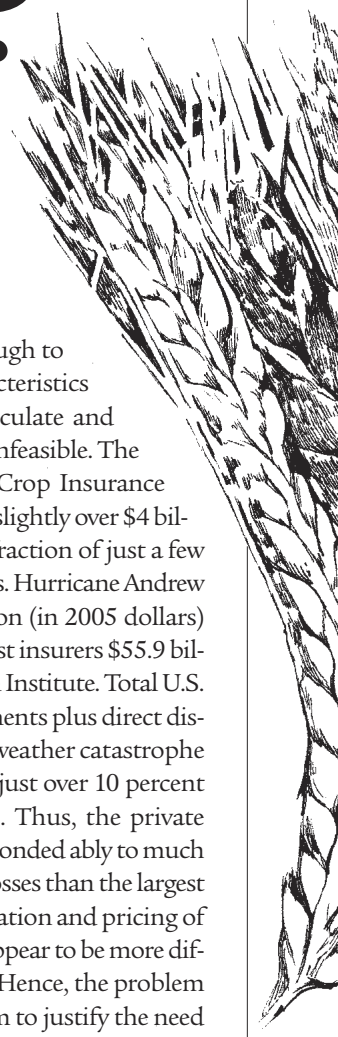
The 2007 farm bill provides Congress another opportunity to reform federal crop insurance.

A New Season?



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Federal crop insurance began in 1938 as a focused program to correct certain perceived market failures. It has transformed into a massive wealth transfer scheme that is frequently the subject of supposed legislative reforms. Yet each wave of changes has, for the most part, moved the program further away from economic rationality and exacerbated its distortion of incentives and inefficiency.

The last set of statutory changes enacted in 2000 is scheduled to sunset in 2007 when a new farm bill will be enacted. This offers an opportunity to truly reform crop insurance and correct its structural flaws.

IS THERE A NEED?

Government intervention into the operation of markets for goods and services is warranted when a significant market failure exists and the government can substantially improve social welfare by remedying the failure or at least mitigating its negative effects. The most compelling argument for a government role in crop insurance is the correlation of losses for agricultural risk exposures, creating the potential for catastrophic losses. The argument for government intervention also presumes that private financial and reinsurance markets are unable to efficiently diversify the catastrophic risk exposure faced by agricultural producers and their insurers.

However, private insurers have demonstrated their ability to insure other catastrophic risks such as residential and commercial property in hurricane-prone areas. Is the risk of catastrophic losses so great in crop insurance that it requires the government to underwrite all or a significant portion of that risk?

To threaten the viability of the insurance mechanism, catastrophe losses must be potentially large enough to overwhelm insurers or possess other characteristics (e.g., lack of sufficient information to calculate and price the risk) that make private insurance infeasible. The largest indemnity payout for the Federal Crop Insurance Corporation (FCIC) in the past 10 years was slightly over $4 billion — for all losses in all regions. This is a fraction of just a few of the largest hurricane losses in coastal states. Hurricane Andrew in 1992 caused insured losses of $21.7 billion (in 2005 dollars) and in 2005 the largest three Gulf storms cost insurers $55.9 billion, according to the Insurance Information Institute. Total U.S. Department of Agriculture indemnity payments plus direct disaster payments were only 25 percent of the weather catastrophe losses paid by private insurers in 2004 and just over 10 percent of the insured catastrophe losses in 2005. Thus, the private property/casualty insurance market has responded ably to much larger and more concentrated catastrophic losses than the largest payouts from the FCIC. Moreover, the estimation and pricing of catastrophe risks in crop insurance do not appear to be more difficult than they are for property insurance. Hence, the problem of catastrophe risk, by itself, would not seem to justify the need for a government crop insurance program.

Other arguments for federal insurance include the need for agricultural producers to have more "risk management tools." But the proliferation of products by FCIC is unnecessarily complex and overlaps with well functioning private sector tools. In truth, the only feature of the federal program that is not sustainable by the private market is pervasive, indiscriminant subsidies of the purchase price of coverage. Indeed, the desire to use subsidies to "encourage" more agricultural producers to purchase crop insurance instead of relying on disaster aid is probably the stated principal motivation underlying the provision of government crop insurance/reinsurance.

