requirements for utilizing the deduction are, with a few exceptions, similar to those for electing special use valuation. The principal place of business must be the United States, and the business entity must not have debt or equity that is tradable on an established securities market or secondary market. In addition, at least 50 percent of the business entity must be owned by the decedent and members of the decedent's family; or 70 percent must be owned by members of two families (and 30 percent owned by the decedent and members of the decedent's family); or 90 percent must be owned by three families (and 30 percent owned by the decedent and members of the decedent's family).

Several other requirements must be met, including: the value of the business interest must constitute at least 50 percent of a decedent's total gross estate less deductible debt, expenses, and taxes; the decedent or family member must have been actively engaged in the business. An additional estate tax is imposed if, within a period of 10 years after the decedent's death and before the qualified heir's death, the heir fails to actively participate in the business for a total of three years in any 8-year period.[9]

The qualified family-owned business interest deduction (QFOBI), initially set at $675,000 in TRA of 1997, could not exceed $1.3 million when combined with the applicable exclusion. Therefore, as the exclusion increased incrementally from $625,000 in 1998 to $1.5 million in 2004, the maximum allowable deduction decreased and finally disappeared in 2004.[10] For decedents who died in 2001, the available deduction for qualified family-owned business was $625,000.

Only a small fraction of estates utilized the QFOBI in calculating taxable estate and estate tax liability. For year-of-death 2001, an estimated 1,114 estates, or 1.0 percent of the total, claimed the deduction, while small estates made up the majority, 82.3 percent, of those that used the deduction (Figure 3). These 1,114 estates comprised about 7.1 percent of estates that reported closely held or agribusiness assets (i.e., those estates that were potentially qualified to elect QFOBI). The likelihood that an estate would claim the deduction was greater for larger estates. Among all very large estates, 1.5 percent claimed the deduction, while only 1.0 percent of all small estates claimed the deduction. For all estates, the deduction reduced taxable estate by $626.8 million.

DEFERRAL OF TAX AND INSTALLMENT PAYMENTS

Congress has also enacted legislation that lessens the burden of certain estate tax payments for estates comprised largely of closely held businesses. The legislation provides estates with an alternative to selling closely held interests in order to meet federal tax responsibilities. Initially, in 1958, Congress introduced installment payments for these estates, and then, in 1976, Congress established rules for deferral of payments. Under the law, an estate's executor can elect to pay estate tax attributable to the business interest in two or more, but not exceeding ten, equal payments and defer tax payments for five years, paying only interest on the tax liability during the deferral period.

In order to qualify for deferral of tax and installment payments, at least 35 percent of the value of adjusted gross estate must consist of an interest in a closely held business. Under the law in effect

Figure 3: **Number of Estates, Estates with Potentially Qualifying Assets, and Number that Elected QFOBI, by Size of Total Gross Estate**

Size of total gross estate	Total number of estates	Estates with potentially qualifying assets	Estates that claimed QFOBI deduction	CV [1]
	(1)	(2)	(3)	(4)
All estates	**108,330**	**15,612**	**1,114**	**10.3%**
Small ($675,000 under $2.5 million)	93,321	11,711	917	12.2%
Medium ($2.5 million under $5 million)	9,977	2,219	127	18.2%
Large ($5 million under $10 million)	3,449	1,056	47	17.6%
Very Large ($10 million or more)	1,583	626	23	0.4%

[1] Coefficient of variation (CV), the ratio of an estimate's standard error to the estimate, is used to measure the magnitude of potential sampling error. The CVs shown refer to the number of estates that elected QFOBI.

for 2001, the definition of closely held business included three types of entities: (1) sole proprietorships, (2) partnerships, if the estate included 20 percent or more of the partnership interest or if the partnership had 15 or fewer partners, and (3) corporations, if the estate included 20 percent or more of the voting stock of the corporation or if the corporation had 15 or fewer shareholders. An executor's decision to use these payment options is not contingent on the election of special use valuation. However, if the executor elects special use valuation, the same, lower value must be used for determining the deferred tax payments.[11]

