



Payment Limitations and U.S. Farm Policy

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To an industry lobbyist, the role of government is to adopt programs and regulations that increase profits for the firms in the industry. Steel and timber lobbyists argue for higher taxes on imports; lobbyists for power generators argue for lower air quality standards; and farm lobbyists argue for higher support prices and stronger protection from imports. When government responds to lobbying pressure and adopts a new program or regulation, all firms in the industry typically have access to the benefits. And because the benefits often are in proportion to the level of production, the largest firms obtain the greatest benefit. Thus, President Bush's import taxes on steel benefit the largest steel companies the most. In agriculture, the best example of this principle is the sugar program. The program limits U.S. imports of sugar, thus costing U.S. consumers approximately \$1.4 billion per year through higher prices. According to a recent Heritage Foundation study, Alfonso and Jose Fanjul, owners of Flo-Sun, Inc., in Palm Beach, Florida, benefit by approximately \$65 million per year from producing sugar in Central Florida. Furthermore, they obtain an additional \$60 million per year because they are given a portion of the U.S. import quota, which allows them to import inexpensive Dominican sugar into the high-priced U.S. market.



That the benefits from government intervention in agricultural markets accrue to the largest farms troubles many who otherwise support farm subsidies as a means of ensuring adequate incomes for farm families. Making sure that farm families were not financially destitute was arguably the original purpose of farm programs in the 1930s. A large proportion of the U.S. population lived on farms and in rural areas, so program benefits flowed much more widely and uniformly than they do now. But as concentration of farmland ownership increased over time, so too did concern over the concentration of farm program benefits. Congress recognized this concern in the 1970 farm bill by placing limits on farm program payments.

The payment limitations issue was one of the most divisive debates of the 2002 farm bill. Computers, the Internet, and the Freedom of Information Act allowed the Environmental Working Group to create a web site that revealed that most payments went to relatively few farmers. The resulting publicity put supporters of farm programs on the defensive and

gave some impetus to those who argued for an overhaul of payments. The debate highlighted strong regional differences on the issue. Senators and representatives from the Midwest generally supported some tightening of limits. Those from the South generally opposed any new restrictions because southern crops receive relatively high per-acre payments.

Congress passed the new farm bill with few meaningful changes in payment limits. But one outcome of the debate was the appointment of a USDA commission to study the impact of payment limitations on agricultural producers and related entities. The commission report is expected in May or June. An examination of the economics and politics of payment limits will give some perspective to the outcome of the commission report. A brief review of the recent history of payment limits is a useful place to start.

CURRENT PAYMENT LIMITATIONS AND THEIR EFFECTS

The 1996 farm bill limited Production Flexibility Contract payments (commonly known as AMTA or

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"Freedom to Farm" payments), loan deficiency payments, and marketing loan gains. The limits were set for a "person," with a person being defined as an individual, limited liability partnership or company, corporation, or association that has a distinct and separate interest in the land or commodity and maintains separate responsibilities, accounts, and funds from others involved in the operation. For a more detailed description of payment eligibility requirements and limitations, see the Farm Service Agency fact sheet at <http://www.fsa.usda.gov/pas/publications/facts/payelig01.pdf>.

Payment limits were set at \$40,000 per person for AMTA payments and \$75,000 per person for the sum of loan deficiency payments and marketing loan gains. Persons had to be actively engaged in farming to be eligible. A husband and wife were considered as one person unless they requested to be considered as separate persons and met the exception requirements. Persons were limited to receiving payments on three entities. On the second and third entities, persons were limited to a 50 percent ownership share or less. This means that participants could have received up to \$80,000 in AMTA payments and \$150,000 in marketing loan benefits per year. In addition, Congress allowed unlimited use of commodity certificates or forfeiture settlements of marketing loans so that the \$150,000 limit could be circumvented.

The seriousness with which Congress viewed these payment limits is open to question, because once they started to actually bind, they were loosened. During the downturn in crop prices in the late 1990s and early 2000s, Congress authorized temporary changes to the payment limitation guidelines. The limit on marketing loan benefits was raised to \$150,000 per person for the 1999, 2000, and 2001 crop years. In combination with the three-entity rule, this

meant that participants could receive up to \$300,000 in marketing loan benefits. The limits on AMTA payments were not changed because AMTA payments were fixed. The additional marketing loss assistance payments made in these years were not subject to AMTA limits.