HISTORY AND OVERVIEW

The federal crop insurance program was established by Congress in 1938 in response to a perceived lack of availability of

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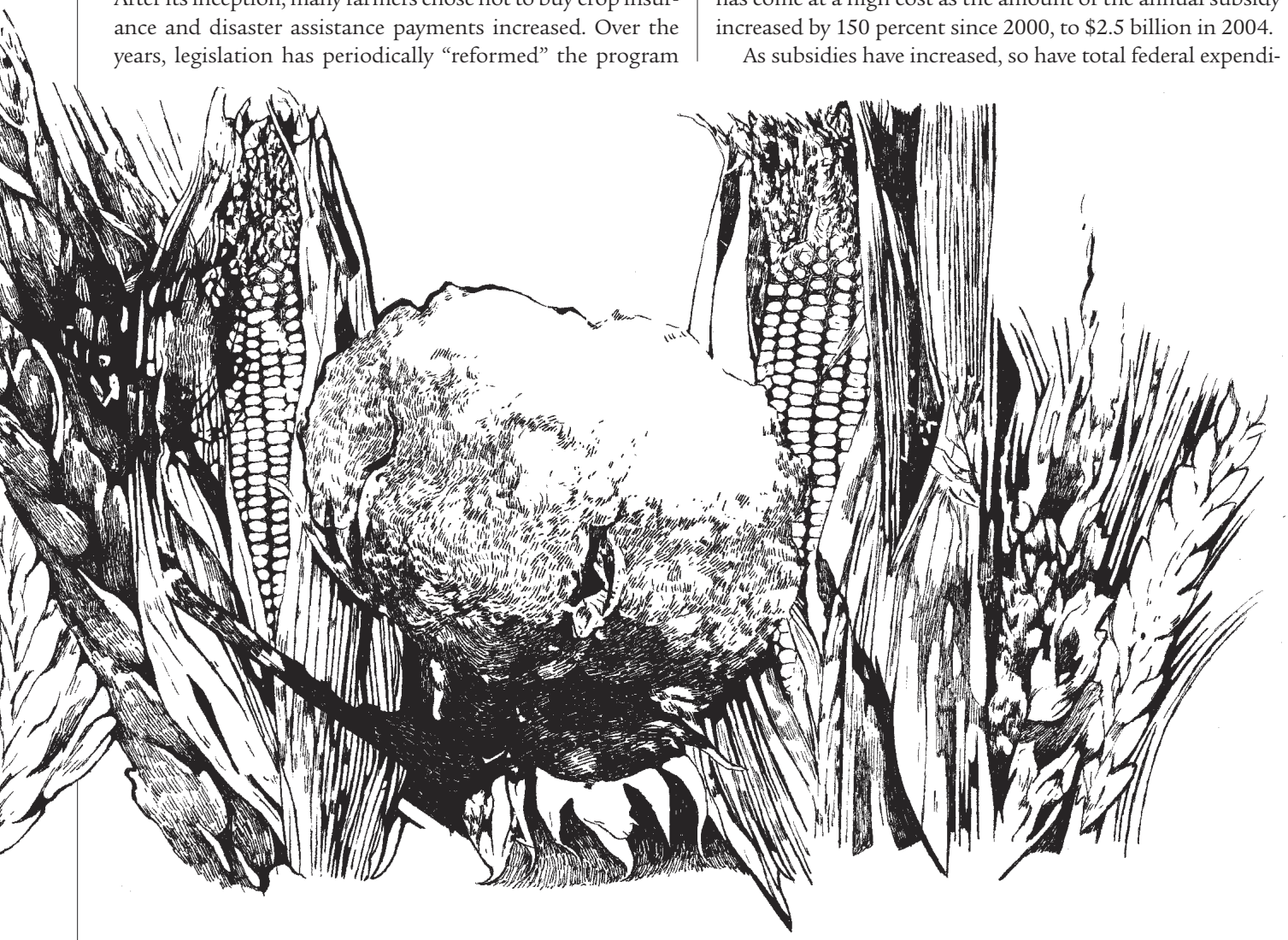
crop multiperil coverage from private insurers. It was also motivated by a desire to help farmers who had been hurt by the Great Depression. In recent years, the program has expanded under the rationale that it would be better to have farmers buy insurance (even if subsidized) than for government to dole out ad hoc disaster aid payments — an argument that is commonly made for government insurance programs.

Like many government insurance programs, crop insurance has failed to produce the results that its proponents promised. After its inception, many farmers chose not to buy crop insurance and disaster assistance payments increased. Over the years, legislation has periodically "reformed" the program with the primary objective of encouraging its expansion to more producers, crops, and areas of the country. Unfortunately, the measures designed to make the program more attractive to producers also undermined its adherence to insurance principles and practices such as rigorous underwriting standards and actuarially fair rates.



MORGAN BALLARD

The level of subsidization has steadily increased to encourage greater producer participation. It is this kind of perverse evolution that raises the question of whether the government "cure" has become more costly than the "disease" the program was originally established to fix.

The latest wave of program changes occurred in 2000 with the passage of the Agricultural Risk Protection Act (ARPA). The act further increased premium subsidies and expanded coverage to make the program more attractive to producers. ARPA also contained provisions that at least nominally promised to reduce waste, fraud, and abuse in the program, but the combined effect of the ARPA provisions appears to be increased costs and waste.

