Estate Taxes and Family Businesses:
Economic Issues

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Summary

The 2001 tax revision began a phaseout of the estate tax, by increasing exemptions and lowering rates. The estate tax is scheduled to be repealed in 2010 and a provision to tax appreciation on inherited assets (in excess of a limit) will be substituted. The 2001 tax provisions sunset, however, so that absent a change making them permanent the estate tax will revert, in 2011, to prior, pre-2001, law. Proposals to make the repeal permanent, or to significantly increase the exemptions and lower the rate, are under consideration.

Currently, discussions of the estate tax are focusing particular attention on the effects on family businesses, including farms, and perception that the estate tax unfairly burdens family businesses because much of the estate value is held in illiquid assets (e.g., land, buildings, and equipment). The estate tax may even force the liquidation of family businesses. A special family business deduction, the Qualified Family Owned Business Interest Exemption (QFOBI) was enacted in 1997. Presently, because of higher exemptions allowed and a previous cap on the combined regular and small business exemption, this provision is no longer relevant. If, however, the estate tax repeal sunsets, QFOBI will again be germane. In the 109th Congress, H.R. 8, which would make the estate tax repeal permanent, was passed by the House, but not by the Senate. There were also proposals to allow an expanded business exemption (H.R. 1612 and S. 928) as well as proposals to allow a higher exemption (H.R. 1577 and H.R. 1574) or both a higher exemption and lower rate (H.R. 1560, H.R. 1568, H.R. 1614, and H.R. 5638). H.R. 5970 — a proposal for a credit eventually equivalent to a $5 million exemption ($10 million for a married couple) with tax rates initially set at the capital gains tax rate (currently 15%, and scheduled to rise to 20%) for estates up to $25 million, and at twice the gains rate for those over $25 million — was passed by the House on July 29, 2006.

Evidence suggests, however, that only a small fraction of estates with small or family business interests have paid the estate tax (about 3.5% for businesses in general, and 5% for farmers, compared to 2% for all estates). Recent estimates suggest that only a tiny fraction of family-owned businesses (less than ½ of 1%) are subject to the estate tax but do not have readily available resources to pay the tax. Thus, while the estate tax may be a burden on those families, the problem is confined to a small group.

If the estate tax is repealed, QFOBI will allow an exemption for some or all of business assets in about a third to a half of estates with more than half their assets in these businesses, but the value of the exemption will be reduced because the general exemption has increased. If the estate tax repeal is made permanent, liquidity will cease being a problem, although family businesses may be more likely than other estates to be affected by the capital gains provisions. Exposure to the estate tax, if it is reinstated, would be significantly decreased by increases in either the family business or general exemptions. The report also discusses an uncapped exemption and an uncapped exemption targeted at liquidity issues. This report will be updated as legislative events warrant.
Estate Taxes and Family Businesses: Economic Issues

The Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) phased out the estate tax by gradually increasing the exemption and lowering the rate; the tax will be eliminated in 2010. A provision providing for carryover basis for assets transferred at death will replace the current step-up in basis. This latter provision would require heirs, when selling inherited assets, to pay tax on the gain that existed at the time of death, in addition to any appreciation since transfer. (A $1.3 million exemption would be allowed, with an additional $3 million for a surviving spouse.) The repeal of the estate tax and the provision for carryover basis is sunsetted and, absent legislative change, will revert to pre-2001 law in 2011, with an exemption of $1 million and a top statutory tax rate of 55%. The law will also revert to the prior rule of a stepped-up basis for assets, where no capital gains tax would be paid on appreciation of assets existing at the time of death.

Currently, discussions about the estate tax are focusing particular attention on the effects on family businesses, including farms. Many policy makers and observers have maintained that the estate tax unfairly burdens family businesses because much of the estate value is held in illiquid assets (e.g., land, buildings, and equipment). The estate tax, it is suggested, forces these businesses to liquidate vital assets to pay the tax. Critics of the estate tax posit that, in some cases, liquidating the business completely may be the only option.

Prior law contained a special deduction for family-owned businesses (the qualified family-owned business interest deduction, or QFOBI) to address this issue; this deduction was capped so that the total of the normal exemption and the family business exemption could not exceed $1.3 million. The deduction was also contingent on meeting a number of qualifying rules. QFOBI is currently irrelevant since the exemption is $1.5 million (and was repealed by EGTRRA for 2004 and beyond), but will play a role again if the EGTRRA provisions sunset. The estate tax (both under current and permanent rules) contains some other provisions that may make the payment of the tax easier for family-owned businesses. Qualifying estates can pay the tax in installments over a maximum of 10 years after a five-year deferral,

1 For a discussion of the political issues surrounding the estate tax issue, including the issue of family businesses, see Michael J. Graetz and Ian Shapiro, Death by a Thousand Cuts: The Fight over Taxing Inherited Wealth, (Princeton: Princeton University Press, 2005).

