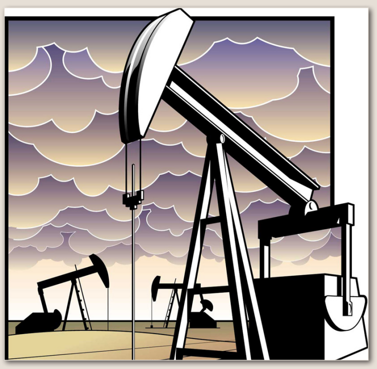
NATIONAL CENTER FOR POLICY ANALYSIS

How the Shale Gas Boom Creates Estate Tax Problems for Farmers

Issue Brief No. 164 by Mike Gajewsky June 2015

On April 16, 2015, the House of Representatives voted to repeal the estate tax.[1] The Obama Administration decried the proposed tax cut and vowed a veto.[2] The Senate is now considering a repeal bill introduced by Senator John Thune.[3] With this controversial tax again in the news, it is time for a re-evaluation, because this tax stifles economic growth and punishes small business owners and farmers.



Dallas Headquarters:
14180 Dallas Parkway, Suite 350
Dallas, TX 75254
972.386.6272

www.ncpa.org

Washington Office:
600 Pennsylvania Ave., SE
Suite 310
Washington, DC 20003
202.830.0177

The Internal Revenue Service defines the estate tax as: "a tax on your right to transfer property at your death." For the 2015 tax year, the first $5.43 million of an individual's estate — or double that amount for a married couple, is exempted from the tax, and any remaining unused exemption can be passed on to a surviving spouse.[4] Thus, a married couple could leave an estate of $10.86 million without incurring the estate tax. The tax has a top marginal rate of 40 percent.[5]

Advocates for the estate tax decry the perpetuation of inequality due to inherited wealth. The estate tax, often called the "death tax" by opponents, is ineffective in reducing inequality; it does, however, excel at destroying family business, especially agricultural operations.[6] In fiscal year 2014, the estate tax accounted for 0.7 percent of all federal tax revenues.[7] Yet this small tax employs legions of attorneys and accountants to administer it. While the public pays for these skilled professionals, wealthy families hire attorneys to place the money into trusts.

Many asset-rich and cash-poor families, such as owners of family businesses, are unable to take advantage of trusts to protect their wealth. Faced with both the prospect of paying taxes and cash-flow problems, family-owned businesses often have to sell many assets to pay the tax. The result is corporate consolidation of these firms.[8]

While the tax is a burden on American families, attorneys and accountants earn healthy incomes by helping clients establish trusts or structure their estates to avoid the tax.[9] Thus, many of the very wealthy do not pay close to the top 40 percent rate.[10] Unlike investments and cash, real estate cannot be as easily placed into a trust. Thus, American farmers and small business owners are hardest hit by the tax, while cash-rich Americans avoid it.

The Shale Gas Revolution. The shale gas revolution has created economic booms from Pennsylvania to Texas to North Dakota, but it is a mixed blessing for American farmers. The sudden influx of money to rural areas is increasing the wealth of farms in America and complicating estate tax calculations for farms in three important ways:

- The discovery and exploitation of shale gas deposits has increased the value of farmland;

- The royalties paid to land owners are often used for capital investments on the farms, increasing the value of the farm when estates are valued; and,
- The influx of money into the local economy, paired with extraction taxes on natural gas, has increased the local tax base in many rural counties, spurring infrastructure investments that further increase the value of local land.

The Barnett shale formation in Texas and the Marcellus shale formation in Pennsylvania provide particularly interesting examples. In Pennsylvania, natural gas deposits run along the border with New York; however, New York has placed a moratorium on hydraulic fracturing, whereas Pennsylvania has not, allowing for direct comparison of a small geographic region in one state with hydraulic fracturing and one without.