Table 1 summarizes historical statistics on key aspects of the program for 1995–2005 "crop years to date." The total number of crop insurance policies has decreased, but other indices of the program's size have increased. This expansion has come at a high cost as the amount of the annual subsidy increased by 150 percent since 2000, to $2.5 billion in 2004.

As subsidies have increased, so have total federal expenditures on crop insurance. In a 2001 *Regulation* article, Jerry Skees tracked the increase in those outlays to above $2 billion in 1999 and estimated expenditures rising to $3 billion by 2001 ("The Bad Harvest," Vol. 24, No. 1). Figure 1 reveals that this trend has continued, with estimated expenditures in 2007 increasing to $3.6 billion.

The increase in crop insurance expenditures might be more palatable if it were offset by a significant decline in disaster assistance payments for agricultural losses. But this has not occurred, as shown in Figure 2. Over the period 1989–2005, disaster payments have averaged $3.7 billion (in 2005 dollars) annually, and there is no indication that the trend in the amount of payments is declining. From 2000 to 2005, a total of $37.7 billion has been paid in "emergency"

Table 1

Summary of FCIC Combined Business

1995–2005 (Net Acres and Dollars in Thousands)

Crop Year to Date	Policies with Premium	Units with Premium	Net Acres Insured	Liabilities ($)	Total Premium ($)	Subsidy ($)	Indemnity ($)	Loss Ratio
1995	2,034,337	3,683,452	220,510	23,728,452	1,543,349	889,372	1,567,730	1.02
1996	1,615,191	3,204,328	204,863	26,876,812	1,838,559	982,062	1,492,662	0.81
1997	1,319,762	2,799,404	182,188	25,459,037	1,775,382	902,800	993,550	0.56
1998	1,242,663	2,697,204	181,834	27,921,436	1,875,927	946,312	1,677,542	0.89
1999	1,288,778	2,896,483	196,918	30,939,450	2,310,133	954,871	2,434,715	1.05
2000	1,323,243	3,046,928	206,466	34,443,753	2,540,163	951,191	2,594,835	1.02
2001	1,297,925	3,080,139	211,329	36,728,588	2,961,847	1,771,740	2,960,125	1.00
2002	1,259,484	3,058,549	214,865	37,299,303	2,915,944	1,741,410	4,066,733	1.39
2003	1,241,433	3,074,821	217,398	40,617,090	3,431,247	2,041,965	3,259,104	0.95
2004	1,228,765	3,075,792	221,000	46,607,191	4,186,005	2,477,339	3,206,714	0.77
2005	1,190,574	3,022,057	245,844	44,269,416	3,949,222	2,343,815	2,350,617	0.60

SOURCE: *Risk Management Agency, U.S. Department of Agriculture*

appropriations by Congress, averaging $6.3 billion annually (in 2005 dollars).

Federal crop insurance is provided through a federal corporation in partnership with private entities. Private insurance companies and their agents sell and service crop insurance policies to agricultural producers, backed by reinsurance provided by the FCIC. The Risk Management Agency (RMA) administers the crop insurance program and performs other related activities.

The government imposes a heavy and extensive set of administrative requirements on participating private entities in a valiant but doomed attempt to manage their behavior and correct inherent incentive conflicts. The requirements attempt to achieve a questionable array of contradictory program objectives. The efforts of federal administrators to overcome the incentive conflicts and make the program work are further hampered by political mandates, constraints, and interference from Congress. Indeed, the RMA staff plays out the accommodating role of the bureaucracy to congressional committee leaders with budget and oversight responsibilities. Hence, what has been sold as an efficient partnership of the public and private sectors has become an overly expensive front to preserve the fiction of harnessing the efficiencies of private sector competition.

Under the standard multiple peril policy, farmers are compensated for losses in crop yield. The market price paid for each bushel is fixed at a level set by the government in advance of the growing season, regardless of the actual price at harvest time, which could be lower or higher than the government forecast.

A farmer purchasing multiple peril crop insurance has a number of coverage options. One is a CAT (catastrophe) policy, the lowest amount of protection available — it pays 55 percent of a crop's established price on crop losses in excess of 50 percent. The federal government subsidizes the entire cost of CAT coverage; farmers pay only a $100 administrative fee.