The 2002 farm bill authorizes a new countercyclical price program and allows updating of program bases for farm programs. Congress adjusted the structure of payment limitations to account for these changes. The combined limit on loan deficiency payments and marketing loan gains has been returned to \$75,000 per person. Direct payments are limited to \$40,000 per person. Countercyclical payments are limited to \$65,000 per person. The three-entity rule remains in effect, allowing participants to receive up to \$360,000 per year from these programs. Again, the use of commodity certificates or forfeiture settlement of marketing loans does not count against marketing loan benefit limitations.

Senator Charles Grassley introduced a bill in March 2003 that would cap direct payments at \$20,000, countercyclical payments at \$30,000, and the combination of loan deficiency payments, marketing loan gains, commodity certificates, and forfeiture of loans at \$87,500 per person per year. With the three-entity rule, total benefits would be constrained to \$275,000 per year. If passed, this bill—Senate Bill 667—would greatly increase the number of farmers affected by payment limits.

For example, for the current crop year, only cotton, rice, and peanut prices are low enough to trigger countercyclical payments. Countercyclical payments are projected to be 13.7¢ per pound for cotton and \$1.66 per hundredweight for rice. Given payment yields of 605 pounds for cotton and 48.15 hundredweight for rice (their national averages under the 1996 farm bill), program participants with 923 base acres in cotton or 957 base acres in

rice would hit the countercyclical limit. According to the 1997 Census of Agriculture, 10 percent of cotton farms and 4.5 percent of rice farms had over 1,000 acres. Under the Grassley proposal, 426 acres of cotton and 442 acres of rice would hit the limit. Census data shows that 28.8 percent of cotton farms and 19.9 percent of rice farms exceeded 500 acres. In addition, cotton and rice producers are the main users of commodity certificates. Their inclusion in the payment limitation for marketing loans would have a large impact on these crops. This might explain why senators and representatives from the South and California are so opposed to payment limits in general, and to Senate Bill 667 in particular.

DO FARM PROGRAMS INCREASE CONCENTRATION?

Advocates of stricter payment limits typically argue that making large payments to wealthy farmers simply is not fair and that adding to the wealth of large farmers enhances their ability to get even bigger. The fairness of the issue is a political judgment but we can say something about the conditions in which payment limits increase concentration in agriculture.

The ability to expand a farm operation depends on obtaining financing, which in turn depends on the prospective returns from the expansion and the current financial condition of the farm. If two farmers are interested in a tract of land and they have identical cost structures and management abilities, then prospective returns from investing in the tract of land will be identical, which suggests that each farmer's willingness to pay for the land is identical. But the ability to pay for the land may depend on credit availability. A lower cost of capital will give an advantage. In general, the cost of capital will depend on the riskiness of the venture. If one of the farm operations is much larger than the other, then the additional riskiness from expansion,

expressed as a percentage of current cash flow or net worth, will be much less. Thus, the cost of capital will be lower for the larger farmer. And, of course, enhancements of cash flow from government payments will only increase this advantage. In this sense, farm programs can increase land ownership concentration.

Of course, there are other reasons why large farmers may have an advantage in bidding for land. Increases in farm size often decrease per-acre costs. These economies of scale of the large farms can translate into greater willingness to pay for land. Advocates of payment limits argue that large farms should not be able to use government subsidies to help finance expansion. Rather, market returns should dictate any expansion or contraction. Strict payment limits would reduce the willingness to pay for land if a farm is already above the limit, thus giving an advantage to smaller farmers in competition for land. Adoption of lower payment caps would not necessarily result in a dramatic reduction in the price of land if there were many farmers below the payment cap. But the extra advantage that large farmers have in bidding on land would disappear.

ARE PAYMENT LIMITS CONSISTENT WITH FARM POLICY OBJECTIVES?

Most advocates of stricter payment limits argue that farm programs should be designed to maintain and strengthen the financial condition of farm families that own and/or operate small- to moderate-sized farms, as was their original intention in the 1930s. Supporting the wealth of large farmers does not seem consistent with this objective. Judging Congress by its actions rather than its rhetoric, we must conclude that the objective of the farm program has changed. After all, Congress makes payments when prices are low without regard to production costs, makes disaster payments when yields are low without regard to

prices received, and makes no account of the actual financial conditions of farm families before cutting checks. That is, there is little targeting of payments and absolutely no means tests. Moreover, it is well documented that average farm family income meets or exceeds non-farm family income. So, without a means test, most farm support flows to families that have higher-than-average incomes.

We cannot conclude, however, that maintaining farm income is not the objective of farm programs. As Senator Lugar of Indiana argues, the farm policy actions of Congress over the last 10 to 20 years are consistent with a policy objective of maintaining national net farm income at a particular level. Given that so few commodities receive subsidies, perhaps it is more accurate to say that Congress wants to support the farm income generated by a chosen few commodities.