Relatively few estates for 2001 decedents chose to elect deferral of tax (DOT) due to ownership interests in closely held businesses. As shown in Figure 4, an estimated 382 estates, or 0.4 percent of all estates and 2.4 percent of estates that reported closely held businesses and agribusiness assets (potentially qualifying assets), elected to use this provision. Larger estates were much more likely to use the provision than their smaller counterparts. About 0.2 percent of small estates (those with less than $2.5 million in total gross estate) used DOT. This percentage increased dramatically as the size of gross estate increased, as 2.9 percent of the largest estates (those with $10 million or more in total gross estate) used the provision. Estates deferred more than $365.6 million in estate tax, or 58.9 percent of reported tax liabilities for those estates; closely held business assets for which tax was deferred totaled $1.3 billion.

LOGISTIC REGRESSION MODELS

Using unweighted estate tax records from years-of-death 1998 and 2001, we created a data set of 37,179 records. Of these, 211 elected SUV, 389 elected DOT, and 485 elected QFOBI. Next, we determined eligibility criteria for each provision. Ideally, the sample used for the regression analysis should include only estates that were eligible to claim the provisions. This would have allowed for a cleaner analysis of the factors that executors of eligible estates use to determine whether or not to claim a business provision. Unfortunately, eligibility cannot be directly observed in the data, as requirements for claiming the business provisions are numerous and complex, and data reported on estate tax returns are limited.

Unable to observe eligibility directly, we created partial eligibility criteria based on available

Figure 4: **Number of Estates, Estates with Potentially Qualifying Assets, and Number that Elected DOT, by Size of Total Gross Estate**

Size of total gross estate	Total number of estates	Estates with potentially qualifying assets	Estates that elected DOT	CV [1]
	(1)	(2)	(3)	(4)
All estates	**108,330**	**15,612**	**382**	**11.8%**
Small ($675,000 under $2.5 million)	93,321	11,711	147	26.5%
Medium ($2.5 million under $5 million)	9,977	2,219	103	18.7%
Large ($5 million under $10 million)	3,449	1,056	86	13.7%
Very Large ($10 million or more)	1,583	626	46	2.7%

[1] Coefficient of variation (CV), the ratio of an estimate's standard error to the estimate, is used to measure the magnitude of potential sampling error. The CVs shown refer to the number of estates that elected DOT.

information. As noted previously, each provision has an eligibility requirement based on the percentage of an estate composed of farms or closely held business assets. Since SOI captures asset type information in its data editing process, it was possible to create a filter to identify potentially eligible records based on the presence of farm or closely held business assets. Using this eligibility criterion resulted in 11,187 records with potentially qualifying assets, about 30 percent of the observations in our data set.

We attempted to further refine our eligibility filters by limiting our data set to returns for which the proportion of assets held in farms or closely held businesses matched the statutory requirements for each provision. The results of this process produced an unacceptable level of classification error (i.e., returns that were determined to be ineligible claimed the provisions), which may have occurred due to the difficulty in correctly coding business asset types during the data collection process.

The Model

Our initial approach was to determine one model for each provision using explanatory variables suggested by prior research. For each estate tax return i, we consider the following model on the log-odds of the probability of the taxpayer claiming a provision:

$$\log\left[\frac{1-\pi_i}{\pi_i}\right] = x_i'\beta,$$

where π_i is the probability of taxpayer i using the provision of interest, x is the matrix of 19 explanatory variables from Figure 5, and β is the vector of slope coefficients for each corresponding x-variable.

We fit our model to each provision separately. Since there is some similarity between the eligibility requirements for the three provisions, the same model was fit to a dichotomous variable that indicates election or nonelection of at least one business provision. The results from these four models are displayed in Figure 6.

