TAX POLICY CENTER
URBAN INSTITUTE & BROOKINGS INSTITUTION

DO ESTATE AND INHERITANCE TAXES AFFECT ENTREPRENEURSHIP?

Leonard E. Burman, Robert McClelland, and Chenxi Lu

March 05, 2018

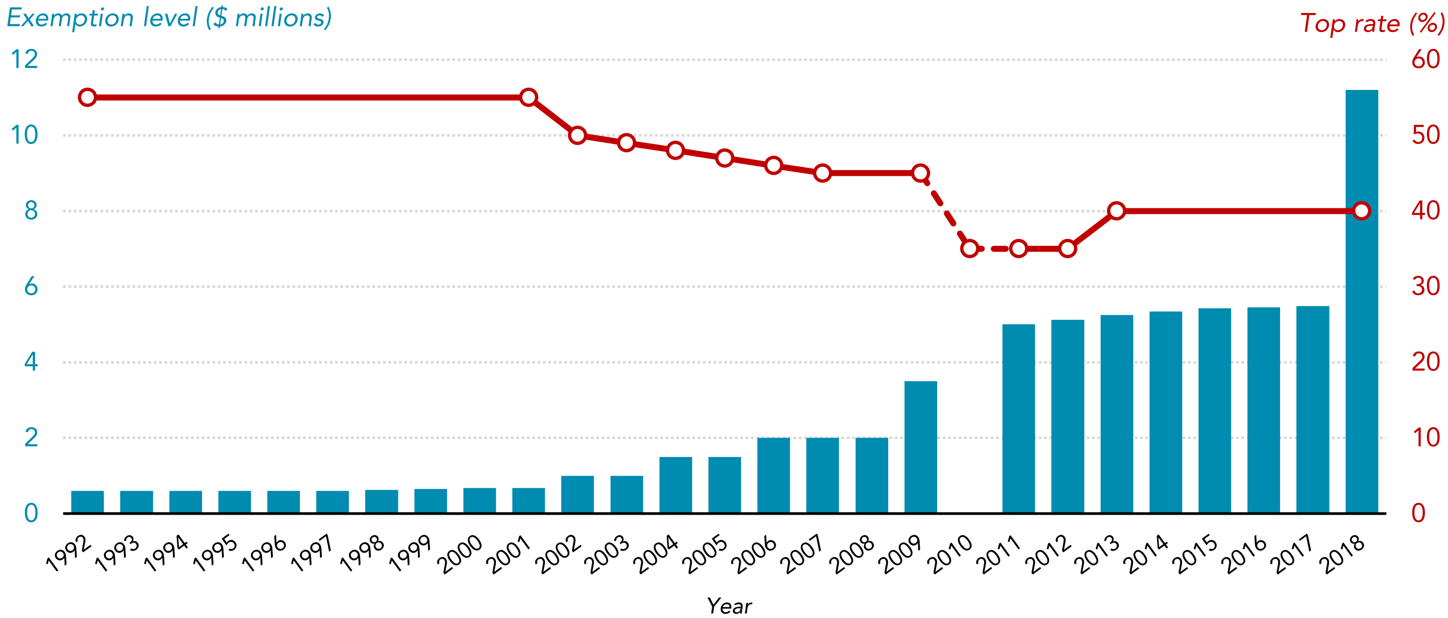
Despite its relatively small role in the federal taxation system—accounting for less than 1 percent of revenues—the estate and gift tax is controversial. This brief surveys research on the effect of estate and inheritance taxes on entrepreneurship and presents new evidence. We find that receiving an inheritance increases the likelihood of owning and managing a business. The prospect of leaving an estate subject to taxation may reduce the likelihood of continued self-employment by encouraging retirement.

The federal estate tax has existed since 1916. Despite accounting for less than 1 percent of federal tax revenue, the estate and gift tax is controversial. Advocates for the tax point out that it is highly progressive, currently affecting less than 0.2 percent of estates, and that it may reduce large concentrations of wealth in a few families. Critics counter that estate taxes are a tax on virtue, penalizing hard work and thrift, and amount to a double tax because most wealth has already been subject to income taxation.

In the United States, wealth transferred at death is taxed through the unified estate and gift tax. The first $11.2 million is exempt from federal taxation in 2018 for single filers and $22.4 million for couples. The threshold is adjusted annually for inflation. Amounts above the threshold are taxed at 40 percent, but transfers to spouses are tax-free.

FIGURE 1

Federal Estate Tax Exemption and Top Tax Rate, 1992–2018



Source: Jacobson, Raub, and Johnson (2007); "Exemption Level, 1999-2015." Tax Policy Center Statistics, May 31, 2017; and the Form 706 Changes, from "What's New – Estate and Gift Tax," Internal Revenue Service, last revised January 12, 2018.
Note: In 2010, estate executors could opt out of the estate tax in exchange for taxing some capital gains of heirs. Exemption level for married couples is double that for singles after 2001.