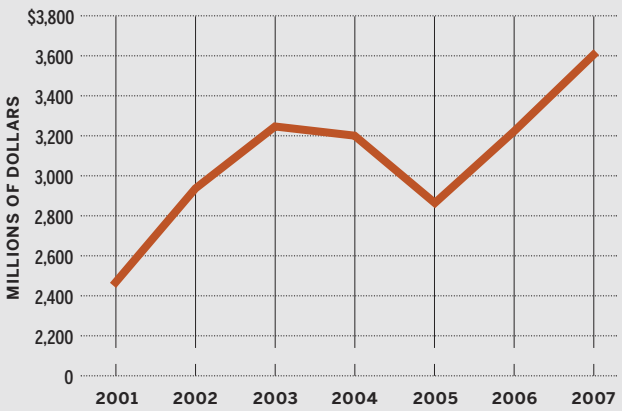
Further, farmers can buy additional insurance to cover a greater portion of their losses, known as "private supplemental," under a "buy up" program. Under the program, the federal government subsidizes a large portion of the premium. Currently, the subsidy rate decreases as the amount of coverage rises.

Producers of some crops may be eligible for a multiple peril coverage known as "group risk" crop insurance, which may cost less than other options. It differs from the basic coverage in that yield guarantees are based on the county average yield rather than that of the individual farmer, and is suitable for farmers whose yields tend to follow countywide yields. Group risk income protection adds a price protection feature to this coverage. Another product, "revenue insurance," which was

Figure 1

Federal Expenditures for Crop Insurance

2000–2007



NOTE: *2006 and 2007 are estimates.*

first introduced in the mid-1990s, guarantees farmers a certain income, allowing them to manage both yield and price risk.

PRIMARY PROGRAM FLAWS

The design of the federal crop insurance program makes it subject to a number of conflicts, perverse incentives, and inefficiencies. Here, we discuss a few of the more significant problems.

PUBLIC-PRIVATE PARTNERSHIP CONFLICTS The unique relationship between the federal government and private insurers in delivering federal crop insurance is laden with conflicts. The federal government encourages private insurers to market aggressively, and mandates that they underwrite any willing applicant. An array of measures to control adverse selection used in private insurance are precluded in crop insurance, e.g., insurers are not allowed to reject high-risk producers or charge them higher rates.

The government attempts to control the inevitable tensions through intricate contractual relationships and labor-intensive enforcement. The challenge to the RMA is to devise a set of standards to guide insurer conduct toward public policy goals and to constrain shortcuts and inappropriate cost-cutting practices.

Another problem arises in that the FCIC is constrained in using the array of "standard" devices employed in private reinsurance arrangements to mitigate moral hazard and realign ceding insurers' incentives with its own. As with other unconventional limits embodied in the program, these constraints can be traced back to the program's broad policy objectives.

DISTORTED PRODUCER INCENTIVES In private insurance, rates must approximate the expected loss plus full administrative expenses, including an allowance for the cost of capital. This principle is violated by the FCIC in three ways:

- The target loss ratio is greater than the expected indemnity payout.
- The expense load is not charged to the insured.
- Individual products or rating classes receive chronic subsidies by setting prices below an artificially low target rate.

Intentional subsidies are an important element of federal crop insurance. By law, crop insurance premiums are set to recover only 93 percent of expected losses (the reciprocal of a 1.075 loss ratio) and none of the other expenses associated with delivering the insurance product. Thus, for federal crop insurance products generally, policyholders can expect to get more dollars in indemnity coverage than what their premiums pay for. Further, the ratio of expected indemnity payments to premiums can be chronically and grossly out of alignment for some products in some areas. The substantial subsidies offered to agricultural producers through the crop insurance program create incentives that promote gaming insurance and poor agricultural practices.

Figure 3 shows that the ratio of indemnity payments plus subsidies to the total premiums paid by insureds has substantially exceeded 100 percent for both the CAT and "additional insurance" programs. While this ratio appears to be steadily declining for the CAT program, this is not the case for additional insurance. We should also note that the indemnity payment figures for later crop years may tend to be understated because of the lag in some claims payments, implying that the ratios for the later years are likely to increase as indemnity payments are updated.