Maintaining national or aggregate farm income is analogous to an industrial policy objective, because what matters is aggregate income in the industry. Any payment to any participant in the industry helps fulfill the objective. Maintenance of family income, on the other hand, requires an income means test, much like we have with food stamps and other social welfare programs. A recent USDA study showed that farm family income could be supported at a far lower cost than that of the current commodity programs.

Even if Congress were to decide to target program benefits to farm families in financial difficulty, it is not clear that this would be best accomplished through stricter payment limits. The most direct tool for achieving this policy objective is the tax code. For example, a government payment could be made to farm families that do not meet a certain income threshold.

What then can be said about arguments for and against payment

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Overcoming Information Barriers in Cattle Marketing

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Editor's Note: This article is adapted from a CARD briefing paper, "Quality Management and Information Transmission in Cattle Markets: A Case Study of the Chariton Valley Beef Alliance." The full text of the briefing paper is available at www.card.iastate.edu.

Beef consumption has declined steadily over the last two decades, both in total quantity and as a share of U.S. meat consumption. Reductions in the price of pork and poultry and health concerns about the effects of red meat consumption account for much of this trend. However, relative improvements in the quality and consistency of pork and poultry products may also be a factor. Perhaps it is no coincidence that the beef industry has trailed pork and poultry in adopting methods for vertical coordination among the various production stages from farm to market. Contract arrangements and vertical linkages—*alliances among producers, processors, and retailers*—are common in pork and poultry production. Beef production, on the other hand, mainly is still coordinated through traditional market structures.

Whether vertical coordination of the kind observed in pork and poultry markets is necessary for further improvement in beef quality is a question that beef industry participants currently are trying to sort out. The beef industry has adopted a variety of novel marketing practices in recent years to improve quality and reduce overall production costs. At one extreme are recent attempts to fully integrate the beef production process,

with a single firm coordinating genetic selection, feeding practices, slaughter and fabrication, and marketing. Long-term marketing arrangements between feedlots and packers represent a somewhat less extreme form of integration and have been used in some production areas for many years. Interestingly, the most widely adopted change in recent years—so-called grid pricing—represents an attempt to improve market coordination through more sophisticated quality-based pricing mechanisms. In this case, and in contrast with direct vertical integration, there are essentially no formal vertical linkages; instead, the process attempts to improve vertical coordination through the communication of precise signals about the relative value of various carcass attributes.

Behind all these efforts is at least one common objective: to align incentives so that quality improvement is in everyone's best interest. It seems that many of the traditional methods for marketing live cattle (both feeder and finished cattle) are not designed with this objective in mind. In particular, in traditional marketing, the flow of production-relevant information across the various stages of beef production is significantly restricted.

CATTLE MARKETS AND INFORMATION TRANSMISSION

The production process for beef cattle is typically characterized in terms of a number of distinct stages starting with genetic selection and breeding, then rearing and weaning, and finally fattening to market weight ("finishing") and slaughter. Specialization in cattle markets to some extent mirrors each of these stages: seedstock firms control genetic selection and breed development; ranchers manage cow and calf herds and raise young calves through the weaning stage; feeders raise animals from weaning to market weight; and packers slaughter



and process live animals. Although there are many variations on this structure of specialization, for the moment we will focus on this particular arrangement.

We can characterize efficient decision making at each production stage, subject to a given set of growing conditions, breed types, feed costs, other market parameters, and other pieces of production-relevant information. For instance, a feeder's nutrition and health maintenance program for a given animal (or lot of animals) might conceivably depend on nutrition and treatment histories during the rearing and weaning production stages, thus creating the need for information transmission from ranchers to feeders. It may also be important to transmit information in the reverse direction, from feeders to ranchers. For example, ranchers need information on feeders' management procedures, finishing performance, and post-slaughter carcass quality in order to evaluate past decision making.

While sharing this kind of information may seem like an obvious requirement for efficient decision making in beef production, in fact it rarely occurs. Tracking, recording, and transmitting information is

costly. If the costs are high enough, the transacting parties may choose to either forgo information transmission entirely or may seek some substitute information that is not quite as detailed but is less costly to obtain. In the context of markets for feeder calves, many feedlots employ order buyers to visually inspect calves for traits that are appropriate to the particular operation. However, any such visual inspection, no matter how experienced the buyer, is an imperfect substitute for perfect transmission of all production-relevant information. Specifically, vaccination, nutrition, and treatments histories cannot be observed. Feedlots assume a worst-case scenario, often expecting the need to readminister treatments, and they therefore reduce bid offers. Similar problems arise in the transmission of information from packers to feeders and ranchers.