Because of the high exemption levels, very few estates are subject to federal tax. The Tax Policy Center estimates that 3,700 estate tax returns will be filed on behalf of those who die in 2018. Estates with assets above the filing threshold may avoid or reduce estate tax liability via various deductions. In addition to the unlimited spousal deduction, estates may also deduct donations to charity, debts, funeral expenses, legal and administrative fees, and estate and inheritance taxes paid to states. Special provisions also allow valuation discounts for family-owned businesses and farms. The taxable estate equals the gross estate (i.e., total assets) less these deductions. The Tax Policy Center estimates that 1,700 decedents will have a taxable estate (after deductions) in excess of the exemption in 2018. The Bureau of the Census projects that 2.7 million people will die in 2018. Thus, less than 0.2 percent of decedents' estates will be required to file and less than 0.1 percent will owe any estate tax. TPC estimates that estate tax liability will total $13.6 billion after credits, or about 0.4 percent of federal revenues.

Statistics for 2018

- Number of expected federal estate tax returns:

3,700 (less than 0.2% of decedents' estates).

- Number of estates expected to owe estate tax:

1,700 (less than 0.1% of decedents' estates).

- Expected estate tax liability:

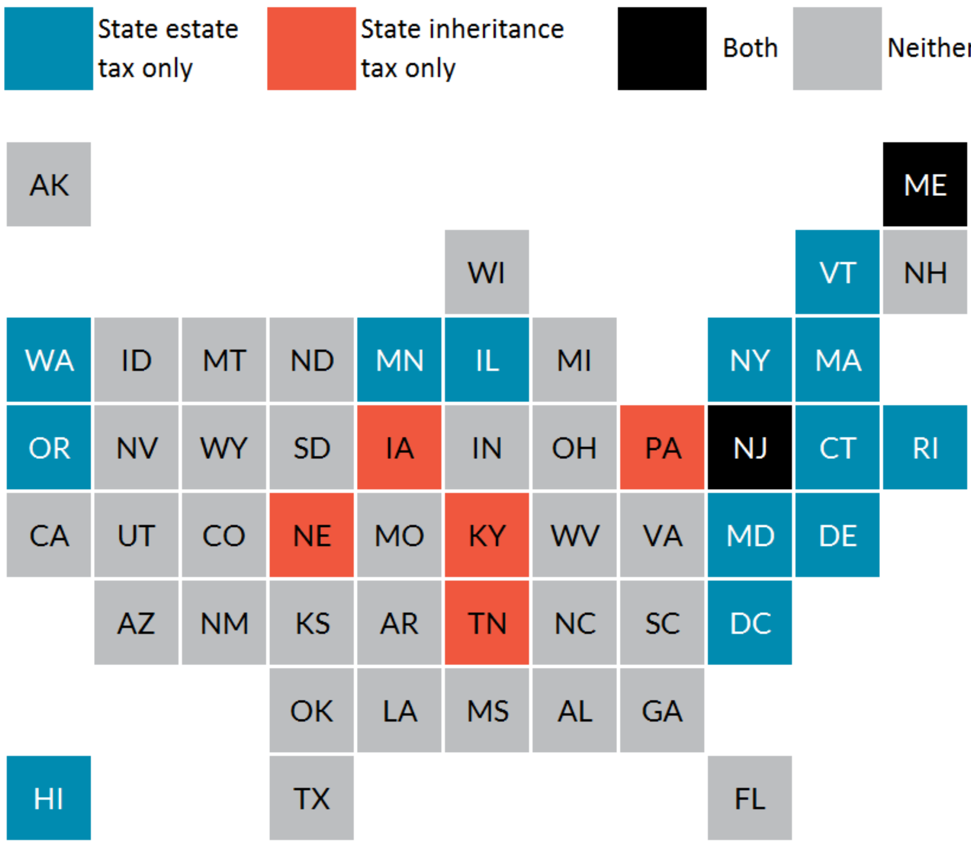
$13.6 billion (0.4% of federal tax revenues).

Source: Urban-Brookings Tax Policy Center.

Many states have their own taxes on estates or inheritance. As of 2015, a dozen states and the District of Columbia had their own estate taxes; five states had inheritance taxes. Maine and New Jersey had both, wherein the estate owed the greater of the two taxes rather than the sum. (Michael 2015) The state taxes often apply to much smaller estates than the federal tax. New Jersey's exemption of $675,000 is the lowest among all the states. In addition, many states phased in and out their estate taxes as their political and budget situations changed, so estate taxes have varied widely across states since 2000.

FIGURE 2

States with Estate or Inheritance Taxes, 2015



Source: Michael (2015).

