



How the States Manage Revenue from Growing Oil and Natural Gas Production

Daniel Raimi, Resources for the Future
Richard G. Newell, Duke University

Oil and natural gas production has expanded dramatically in the United States over the past decade. With this growth in production comes new revenue for state and local governments, along with new questions over how to manage that revenue. Because of the volatile and unpredictable nature of prices for these commodities, public revenue associated with their production can rise or fall in dramatic and unexpected ways.

Although the U.S. federal government levies taxes and imposes certain regulations on the oil and gas industry, most fiscal and regulatory policies are designed and implemented by the states. However, as they try to meet the needs of residents, businesses, and multiple levels of government, policymakers have limited information that allows for clear comparisons between different states.

Our research begins to fill this gap by quantifying revenues raised by state and local governments through four sources: **state taxes** levied on the value or volume of oil and gas produced (often referred to as “severance” taxes); **local property taxes** levied on the value of oil and gas property; oil and gas **lease revenues from state lands**; and oil and gas **lease revenues from federal lands**. Because of methodological issues and limited data, we do not include corporate income taxes or estimate indirect revenues raised from sales taxes or income taxes.

Revenue Flows in Key States

To make clear comparisons among states, we examined revenue in a single fiscal year – 2013 – and show the amount of revenue generated as a percentage of the total value of oil and gas produced during that period. To calculate oil and gas revenue flows to each level of government, we relied primarily on state and federal government data and to a lesser extent on estimates referring to specific statutes. Our study includes the top 16 oil- and gas-producing states: Alaska, Arkansas, California, Colorado, Kansas, Louisiana, Montana, North Dakota, New Mexico, Ohio, Oklahoma, Pennsylvania, Texas, Utah, West Virginia, and Wyoming. During the 2013 fiscal year, these states respectively produced 99% and 97% of U.S. onshore oil and natural gas. Looking at these states for this one-year period, we found that:

- U.S. state and local government revenue from oil and gas production ranges from a low of 1% of production value to a high of nearly 40%.
- On average, severance taxes make up the largest source of oil and gas revenues for state and local governments, followed by state oil and gas leases, local property taxes, and federal leases.
- Revenue allocation varies substantially across states. On average, most revenue goes to current state expenditures and education. Smaller shares flow to local governments and long-term trust funds which endow future state government or educational expenditures.
- Certain policy designs, such as those that allocate a large share of revenue to current government operations, have the potential to generate windfalls during periods of high prices or production, and create budgetary challenges when prices or production decline.

Five Destinations for Revenue Raised from Four Sources

Revenues from the four sources discussed above flow to a variety of government entities, depending on the particular state in question. We identify five leading destinations for oil and gas revenues: **current state expenditures** (where revenues flow into state general funds or directly to government agencies for operational expenses); **state trust funds** (savings accounts that endow future state government expenditures or, in the case of Alaska, annual disbursements to residents); **current educational expenditures** (where revenues are collected by or flow to school districts, higher education, or other educational institutions); **education trust funds** (savings accounts that endow future educational expenditures); and **local governments** (revenues that are collected by or flow to local governments, including counties, municipalities, and others). In practice, these categories may overlap, as most states allocate a portion of current state expenditures to education or local governments based on a budgeting process.

States vary in how they utilize oil and gas revenue. On average, 4.8% of production value supported current state expenditures in the 2013 fiscal year, with an additional 0.9% flowing into state trust funds. Education current expenditures received on average 1.8%, with an additional 0.7% flowing into trust funds to support future education expenses. 2.1% of production value was shared between local governments, with the largest portion flowing to counties.

Current expenditures on education receive the second-largest share of revenue on average. In Oklahoma and Wyoming, educational institutions are the largest recipient of oil and gas revenue. In several states, notably Colorado, New Mexico, Texas, and Utah, a substantial share flows to education through long-term trust funds that support local school districts or higher education.

Risks for Government Budgets

State trust funds can be a valuable tool for managing volatile oil and gas revenue streams, because they can provide a fiscal cushion during periods of low production or prices (though prices tend to be more volatile than production). Alaska, North Dakota, and Wyoming led our sample by allocating 5.8, 3.2, and 2.6% of production value respectively to these mechanisms in fiscal year 2013. However, as recent experience in certain states – notably Alaska – shows, trust funds can be drained quickly during sustained downturns in oil and gas prices. In particular, policy designs that exacerbate, rather than smooth out revenue volatility for state operational expenses can lead states to draw heavily from trust funds during periods of low prices.

More broadly, directing large shares of oil and gas revenue to state general funds and operational expenditures can be risky for year-to-year budgets, primarily due to the volatile nature of oil and natural gas prices. Looking forward, states that are, or have become, heavily reliant on oil and gas revenues will need to consider these issues as commodity prices continue to fluctuate.

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