2 Non-business assets, such as cash, bonds, and publicly traded stock, are all relatively liquid assets. Under current estate tax rules, the basis of these assets is stepped up to the value at the time of death, thus eliminating the potential for capital gains taxes on inherited appreciation after liquidation.
and can value their land as currently used rather than at fair market value. Family-owned business may also be more likely to benefit from minority and marketability discounts, which allow a lower valuation if the property is held by several heirs with a minority interest or is otherwise difficult to sell.

Proposals have been made to make the 2010 provision permanent, and legislation to that effect in the 109th Congress, H.R. 8, passed the House. Making the change permanent would involve a significant revenue loss, in excess of $50 billion in 2012. There were also proposals to retain the estate tax but allow an expanded business exemption (H.R. 1612 and S. 928), a higher exemption (H.R. 1577 and H.R. 1574), or both a higher exemption and lower rate (H.R. 1560, H.R. 1568, and H.R. 1614). Recently proposals have been made to retain the estate tax; they include a proposal suggested by Senator Kyl to provide a $5 million exemption per spouse and a 15% rate (equal to the current capital gains tax rate). Senator Baucus has a proposal to provide a larger exemption and lower, but graduated, rates as a permanent provision.

In 2006, the House adopted H.R. 5638, which allowed a $5 million exemption per spouse and sets the rate at the capital gains tax rate (currently 15% but scheduled to revert to 20% in 2011) for estates not over $25 million and twice that rate for the remainder; this legislation was included in H.R. 5970, passed by the House, and now being considered by the Senate.

This report discusses the general issue of family-owned businesses, and then discusses the consequences of several options including making no revisions (and hence returning to pre-2001 law in 2011); making the repeal of the estate tax permanent; and, modifying exemptions while retaining an estate tax. This latter discussion considers expanding or altering the existing general or business exemptions, providing an exemption for all business assets (no dollar ceiling or other restrictions), or modifying the QFOBI-type exemption to eliminate a cliff effect that currently exists because only estates with half of the assets in a business were eligible for the special deduction.

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3 Some of the deferred tax is subject to a 2% interest payment. The provision allowing current use valuation requires a recapture tax, unless heirs continue to use the land in the business for at least 10 years. The market value can be reduced by a maximum of $750,000 through 1998. After 1998, the maximum is indexed for inflation, rounded to the next lowest multiple of $10,000. In 2004, the maximum was $850,000.

4 The idea behind the minority discount is that heirs without control are constrained in the flow of income, and the possibility of sale. There are other related discounts, such as marketability discounts (because no ready market exists for the asset). There are concerns that these discounts are excessive in some cases and that they are used through estate planning to minimize estate taxes, and the Joint Tax Committee, in its study Options to Improve Tax Compliance and Reform Tax Expenditures, January 27, 2005, has proposed some revisions (see pp. 396-404).


Family Business Assets in the Estate Tax Base

Although much attention has been devoted to the effect of the estate tax on family farms and businesses, and in particular the forced liquidation of family businesses and business assets, very few family businesses pay the estate tax and very little of the estate tax is collected from family businesses (and none from truly small businesses due to the exemption levels). Of those estates with family business assets, most would appear to be able to pay the tax, as discussed below.

Farm and business assets appear to account for around 11-12% of taxable estate assets, and perhaps a little more because these data are from 2003 when some QFOBI still existed.7

Some data reported in another CRS report8 are instructive regarding the ability of family-owned businesses to pay the tax. Of taxable estates in 2003, 6.4% reported farm assets and 36.0% reported business assets. However, while around 40.0% of taxable estate tax returns report some business or farm assets (there is some overlap between the farm and business numbers), only 1.4% of estates were those where farm assets were at least half the estate and only 1.6% of estates had business assets that accounted for half the estate. Farm assets in these returns accounted for 0.6% of estate value and business assets 4.1%. Since estates with less than half their assets in farm or business assets would have other sources (from the estate itself) to pay the tax, only this small fraction of estates would presumably have to deal with possible liquidation, and these estates were targeted by QFOBI. Table 1 and Table 2 below report the percentage of estates with business assets by estate size and the value of the business assets as a percentage of the estate by estate size for returns filed in 2003, respectively.

This same report also estimated that only 3.3% of business owners face the estate tax, and about 5% of farmers do. This share is slightly larger than the share of all decedents, where less than 2% pay the tax, reflecting the higher average wealth of the farm and business owners.

If one considers the ability to pay the tax out of all non-business assets, then if half the estate is held in other assets, given a tax rate of 55%, and since assets are excluded from the estate through general exemptions as well, the non-business assets would generally be adequate to pay the tax (since the tax as a share of the estate will usually be below 50% of the value). According to the data reported above, about 20% of returns with farm assets (1.4/6.4) have more than 50% of assets in farm assets, suggesting that less than 1% of decedents with farm assets would not have enough non-business resources to pay the tax. For business owners, only about 4% involve returns where business assets are more than one half the estate. Thus, by this calculation, less than 1/10 of 1% of business owners would not have enough non-business resources to pay the tax.