KEY ISSUES—EFFECT OF ESTATE TAX ON ENTREPRENEURSHIP

Estate and inheritance taxes could affect entrepreneurship decisions in several ways. They could affect the decision to start a business or terminate it, or they could alter decisions within the business, in turn affecting investment, employment, and the rate of growth. They might affect the decisions of investors, thereby affecting the availability of capital, in a new enterprise. They could affect the entrepreneur subject to estate or inheritance taxes, and they could also affect the decisions of heirs.

Effects of Estate Tax on Entrepreneurs

The theoretical effects of the estate tax on entrepreneurs are ambiguous. They depend critically on the existence of a bequest motive. For many estates, bequests are essentially accidental—a consequence of saving against longevity risk (people do not want to run out of savings) and the risk of high expenses for medical care or long-term care combined with imperfect insurance markets, which make the cost of fully insuring against these risks appear prohibitive. Davies (1981), Abel (1985), and Hurd (1987) find evidence that most bequests are accidental.

Further support comes from studies that look for evidence of altruistic intent. If parents care about the well-being of their children, then bequests should compensate heirs for differences in ability (Becker 1974; Bernheim, Shleifer, and Summers 1985). McGarry and Schoeni (1995) find evidence that inter vivos transfers are compensatory, but Altonji, Hayashi, and Kotlikoff (1992) and Wilhelm (1996) find little evidence of intrafamily redistribution in bequest decisions. Bernheim and Severinov (2003) rationalize equal bequests because children view gift size as a signal of the intensity of affection, and parents do not want to indicate favoritism in their wills. Francesconi, Pollak, and Tobasso (2015) provide a simpler explanation: almost 40 percent of decedents in the Health and Retirement Study died intestate, which typically entails equal distribution of assets among surviving biological children. The lack of a will makes it hard to infer intentions, although it may suggest relatively little concern about bequests. Francesconi, Pollak, and Tobasso (2015) also find that unequal bequests were more common in complex families (favoring biological children over stepchildren or adopted children, possibly in part because of evolutionary motives) and in cases where biological children had lost touch with the parents.

Other evidence, however, supports the existence of a bequest motive. Yaari (1965) shows that absent a bequest motive, people would fully annuitize their wealth to insure against longevity risk. The relative rarity of annuities suggests that parents might have a bequest motive or they might care about keeping the family business going after they die. The risk of uncertain health care and long-term care costs (Skinner and Zeldes 2002; Dynan, Skinner, and Zeldes 2004; Palumbo 1999) would also argue against fully annuitizing.

Kopczuk and Lupton (2007) develop a model of bequest motives as a function of family composition and other factors. People with children were more likely to have a bequest motive than people without children, and those with a bequest motive reduced their lifetime consumption compared with childless adults. Kopczuk and Lupton (2007) estimate that 75 percent of single elderly individuals have bequest motives.

Holtz-Eakin, Phillips, and Rosen (2001) find that business owners are more likely to purchase life insurance than others, although they do not fully insure against expected estate tax liability. The authors acknowledge that they may be overestimating estate tax liability because of tax avoidance measures that they cannot identify in their data, but they also raise the possibility that "contrary to the popular view that keeping a business in the family is very important to business owners, they make no special efforts in this respect." However, purchasing life insurance only makes sense if purchasers care about their heirs.

Finally, Kopczuk and Lupton (2007), Slemrod (2000), and Gale and Slemrod (2000) conclude that wealthy people are most likely to have a bequest motive because they have more than enough assets to sustain their required consumption through retirement. These are, of course, the people most likely to be subject to estate taxation.

Comparatively less evidence is available on how entrepreneurial activities respond to estate tax incentives. Holtz-Eakin (1999) treated the estate tax as equivalent to a surtax on capital and labor because it would reduce the after-tax returns to both for households who without taxation would have estate values above the taxable threshold. The theoretical effects are ambiguous because there are income and substitution effects. The substitution effect, or how individuals respond to a change in the relative prices (for leisure, current, and future consumption) while adjusting income to leave them indifferent, would imply less work effort and saving when the effective estate tax rate increases. The income effect, however, cuts the other way. If entrepreneurs have targets for bequests, for example, then an increase in the estate tax could encourage them to work and save more to increase the pretax estate enough to offset some or all of the additional tax liability. It is unclear a priori which of these contradictory incentives would dominate.

Holtz-Eakin (1999) reports evidence consistent with a larger substitution effect. Based on a survey of New York business owners, he finds a negative correlation between estate tax rates and employment growth. Based on data from the Health and Retirement Study (HRS) and the Asset and Health Dynamics among the Oldest Old dataset, he also finds that the likelihood of being subject to the estate tax discouraged work effort by the entrepreneur. It is not clear, however, that either of these correlations imply a causal relationship.