The Dallas-Fort Worth metropolitan area provides another useful comparison: the shale deposit runs through Fort Worth and to the west, whereas there are no large deposits in Dallas and to the east. Therefore, Fort Worth reflects the impacts of natural gas and Dallas the lack. (Only the western edge of Dallas County is part of the Barnett Shale.)[11] Additionally, the Dallas City Council has placed tough restrictions on hydraulic fracturing, which have been characterized by the natural gas industry as a *de facto* moratorium.[12]

The Effect of Lease Payments on Farm Values. Many farm estates have increased in value due to the mineral rights to the land. Farmers saw land values appreciate immediately upon signing leases with natural gas producers, and land values have continued to rise. In both Texas and Pennsylvania, land values increased from 1997 to 2012, even after several years of drilling.[13]

In Pennsylvania, where a larger portion of landowners retain their mineral rights than in Texas, the growth in real estate values was significant:

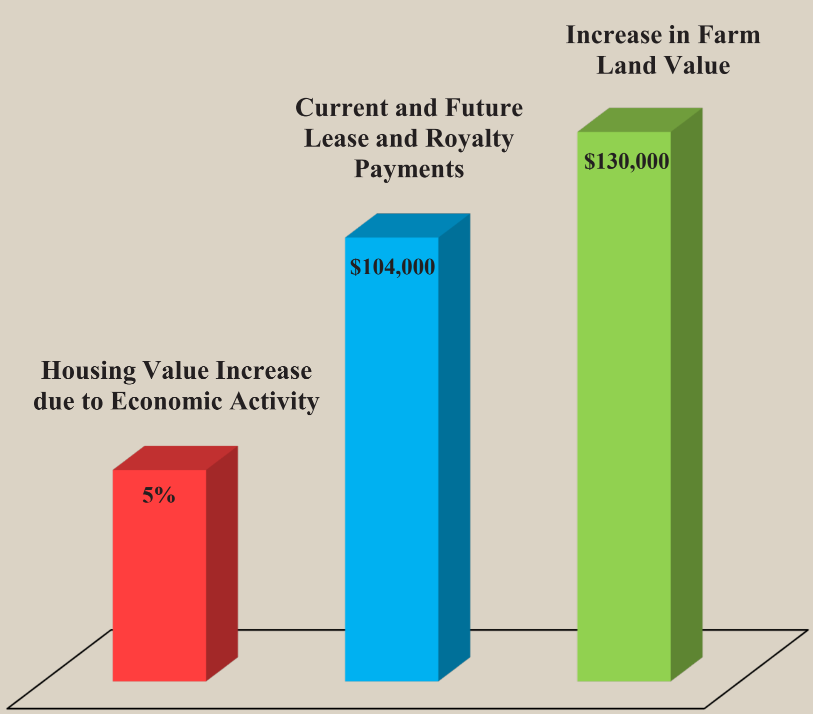
- Real estate values in shale counties grew eight percentage points more than nonshale counties.[14]
- The effect was more pronounced on Pennsylvania farm properties, which appreciated 28 percentage points more than farms in New York, where hydraulic fracturing was banned.
- The wealth of farm families in Pennsylvania increased $466 million, an average $130,000 per farm.[15]

As $130,000 is the average per farmer, there were even larger, unexpected increases in wealth for some asset-rich but cash-poor farming families in Pennsylvania.

Effect of Royalties on Farm Estates. The increase in land value due to the demand for mineral leases was followed by increases in farm estate values, as many farmers invested their royalties from gas extraction back into their farms. The Federal Reserve Bank of Kansas estimates that three-fourths of farms' wealth accumulation from energy payments are through increases in land values.[16] Royalty payments, which could total over a billion dollars in shale regions, account for the remaining accumulation of farm estate wealth.

The average farm in the study received about $104,000, including the initial lease payment for the right to drill, and future

Farm Wealth Accumulation



Note: Values are averages.

