DYNAMIC ANALYSIS & THE SEVERANCE TAX HIKE

"(T)ax proposals should be submitted to a process of dynamic scoring in order to assess the economic impact. Findings should be reported to the public before enactment of the policies." (Murphy Commission, 1998)

(March 24, 2008) Arkansas legislators will rely on a state revenue estimate based on an $8 natural gas futures contract price when they meet in special session next week to consider a proposed increase in the state severance tax. A recent study by the Univ. of Arkansas Center for Business and Economic Research cites an average $6.21 price for forecast investments to occur, but the contract has also traded at a lower price in the past.

Democratic Gov. Mike Beebe has set a special session for March 31 to consider raising the severance tax. One-time Republican gubernatorial candidate Sheffield Nelson has proposed a 7 percent state severance tax rate. Gov. Beebe has proposed a 5 percent rate with two- and three-year reduced rates for new high-cost and other wells, and a lower, long-term rate for low-production wells. The current rate is three-tenths of one percent.

A revenue estimate of Gov. Beebe's proposal by the state Department of Finance and Administration projects the new severance-tax rate would generate about $57 million for the state in the first year, increasing each year and reaching the $100 million mark by the year 2013. The estimate is based on an $8 natural gas price. Policymakers, in debating the issue, should also consider the variable of a lower price.

Dynamic Analysis

One way to address this problem is to provide revenue estimates to policymakers based on natural gas prices less than $8.

Dynamic analysis attempts to measure feedback effects from proposals to increase or decrease tax rates. Two papers published since 2004 by leading national economists[1] have examined the process in detail. The Policy Foundation has maintained since 1998 that all tax proposals should be subject to dynamic analysis so policymakers and the citizens they represent have access to more information[2]. Estimates based on the $6.21

[1]The issue was examined in a session at the 117th annual meeting of the American Economic Association in Philadelphia, Jan. 7-9, 2005. *American Economic Review*, May 2005, pp. 421-40. Also see the paper by Harvard economists N. Gregory and Matthew Weinzerl, "Dynamic Scoring: A Back-Of-The-Envelope Guide." Cambridge: NBER Working Paper 11000.

[2] If dynamic analysis is used the non-commercial methods used to develop revenue estimates should be transparent and subject to disclosure under the Arkansas Freedom of Information Act.

price cited in the UA report[3] or lower historical prices would provide legislators with more information and lead to a more conservative process of revenue estimation.

Commodity Prices are Cyclical

National gas, like other commodities, increases and decreases in price in response to market forces. **Commodity price movements are cyclical.** The state estimate of projected revenues from a proposed 5 percent severance rate is based on an $8 natural gas price. Policymakers should understand a lower price would effect revenues.

Any severance tax proposal is incomplete until it employs a dynamic process that uses the natural gas price as a variable at higher—and lower price levels.

-- Greg Kaza

[3] Wiest, Jason. "Updated study: Fayetteville Shale's economic impact $17.9 billion through '12." Arkansas News Bureau, March 14, 2008.