Abstract:

Oil production represents an economically important sector in the United States. It provides a valuable source of employment and industry profit while generating government revenue to fund public goods and other programs. Given this, state legislatures must balance the ability to generate revenue through taxation with the potential loss of economic activity that results from higher taxes. The potential for both benefit s and costs means that changes to firm tax rates can spark intense debate in state and local governments. Whether a change leads to a net benefit depends on how firm drilling decisions change in response to taxes. Despite the importance for understanding policy impacts, there are few empirical estimates of the relationship between drilling activity and firm taxes. We help fill this gap by developing a model of firm drilling decisions and estimating the responsiveness of drilling activity to changes in production severance taxes between 1981 and 2015. We find that drilling is inelastic with respect to severance taxes and even less responsive to severance taxes in other locations. Our results suggest that state governments should use caution when considering the use of lower tax rates to attract more drilling. They also suggest that tax breaks on oil production are not likely to increase state severance tax revenues, at least in the short run.