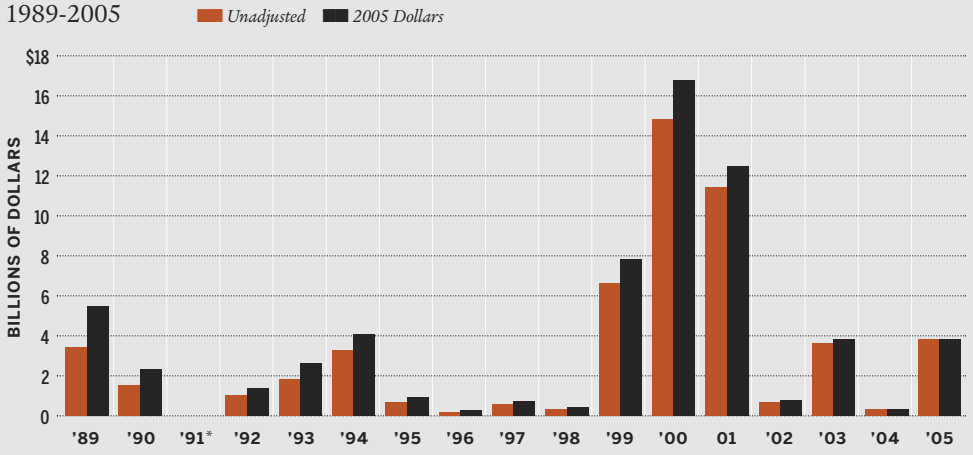
In order to avoid providing subsidies greater than those established in the law, the RMA must maintain a rate structure that will achieve the target ratios. This requires proper classification of risk and correct rate relativities, as well as an adequate overall rate level. If individual products, area characteristics, growing areas, and farming techniques are not given the proper rate relativity, several bad outcomes are likely, including adverse selection, lack of market acceptance by low risk producers, and unfair discrimination among producers.

In principle, the rate making methods of the RMA look quite orthodox from an actuarial perspective. However, special interests chip away at the rules to make them "fairer" or more "farmer friendly." Such intervention produces rates that are grossly out of alignment with expected losses. Thus, they encourage inappropriate shifts in producer behavior, e.g., wide-scale shifts to crops by growers who, absent insurance, would avoid them as being too risky.

Figure 2

Federal Economic/Farm Disaster Assistance

1989-2005



SOURCE: *Congressional Research Service* * *Figures unavailable*

One example of such behavior was the planting of "winter watermelons" in Texas in 1999 against the advice of experts who warned of the problem of significant insect infestation. Crop insurance covered $48 million in losses that subsequently occurred. The planting of crops on arid land in west Texas and Kansas is another example.

Experience rating can be used to tailor premiums to producer-specific risk characteristics as well as bolster insureds' incentives to reduce risk and control losses. Experience rating need not penalize classes of farmers for suffering bona fide catastrophe losses beyond their control. Rather, it can penalize producers with uncommonly high historical losses relative to their peers and risk factors under their control. However, experience rating was abandoned by the FCIC several years ago.

The basic methods used in actuarial analysis, product underwriting, and marketing are relatively stable and well designed. This is especially true for the six major field crops — barley, corn, cotton, grain sorghum, soybeans, and wheat, which have a long history of loss data upon which to base rates and employ refined rating systems. However, the General Accounting Office has concluded that, for many crop-state programs, rates remain inadequate.

Specialty crops present an even greater challenge than the six main row crops. They do not always have the stability and straightforward application to farm risk management. The plant species, growing conditions, and agronomic practices defy easy classification. Loss experience is unstable and locally variable. Producer interest groups routinely vie for modifications to make the use of crop insurance easier and more convenient for their constituents.

Table 2 illustrates how some products can maintain excessively high loss ratios despite the annual review process by the RMA. The table tracks the 11-year history of loss ratios for six products that seem to have persistently high loss ratios. No obvious weather-related catastrophe explains these high loss ratios. While there seems to be some, albeit unsteady, improvement for certain products, others continue to be plagued by poor results. These extraordinarily high, multiyear loss ratios would have triggered alarms in a traditional insurer. Geographic disparities in loss ratios also have persisted. University of Georgia professor Barry Barnett, in a 2003 Agricultural Outlook Forum presentation, documents that hundreds of counties had loss ratios greater than 1.5 for the period 1981–2002.

The problem lies with the statutory and administrative constraints and decisions that determine the actual rates that are set. For example, the experience period that is used for rate making may be a major cause of the underrating of some areas and products. Farm advocates have lobbied to have bad years removed from the loss experience for rate making. While smoothing methods are common for various types of insurance for dealing with year-to-year volatility in the loss experience, especially high losses in certain years cannot be completely disregarded in estimating the long-term actuarial cost of the crop insurance program.

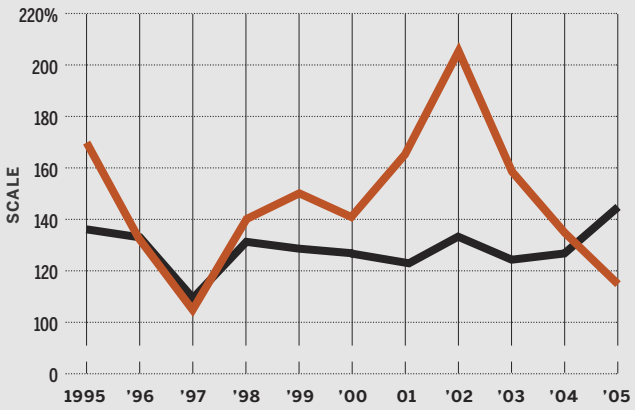
EXCESSIVE PRODUCT DEVELOPMENT The introduction of new products to accommodate particular producer interests exacerbates the pricing problems. A critical source of uncertainty and potential error lies in the lack of data on loss experience for a particular set of counties, type of crop, and production process. On paper, the RMA has a deliberate plan for product development that should take eight to 11 years to complete. But the GAO has found that some products are launched with shortcuts or pilots are expanded too quickly (the FCIC expanded the availability of crop insurance from 59 crops insured in 1994 to 75 in 1999) because of strong pressure from Congress to extend coverage to more constituents. And there is no provision in the rates for the cost of greater uncertainty or the lack of information associated with new products.