Ample evidence suggests that the income tax affects entrepreneurs' decisions, but less evidence is available for the estate tax. One obvious incentive is to make inter vivos transfers up to the annual exclusion amount, but McGarry (2013) reports that most people likely to be affected by the estate tax give less than the annual tax-free amount every year. Even among the very wealthy, whose estates would have faced tax rates of up 55 percent before 2001, most "give far less than the amount they are potentially able to give tax free." (McGarry used HRS data from 1992 to 2006.) This suggests that entrepreneurs' responses to estate taxation might be relatively modest.

Cagetti and DeNardi (2009) take a different approach, developing a general equilibrium model of entrepreneurship and calibrating it to match data from the Survey of Consumer Finances (SCF). The authors conclude that the estate tax distorts decisions of large firms but not small ones. Although eliminating the estate tax in isolation makes all cohorts and wealth classes better off, in the more realistic case where the revenue must be replaced by other taxes, most of the young are actually worse off.

Effects of Inheritance on Business Formation

Estate and gift taxes have at least two effects on heirs. First, by reducing the size of after-tax bequests, they reduce heirs' wealth, encouraging them to work and save more. However, bequests can also serve as an important source of seed capital for new investment by potential entrepreneurs who would otherwise have limited capital. Thus, wealth transfer taxes might reduce the odds that heirs will start a new business.

Industrialist and Treasury Secretary Andrew Carnegie thought large bequests were a bad thing because they could discourage work and thrift. In an 1891 essay, he wrote, "The parent who leaves his son enormous wealth generally deadens the talents and energies of the son, and tempts him to lead a less useful and less worthy life than he otherwise would." When the modern estate tax was created in 1916, there was a bipartisan consensus that large accumulations of wealth across generations were undesirable. The estate tax was a comparatively uncontroversial revenue source for the country on the eve of World War I (Thorndike 2006).

Although the "Carnegie conjecture" prevailed as folk wisdom for several generations, it largely escaped careful scrutiny until Holtz-Eakin, Joulfain, and Rosen (1993) used data from 1982 to 1985 to study the effect of bequests on labor supply based on a sample of estate tax returns matched to the income tax returns of working-age adults in the four years after they received an inheritance. The authors find that families that receive a large inheritance are more likely to exit the labor force and report less labor income than those who receive little or no inheritance. The income response is somewhat ambiguous because income might fall if an entrepreneur earns little cash income in the early years of a business. Nonetheless, although the tax data have limitations (such as little demographic information and no information about choices that might have been made in the years before death), the findings are consistent with the Carnegie conjecture.

Another strand of research has focused on an indirect channel through which bequests might affect business formation or expansion: a substantial bequest could relax liquidity constraints that previously prevented the recipient from making major investments, such as a new business. Holtz-Eakin, Joulfaian, and Rosen (1994a), using tax data, conclude that the size of an inheritance has a big effect on likelihood of starting a business: "…the probability of becoming an entrepreneur and the amount of capital employed in the new enterprise are both affected by the size of the inheritance." Blanchflower and Oswald (1998) searched for evidence that a lack of capital limits self-employment (as opposed to unobserved personality traits that might be correlated with availability of capital). They conclude that liquidity constraints are statistically and quantitatively important and consistent with self-reports that a lack of capital is an impediment to entrepreneurship. Holtz-Eakin, Joulfaian, and Rosen (1994a and 1994b) also find evidence that bequests extend the longevity of new enterprises.

Thus, if estate taxes reduce the size of inheritances, that could indirectly deter business formation and the likelihood of success.

DATA AND FINDINGS

We use the SCF to examine how receipt of an inheritance affects the likelihood that an heir will own and manage a business, and we use the HRS to examine how the changing rules for wealth transfer taxation at the federal and state level affect the likelihood of continued self-employment.[1]

An important caveat is that, as in previous studies, data limitations prevent us from accurately measuring entrepreneurship. Owning and managing a business and self-employment are not the same as entrepreneurship, which involves innovating and taking risks. Unfortunately, however, most survey data are unable to distinguish owners of franchise stores or service providers, for example, from true entrepreneurs.

Evidence from the SCF

The SCF is a cross-sectional survey conducted every three years. Each survey contains detailed information on assets for several thousand households. We pool samples from 1992 through 2010 and limit the sample to (1) those who have never received an inheritance and (2) those who received an inheritance within 20 years before being surveyed. The final sample has over 153,000 observations and represents over 30,000 families. In a typical year, about 12 percent of households include someone who owns and manages a business. Among households that have received an inheritance, nearly 20 percent include such a person.

