



DISTRIBUTIONAL EFFECTS OF SELECTED FARM AND FOOD POLICIES The Effects of Crop Insurance, SNAP, and Ethanol Promotion

The debate over the most recent Farm Bill passed by Congress centered mainly on the size of the Supplemental Nutrition Assistance Program (SNAP) and the move toward subsidized crop insurance and away from traditional direct payments and commodity programs for farmers. While the Farm Bill will affect food prices, so will the Environmental Protection Agency's Renewable Fuel Standard (RFS), which requires increasing amounts of transportation fuel to come from renewable resources, particularly ethanol.

In a new study based on empirical research for the Mercatus Center at George Mason University, agricultural economist Jayson L. Lusk concludes that the reduction or elimination of subsidized crop insurance, SNAP, and ethanol production mandates would reduce food prices for many consumers, benefit food producers who are not heavily subsidized by the government, and provide an overall economic benefit to taxpayers across the United States by potentially decreasing taxes.

To read the study in its entirety and learn more about its author, see [“Distributional Effects of Selected Farm and Food Policies: The Effects of Crop Insurance, SNAP, and Ethanol Promotion.”](#)

ECONOMIC MODEL: FROM FARM TO FORK

An economic model that links production of crops with retail food categories shows the effects of crop insurance, SNAP, and ethanol promotion on producers and consumers “from farm to fork.” All three programs significantly distort food and agricultural markets and create winners and losers via government policy rather than through the market. The economic model can illustrate how and why each program interacts with food prices on a national and a state level.

SUBSIDIZED CROP INSURANCE

Federal crop insurance was introduced during the Great Depression but was not widely used until the mid-1990s. In 2013, 295 million acres (83 percent of insurable cropland) was insured under

For more information, contact
Kyle Precourt, 703-993-8196, kprecourt@mercatus.gmu.edu
Mercatus Center at George Mason University
3434 Washington Boulevard, 4th Floor, Arlington, VA 22201

the federal crop insurance program, and 90 percent of enrolled land was for corn, soybeans, wheat, cotton, and pasture, rangeland, and forage. Policies are sold and serviced through private insurers, but the federal government insures company losses, reimburses administrative and operating costs, and establishes guidelines and premium rates. Producers pay only a portion of the premium; the government pays the rest. The 2014 Farm Bill established new provisions (the Supplemental Coverage Option) to insure against “shallow losses” by also subsidizing a portion of producers’ deductibles.

While removing federal crop insurance would increase food prices, taxpayers would save about \$8 billion in a year. Ultimately, the aggregate net gain to taxpayers—after taking into account higher food prices and the direct loss of the subsidy for producers—would be \$932 million per year.

- *Federal crop insurance is a textbook example of concentrated benefits and diffuse costs.* Most food producers and consumers receive some benefit from crop insurance through the direct subsidy and decreased food prices. Those who stand to benefit most from the program are best able to convince legislators to continue it. But taxpayers as a body, less able to advocate for their own interests, suffer a net loss as money is transferred from the pockets of all taxpayers through higher taxes to the pockets of producers and consumers of food, meaning people pay higher taxes rather than choosing to pay higher grocery bills. The \$932 million in projected savings if federal crop insurance were ended represents the deadweight loss of subsidies: the economic cost of transferring money from many to some and the cost of the lobbying necessary to maintain the system.
- *Some farmers win from subsidies while other farmers lose.* While farmers in the plains states that produce the bulk of the food insured by the government would lose money if the program were eliminated, farmers in western states such as California, Oregon, and Washington would benefit because products such as fruit, vegetables, and nuts, which are not heavily subsidized, would no longer be disadvantaged.
- *Consumers pay more in taxes rather than more at the grocery store.* Consumers would pay higher prices for food if subsidized crop insurance were removed, but the benefit to taxpayers more than compensates for the higher food prices. Taxpayers have to pay about \$1.80 for every \$1 in lower food prices owing to federal crop insurance.

SNAP

The Supplemental Nutrition Assistance Program, popularly known as food stamps, provides monetary assistance to poor Americans for buying certain kinds of food. The 2014 Farm Bill allocated most of its funding—79 percent—to SNAP and other nutrition programs. Funding for SNAP has increased dramatically over the last decade, rising from \$33 billion in 2007 to nearly \$80 billion in 2013, while the number of participating households has increased from 26 million to 47 million. Debate has focused on whether SNAP is a pure cash transfer from wealthy to poor Americans or whether it alters how consumers allocate their budgets toward food.

Depending on how SNAP recipients allocate their SNAP dollars, the removal of the program is projected to generate net economic benefits ranging from \$12.7 billion to \$42.8 billion, with the benefits accruing to taxpayers and SNAP nonrecipient consumers, who will pay lower prices.

- *SNAP increases food prices.* SNAP recipients would lose benefits if the program were eliminated. They currently receive only part of the \$75.9 billion that would be returned to taxpayers, however, because producers capture some of the benefits and increased expenditures have an inflationary effect by increasing food prices, causing all consumers to pay more.
- *SNAP provides inefficient farm support.* SNAP may be included in the Farm Bill in part to support agricultural commodity prices for producers, but the evidence shows that it is an inefficient form of support: for every dollar spent by taxpayers, farmers benefit by only one cent.

PROMOTION OF ETHANOL

Direct payments for the production of corn-based ethanol have existed since the 1980s. Tax credits for such production ended in 2012. However, the Renewable Fuel Standard mandates that a certain percentage of transportation fuel be blended with renewable biofuels, primarily ethanol. The ultimate effect of the RFS depends on whether the mandate is considered economically binding—whether the required quantity is above or below what the free market would demand in the absence of a government mandate. One major concern for consumers is that food and agricultural prices have spiked in recent years, with estimates of the increase in food prices owing to biofuel mandates ranging from 5 to 20 percent.

- *Reducing the demand for corn-based ethanol will reduce food prices, especially meat prices.* If demand for ethanol falls (perhaps owing to a relaxation of the RFS), consumers will benefit by paying lower food prices, but producers, particularly corn producers, will be harmed.
- *Prices substantially decrease if buyers of corn for ethanol use are free to adjust their purchases as they wish.* If demand becomes more elastic (buyers are more responsive to changes in price), corn prices will drop by 7.54 percent, and consumers will benefit by \$855 million. Producers will lose \$3.6 billion if corn-based ethanol demand falls by 20 percent.