Model Results

Prior to modeling the data, we expected that liquidity would have a strong, inverse relationship with the likelihood of claiming each of the three business provisions, since, for all three provisions, eligibility requires that an estate holds a certain

Figure 5: **Explanatory Variables and Their Definitions**

Variable	*Definition*	*Variable*	*Definition*
Age	Age, in years, of decedent at time of death	**Gross estate**	Amount, in millions of dollars, of total gross estate
Married, single, widow	Dummy variables indicative of marital status of the decedent at time of death	**Marginal tax rate**	Projected marginal tax rate of estate prior to claiming any of the provisions
Retired	Dummy variable indicating that decedent was retired	**Farm**	Amount, in millions of dollars, of farm assets
Female	Dummy variable indicating that decedent was female	**Closely held**	Amount, in millions of dollars, of total gross estate
Liquidity Cat 1	Dummy variable indicating that estate had a liquidity ratio of 0.25 or less (see endnote 12)	**Year**	Dummy variable indicating that the record was from Year of Death 2001
Liquidity Cat 2	Dummy variable indicating that the estate had a liquidity ratio of 0.25 but less than 1	**Widow*Female**	Interaction variable of Widow and Female
Liquidity Cat 3	Dummy variable indicating that estate had a liquidity ratio of 1.0 but less than 5	**Single*Female**	Interaction variable of Single and Female
Liquidity Cat 4	Dummy variable indicating that estate had a liquidity ratio of 5 or greater	**Married*Female**	Interaction variable of Married and Female
Debts	Amount, in millions of dollars, of debts owed by the estate	**Debts*Farm**	Interaction variable of Debts and Farm
		Age*Retired	Interaction variable of Age and Retired

percentage of its assets in farms or closely held businesses (i.e., illiquid assets).[12] As shown in Figure 6, the expected outcome was validated, as each of the three single provision models and the combined model have significant, relatively large, negative coefficients for the highest liquidity categories.

Based on our earlier findings, we further expected to find that, *ceteris paribus*, larger estates were less likely to claim the SUV and QFOBI provisions, but more likely to claim the DOT provision. These expectations were partially validated. Gross estate was significant in the SUV and QFOBI models with a negative coefficient. In the DOT model, gross estate had a small, positive coefficient, consistent with expectations, but it was not significant at the 5 percent level. In the combined model, gross estate has a small, but significant negative coefficient.

We also expected that a higher marginal tax rate before claiming any provisions would increase the economic value of claiming a provision and would increase the log-odds. This expectation was validated, as marginal tax rate has a significant, relatively large coefficient in each of the four models. The coefficient is largest in the SUV and QFOBI models, which is unsurprising, given that these two provisions have the effect of directly decreasing the size of taxable estate.

Our expectations about the significance of debt and demographic variables were less defined. The amount of debt held by an estate was significant only in the SUV model, with its positive coefficient that suggests that holding more debt tended to increase the likelihood of claiming this provision, *ceteris paribus*. Interestingly, while debt alone was not significant in the QFOBI model, the interaction of debts and farm assets had a significant, positive coefficient.

Regarding demographic characteristics, age had a significant effect only in the DOT model, with a small, positive coefficient, suggesting that older decedents were more likely to claim this provision. Being married had a significant effect in each of the three single provision models, although the direction of this effect was varied. *Ceteris paribus*, married decedents were more likely to claim the SUV and QFOBI provisions, but less likely to claim