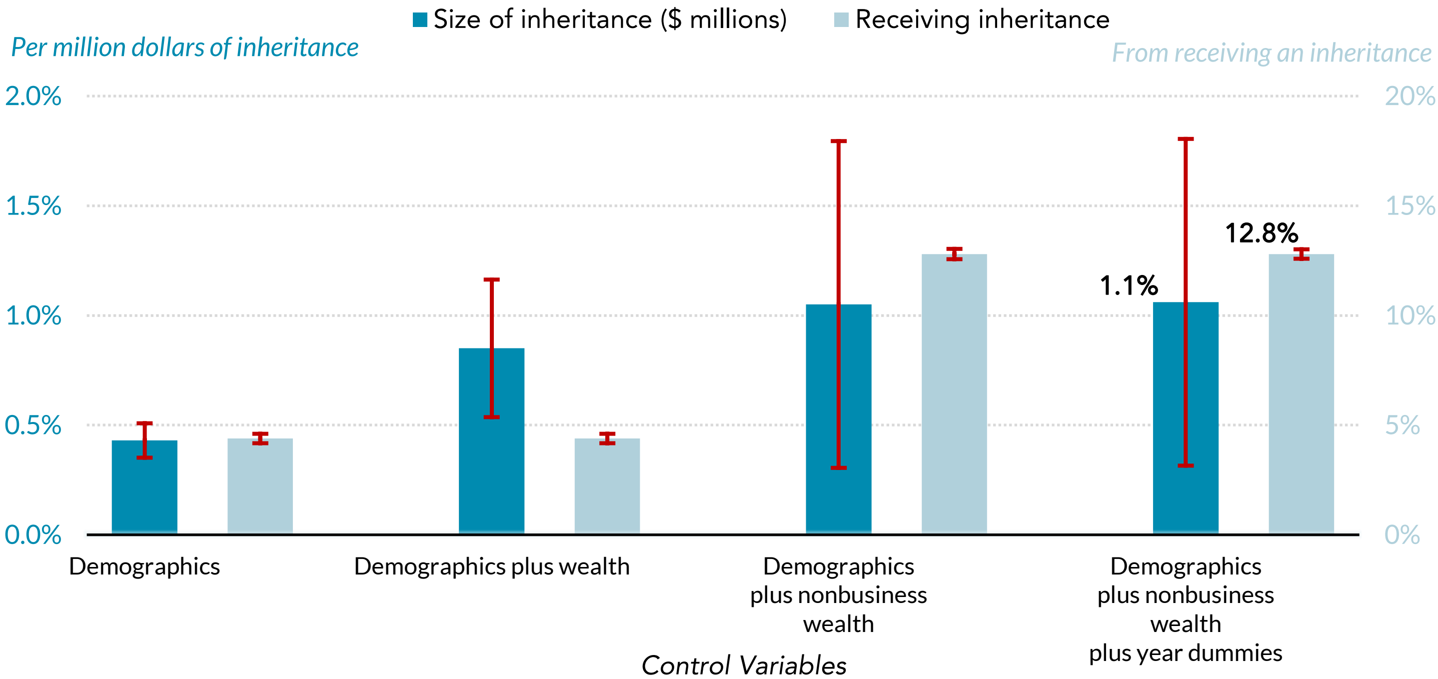
Our measure of entrepreneurship is whether the respondent owns and actively manages a firm, such as a partnership, a sole proprietorship, or a subchapter S corporation. Controlling for age, gender, marital status, education, wealth net of business assets, and the average annual effect of macroeconomic factors, such as employment and inflation, receiving an inheritance is associated with a large and highly statistically significant increase in the probability of owning and managing a business. With the full set of control variables, including nonbusiness wealth and year dummies, receiving an inheritance increases the likelihood of owning a business by almost 13 percentage points (figure 3). Controlling only for demographic factors, the increase is estimated at a little less than 5 percentage points. However, an important caveat is that if entrepreneurs are more likely to leave a bequest, inheritance may be a proxy for inheriting entrepreneurial skills or inclinations.

We also examine the effects of inheritance amount on business decisions. We estimate that an additional $1 million in inheritance would increase the likelihood of owning and managing a business by about 1 percentage point. The effects are somewhat smaller, but not statistically different, with fewer control variables. We can estimate the effect of the estate tax on owning and managing businesses by treating the estate tax as a reduction in inheritances. In 2007, for example, the average estate tax paid was about $1.3 million. If we assume that a decedent has only one heir, this amount of reduction in after-tax inheritance would have reduced the likelihood of the heir's business ownership by about 1.5 percentage points. Estates typically have multiple heirs, so the effect at the mean estate tax level would be smaller. Further, evidence suggests that some entrepreneurs partially insure against estate tax liability, so the net effect on business formation would be much smaller. In addition, the federal exemption level is substantially higher now than it was in 2007, so many fewer would-be business owners would be affected at current levels. Figure 3 shows the results from models that have different sets of control variables.

[1] This brief provides an overview of our data, methodology, and main findings. For details, see Burman, McClelland, and Lu (2018).

FIGURE 3

Effect of Inheritance on Probability of Owning and Managing a Business



Source: Survey of Consumer Finances, 1992–2010.
Note: The vertical bars represent 95 percent confidence intervals of corresponding effects.

