



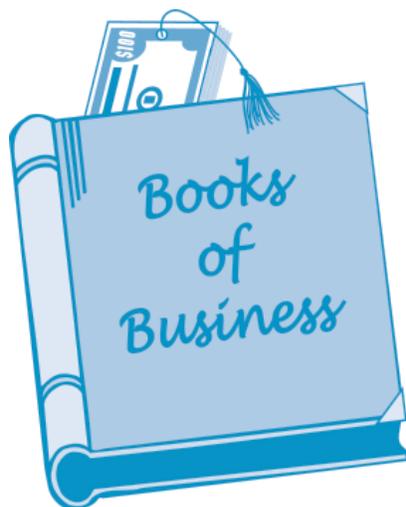
Examining the Health of the U.S. Crop Insurance Industry

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In late September the Risk Management Agency (RMA) of USDA released the results of commissioned studies that calculated the rate of return that U.S. crop insurance companies have received from selling multi-peril crop insurance (MPCI) (<http://www.rma.usda.gov/pubs/2009/millimanhistoricalrate.pdf>). Since 2000, the average annual rate of return on equity has been 19 percent. The study also estimated that a reasonable rate of return over the same time period for this line of business would be about 11 percent. One straightforward interpretation of this difference is that since 2000, the crop insurance industry has received a rate of return that is 72 percent higher than what would be needed to induce private companies to participate in the crop insurance program.

The insurance industry disagrees with this assessment of profitability. In a report released in early October (http://www.ag-risk.org/NCISPUBS/SpecRPTS/GrantThornton/Grant_Thornton_Report-2009_FINAL.pdf) the industry argues that “the MPCI program is not as profitable as the P&C (Property and Casualty) industry and writing MPCI entails greater risk.” Clearly there is a difference of opinion here.

Arguments over the profitability of the crop insurance industry are to be expected and have occurred often. An arm of government, be it the Government Accountability Office (GAO) or the RMA, releases a report that finds excess industry profits. The industry responds with arguments about the flawed account-



ing standards used by government analysts and then releases its own report that allows it to argue that it cannot absorb any cuts in the taxpayer subsidies that it receives because the industry is already undercompensated.

What should Congress conclude? Should members and their staff believe the industry reports that further cuts will reduce industry profits to the point at which companies will not be willing to participate in the program? Or should they believe the GAO and RMA reports that conclude that substantial cuts can be made because the industry is overcompensated?

Although economists are often maligned for their lack of ability to be precise in offering prescriptions for what ails the economy, their concepts and analytical tools can often give insights into competing arguments. An examination of how the crop insurance industry operates and competes provides a simple and reasonably accurate measure of the amount of excess profits the industry receives. This measure estimates that industry subsidies could be reduced by more than a billion

dollars without adverse impacts on program effectiveness.

Revenue and Costs in the Insurance Industry

Insurance companies obtain revenue from premiums paid by their customers and obtain additional revenue from invested capital. This revenue must cover claims paid out, the cost of adjusting claims, any cost of reinsurance, as well as other overhead costs such as salaries. Profits are positive when total revenue exceeds total costs. The big difference between the crop insurance industry and unsubsidized insurance industries is that about 80 percent of the premium revenue that would be paid by customers is actually paid by taxpayers. This 80 percent number consists of the 60 percent of premiums that are paid by taxpayers and the 20 percent expense reimbursement. In addition, taxpayers provide crop insurance companies subsidized reinsurance in exchange for the requirement that the companies must sell insurance to all farmers in areas in which they do business.

That such a large portion of premium is paid by taxpayers heightens the importance of determining whether the RMA report of a 72 percent excessive rate of return does, in fact, accurately describe the current situation.

Competition in the Crop Insurance Industry

In most lines of insurance, as with most other industries, companies compete on the quality of their product and on price. This competition is what keeps industry profit levels from getting too far above or

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below the levels needed to keep the industry viable. But, as discussed in the accompanying article on page 4, RMA has the responsibility of setting premium rates. In addition, its governing board, the Federal Crop Insurance Corporation, determines which products companies can offer. Thus all crop insurance companies sell the same products at the same price.

Companies do compete, however. Those companies that are best at using the government-provided reinsurance make more money than others. In addition, companies compete with each other for market share by competing for crop insurance agents' books of business. All crop insurance policies must be sold by crop insurance agents. Most agents are independent so they can route their policies through any of the crop insurance companies that service policies in their regions. Agents are more likely to offer their books of business to the highest bidder. Thus competition for market share is conducted in terms of agent commissions. Those companies that pay higher commissions will tend to increase their market share.