The proliferation of specialty programs has led to more fraud opportunities. Farm operators often own physically separate fields that grow different crops. They often insure those fields separately rather than insure the integrated farm enterprise. This practice allows unscrupulous producers to

Figure 3

Additional and Catastrophic Business Loss and Subsidy Ratios

Crop years 1995-2005



SOURCE: *RMA Summary of Business Report, 1993–2006*

Table 2

Loss Ratios for Selected Insurance Plans

1999–2005

Year	Adjusted Gross Income	Aquaculture Dollar Amount	Group Risk Plan	Indexed Income Protection	Tobacco Guarantee Production	Tobacco Quota
1999	1.36	N/A	1.07	5.84	3.07	2.65
2000	1.01	1.84	1.11	3.07	1.29	1.85
2001	1.82	2.06	1.68	0.48	0.94	1.26
2002	1.21	1.84	1.88	3.2	2.63	2.12
2003	0.86	1.66	1.84	2.43	3.12	2.15
2004	2.38	2.25	0.69	1.88	1.60	1.97
2005	0.37	0.98	0.33	0.33	2.56	1.92

SOURCE: *RMA Summary of Business Reports by product*

shift yields from some fields to others to trigger a loss even though the farm as a whole would not qualify.

RESTRAINTS ON INSURER CONTROL MECHANISMS Both RMA and participating insurers are faced with a number of mandates and constraints that were created with the intent to maximize insurance coverage. If a participating insurer elects to operate in a state, it must offer all FCIC products to all willing purchasers who meet the product underwriting specifications, regardless of their claims histories. Further, the insureds in a given geographic area, product class, and production history pay the same unit price for coverage. Insurers are denied the usual tools of underwriting: excluding excessively risky perils and hazards, adding a risk premium to pricing, and denying coverage to applicants who do not meet minimum standards for insurability. Further, higher co-insurance or lower coverage limits would achieve greater cost sharing and increase insureds' incentives to prevent and mitigate losses, but those measures are discouraged or precluded. Together, the restrictions significantly hamper insurers' ability to combat adverse selection and moral hazard.

OPTIONS FOR REAL REFORM

Given federal crop insurance's many flaws, there are clear opportunities for public welfare benefits and taxpayer relief through reform. Reform could take two general forms: toward a more market-oriented form of crop insurance, or toward complete government takeover of crop insurance.

PRIVATIZATION If the federal government withdrew from the delivery of crop insurance, would the private sector fill the gap? Historically, private insurers were reluctant to write multiperil crop insurance because of the lack of information on which to base prices and insurers' concern about catastrophe losses. Today, private insurers would have much more information and could use reinsurance and other capital market devices to diversify the risk of catastrophe losses. On the other hand, private insurers might be reluctant to assume another catastrophe risk in the face of their catastrophe risk in other lines of insurance and concerns about the potential for government regulators to suppress rates.

To the extent that private insurers would stay in the market, it is reasonable to predict that there would be far fewer products and policy terms would be considerably less attractive to most purchasers. Producers subject to greater volatility in crop yields or areas where insurers were uncomfortable with the potential for catastrophic losses would have greater difficulty in obtaining insurance or at least pay much more for it. Of course, in assessing the need for government insurance, one needs to distinguish situations where agricultural operations make economic sense (but suffer from greater volatility or catastrophic losses) from operations that do not make economic sense because of the unsuitability of the land and environment to support the operations. With that in mind, privatization would likely have a negative effect on several of the objectives sought in federal crop insurance, e.g., maximizing the purchase of insurance coverage by producers. Hence, Congress is not likely to seriously consider full privatization.

Incremental privatization might be more politically feasible, depending on how it is approached. It would seem that producers who are paying more for government crop insurance than what they would for private crop insurance would be amenable to less costly coverage terms and/or would favor private insurance. Government regulators, state and federal, could make it easier for private insurers to sell crop insurance to such producers. Of course, this could have a negative effect on the overall financial results of the federal crop insurance program by encouraging "cherry-picking" by private insurers. This would either require greater taxpayer funding of subsidies or force government administrators and the Congress to increase the actuarial adequacy and fairness of the rates charged for subsidized products, areas, and producers. Obviously, the beneficiaries of current subsidies would oppose rate increases.