THE CHARITON VALLEY BEEF ALLIANCE

The Chariton Valley Beef Alliance (CVBA) is a group of 350 southern Iowa cattle producers who are attempting to overcome these problems. The CVBA has been in place since early 1998. The alliance arose because area packers increasingly used grid-pricing arrangements and the producers wanted to learn to produce, sort, and market cattle more effectively under these arrangements. Carcass data collection and source verification are two of the alliance's primary activities.

CARCASS DATA COLLECTION

Grid marketing involves the pricing of individual animals (rather than lots of animals) based on the measurement of various carcass-quality attributes. Yet, animal-specific carcass measurements are rarely transmitted back to the feeders and cow-calf producers who deliver under these arrangements. Perhaps the most important activity of the CVBA is to facilitate and coordinate this transmission. Producers interested

in obtaining carcass data pay a service fee to the CVBA (\$3–\$8 per head). The CVBA then coordinates with a third party to physically carry out carcass measurement during slaughter, recording them in electronic form for access by the relevant producer. Packers cooperate in this process by allowing third-party access to the slaughter floor for traits measurement (beyond those reported in USDA yield and quality grades). The CVBA additionally provides support for accessing and interpreting the relevant data. This analysis allows growers to make better marketing, nutrition, and genetic decisions.

While it might seem a small matter to distribute animal-specific carcass-quality data to producers (given that prices are based on this data), in fact it is quite complicated and costly. As we noted, doing so adds \$3 to \$8 dollars per head to the cost of production. Iowa State University Extension estimates a gross margin of roughly \$15 per head for Iowa feedlots.

SOURCE VERIFICATION

Assessing quality in markets for feeder cattle is a notoriously difficult task. USDA quality grades do exist for feeder cattle, but they are rarely used. Instead, most quality assessment is accomplished through visual inspection by experienced buyers. Of course, many of the important quality characteristics of feeder calves are not fully expressed until the calves have been fattened and readied for slaughter. One means of making this process more objective is to provide third-party verification of genetic and health characteristics of feeder cattle. In addition to providing an objective measure of quality, source verification provides feedlots with accurate information on the status of medical treatments that have occurred before the point of sale and on the genetic composition of animals in a given lot. In addition, the CVBA's source verification program includes agreements by

those receiving information on feeder cattle to return information on carcass quality. Information thus flows in both directions.

AN EVOLVING SYSTEM

Vertical integration can be defined in many ways, and it is not clear what specific type of arrangement may be necessary to further improve coordination. Whatever the type, however, the feature that seems most important in cattle markets is the establishment of a long-term (and potentially exclusive) relationship among the transacting parties.

While clearly beneficial in some respects, long-term commitments (that is, vertical integration) also entail costs. In particular, the parties to such an agreement limit their use of markets, which offer greater flexibility in procurement and sourcing options, enhanced price discovery, and arguably higher-powered incentives for cost-reducing efforts. "Firms" inevitably involve elements of bureaucracy that can lead to higher overall production costs. Activities by organizations such as the CVBA therefore can be viewed as attempts to achieve the degree of coordination and information transmission observed in firms without sacrificing the benefits associated with market institutions. Time will tell whether such an outcome can be achieved. ♦

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Iowa's Agricultural Situation

Analysts watch for high prospective corn plantings and possible record biotech acres

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PLANTING INTENTIONS

The March 31 USDA *Prospective Plantings* report lowered the national corn acreage and slightly raised the soybean acreage relative to the market expectation. According to the report, U.S. growers plan to sow 79 million acres of corn in 2003, which is unchanged from the previous year's level and close to the five-year average. Most states in the Great Plains region reported a decrease in the intended corn plantings because of possible drought conditions and higher fertilizer and energy prices. This decline is offset by increases in prospective corn plantings by growers in the eastern Corn Belt who shifted into soybeans last year because of the wet season. U.S. soybean producers are projected to plant 73.2 million acres, down 1 percent from 2002. The expected soybean acreage is the lowest in the last five years and is slightly lower than the five-year average of 73.6 million acres. Counteracting the national trend, soybean acreage is expected to increase in the northern Great Plains as well as some areas in the south.