Price as an Indicator of Profits

In a competitive market, profits will accrue to the factors of production that are limited in supply. In professional baseball, increases in revenue typically show up in inflated salaries to star players because they are in limited supply and owners compete for their services. In farming, an increase in the price of crops tends to increase land rents because there is only so much land to go around. In economic terms, the factor that is most limited in supply is the residual claimant of any excess profits to an industry.

In the crop insurance industry, though, as mentioned earlier, the only price that reflects competition among companies is the price they pay agents for their books of business. Thus a good measure of

the degree of excessive taxpayer compensation to the industry is to look at the only price in the industry—the agent commission—that is free to adjust. If compensation to the industry is excessive, then we should see the price paid to agents for their books of business increase as companies seek to expand. If compensation to the industry is too low, then we should see the price paid to agents drop as companies attempt to cut their losses.

Agent Commissions

Figure 1 shows one measure of agent commission. Although agent commission rates have increased from just below 16 percent to about 17 percent of total premium, there is no obvious evidence in Figure 1 that agent commissions have been bid up in response to excessive profits in the industry.

However, the cost of selling and servicing a crop insurance policy and running a crop insurance agency is not proportionate to the amount of premium collected. In crop insurance, a farmer's premium will double if the price of the insured crop doubles. But the cost of servicing the policy will be constant. A better measure of agent commissions is the dollar amount of commission paid per policy sold. As shown in Figure 2, commission received per policy sold has increased by a factor of almost four.

One measure of the extent to which the industry is overcompensated is the difference between the minimum amount agents would accept to sell crop insurance policies and the amount that they currently receive. This measure assumes that all other factors in the crop insurance industry, such as staff or executive salaries, are paid a competitive amount. An overestimate of the minimum amount of compensation required to sell crop insurance policies is the amount received in 2001. This is an over-estimate because there was no shortage of

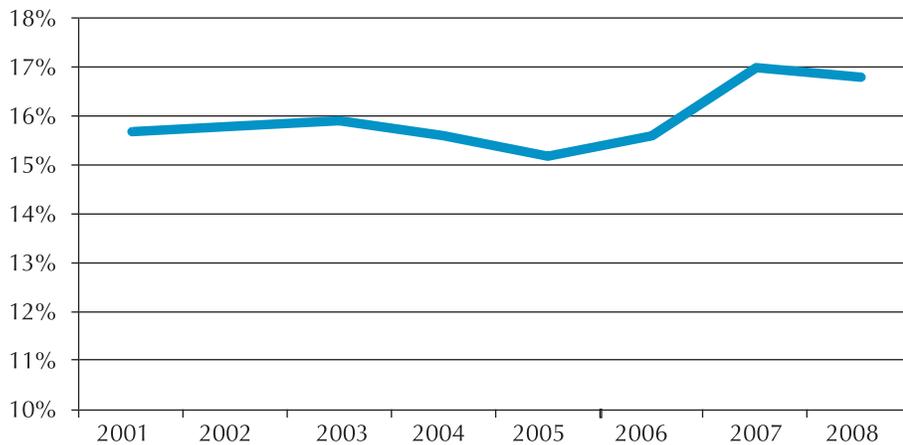


Figure 1. Agent commissions as a percentage of total premium

Source: Table 5.1 of Grant Thornton report for National Crop Insurance Services, October 2, 2009.

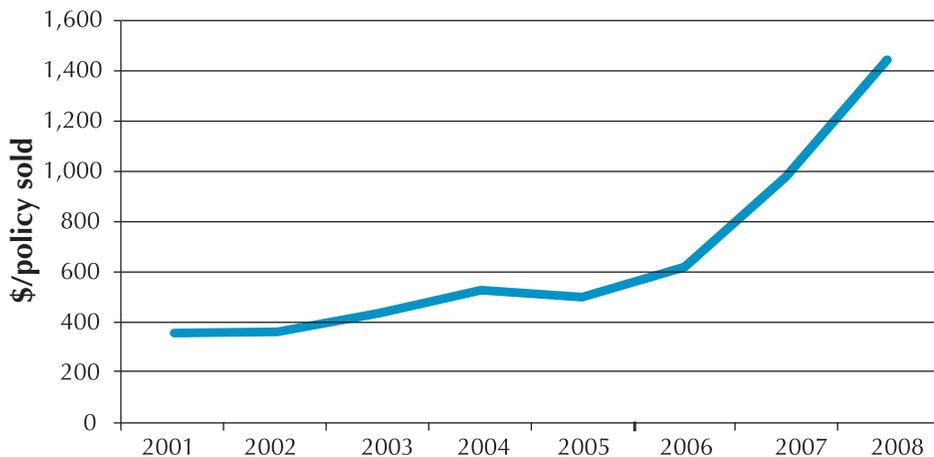


Figure 2. Commissions received per U.S. crop insurance policy sold

agents willing to sell crop insurance in 2001, which implies that this amount gave them a good return on their labor.