Incremental privatization also could be used to test the real need for government crop insurance. For any product and area, if the government premium charged would reflect full costs — expected claims costs, expense loadings, tax subsidies, and the cost of capital — then private insurers could be allowed to offer competitive products at rates that would fully cover their costs. Where a viable supply of private insurance would be established, the need for government insurance would evaporate. However, subsidies of government insurance would have to be eliminated for private insurance to become competitive. Again, the beneficiaries of current subsidies would be expected to oppose such moves.

Also, we note again that insurance is but one of several good risk management tools available to farmers. Others include diversification of products, forward contracting of crops, and many risk-minimizing farming techniques. With incremental privatization, producers might be induced to employ a more

There are clear opportunities for public welfare benefits and taxpayer relief through reform of federal crop insurance.

efficient array of risk management measures that would not be limited to insurance.

SOCIALIZATION Alternatively, crop insurance could be totally "retaken" by the federal government, with no underwriting of any risk by private insurers. This would bring crop insurance closer to the way in which flood insurance is handled. The primary advantage of this strategy would be to eliminate the incentive conflicts between the government and participating insurers and the associated transactions costs. However, the disadvantages of this move could greatly outweigh any savings in transactions costs.

In looking at other government insurers, one can find examples of both very good and very bad management. For example, some monopolistic state workers' compensation funds are well-managed and efficient and others are "walking disasters" propped up by their state governments. Indeed, federal flood insurance is the subject of considerable criticism for its subsidies and promotion of building in flood-prone areas. There is a strong possibility that a fully socialized crop insurance program would increase the amount of subsidies and other program abuses resulting in even greater inefficiency and waste. Hence, full socialization would be a risky move that we would not recommend.

RECOMMENDATIONS

If one could set political considerations aside, the federal crop insurance program could be greatly improved within the current framework. This still may be a more politically realistic strategy than full or incremental privatization. Legitimate risk management goals could be met without the deadweight costs of inefficiency borne by taxpayers. Such reforms would cut against the grain of decades of Congress favoring special interests.

Some might consider discussion of such reforms to be an esoteric exercise, but regardless of the political realities, the elements of good policy should be presented even if they fall on deaf ears. Below we discuss several potential reforms that are not mutually exclusive.

Reduce government costs by limiting the portfolio of products. There should be a thorough review of why the RMA needs to offer risk management tools that are readily available in private markets. Protection against price risk is the primary example. If farmers want to manage this risk, they have several very good private management options, such as crop diversification, Chicago Board of Trade futures, and forward contracting of crops with buyers.

The number of current products could be significantly reduced by replacing them with a more general comprehensive product designed along the lines of commercial multiple peril insurance policies used to cover a variety of businesses and types of operations. Such a product could utilize a standard framework and set of coverage terms, with modules inserted to meet the specific needs of a particular producer with associated risk-based pricing.

To its credit, the RMA has begun to take some steps to reverse the over-expansion of products. For example, it has proposed a "combination policy" like those used in the private property/casualty insurance industry. However, such proposals have not yet made it through the political gauntlet facing any such proposed program or rule change.

> Congress uses federal crop insurance as an implicit replacement for other farm subsidies like direct commodity support programs.

Set rates closer to actuarially adequate and fair levels. Promoting crop insurance through large price subsidies distorts production decisions. While it may be politically difficult to make the subsidies more direct and transparent, the advantages to the environment and efficient markets commend such a policy. At a minimum, crop insurance should have an expected cost that is at least as great as the expected gain. The economically preferable change would be to set rates to cover all costs — both expected losses and all associated expenses. A second best (but less politically difficult) reform would be to lower the target loss ratio to at least 1.0. Moreover, this overall target should be required for individual products and states. Otherwise, cross subsidies would creep back into the program and adverse selection would be worsened. This second-best reform would at least reduce the amount of subsidies and the gains from "gaming" insurance.

Allow for direct purchase of some products via the Internet. One insurer has experimented with online purchase of some crop products. Agents predictably lobbied successfully to have online purchase limited to the point that it was effectively killed.

Many farm operations are run by very astute business agents who use computerized tools to aid their business decisions. Online purchase of crop insurance is well within the capacity of these operators, especially those who are simply renewing coverages for which they have years of experience. Online purchase of crop insurance would reduce unnecessary agent commissions and allow for direct entry of underwriting information by the applicant into the computerized sys-

tems that now check for validity of coverage and computation of premium.