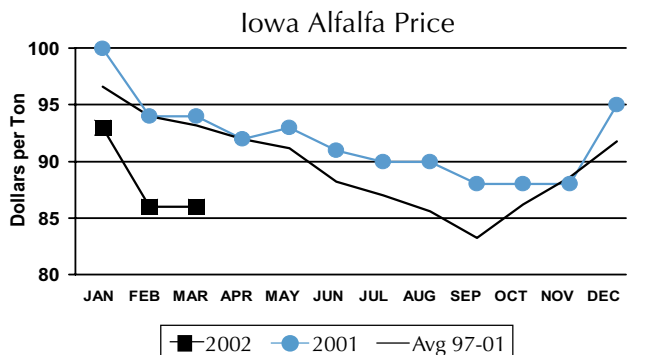
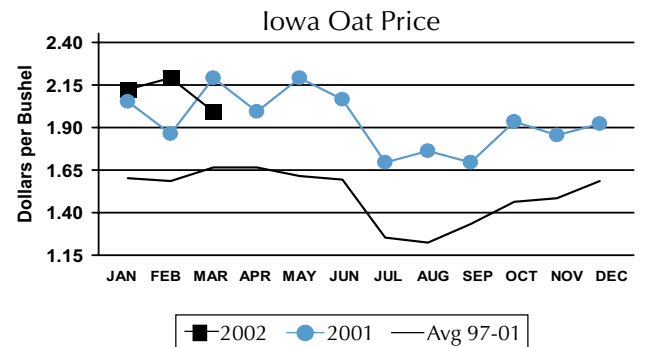
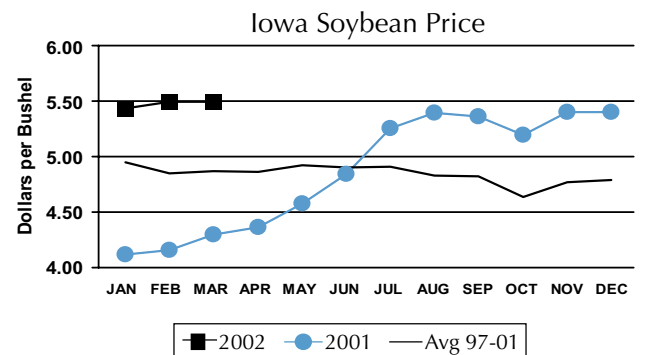
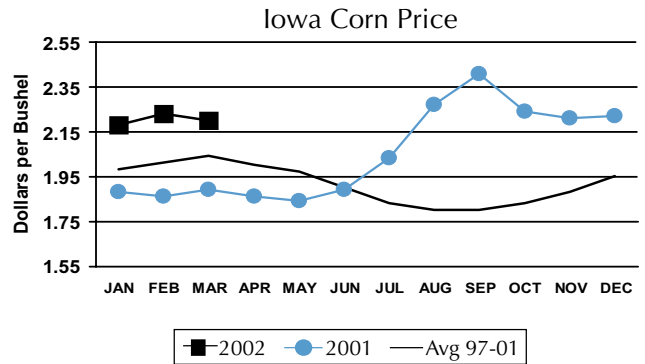
Traders were astounded by the higher-than-expected prospective corn acreage reported. While market analysts cite input costs, crop rotation patterns, and changes in loan rates as potential motives behind the planting intentions, they point out that the final plantings likely will be influenced by future developments. According to the latest USDA *Grain Stocks* report, national corn and soybean stocks were estimated at 5.13 and 1.2 billion bushels as of March 1, down 11 and 10 percent respectively from last year's levels. Because of increases in corn fed to livestock and used for ethanol, domestic use of corn was 4 percent higher this winter than a year ago. Corn futures prices jumped after release of the positive news in the reports but subsequently leveled off in view of disappointing corn exports. Soybean prices remained high, in spite of the negative news contained in both reports, mostly owing to strong export demand running well ahead of USDA's export projections and to continuing delays in shipments of the large South American crop.

In Iowa, intended corn and soybean acreages for 2003 are unchanged from last year's levels at 12.3 and 10.4 million acres respectively.

BIOTECH ACRES

According to the report, the prospective acres sown to crop varieties developed using biotechnology attained a record share of 38 percent, up 6 percentage points from 2002.

Nationwide, the split of biotechnology varieties present in the 2002 corn crop was 22 percent to *Bacillus thuringiensis* (Bt) insect-resistant corn, 9 percent to herbicide-resistant corn, and



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Iowa Cash Receipts Jan. – Dec.