Figure 6: **Estimated Coefficients and Standard Errors, by Model**

	SUV	QFOBI	DOT	At least one provision
Variables	*Estimate (SE)*	*Estimate (SE)*	*Estimate (SE)*	*Estimate (SE)*
Age	0.000372	-0.00076	0.00264 *	0.00136
	(0.00189)	(0.00177)	(0.00126)	(0.00118)
Married	0.7441 *	0.7632 *	-0.5220 *	-0.1175
	(0.3520)	(0.1988)	(0.2058)	(0.1499)
Single	-0.1422	-0.2398	-0.3055	-0.2407
	(0.4826)	(0.2835)	(0.2931)	(0.2151)
Widow	0.7775 *	0.3138	-0.1933	-0.0381
	(0.3787)	(0.2275)	(0.2397)	(0.1788)
Retired	-2.3365	-1.6085	-0.7653	-1.6585 *
	(1.3810)	(1.0975)	(1.3461)	(0.8598)
Female	0.1441	-0.6373	-0.4038	-0.6246 *
	(0.5990)	(0.4134)	(0.3947)	(0.3112)
Liquidity Cat 1	-0.8662	0.0536	-0.5644	-0.0407
	(0.6949)	(0.6616)	(0.6462)	(0.5108)
Liquidity Cat 2	-0.6605 *	-0.2500	-0.5166	-0.2640
	(0.3456)	(0.3297)	(0.3215)	(0.2543)
Liquidity Cat 3	-0.7907 *	-0.7576 *	-1.0798 *	-0.8373 *
	(0.2336)	(0.2229)	(0.2201)	(0.1718)
Liquidity Cat 4	-0.9110 *	-0.6008 *	-1.2975 *	-0.9322 *
	(0.3045)	(0.1946)	(0.2971)	(0.1545)
Debts	0.1921 *	0.0703	0.00549	-0.0585
	(0.0714)	(0.0633)	(0.0208)	(0.0333)
Gross Estate	-0.3828 *	-0.2224 *	0.000567	-0.00483 *
	(0.0499)	(0.0335)	(0.0022)	(0.00194)
Marginal tax rate	0.3741 *	0.5248 *	0.2000 *	0.2026 *
	(0.0486)	(0.0335)	(0.0170)	(0.0138)
Farm	0.5715 *	0.1363 *	0.1302 *	0.1701 *
	(0.0726)	(0.0535)	(0.0455)	(0.0360)
Closely held	0.0802	0.1845 *	**	**
	(0.0817)	(0.0240)	**	**
Year	0.0812	-0.1835	-0.3052	-0.1725
	(0.1774)	(0.1222)	(0.1415)	(0.0950)
Widow*Female	-0.0501	0.2892	0.4174	0.5260
	(0.6468)	(0.4541)	(0.4452)	(0.3450)
Single*Female	0.1627	-0.1213	0.4727	0.4011
	(0.9178)	(0.7601)	(0.6625)	(0.5079)
Married*Female	-0.4426	0.2409	-0.4296	0.1943
	(0.6729)	(0.4614)	(0.5228)	(0.3550)
Debts*Farm	-0.0242	0.0316 *	-0.00779	-0.00676
	(0.0205)	(0.0135)	(0.0131)	(0.0103)
Age*Retired	0.0267	0.0141	0.00198	0.0141
	(0.0167)	(0.0137)	(0.0167)	(0.0107)

* Indicates significance at 5 percent
** Variable was excluded from model because inclusion resulted in a model convergence problem

the DOT provision. Widowed decedents were also more likely to claim the SUV provision than single or divorced decedents. Gender and retired status had no significant impact in any of the three single provision models, but they were significant in the combined model, with female and retired decedents less likely to claim at least one of the provisions than male decedents and single or married decedents. The significance of gender and retired status in only the combined model may be attributable to the larger number of observations in the subsample of estates that claim one or more provisions.

CONCLUSIONS

Our findings reveal that, holding other factors constant, smaller estates were more likely to claim the SUV and QFOBI provisions than their larger counterparts, and that estates facing higher marginal tax rates were more likely to claim each of the three provisions. From a demographic standpoint, being married had a significant impact on the odds of claiming each of the provisions, although the direction of the effect varied. While being married increased the likelihood of claiming SUV or QFOBI, holding other factors constant, it decreased the likelihood of claiming DOT.