Evidence from the HRS

The HRS[2] is a panel dataset that follows four cohorts of older Americans (age 50 and over) every two years starting in 1992. Each wave of the panel contains detailed information on respondents' assets, income, and health status. We use data through 2014, representing the first 11 waves of the sample. We exclude the observations of each respondent's first entry because we use lagged values of income and wealth in estimation. This yields a sample of approximately 147,000 observations representing 26,000 respondents. Forty-four percent of the population were working during the survey year; 20 percent of workers were self-employed. Overall, approximately 9 percent were self-employed.

Our measure of entrepreneurship is whether the respondent is self-employed. We estimate that an additional $1 million of expected taxable estate[3] would decrease the likelihood of continued self-employment by 8.3 percentage points (figure 4). We controlled for all the time-invariant characteristics and aggregate time-varying factors as well as other factors such as age, lagged income, and lagged wealth. The coefficient and its significance vary by marital status and the presence of children. It is statistically significant for married couples and families with children, with an effect of 7.3 and 7.8 percentage points, respectively, and statistically insignificant for people without children. This finding is

[2] We use public-use HRS data linked to the restricted "Cross-Wave Geographic Information—State", which contains state-level geographic information for respondents. The geographic identifiers allow us to link HRS respondents to state-level data on estate and inheritance tax systems. These linkages enable us to measure variation in entrepreneurial activity in response to variation in state-level estate tax over time.

[3] The expected taxable estate is calculated as the probability of a person dying multiplied by the value of the taxable estate (before deduction) that year. The probability of dying is estimated from a semi-parametric Cox hazard model detailed in Burman, McClelland, and Lu (2018). We employ the variation of state-level estate and inheritance tax thresholds to estimate each respondent's taxable estate.

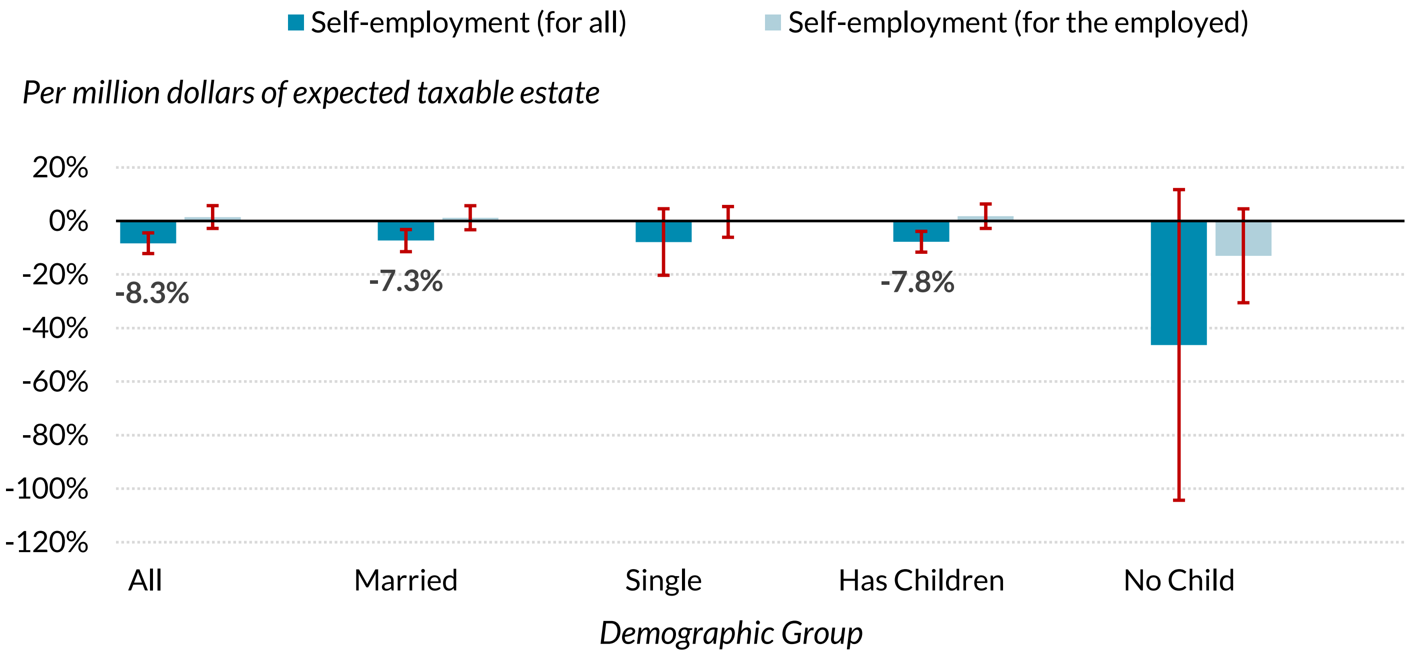
consistent with previous research indicating that people with heirs are much more likely to be sensitive to estate taxes than those without.