Of course, we should increase this 2001 amount by general wage inflation to reflect the prevailing increase in wage rates. If we make this adjustment, then the minimum amount of compensation needed in 2008 to induce crop insurance agents to provide the same level of service that they provided in 2001 is \$426 per policy. The actual compensation was \$1,442. Thus, the amount by which agents were able to increase their compensation because of increased profits of the

crop insurance companies in 2008 was \$1,015 per policy.

There were 1.148 million policies sold in 2008. So an estimate of the amount of excessive compensation that crop insurance companies receive from taxpayers is \$1.165 billion (\$1,015 per policy multiplied by 1.148 million policies). More specifically, if taxpayer subsidies to the crop insurance industry had been \$1.165 billion lower in 2008, then the level of service that existed in 2001 would have existed in 2008. And, as stated earlier, this estimate of the amount of excess compensation to the industry is too low if the salaries of other personnel involved

with the industry increased faster than industry norms.

It is difficult to compare this \$1.165 billion estimate of over-compensation with the 72 percent excessive rate of return estimate made in the RMA report because of different methods used. But these two estimates are clearly consistent with an overall conclusion that taxpayer support of the U.S. crop insurance industry is excessive. To better reconcile different estimates of whether subsidies are too high or too low, government analysts could make a simple adjustment: remove agent commissions as an unavoidable cost of business. As explained, agent commissions are determined by the level of subsidies provided to the industry. Only the level of commission that would induce agents to quit the crop insurance business is an unavoidable expense.

Ways to Cut (But Is There a Will?)

Industry revenue from underwriting gains and expense reimbursement totaled \$3.2 billion in 2008. Thus, a cut of \$1.165 billion would have left the industry with about \$2 billion in revenue. The two ways that this amount of money could be reduced is a combination of a reduction in average underwriting gains along with a change in the way that expense reimbursements are calculated.

Underwriting gains, though, give companies incentives to police fraud in the program. But RMA could increase the amount of underwriting gains that companies give back to the agency in years in which there are gains (the quota share) in exchange for the agency taking on more of the losses in loss years—which would cut average taxpayer costs.

To cut expense reimbursement, RMA could pay companies a flat amount per policy, say \$426 per policy. This would amount to about \$500 million per year to pay agent

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commissions. Then RMA could add in so much per policy for claims adjustment and so much per policy for salaries and other overhead.

The chances that Congress will soon embrace a cut in funding for a

program that has generated 20 percent annual salary growth for crop insurance agents who reside in rural areas seems pretty remote. After all, Congress and the administration are currently borrowing money to create jobs to keep unemployment down. But eventually, borrowed money has to be paid back. And the only way to pay back money is to

raise taxes or cut expenditures. But there are economic costs associated with raising tax revenue, so federal programs should be scrutinized for efficiency. In agriculture, the place to start is the crop insurance program. There is no doubt the same level of service can be provided to farmers at much lower cost. ♦

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are calculated as a proportion of premiums. This drop in expense reimbursement could be lower if farmers responded to a premium decrease by buying more expensive coverage.

In addition, a drop in premium rates would increase loss ratios, which would decrease underwriting gains. Because taxpayers do not benefit as much from underwriting gains as they lose when there are underwriting losses, such a change would likely benefit taxpayers. Thus, taxpayers and farmers would likely be net winners from an adjustment to crop insurance premiums to account for increasing drought tolerance.

A Full Accounting

The efforts of biotechnology companies seem to have paid off in an unanticipated manner by making corn hybrids better able to withstand drought conditions. Modern, herbicide-resistant soybeans also seem, for more enigmatic reasons, to have increasing drought resistance. In addition, both crops are being managed by larger and perhaps more able managers. And better management leads to more timely field operations, which could result in increasing drought tolerance.

The large impacts of this newly evident drought tolerance in corn and soybeans may be dwarfed if seed companies are in fact successful in their targeted efforts to reduce yield losses due to drought. As new technologies

become available, it is important that the crop insurance industry and Risk Management Agency alter the way they determine crop insurance rates so the system can directly reflect the lower risks.

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