	2002	2001	2000
(Million Dollars)			
Crops	5,979	5,406	4,979
Livestock	5,179	5,936	5,912
Total	11,158	11,342	10,892

World Stocks-to-Use Ratios

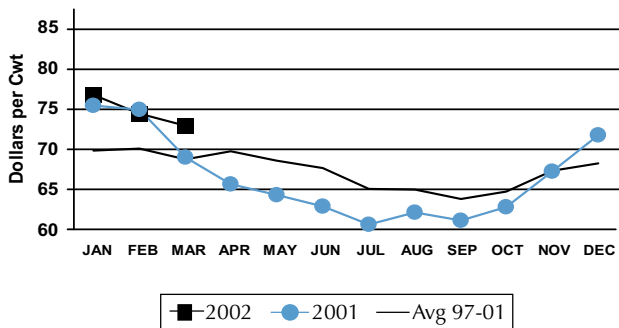
	Crop Year		
	2002/03 (March Projection)	2001/02 (Estimate)	2000/01 (Actual)
(Percent)			
Corn	17.22	21.36	25.42
Soybeans	15.93	17.40	17.83
Wheat	29.03	34.55	34.93

Average Farm Prices Received by Iowa Farmers

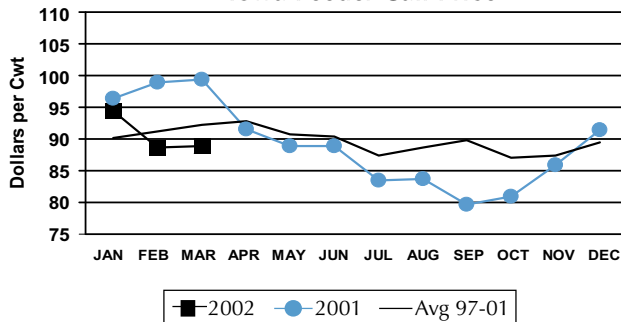
	March* 2003	Feb. 2003	March 2002
(\$/Bushel)			
Corn	2.20	2.23	1.89
Soybeans	5.50	5.50	4.29
Oats	2.00	2.20	2.20
(\$/Ton)			
Alfalfa	81.00	81.00	89.00
All Hay	78.00	79.00	86.00
(\$/Cwt.)			
Steers & Heifers	73.00	74.50	69.00
Feeder Calves	89.30	89.00	100.00
Cows	37.50	38.00	41.60
Barrows & Gilts	35.60	35.20	36.70
Sows	27.10	26.20	33.10
Sheep		46.60	31.70
Lambs		87.20	65.00
(\$/Dozen)			
Eggs	0.44	0.36	0.47
(\$/Cwt.)			
All Milk	11.20	11.70	12.60

*Mid-month

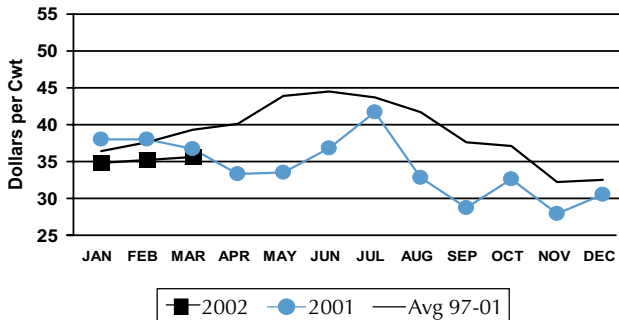
Iowa Steer and Heifer Price



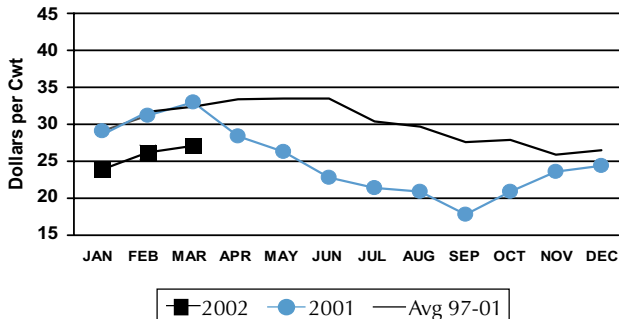
Iowa Feeder Calf Price



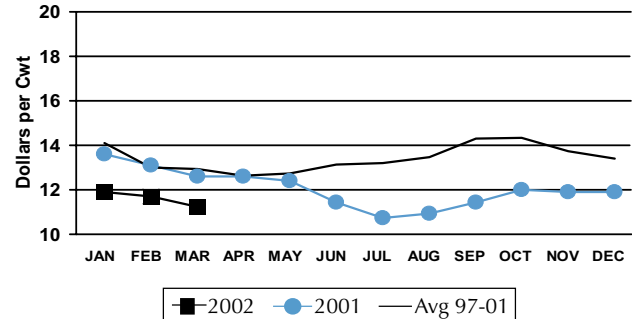
Iowa Barrow and Gilt Price



Iowa Sow Price



Iowa All Milk Price



Disaster Assistance and Crop Insurance: Time for a New Approach?