However, the estimates above may be confounding two decisions that could both be affected by the estate tax: working versus retiring and, for employed individuals, self-employment versus wage employment. Additional tests[4] suggest that the main channel through which the estate tax influences entrepreneurship is the decision to retire, not the choice of self-employment for people who remain in the work force. Entrepreneurs may be prodded to retire earlier because of the estate tax, but it does not seem to push them to switch from self-employment to wage employment.

FIGURE 4

Effect of Expected Taxable Estate on Self-Employment

By marital status and presence of children



Source: Health and Retirement Study, 1994–2014.
Note: Results based on our full fixed-effect model with nonbusiness wealth spline control. The vertical bars represent 95 percent confidence intervals of corresponding effects.

CONCLUSION AND POLICY IMPLICATIONS

This brief presents new evidence on the effects of estate and inheritance taxes on decisions of heirs and on entrepreneurs who may be subject to the tax. For the first question, we examine pooled cross-section data from the SCF from 1992 to 2010. For the second, we use panel data on older workers in the HRS, examining biennial data from 1994 to 2014.

The effects of inheritance on business formation are statistically significant and consistent with earlier evidence. Receipt of an inheritance raises the likelihood of having active business income. The amount of the inheritance is less important than the existence of the inheritance. Nonetheless, a $1 million reduction in the size of an inheritance would reduce the

[4] To identify the exact channel of the effect of estate tax on entrepreneurship, we build separate models using two other dependent variables. One is a binary variable equal to one if the respondent is working (either self-employed or as an employee). The other is a binary variable defined among working respondents only: it equals one if the respondent is self-employed, and it equals zero if working as an employee.

likelihood of owning and managing a business by about 1 percentage point. At current estate tax levels (an $11.2 million exemption and $22.4 million for couples), the estate tax is likely to affect decisions of very, very few would-be entrepreneurs.

We also find evidence that the specter of estate or inheritance taxes affects the likelihood of remaining self-employed, but this effect seems to primarily operate by making retirement somewhat more attractive. That effect, however, is not specific to entrepreneurs.

Several caveats must be attached to our conclusions. Notably, self-employment is not the same as entrepreneurship. Unfortunately, most survey data cannot distinguish entrepreneurs from business owners who do not innovate or take risks. Second, we also do not know how entrepreneurs assess estate tax liability, which might be in the distant future, especially given that some laws change frequently. For example, the Tax Cuts and Jobs Act doubled the estate tax exemption, but that change will last only from 2018 to 2025. Because of data limitations, we cannot measure expected federal and state wealth transfer tax liability accurately (which is why we use the size of the taxable estate as a proxy). Finally, even if the estate tax is distortionary, raising other taxes to offset the revenue loss might create larger distortions. Cagetti and De Nardi (2009) conclude that replacing the federal estate tax with higher personal income or consumption taxes would cut overall social welfare. Indeed, entrepreneurs might view the trade-off exactly this way. A recent *Wall Street Journal* survey found that business owners cared more about lowering business tax rates than repealing the estate tax.[5]

REFERENCES

Abel, Andrew B. 1985. "Precautionary Savings and Accidental Bequests." *American Economic Review* 75 (4): 777–91.

Altonji, Joseph G., Fumio Hayashi, and Laurence J. Kotlikoff. 1992. "Is the Extended Family Altruistically Linked? Direct Tests Using Micro Data." *American Economic Review* 82 (5): 1177–98.

Becker, Gary S. 1974. "A Theory of Social Interactions." *Journal of Political Economy* 82 (6): 1063–93.

Bernheim, B. Douglas, and Sergei Severinov. 2003. "Bequests as Signals: An Explanation for the Equal Division Puzzle." *Journal of Political Economy* 111 (4): 733–64.

Bernheim, Douglas B., Andrei Shleifer, and Lawrence H. Summers. 1985. "The Strategic Bequest Motive." *Journal of Political Economy* 93 (6): 1045–76.

Blanchflower, David G., and Andrew J. Oswald. 1998. "What Makes an Entrepreneur?" *Journal of Labor Economics,* 16(1): 26-60.

Burman, Leonard E., Robert McClelland, and Chenxi Lu. 2018. *The Effects of Estate and Inheritance Taxes on Entrepreneurship*. Washington, DC: Urban-Brookings Tax Policy Center.

Cagetti, Marco, and Mariacristina De Nardi. 2009. "Estate Taxation, Entrepreneurship, and Wealth." *American Economic Review* 99 (1): 85–111.

Davies, James B. 1981. "Uncertain Lifetime, Consumption, and Dissaving in Retirement." *Journal of Political Economy* 89 (3): 561–77.

Dynan, Karen E., Jonathan Skinner, and Stephen P. Zeldes. 2004. "Do the Rich Save More?" *Journal of Political Economy* 112 (2): 397–444.