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7 See CRS Report RS20593, Asset Distribution of Taxable Estates, by Steven Maguire.
Evidence suggests that most of these estates could still pay the estate tax out of liquid assets alone (cash, bonds, and publicly traded stock) under pre-2001 law, and thus would not have to cash in any other property (such as a home or other real estate). A recent study by the Congressional Budget Office\(^9\) (hereafter the CBO study), examined data from 2000 to determine the fraction of estates that would not have enough liquid assets (stocks, bonds, cash, etc) to pay the tax. (They also indicated that liquid assets would be somewhat higher because it was not able to include assets held in trusts in this study.) For farms, it found that, in 2000, 8% of farm estates could not pay the tax out of liquid assets. Given that an estimated 5% of farm estates pay the tax, less than one half of one percent of farm decedents would be faced with selling any non-liquid assets (whether business or other) to pay the estate tax.

The CBO study did not examine business owners broadly, since it restricted its examination to those business returns that were eligible for QFOBI, and which, therefore, by definition, have estates where business assets account for over half of the estate. These estates are thus much less likely than the average business owner to have sufficient liquid assets to pay the estate tax. But even among these estates, only 32% did not have sufficient liquid assets to pay the estate tax. Thus, it seems

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likely that the shares of businesses overall that could not pay the tax out of liquid assets are similar in magnitude, and probably smaller, than farms.

Table 2. Percentage of Estate Value Held in Business Assets by Type of Asset and Estate Size in 2003

<table>
<thead>
<tr>
<th>Size of Gross Estate</th>
<th>Amount (Thousands of Dollars)</th>
<th>Real Estate Partnerships</th>
<th>Closely Held Stock</th>
<th>Farm Assets</th>
<th>Limited Partnerships</th>
<th>Other Non-corp. Bus. Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Returns</td>
<td>194,555,081</td>
<td>1.32%</td>
<td>5.39%</td>
<td>0.44%</td>
<td>1.99%</td>
<td>1.59%</td>
</tr>
<tr>
<td>1 to 2.5 million</td>
<td>74,007,063</td>
<td>0.53%</td>
<td>2.34%</td>
<td>0.58%</td>
<td>0.52%</td>
<td>0.62%</td>
</tr>
<tr>
<td>2.5 to 5.0 million</td>
<td>35,954,444</td>
<td>0.97%</td>
<td>3.95%</td>
<td>0.44%</td>
<td>1.37%</td>
<td>1.08%</td>
</tr>
<tr>
<td>5.0 to 10.0 million</td>
<td>25,285,191</td>
<td>1.18%</td>
<td>5.47%</td>
<td>0.40%</td>
<td>2.28%</td>
<td>1.60%</td>
</tr>
<tr>
<td>10.0 to 20 million</td>
<td>17,645,262</td>
<td>2.08%</td>
<td>7.83%</td>
<td>0.39%</td>
<td>2.66%</td>
<td>1.65%</td>
</tr>
<tr>
<td>over 20.0 million</td>
<td>41,663,121</td>
<td>2.78%</td>
<td>10.96%</td>
<td>0.23%</td>
<td>4.68%</td>
<td>3.73%</td>
</tr>
<tr>
<td>Taxable Returns</td>
<td>109,867,168</td>
<td>1.30%</td>
<td>4.84%</td>
<td>0.30%</td>
<td>2.02%</td>
<td>1.47%</td>
</tr>
<tr>
<td>1 to 2.5 million</td>
<td>33,754,841</td>
<td>0.56%</td>
<td>1.37%</td>
<td>0.36%</td>
<td>0.54%</td>
<td>0.36%</td>
</tr>
<tr>
<td>2.5 to 5.0 million</td>
<td>18,875,602</td>
<td>0.67%</td>
<td>2.71%</td>
<td>0.35%</td>
<td>1.29%</td>
<td>0.57%</td>
</tr>
<tr>
<td>5.0 to 10.0 million</td>
<td>14,684,938</td>
<td>0.72%</td>
<td>3.79%</td>
<td>0.18%</td>
<td>2.10%</td>
<td>1.37%</td>
</tr>
<tr>
<td>10.0 to 20 million</td>
<td>11,218,994</td>
<td>1.79%</td>
<td>6.51%</td>
<td>0.27%</td>
<td>2.05%</td>
<td>1.00%</td>
</tr>
<tr>
<td>over 20.0 million</td>
<td>31,332,793</td>
<td>2.57%</td>
<td>9.77%</td>
<td>0.26%</td>
<td>4.00%</td>
<td>3.41%</td>
</tr>
</tbody>
</table>