Eliminate risk bearing by crop insurers that market federal crop policies. The Crop Insurance Act of 1980 created the current "partnership" with private insurers in the hope that their skills could "jump start" slow growth in program participation. But, unlike the federal flood insurance program where private insurers simply distribute the product for a service fee, in the case of federal crop insurance the private insurers nominally bear underwriting risk. The defects of this model are obvious and substantial. First, the private insurers bear very little risk and in most years earn a high underwriting profit. Second, the surveillance and administrative burden of maintaining this fiction of risk bearing is substantial.

By using the flood insurance model, the RMA could simply allow qualified insurers to market and write crop policies on its behalf, with a 100 percent cession of the risk to the FCIC. The Standard Reinsurance Agreement between the FCIC and participating insurers could be eliminated. This would have obvious administrative savings to the RMA and some savings to insurers relieved of the task of risk selection to maximize their reinsurance recoveries. Reinsurance indemnity payments could in part be directed to increasing the service fee to insurers for product distribution. Regulatory and administrative oversight could be focused on monitoring and controlling servicing carriers' activities, as is the case with flood insurance and other government programs that provide 100 percent reinsurance.

Promote producer "self-insurance" accounts. Rep. Terry Everett (R, Ala.) has introduced the "Farm Risk Management Act," H.R. 5931, which would permit farmers to create tax-free, interest-bearing "risk management accounts" to cover crop losses as well as other risks such as increases in fuel or fertilizer costs. The proposed program would contain minimum and maximum limits for producers' contributions. The accounts would also entail a phase-in transition from crop insurance to self insurance.

The proposed bill has some attractive aspects that warrant consideration. From a producer's perspective, his contributions would be used to fund his losses and would not go into an insurance pool that he perceives as unfair to his interests. Also, it would promote producers' incentives to reduce risk and control their losses as "their money" would be used to cover any claims they would file. The use of self-insurance is common among other types of commercial firms (with sufficient resources) and, in fact, some agricultural producers already may practice some form of self-insurance, albeit without the favorable tax treatment offered in the proposed legislation.

There are several potential downsides to this kind of program, however. The amount of protection would depend on a producer's contributions and participants would lose the benefits of pooling the risk of large losses. The advantages of self-insurance diminish as the size and diversification of the producer decrease. This kind of program would also increase the adverse selection problem for standard crop insurance as low-risk producers would be more likely to find self-insurance attractive. Of course, the emigration of low-risk producers from the crop insurance program could increase the pressure to implement reforms that would improve its actuarial equity and efficiency.

CONCLUSION

While federal crop insurance is described as a risk management tool, Congress uses it as an implicit replacement for other farm subsidies like direct commodity support programs. To deliver those subsidies, the federal program strays far from the principles and practices of private insurance markets.

Selected, administratively easy reforms could transform crop insurance into a more legitimate risk management tool based on sound economic/insurance principles, cut deadweight inefficiency, and ease taxpayer and international criticism of bloated subsidies to American farmers.

We must acknowledge that most of the reforms we have suggested would likely decrease the demand for federal crop insurance because they would substantially reduce current subsidies and other concessions to producers. This would fly directly against the promotion of crop insurance to displace ad hoc disaster assistance. Arguably, if Congress could exercise true discipline by denying disaster assistance to uninsured producers, this could significantly increase producers' incentives to buy insurance. However, such a policy is probably politically unrealistic. One could also argue that it makes no sense to distort the crop insurance program in the vain hope that Congress will reduce ad hoc payments. Further, it is not clear that replacing disaster assistance payments with the expansion of the current crop insurance program would do much to improve the efficiency and equity of the full array of federal programs to help farmers cover the cost of crop losses. R

Readings

- *Agricultural Policy Reform in the United States*, edited by Daniel A. Sumner. Washington, D.C.: AEI Press, 1995.
- "The Bad Harvest," by Jerry R. Skees. *Regulation*, Vol. 24, No. 1 (Spring 2001).
- *The Economics of Crop Insurance and Disaster Aid*, by Barry K. Goodwin and Vincent H. Smith, Washington, D.C.: AEI Press, 1995.
- "The Federal Crop Insurance Program: Opportunities and Challenges," by Barry Barnett. *Agricultural Outlook Forum 2003*, presented February 20, 2003.
- "The Political Allocation of U.S. Agricultural Disaster Payments in the 1990s," by Thomas A. Garrett, Thomas L. Marsh, and Maria I. Marshall. Federal Reserve Bank of St. Louis working paper, 2003.
- "Reform's Stunted Crop," by David Orden. *Regulation*, Vol. 25, No.1 (Spring 2002).
- "Rethinking Disaster Policy," by Scott E. Harrington. *Regulation*, Vol. 23, No. 1 (Spring 2000).