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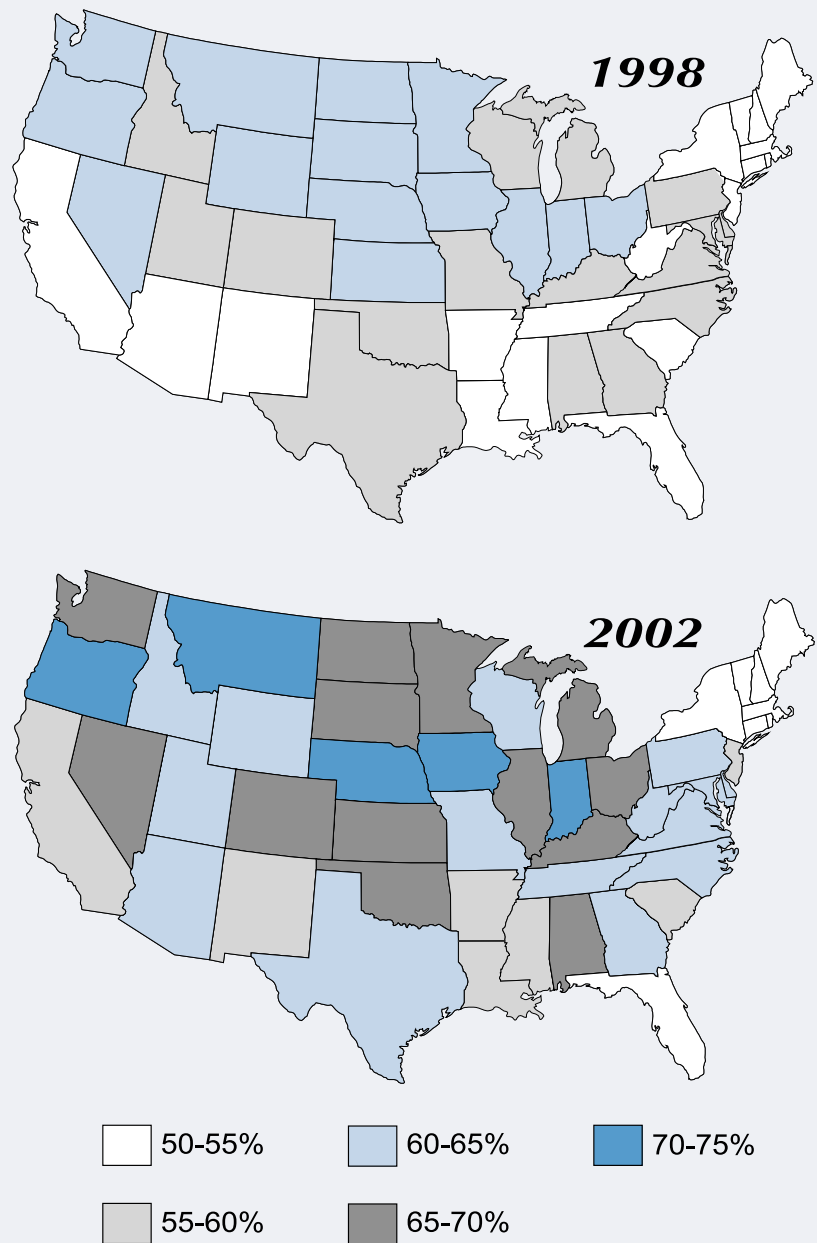
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Congress has once again passed a disaster assistance program for farmers. This time the drought of 2001 and 2002 was the rationale for the legislation. (For a review of the build-up to the current disaster aid package, see “Disaster Assistance: How Best to Pay When Nature Has Her Way,” in the Fall 2002 *Iowa Ag Review*, available at www.card.iastate.edu/iowa_ag_review/fall_02/article4.html.) In 1998, 1999, 2000, and 2001, the rationale was low market prices. The current disaster assistance program pays crop farmers if their harvested yield was less than 65 percent of the average yield. The cost of the crop assistance package is estimated at about \$2.1 billion. While this might seem relatively modest, it is important to recognize that the crop insurance program will pay out more than \$4 billion in 2002, and it paid out almost \$3 billion in 2001.

What is it about the crop insurance program that makes it an inadequate assistance tool? After all, Congress passed the Agricultural Risk Protection Act (ARPA) in 2000 to better enable farmers to withstand financial downturns. Did ARPA have its intended effects?