These estimates suggest that only a tiny fraction of family-owned businesses (less than ½ of 1%) do not have enough readily available resources to pay the estate tax. Thus, while the estate tax may be a burden on those families, the problem is confined to a small group. In addition, businesses that do not have other assets sufficient to pay the tax still have the option of paying in installments, borrowing, or selling a partial interest in the business. On average these businesses also received significant minority discounts, so that the estate tax owed would be smaller relative to the value of the property.10

Policy Options for Addressing Family Business Issues

There are several alternative policy options for addressing family business estate tax issues. If EGTRRA sunsets, the QFOBI deduction will once again become

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10 Minority discounts ranged from an average of 16% for residential real estate to 51% for undeveloped land or farmland.
relevant: the first section below discusses general issues surrounding this provision. The following section discusses the implications for family businesses of making the estate tax repeal permanent. The remaining sections address various revisions within the framework of retaining an estate tax, including an increase in either the QFOBI or general exemption, an unlimited business assets deduction, and an alternative business deduction that would target illiquidity but address a problem with QFOBI due to a “cliff” effect.

**Permanent Effects of the Current Law (No Legislative Change and a Reversion to Pre-2001 Law in 2011)**

If no legislative action is taken, the estate tax exemption will rise through 2009 (to $3.5 million) and the rate will fall to 45%. In 2010, the estate tax will be repealed, but in 2011 the rules will revert to those that existed before EGTRRA. Under these rules, which were last revised in 1997, the general estate tax exemption will be $1 million, the tax rate will be 55%, and a QFOBI exemption will be allowed, but the combined exemption will still be limited to $1.3 million. Thus, the effective QFOBI exemption is capped at $300,000.

Returning to the status quo and QFOBI raises several issues, a key one being that the real value of the cap has fallen compared to pre-2001 law, so more qualifying estates will be subject to tax. Thus, it might be appropriate to increase the overall cap.

The QFOBI provisions are subject to a number of restrictions designed to ensure that the business is family owned (the decedent and decedent’s family must own 50% of the business, or own 30% of a business that is 70% owned by two families, or 90% owned by three families). The business cannot have been publicly traded in the last three years, no more than 35% of the business income may be personal holding company income, and the business must have been owned and operated for five of the past eight years. Heirs are required to continue the business for the next 10 years to avoid recapture. Finally, QFOBI applies only to estates where at least 50% of the assets are family business assets. There are also restrictions on the amount of working capital which are designed to prevent the movement of cash and other liquid assets into the business to increase the deduction or allow an estate to qualify.

The rules designed to target the QFOBI provisions have been criticized due to their complexity. For example, Michael Graetz and Ian Shapiro write:

*Everyone now agrees — regardless of which side of the issue they are on — that QFOBI has been a complete and utter failure... It did not solve anything. QFOBI*

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11 The estate tax actually has graduated rates, but the exemption is effectively a credit, which means that the first dollar taxed is taxed at a rate in the middle of the tax schedule, rather than at the beginning as in the income tax. The first taxable dollar is effectively taxed at 41%, the rates rise to 55%, and there is also a 5% surcharge applying for estates between $10 million and $17.84 million to eliminate the advantages of the lower rate and exemption so that estates above this top limit are taxed at an average rate of 55%.
has so many requirements, so many structures and pitfalls, that very few family businesses have obtained any tax relief at all because of it.¹²

This is a harsh criticism, and it is not necessarily supported by the data. According to the CBO study, for 2000, about 1% of taxable returns claimed the QFOBI and about 1.4% of estates filing returns did so. Given the evidence that only about 3% of taxable estates had more than half of assets in business (and recognizing that some of these estates become nontaxable because of QFOBI), it appears that about a third to a half of these businesses qualified for QFOBI. QFOBI’s scope was limited primarily because it was allowed only for those estates where a majority of assets were in the business. Other estates with more than half of their assets in business assets might not have qualified because the business assets were not fully a family business (i.e. largely owned by no more than three families), or because the heirs chose to sell the business.

The QFOBI provision does, nevertheless, raise questions of equity and can produce some economic distortions, as well as complications.

The special business deduction does create some issues of equity — as is the case with any type of special tax exemption. Those with eligible business assets will pay lower taxes on the same amount of wealth than those without such assets. This inequity is a necessary price of targeting a specific group, and must be weighed against the benefits of the QFOBI targeted tax benefit generating a smaller revenue loss than a broader exemption.

QFOBI also creates economic distortions. It induces taxpayers to shift assets into business form, or, alternatively, to avoid liquidating a business when that outcome would be most desirable. How these incentives work depends, in part, on the kind of exemption. Consider an unlimited exemption for business assets. For taxable estates and a 55% estate tax rate, a dollar shifted from non-business assets to business assets saves 55 cents. Or, from another perspective, if business assets earned the same return as other assets, one would be willing to pay $2.22 ($1/(1-0.55)) for a business asset that normally sells for a dollar. Or if asset prices are fixed, one would be willing to accept a rate of return that was as much as 55% smaller in a business investment than in other investments.