Sources: Housing values, Weber et al., USAEE Work Paper No. 14-165; royalty payments, Weber et al., RWP 13-07; and Farm land values, Weber and Claudia Hitaj, National Agricultural and Rural Development Policy Center.

royalty payments based on the gas extracted. The increase in farm wealth ranged from 5 percent to 10 percent. Many large farms greatly increased this average payment with only 15 percent of farms receiving more than $50,000.[17]

- Royalty payments represent a large amount of farm income, compared to federal farm aid:
- The billions of dollar in royalties paid by energy producers equal about half of direct federal payments made to farmers and 20 percent of total aid farmers receive.
- While federal aid is fairly well distributed across the whole country, energy payments tend to be larger, and concentrated in certain areas.
- The median government payment was $3,642; however, the average energy payment was $7,000 per year.
- The top quarter of farms received more than $25,000 per year.[18]

The Kansas Federal Reserve Bank study indicates these revenue streams are typically reinvested in the farms. Compared to the average American family, which consumes 71 percent of its income, farm families consume only 57 percent. Thus, for every dollar received in royalty payments, 10 cents was reinvested in farms, on average.[19]

A survey of 42 Pennsylvania farmers puts the figure much higher for lease and royalty payments: These farmers received $2.3 million in lease payments, and they spent 6.9 percent of the lease payments on construction, home improvement and real estate, 17 percent on taxes, and 55 percent on investments and savings.[20]

Farmers also benefit from the local economic stimulus of drilling. The influx of shale drilling increases employment and tax revenues in rural counties:

- Pennsylvania State University researchers found that hydraulic fracturing activity in Pennsylvania added $2.3 billion, 29,000 jobs and $240 million in additional tax revenue in 2008.[21]
- In 2014, the American Petroleum Institute found hydraulic fracturing activity added $34.7 billion to Pennsylvania's economy.[22]
- Statewide, they estimated, each $1 dollar spent on the Marcellus shale industry leads to $1.94 in economic output.[23]
- In addition, Jeremy Weber of the University of Pittsburgh found a 5 percent appreciation in home values in shale counties, but not in neighboring nonshale counties.[24]

In many counties, these tax revenues are used for school and infrastructure improvements, spurring further increases in property values. Including all tax revenues, a $1 increase in oil and gas property tax led to a $0.43 increase in the value of the typical home.[25]

Conclusion. As the U.S. Senate begins debate on repeal of the estate tax, it is obvious the stakes are higher than ever. With farms in Pennsylvania and Texas experiencing 10 percent or greater increases in household wealth, the estate tax is a continuing threat to farm families' ability to pass their farms to their children.

Mike Gajewsky is a research associate with the National Center for Policy Analysis.

Notes

1. John D. McKinnon, "House Passes Bill to Repeal Estate Tax," *Wall Street Journal*, April 16, 2015. Available at http://www.wsj.com/articles/house-passes-bill-to-repeal-estate-tax-1429205647?KEYWORDS=estate+tax.

2. Peter Baker, "House Votes to Repeal Estate Tax," *New York Times*, April 16, 2015. Available at http://www.nytimes.com/2015/04/17/us/politics/house-votes-to-repeal-estate-tax.html?_r=1.

3. Jordain Carney, "Abolish the 'death tax,' say Senate Republicans," *The Hill*, March 31, 2015. Available at http://thehill.com/blogs/floor-action/senate/237479-abolish-the-death-tax-say-senate-republicans.

4. Internal Revenue Service, "Estate Tax," January 9, 2015. Available at http://www.irs.gov/Businesses/Small-Businesses-&-Self-Employed/Estate-Tax.

5. Internal Revenue Service, "Instruction for Form 706," August 2014, Table A. Available at http://www.irs.gov/pub/irs-pdf/i706.pdf.

6. Jagadeesh Gokhale and Pamela Villarreal, "Wealth, Inheritance, and the Estate Tax," National Center for Policy Analysis, Policy Report, September 2006. Available at http://www.ncpa.org/pdfs/st289.pdf.

7. Internal Revenue Service, "Data Book, 2014," Publication 55b, Table 1, March 2015. Available at http://www.irs.gov/pub/irs-soi/14databk.pdf.

[8.] Patrick Fagan, "How the Death Tax Kills Small Businesses, Communities—and Civil Society," Heritage Foundation, Backgrounder No. 2438, July 26, 2010. Available at http://www.heritage.org/research/reports/2010/07/how-the-death-tax-kills-small-businesses-communities-and-civil-society.

