“State” Tax Implication of Marcellus Shale

This column is presented weekly by the Public Education sub-committee of the Clinton County Natural Gas Task Force in an effort to provide accurate, up-to-date information on activities surrounding the Marcellus Shale formation and the natural gas exploration industry. For more information on Task Force activities, visit the Task Force page on the Clinton County government website at www.clintoncountypa.com.

In 2004, Range Resources drilled the first Marcellus Shale well in Washington County, Pennsylvania. Ever since that first well was drilled there have been countless studies looking at what the exploration of the Marcellus Shale play might mean for economic development in Pennsylvania. After all, the Marcellus is currently estimated to be the world’s second largest unconventional natural gas field at roughly 489 trillion cubic feet of extractable natural gas. Initially, Pennsylvanian’s needed to turn to other states like Texas, Oklahoma, and Louisiana to learn from their experience in deep gas development. But, with roughly seven years of exploration experience under our collective belt, Pennsylvania can begin to see some potential trends through “state” tax data.

Recently Tim Kelsey, a Professor of Agricultural Economics at Penn State University, and Charles Costanzo, a Penn State student studying Community and Environment, released a publication outlining what state data show about Marcellus development.

Using the PA Department of Revenue state “Tax Compendium” and state “Personal Income Statistics” in conjunction with well drilling patterns from the PA Department of Environmental Protection, Dr. Kelsey and Mr. Costanzo found a few trends began to emerge. Specifically, some rather dramatic differences surfaced when well drilling activity is compared with state sales tax collections, realty transfer tax collections, and state personal income tax collections.

State sales tax collections generally are an indicator of retail activity by county (excluding food and clothing). Overall, as retail sales increase we would usually expect to see a sales tax collections increase as well. Therefore, if businesses and individuals are spending more money in a county, then more sales tax would be collected for the state.

Taking a quick look at counties with 150 or more wells drilled between 2007-2010 we find an 11.36% increase in state sales tax, while the state average was a -3.77% decrease in sales tax collections. Counties with one but fewer than 150 wells decrease -3.11% and counties with no Marcellus activity saw state sales tax collections decreased -6.56%.

Another possible area we might expect to find a Marcellus tax impact is in the area of state realty transfer tax collections. The state realty transfer tax is a 1% tax on the sale of real estate in the Commonwealth. Although many municipalities and school districts also levy a realty transfer tax, for the purposes of this review only state realty tax collections were analyzed.

Not surprisingly, across Pennsylvania realty transfer tax collections were down a whopping average of -22.10% between 2007 and 2010. However, when looking at the realty transfer tax collections based on Marcellus drilling, we find counties with no Marcellus activity declined by -27.93%; counties with one but fewer than 150 Marcellus wells drilled declined -16.38%; and counties with 150 or more Marcellus wells declined the least at -14.54%. Although the initial development of Marcellus did not eliminate the collapse in the housing market, the realty tax collections appear to indicate some buffering may have occurred as a result of Marcellus development.

State personal income tax collections are a bit more challenging as the most current data available is only through the 2007-2008 tax year, and heavy Marcellus drilling activity really did not start until roughly 2009. However, even with limited data, the state personal income tax does allow a peak at the impact of taxes levied on wages, investment income, leasing income, and royalty income during the early stages of Marcellus leasing and drilling. What the early state data show is that although there was little change in the total number of tax returns filed, Marcellus counties with ten or more wells drilled still saw a 6.96% increase in taxable income when the state average was only 2.04%. Non-Marcellus counties did see a slight increase of 0.89% in taxable income and counties with one to nine wells saw an increase better than the state average at 3.08%.

State personal income tax returns also differed significantly on the number of returns reporting rights, royalties, and patent income. Perhaps not unexpectedly, tax returns reporting rights, royalties, and patent income increased by 44.1% in Marcellus counties. What might be surprising is the 44.1% increase in rights, royalties, and patent income tax returns translated into a 325.3% increase in taxable income in rights, royalties, and patent income. In comparison, non-Marcellus counties saw an increase of only 12.19% in rights, royalties, and patent income tax returns and a change in taxable income related to rights, royalties, and patent income of 86.6%.