The QFOBI provision was limited to estates with 50% or more of gross estate value in business assets, and was capped. Thus, very large estates that had already used up the cap would have no incentive to shift assets, as would estates with so few business assets they would be unlikely to qualify. However smaller estates that fell below the cap and were eligible would have the same incentives as described above for the unlimited simple exemptions (each dollar shifted would, with a 55% tax rate, save 55 cents). And estates that were very close to eligibility would have powerful incentives to shift business investments, though a “cliff” effect. To use a simple example, from pre-2001 law (a $675,000 regular exemption and a maximum of $1.3 million with the business deduction, but using a flat rate for illustrative purposes), if business assets were 45% and the estate totaled $3 million, by shifting $150,000 in

¹² Graetz and Shapiro, p. 36.
assets from non-business to business would save $343,750 (0.55 times $625,000). Even if the assets were virtually worthless, as long as they were not shifted for a long time (causing forgone earnings), one would be better off making the investment. Cliffs are generally to be avoided in devising minimally distorting tax rules.

A third response to this cliff effect would be to overvalue business assets; these rules also magnify existing incentives to undervalue other assets. This response does not distort investment but it does use up resources in estate planning and causes unintended benefits and revenue losses. The cliff effect can also intensify the existing incentives to remove non-business assets from the estate. All of the special business deduction provisions create incentives to recharacterize as much of the estate as possible as business assets.

The provision of QFOBI that required keeping the business in the family after the decedent’s death (that recaptured all or part of the tax when the business was ended) also produces economic distortions. The provision affects the allocation of capital and the employment of the heirs. This rule, of course, was intended to target those family businesses whose failure to continue was due to the estate tax.

Finally, the QFOBI provisions complicate administration and compliance. For example, there are rules to prevent holding of cash and other liquid assets in the business; since all businesses must have some cash or near-cash assets available, it is necessary to determine what level of working capital is needed in the business. Such a provision would be necessary with any form of business exemption, since without such rules non-business assets could be lodged in the business. There are also provisions to deal with ownership and control by the family, and whether someone has materially participated in the business.

From this analysis, it seems clear that QFOBI went a long way towards achieving its objective, but it does reflect problems that arose as a result of the targeting of the provision. These problems do not mean that QFOBI was not desirable, as it reflects a specific trade-off of the benefits of addressing the liquidity problem at a minimal revenue cost against the efficiency, equity, and administrative costs. The difficulties in qualifying for QFOBI were perhaps largely because the provision was targeted at family-owned businesses that dominated the estate, not estates that were less clearly “family-owned.”

**Effect of Making Estate Tax Repeal Permanent**

If the estate tax repeal is made permanent, the liquidity issue will disappear for years 2010 and after. However, given that less than 3% of estates could encounter a liquidity problem (returns with more than half of assets in the business, 1.4% for farms and 1.6% for other businesses), this repeal would be very costly from the federal budget perspective if the only objective were to deal with the family-owned business issue.

There is no liquidity problem with this tax regime, because there would be no estate tax and the capital gains tax would apply only if the assets are sold.
This new regime would, however, raise some different issues regarding the effects on the family business. Theoretically, under an income tax, “all accretions to wealth” over a given period of time should be taxed. Traditionally the U.S. income tax has not imposed a tax on gain until realized, and has allowed stepped up basis for appreciated assets so that no tax on the gain accumulated by the decedent is taxed on sale by the heirs. The estate tax provided a backstop to this exemption so that large accumulations of gain would be taxed under the estate tax. The Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) addressed this issue through changing the asset valuation to a “carry-over” basis regime when the estate tax is repealed in 2010. Under carry-over basis, the heir assumes the basis of the decedent. In other words, the heir “steps into the shoes” of the decedent and would pay capital gains taxes (upon sale of the asset) based on the appreciation from the original purchase price (or value).13 Congress included in EGTRRA a $3 million spousal exclusion and a $1.3 million general exclusion for capital gains on transferred assets to reduce the tax burden on heirs who sell inherited assets.

Family businesses, and small businesses more generally, likely have significant unrealized capital gains when the proprietor dies. One study estimated the amount of unrealized capital gains held at death for estates valued under $5 million to be approximately 35% of the estates’ value (approximately $34 billion in the aggregate in 1998).14 Any business with total assets valued less than the exemption amount, which is $1.5 million in 2005 rising to $3.5 million in 2009, would not pay any federal estate taxes.15 In addition, the value of all assets in the business would be stepped up to the value at the time of death. Based on the above estimate of the portion of estate value represented by untaxed capital gains, the step-up treatment confers a significant tax benefit to these estates. The estate tax regime with the stepped-up basis on transferred assets clearly favors these relatively small business estates, sheltering a total of approximately $34 billion in capital gains from taxation. Some have noted that farms in particular benefit from this treatment because, among other reasons, “…the income tax basis of raised animals, for farmers on the cash method of accounting, is zero:....”16

When the estate tax is repealed in 2010, the stepped-up basis is replaced with carry-over basis treatment (explained earlier). Congress, however, included a safe harbor for $1.3 million in capital gains passed to a non-spouse. Using the 35% unrealized capital gains estimate above, this treatment would, on average, shelter an estate valued at approximately $3.7 million from capital gains tax liability (if heirs

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13 This value is identified as the “cost-basis” of the asset. Ordinarily it is the original purchase price of the asset adjusted for improvements and depreciation in the case of physical assets.