[9.] Edward J. McCaffery, "The Politics of Estate Tax Reform," National Center for Policy Analysis, Brief Analysis No. 690, February 10, 2010. Available at http://www.ncpa.org/pub/ba690.

[10.] Curtis Dubay, "The Economic Case Against the Death Tax," Heritage Foundation, Backgrounder No. 2440, July 20, 2010. Available at http://www.heritage.org/research/reports/2010/07/the-economic-case-against-the-death-tax.

[11.] Jeremy G. Weber and Claudia Hitaj, "What Can We Learn About Shale Gas Development from Land Values? Opportunities, Challenges, and Evidence from Texas and Pennsylvania," presented July 27-30, 2014, at the Agricultural & Applied Economics Association's 2014 AAEA & CAES Joint Annual Meeting, pages 10-11, 14 and 27. Available at http://ageconsearch.umn.edu/bitstream/170596/2/Shale%20Gas%20Development%20and%20Land%20Values%20AAEA.pdf.

[12.] Amy Silverstein, "Dallas Council Passes Tough New Fracking Rules Industry Calls A 'Moratorium' On Dallas Drilling," *Dallas Observer*, December 12, 2013. Available at http://www.dallasobserver.com/news/dallas-council-passes-tough-new-fracking-rules-industry-calls-a-moratorium-on-dallas-drilling-7104711.

[13.] Jeremy G. Weber and Claudia Hitaj, "What Can We Learn About Shale Gas Development from Land Values? Opportunities, Challenges, and Evidence from Texas and Pennsylvania," pages 4-5.

[14.] Jeremy G. Weber and Claudia Hitaj, "Shale Gas Drilling and Farm Real Estate Values," National Agricultural and Rural Development Policy Center, Policy Brief, June 2014. Available at http://www.nardep.info/uploads/Brief25_DrillingFarmRealEstate.pdf.

[15.] Ibid.

[16.] Jeremy G. Weber, Jason Page Brown and John Pender, "Rural Wealth Creation and Emerging Energy Industries: Lease and Royalty Payments to Farm Households and Businesses," Federal Reserve Bank of Kanas, RWP 13-07, June 2013, page 22. Available at https://www.kansascityfed.org/publicat/reswkpap/pdf/rwp13-07.pdf.

[17.] Ibid., page 21.

[18.] Jeremy G. Weber, Jason Page Brown and John Pender, "Rural Wealth Creation and Emerging Energy Industries: Lease and Royalty Payments to Farm Households and Businesses," page 9.

[19.] Ibid., pages 14-16.

[20.] Timothy W. Kelsey et al., "Economic Impacts of Marcellus Shale in Pennsylvania: Employment and Income in 2009," Marcellus Shale Education and Training Center, August 2011, pages 22-24. Available at http://www.shaletec.org/docs/EconomicImpactFINALAugust28.pdf.

[21.] Timothy Considine et al., "An Emerging Giant: Prospects and Economic Impacts of Developing the Marcellus Shale Natural Gas Play," Pennsylvania State University, August 5, 2009, page iv. Available at http://marcelluscoalition.org/wp-content/uploads/2010/05/EconomicImpactsofDevelopingMarcellus.pdf.

[22.] Joe Massaro, "Shale Supply Chain Stimulates Pennsylvania's Economy," September 26, 2014. Available at http://energyindepth.org/marcellus/shale-supply-chain-stimulates-pennsylvanias-economy/.

[23.] Timothy Considine et al., "An Emerging Giant: Prospects and Economic Impacts of Developing the Marcellus Shale Natural Gas Play," page 23.

[24.] Jeremy Glenn Weber, J. Wesley Burnett and Irene M. Xiarchos, "Shale Gas Development and Housing Values Over a Decade: Evidence from the Barnett Shale," United States Association for Energy Economics, Working Paper No. 14-165, November 18, 2014, pages 2-3, 16-17. Available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2467622.

[25.] Ibid.