It is important to note that some of the royalty income in non-Marcellus counties is likely attributable to landowners who have a vacation property, hunting camps, or second homes, within the Marcellus footprint, but have their main home outside the Marcellus counties.

Although the look at state tax collections reflects only the very early stages of Marcellus development, the data generally show a positive relationship between community economic activity and Marcellus development. Even given the positives at the state level, it is important not to confuse state tax data with impacts on local government and school district tax collections, since royalty and leasing income is exempt from the local earned income tax, and most local municipalities cannot levy a sales tax.

For more information on state tax collections and Marcellus development, please download the entire Marcellus Education Fact Sheet "State Tax Implications of Marcellus Shale: What the Pennsylvania Data Says in 2010" at: http://pubs.cas.psu.edu/FreePubs/pdfs/ua468.pdf.

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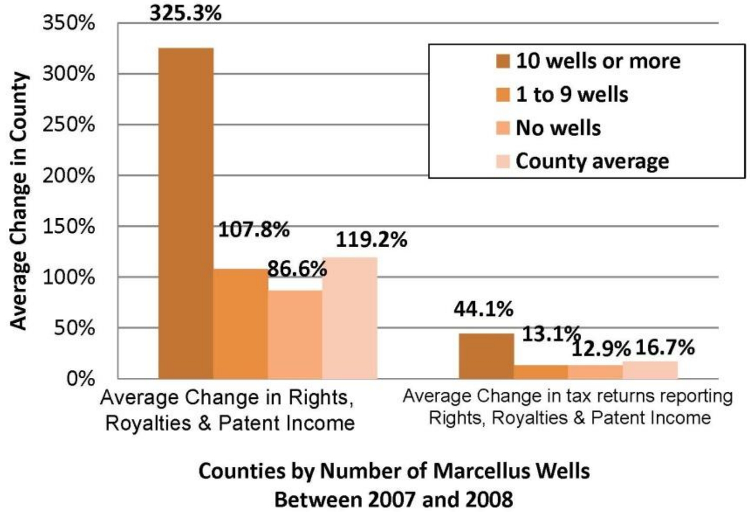
(See graphs on next page)

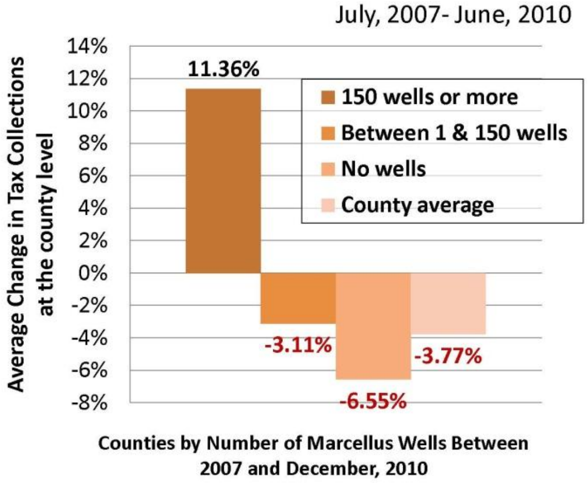
Change in Rights, Royalties & Patents- State Personal Income Tax Collections, by County Level Marcellus Drilling Activity, 2007-08



Source: Costanzo and Kelsey, 2011, using PA Department of Revenue 'Statistical Supplements for the Tax Compendium

Change in State Sales Tax Collections, by County Level Marcellus Drilling Activity

July, 2007- June, 2010



Sales tax dollars go to the state - none remains at the local level (except in a few urban counties)

Counties with more than 150 wells since 2007 include:

- Bradford (482 wells)
- Tioga (387 wells)
- Washington (305 wells)
- Greene (179 wells)
- Susquehanna (174 wells)

Source: Costanzo and Kelsey, 2011, using PA Department of Revenue 'Statistical Supplements for the Tax Compendium