15 State estate and inheritance taxes vary by state. Many states have “decoupled” from the federal estate tax and levy stand alone estate and inheritance taxes.

sold bequeathed assets). The smaller the portion of unrealized capital gains, the larger the overall estate size that could avoid capital gains taxation. The difficulty in assessing and confirming the decedent’s basis would create an incentive to overstate basis to avoid capital gains taxes.

Theory suggests that the potential capital gains tax liability for the very large estates may generate dynastic asset hoarding. For the largest estates in the NBER study cited above — those with assets over $10 million — the unrealized capital gains comprised over 56% of the estate’s total value. The unrealized gains are predominantly business assets in these very large estates; 72.3% of the unrealized gain is held in active farm or business assets. Over time, the potential tax liability would likely increase along with unrealized capital gains further reducing the probability of capital gain realization.

For family businesses that heirs wish to continue, the potential tax liability and asset liquidity are not primary concerns under the carry-over basis regime. In contrast, for heirs who wish to liquidate the business, in particular business with significant untaxed capital gains, the carry-over basis treatment may generate significant tax implications. The disincentive would contribute to a “lock-in” effect, likely growing with each generation.

**Increasing the QFOBI Dollar Limits**

With no legislative changes, the effective QFOBI exemption has fallen, due to the increase in the general estate tax exemption. The QFOBI dollar limit could be increased, which would reduce the number of firms that are taxable. The CBO study provides some estimates of the effects of a general exemption that can also be used to infer some of the effects of raising the combined QFOBI and general exemption. In 2000, 485 estates claiming QFOBI paid tax, and 164 of those had insufficient liquidity to pay the tax. With a $1 million general exemption, a rise to a $1.5 million total (allowing a $500,000 QFOBI deduction) would reduce those numbers by about 50% — to 223 and 82 respectively. Allowing a $2 million total limit (a $1 million QFOBI) would reduce the numbers by about around two thirds — to 135 and 62 respectively.

**Retaining the Estate Tax and Expanding the General Exemption and/or Lowering Rates**

Another option is to retain the estate tax and stepped-up basis, but increase the general exemption, lower the rates, or both. This approach is much more costly than increasing the QFOBI exemption since it would apply to all estates. But it would alter the taxation of both business and non-business estates substantially. In 2000, 52,000 estates owed taxes and 2,834 (5.5%) had insufficient liquid assets to pay the tax. At that time the general estate tax exemption was $675,000. Increasing the exemption to $1.5 million (the 2005 value), $2 million (the 2006-2008 level), and $3.5 million (the 2009 level) would reduce the number of taxable estates by 70%, 88% and 93% respectively. For all levels of exemptions, between 5 and 6% of

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17 This estimate is calculated by dividing $1.3 million by 35%.
taxable estates would not have enough liquid assets to pay the tax. These results suggest that most estates are in the lower part of the asset value distribution, and that large estates have significant liquid assets. In the case of farmers, the proportional reduction would be greater: 82%, 92%, and 96% respectively. The share (although not the number) of estates that would have insufficient liquidity to pay the tax would rise from 8% to 9%, 12%, and 20% respectively. These values suggest that the share of liquid assets in farm estates becomes smaller as estates become larger.

In a different study, the Tax Policy center found that in 2011, with a $1 million exemption, there would be 760 taxable estates with farm or businesses comprising more than 50% of assets; with a $2 million exemption there would be only 210, and with a $3.5 million exemption only 50. These reductions in the tax burden on business assets are, however, accompanied by even more important general reductions in estate taxes, so that, if the objective is to provide relief for family businesses, it is not target efficient.

Clearly an increase in the general exemption would dramatically reduce the number of taxable estates with family-owned businesses.

**A General Exemption for Business Property**

An alternative approach to raising the general exemption would be to provide an exemption for all business property. With all business property deducted, no estate would have taxes that required the liquidation of the business. With a tax rate of around 50%, about one quarter of the estate would be used to pay taxes if business assets were 50% of the total. Since farm and business assets are slightly over 10% of assets in taxable estates, the cost of this provision would be slightly over 10% of the cost of repealing the estate tax altogether.

