How Do Premium Subsidies Affect Crop Insurance?
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The U.S. federal crop insurance program is an important tool for providing farmers protection against agricultural risk. The federal crop insurance premium subsidies have been increased through several policies to encourage participation. Despite the higher participation with higher premium subsidies, this program has been criticized as inefficient because of the massive government spending and poor actuarial performance. Presently, money decision makers in Washington are considering reducing the premium subsidies for crop insurance. The President budget called for an $18 billion reduction in crop insurance program.

The estimated elasticities of demand for corn and wheat crop insurance are price (premium) inelastic which are consistent with previous studies. However, the magnitude of elasticities varies significantly over insurance plans, coverage levels, and regions, a fact that is overlooked in previous demand studies. The elasticity of demand for corn revenue (CRC) insurance with respect to net premium at the 75% coverage level in the Southern Plains (-0.670) is 14 times higher than the elasticity of demand for corn yield (APH) insurance at the 50% coverage level in the Corn Belt (-0.047). The elasticities of demand for wheat yield (APH) insurance with respect to net premium range from -0.127 (at the 50% coverage level in the Northern Plains) to -0.365 (at the 65% coverage level in the Pacific Northwest).

The results indicate that the expected yield has statistically significant and positive effects on the demand for corn and wheat yield insurance at each coverage level across regions with an exception of the 85% coverage level in the Northern Plains for corn yield insurance. The results also suggest that corn producers in riskier regions are more responsive to the change of per dollar net premium. The two studies show the importance of separating crops, insurance plans, coverage levels, and regions when considering changing the premiums for crop insurance.