While we believe that this research provides a starting point for understanding the factors that influence the utilization of special estate tax provisions for farms and closely held businesses, to expand our understanding of this topic there are at least three main areas for future research. First, an approach that would specifically model the decision-making process that faces the executor of an estate would be enlightening. Ideally, this model would incorporate not only the choice to claim one business provision, but also the choice to claim a combination of business provisions, if eligible for more than one. In addition, the interaction of other choices, such as marital and charitable deductions, should be incorporated into this model, as should some measure of the financial constraints placed on an estate by claiming these provisions.

Second, when analyzing the characteristics of estates that claim these provisions, time is a factor worth examining. Estate tax returns provide a snapshot of the decedent's assets and debts at the time of death, but reveal no information about these characteristics at earlier points in time. This is particularly relevant to our analysis because we have no way of observing what, if any, choices were purposefully made prior to death so that an estate would qualify for a business provision. While the tax law contains a provision that limits the ability of individuals to shift their assets in a tax-beneficial way prior to death, it is possible that various forms of planning are used by some individuals or their representatives in order to qualify for these beneficial business provisions.[13]

Finally, while modeling with records identified by our asset eligibility criteria is clearly superior to modeling with the entire data set, modeling with only records for estates that are eligible would provide more insight into why estates choose to elect a special business provision. While eligibility cannot be observed in the data currently available, it is possible that future changes to tax law or reporting requirements could obviate this limitation.

Notes

1. Special use valuation and deferral of estate tax liability are available to estates for current deaths. However, the qualified family-owned business deduction was repealed for deaths after 2003.
2. See Gangi and Raub (2006).
3. Research Institute of America (1996). This publication provides an overview of tax law, Internal Revenue Code text, House and Senate committee reports, U.S. Treasury regulations, and a general explanation of the tax code.
4. Research Institute of America (1996).
5. Population estimates are from U.S. Census Bureau (2004). Total adult deaths represent those of individuals age 20 and over, plus deaths for which age was unavailable. Death statistics are from U.S. Department of Health and Human Services (2003).
6. Because almost 99 percent of all returns for decedents who die in a given year are filed by the end of the second calendar year following the year of death and because the decedent's age at death and the length of time between the decedent's date of death and the filing of an estate tax return are related, it was possible to predict the percentage of unfiled returns within age strata. The sample weights were adjusted accordingly, in order to account for returns for 2001 decedents not filed by the end of the 2003 filing year.
7. Estate tax returns are sampled while the returns were being processed for administrative purposes, but before any examination. Returns are selected on a flow basis, using a stratified random probability sampling method, whereby the sample rates are preset based on the desired sample size and an estimate of the population. The design for the year-of-death 2001 study had three stratification variables: year of death, age at death, and size of total gross estate plus adjusted taxable gifts. Sampling rates ranged from 1 percent to 100 percent. Returns for over half of the strata were selected at the 100 percent rate.
8. For more information on special use valuation, see code section 2032A in Research Institute of America (2001, p. 6,016).
9. For more information on the qualified family-owned business deduction, see code section 2057 in Research Institute of America (2001, p. 6,047).
10. In the 1997 Act, Congress provided for gradual increase in the lifetime exemption from $625,000 in 1998 to $850,000 in 2004. However, in 2001, Congress enacted legislation in the Economic Growth and Tax Relief Reconciliation Act that completely changed the landscape of estate tax law. As a result, the lifetime exemption, $675,000 in 2000 and 2001, is set to increase

to $3.5 million in 2009, and the estate tax disappears entirely for deaths in 2010.

[11] For more information on the deferral of taxes and installment payments, see code section 6166 in Research Institute of America (2001, p. 9,125).

[12] Liquidity ratio is defined as liquid assets (cash and cash management accounts, state and local bonds, Federal Government bonds, publicly traded stock, and insurance on the life of the decedent) divided by the projected estate tax liability prior to claiming any business provisions plus debts of the estate.

[13] According to Internal Revenue Code 2057(c), most gifts given within three years of a decedent's death are included in adjusted gross estate.

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