An open-ended business exemption would eliminate the cliff effects of the current QFOBI, since all estates with any business property would be eligible to exclude business assets. But, it would also increase the number of estates that would claim a special deduction and increase the amount of assets that receive special tax treatment. The increase in the number of estates and the amount of assets receiving favorable tax treatment would also create distorting effects, encouraging disproportionate investment in business assets across a broad range of estates.

An open ended deduction would also be much more costly than the current QFOBI deductions and would much less precisely target family-owned businesses. Recall that about 40% of taxable estates have business or farm assets, but only about 3% have more than half their assets in business assets, and only about 1% qualify for QFOBI. In addition to expanding the scope of coverage, estates would receive a much larger deduction with an unlimited business exemption.

A general business exemption could still have a dollar cap, which would reduce the cost, relative to an open-ended deduction. Any type of deduction aimed at certain

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assets would still require rules to prevent abuse (such as limits on cash transferred into the business) and would still create inequities and incentives, although there would no longer be incentives to overvalue business assets or undervalue other assets to qualify for the deduction, as in the case of the cliff in QFOBI.

**An Exemption for Business Property Targeted to Liquidity**

Another option is to target the liquidity issue specifically by establishing a business exemption based on the availability of non-business assets to pay the tax. In this case, the business exemption would be a function of both the size of the estate and the share of the estate that is held in business assets. This targeted approach might provide significant revenue savings relative to an exemption that simply excludes all business assets. This approach is illustrated using a simplified example with a flat rate estate tax rate. (Recall that the federal estate tax before the EGTRRA 2001 changes included graduated rates, and the exemption was actually a credit for the taxes that would have been due on the amount up to the exemption amount. The graduated rates (if retained in a final law), however, would need to be taken into consideration under the option described here.)

Congress might wish to consider the policy option of limiting the business exemption so that the tax is no more than the liquidated value of the non-business assets. The reasoning behind this policy objective is readily apparent. Optimally, the estate tax should not force a family business (or farm) to liquidate business assets that generate income, particularly if the business is to continue in the family after the original owner dies. In this scenario, the tax on the entire estate should match the value (at most) of non-business assets.

For example, consider an estate where the total value of all assets in the estate is $10 million, the regular exemption is $1 million, and assume the tax rate is a flat 55% (a simplified version of the pre-2001 tax law rules). Further assume that three-quarters (75%) of the value is held in business assets. If all business assets were exempted, there would be an exemption of $8.5 million ($7.5 million for the business assets and an additional $1 million regular exemption) and the tax due would be $825,000. Suppose instead that an exemption is set precisely so that the tax equals the liquidated value of the all non-business assets (or $2.5 million). This outcome requires a total exemption of $5,454,545 ($2.5 million divided by the tax rate of 55% plus the $1 million regular exemption). Or, stated differently, the tax on what is left in the estate after the business exemption and the regular exemption amount must generate $2.5 million in taxes at the 55% rate.

The estate tax is 55% times ($10,000,000 — $1,000,000 — $4,454,545), or $2.5 million, which is exactly the value of non-business assets. In this case, the effective tax rate is 25% ($2.5 million divided by $10 million). No business faces a liquidity problem, there is no cliff, and the revenue cost of the exemption is less than what would be the case if all business assets were exempt from the estate tax.
In contrast, if exemptions are allowed for all estates, the revenue loss is larger than necessary to target the liquidity issue. If estates are excluded based on a fixed share of business assets (a “cliff” at 50% of total asset value in business assets for example), as in the QFOBI, the rules create very powerful incentives to shift assets to business uses to meet the qualification threshold. This effect will become more powerful if the exemption is unlimited. If the rules precisely target the business assets to deal with the liquidity issue, as described in the previous example, there is also an incentive to shift assets into business uses. In the example provided above, there is an implicit 100% tax on non-business assets, which also creates a powerful incentive to shift assets into the business — not as powerful as a cliff effect, but more powerful than a simple exemption.

For that reason policy makers could opt to modify the formula such that the tax does not consume the entire value of the non-business assets. For example, if every dollar shifted into a business asset increased tax liability by less than a dollar, the incentive effect to reclassify assets is muted. The equation below allows a variety of changes in taxable portion of non-business assets. The variable “d” is the portion of the non-business assets that would be used to pay the tax. Reducing d reduces the estate tax burden on non-business assets. If policy makers chose to only devote 60% of non-business assets (and 0% of the business assets) to pay the tax, then d=0.60.

\[ E^b = A^t - E^s - \frac{A^{nb}d}{t} \]

where,

- \( t \) is the estate tax rate;
- \( A^t \) is the total value of all assets in the estate;
- \( A^{nb} \) is the total value of non-business/farm assets;
- \( A^b \) is the total value of business/farm assets in the estate;
- \( E^s \) is standard estate tax exemption amount; and
- \( E^b \) is the business/farm asset exemption.