Francesconi, Marco, Robert A. Pollak, and Domenico Tabasso. 2015. "Unequal Bequests." Discussion paper 8813. Bonn, Germany: IZA Institute of Labor Economics.

Gale, William G., and Joel Slemrod. 2000. "Life and Death Questions About the Estate Tax." *National Tax Journal* 54 (1): 889–912.

[5] Ruth Simon, "For Small Businesses, Lower Tax Rates Top Estate Tax Repeal." *Wall Street Journal,* May 10, 2017.

Holtz-Eakin, Douglas. 1999. "The Death Tax: Investments, Employment, and Entrepreneurs." *Tax Notes* 84 (August 2): 782–92.

Holtz-Eakin, Douglas, David Joulfaian, and Harvey S. Rosen. 1993." The Carnegie Conjecture: Some Empirical Evidence." *Quarterly Journal of Economics* 108 (2): 413–35.

———. 1994a. "Entrepreneurial Decisions and Liquidity Constraints." *Rand Journal* 25 (2): 334–47.

———. 1994b. "Sticking It Out: Entrepreneurial Survival and Liquidity Constraints." *Journal of Political Economy* 102 (1): 53–75.

Holtz-Eakin, Douglas, John W. R. Phillips, and Harvey Rosen. 2001. "Estate Taxes, Life Insurance, and Small Business." *Review of Economics and Statistics* 83 (1): 52–63.

Hurd, Michael D. 1987. "Savings of the Elderly and Desired Bequests." *American Economic Review* 77 (3): 298–312.

Jacobson, Darien B., Brian G. Raub, and Barry W. Johnson. 2007. "The Estate Tax: Ninety Years and Counting." Statistics of Income Bulletin. Washington, DC: Internal Revenue Service.

Kopczuk, Wojciech, and Joseph P. Lupton. 2007. "To Leave or Not to Leave: The Distribution of Bequest Motives." *Review of Economic Studies* 74 (1): 207–35.

McEowen, Roger A. 2014. "Installment Payment of Federal Estate Tax and Change in Business Form – Is It a Disqualifying Disposition?" *Ames: Iowa State University, Center for Agricultural Law and Taxation*.

McGarry, Kathleen. 2013. "The Estate Tax and Inter Vivos Transfers over Time." *American Economic Review* 103 (3): 478–83.

McGarry, Kathleen, and Robert F. Schoeni. 1995. "Transfer Behavior in the Health and Retirement Study: Measurement and the Redistribution of Resources within the Family." *Journal of Human Resources* 30 (special): S184–226.

Michael, Joel. 2015. "Survey of State Estate, Inheritance, and Gift Taxes." St. Paul, MN: Minnesota House of Representatives, Research Department.

Palumbo, Michael G. 1999. "Uncertain Medical Expenses and Precautionary Saving Near the End of the Life Cycle." *Review of Economic Studies* 66 (2): 395–421.

Skinner, Jonathan, and Stephen P. Zeldes. 2002. "The Importance of Bequests and Life-Cycle Saving in Capital Accumulation: A New Answer." *American Economic Review* 92 (2): 274–78.

Slemrod, Joel. 2000. "The Economics of Taxing the Rich." In *Does Atlas Shrug? The Economic Consequences of Taxing the Rich,* edited by Joel Slemrod, 3–28. Cambridge, MA: Russell Sage Foundation and Harvard University Press.

Thorndike, Joseph J. 2006. "A Century of Soaking the Rich: The Origins of the Federal Estate Tax." *Tax Notes. July 2006: 686-699.*

Toder, Eric. 2017. "Taxing Entrepreneurial Income." Washington, DC: Urban-Brookings Tax Policy Center.

Wilhelm, Mark O. 1996. "Bequest Behavior and the Effects of Heirs' Earnings: Testing the Altruistic Model of Bequests." *American Economic Review* 86 (4): 874–92.

Yaari, Menahem E. 1965. "Uncertain Lifetime, Life Insurance, and the Theory of the Consumer." *Review of Economic Studies* 32 (2): 137–50.

ACKNOWLEDGMENTS

This brief was funded by Ewing Marion Kauffman Foundation. We are grateful to them and to all our funders, who make it possible for the Urban-Brookings Tax Policy Center to advance its mission. The views expressed are those of the authors and should not be attributed to the Urban-Brookings Tax Policy Center, the Urban Institute, the Brookings Institution, their trustees, or their funders.

We are grateful to David Joulfaian, Donald Marron, Mark Mazur, Eric Toder, Jon Schwabish, and Michael Marazzi for helpful comments and advice and to John Iselin for expert research assistance.

The Tax Policy Center is a joint venture of the Urban Institute and Brookings Institution. For more information, visit taxpolicycenter.org or email info@taxpolicycenter.org.