Table 3 illustrates the revenue loss associated with these alternatives for three $10 million estates, assuming a 55% flat rate, and a $1 million general exemption. Note that the difference between the 55% tax and the unlimited business exemption is that the business exemption includes the general exemption when it is smaller, rather than being added to the business exemptions (i.e. each differs by $550,000 which is 55% of $1 million). This adjustment could be made to a general unlimited exemption and would reduce the revenue cost significantly.

Adjusting the exemption of business size in this fashion allows revenue savings for the federal government relative to an unlimited exemption, and eliminates the cliff effect. And, although the equations seem complex, this system would simplify estate planning because qualifying for the exemption would not be as important.

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19 See the Technical Appendix for the full development of the model.
20 Also note, that if d=t, or the cap is set at the prevailing tax rate, the business exemption is simply the value of business assets less the regular exemption.
Shifting one dollar from non-business to business use would save the taxpayer less than one dollar, with the size depending on the share parameter (i.e., if the $d$ parameter is set at 70%, each dollar shifted saves 70 cents, more than with an unlimited exemption, where it saves 55 cents).

**Table 3. Revenue Cost of Options for a $10 Million Estate with a 55% Flat Tax Rate**
(revenue cost in $ millions)

<table>
<thead>
<tr>
<th>Share of Non-business Assets Paid in Tax, the $D$ Parameter</th>
<th>Share of Estate in Business Assets in Three Estates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estate I</td>
</tr>
<tr>
<td></td>
<td>75%</td>
</tr>
<tr>
<td>1.00</td>
<td>2.000</td>
</tr>
<tr>
<td>0.90</td>
<td>2.250</td>
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<td>2.750</td>
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<td>3.000</td>
</tr>
<tr>
<td>0.55</td>
<td>3.125</td>
</tr>
<tr>
<td>Unlimited Exemption</td>
<td>3.675</td>
</tr>
</tbody>
</table>

**Source:** Calculations based on equations in the text. The tax rate is 55%; the estate value is $10 million, the value of the standard exemption is $1 million; share of business assets is set at 25%, 50%, and 75%) and $d$ ranges from 0.55 to 1.

The graphic below exhibits the effective tax rate on a hypothetical estate depending on the business share of assets. If the entire estate is business assets (on the left side of the graph), there is no tax. Each line represents a different value for the policy parameter $d$. Recall that the closer $d$ gets to one, the greater the estate tax burden.
This type of sliding scale means that the fraction of business assets deducted varies depending on the concentration of business assets in the estate. This outcome may be perceived as unfair; at the same time, the average inequity between those with significant business assets and those with no business assets or only a small share would be reduced.

Conclusion

Although the evidence suggests that only a small portion of businesses and farms are subject to the estate tax, there may still be a concern about the impact on those particular businesses.

The options discussed for addressing family-owned business issues involve trade-offs between the revenue cost of providing exemptions to a broader group than necessary to address the issue (including repealing the estate tax in general) and other issues. The more targeted the proposal, the more administrative, distorting, and equity issues arise, but the smaller the revenue cost.

The QFOBI deduction, which is the most targeted of the options considered in this paper, created a particularly difficult problem due to its cliff effect, and the final approach discussed is aimed at eliminating the cliff effect and providing a sliding scale deduction targeted at liquidity issues. Of course, if policy makers desire to eliminate the estate tax as provided in 2010, and there are arguments for doing so, the liquidity issue would disappear. But the revenue effect would be significant and the substitute capital gains provisions would exacerbate lock-in effects.

\[d=\text{share of non-business assets paid in estate tax.}\]
Algebraically, the equations are the following:

1. \[ t(A^t - E^s - E^b) = A^{nb} \]
2. \[ A^t = A^b + A^{nb} \]

where,
- \( t \) is the estate tax rate;
- \( A^t \) is the total value of all assets in the estate;
- \( A^{nb} \) is the total value of non-business/farm assets;
- \( A^b \) is the total value of business/farm assets in the estate;
- \( E^s \) is standard estate tax exemption amount; and
- \( E^b \) is the business/farm asset exemption.

The next step in determining the appropriate value of the business exemption, \( E^b \), is to rearrange equation (1). The following equation, (1)*, for determining the appropriate business exemption if the policy objective is to match the estate tax due to the entire liquidated value of non-business assets.

\[ E^b = A^t - E^s - \frac{A^{nb}}{t} \]

Equation (3) below allows a variety of changes in taxable portion of non-business assets. The variable “\( d \)” is the portion of the non-business assets that would be used to pay the tax. In equation (1)*, \( d = 1 \), or the total value of non-business assets are used to pay the tax. Reducing \( d \), reduces the estate tax burden on non-business assets. For example, if policy makers chose to only devote 60% of non-business assets (and 0% of the business assets) to pay the tax, then \( d = 0.60 \).

\[ E^b = A^t - E^s - \frac{A^{nb} d}{t} \]

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21 Also note, that if \( d = t \), or the cap is set at the prevailing tax rate, the business exemption is simply the value of business assets less the regular exemption.