Crop insurance works by making up the difference between harvested yield (for traditional Multiple Peril Crop Insurance) or harvested yield times market price (for revenue insurance) and a farmer’s chosen in-

Average Crop Insurance Coverage Levels for 1998 and 2002



insurance guarantee. The maximum guarantee available includes a 15 percent deductible, and no insurance payout is made until the loss covers the deductible. Advocates of ARPA felt that if farmers would reduce their deductibles, then the additional indemnities that would flow in difficult years would enable Congress to avoid passing annual disaster assistance.

The easiest way to get somebody to buy more of something is to lower its price, and that is what Congress did with crop insurance. Farmers have discovered that the amount of subsidy available to them on a per-acre basis increases under ARPA when they purchase a lower-deductible policy, so naturally, farmers moved in that direction.

The top map shows that the average coverage level—which is simply 100 percent minus the deductible—in every state before ARPA (1998) was less than 65 percent, which means that the average deductible in every state was greater than 35 percent. The bot-

tom map shows that ARPA increased the average coverage level in every state. Across all states, the average coverage level increased from less than 59 percent to almost 67 percent. That is, ARPA had its intended effect.

Farmers have amplified their insurance coverage since 1998 by about \$9 billion, through increasing both insured acreage and coverage per acre. The taxpayer cost of this increased coverage is about \$1 billion per year. Is this money well spent?

On the surface, we might conclude that the billion dollars per year is wasted. After all, why spend a billion if Congress is still going to bail farmers out with a disaster program? But maybe a more telling question is, How much would Congress have given farmers if ARPA had not been in place? Perhaps the additional coverage farmers purchased under ARPA acted as a restraint on Congress's propensity to give farmers assistance. Conceivably crop farmers would have received \$5 billion rather than \$2.1

billion. If so, then taxpayers came out ahead by \$1.9 billion because of ARPA!

Regardless of what kind of "spin" is used to describe the role of ARPA and disaster assistance programs, we can only conclude that ARPA has failed to wean farmers completely from federal disaster assistance. Perhaps it is time to throw in the towel and do away with federally subsidized crop insurance. Surely there must be a less bureaucratic way of providing financial assistance to farmers when regional disasters hit. After all, we have found a way to pay farmers when national prices fall. Why not find a way to pay farmers when regional yields fall? As shown in the accompanying sidebar, a combination of a new federal countercyclical payment program that covers widespread yield disasters and individualized add-on coverage that is privately provided could offer a high level of risk protection without the problems of our current system. ♦

An Alternative to the Current System

The combination of a federal disaster program and privatized crop insurance is workable. The federal disaster program would cover widescale agricultural disasters. These disasters are what prevent privatized crop insurance from working today. A single agricultural disaster would wipe out most private companies. With a federal disaster program in place, private crop insurance would provide coverage that would pay any losses that exceed the federal payment. Farm-

ers would decide if the federal protection was adequate for their needs or whether the additional private coverage was worth the cost, which they would pay in full.

The current crop insurance program costs roughly \$3 billion per year. A federal disaster program could pay farmers when county revenue falls below a certain percentage of average county revenue for a crop within a year. We estimate that the cost of this program at a 95 percent payment trigger level would average

\$2.65 billion per year. The federal program could be designed to cover losses at the state or crop-reporting district level, which would lower costs, or it could provide coverage for yield losses. With a stable federal program in place, private insurers could determine adequate insurance rates, and producers would have plenty of opportunities to address their risk management needs.

Iowa's Agricultural Situation
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2 percent to a stacked gene variety having both insect and herbicide resistance. Statewide, 41 percent of the 2002 Iowa corn crop was genetically modified: 31 percent was Bt corn, while 7 percent was herbicide resistant and 3 percent was a stacked gene variety. The 2003 intentions survey shows nationwide that corn producers intend to increase their Bt corn plantings by 4 percentage points, while the shares of their acres planted to herbicide-resistant varieties remain unchanged, and stacked gene varieties will increase by only 1 percentage point. Iowa growers intend to sow 47 percent of their corn acreage to genetically modified varieties. The share of intended Bt corn increases to 38 percent, the share of stacked gene corn increases to 4 percent, and the share of acreage planted to herbicide-resistant corn falls to 5 percent.

Nationally, the intentions for 2003 show continued growth for herbicide-resistant soybeans, with 80 percent of the soybean crop allocated to biotechnology varieties compared with 75 percent last year. Iowa soybean producers indicate that 82 percent of the new crop will be herbicide resistant compared to 75 percent in 2002.

LIVESTOCK

The March 28 USDA *Hogs and Pigs* report indicated an expected de-

cline in hog numbers and the continuing liquidation of the breeding herd. The inventory on U.S. farms is lowered to 58.1 million head of hogs, down almost 2 percent from both a year ago and last quarter. The breeding herd, at 5.96 million head, is 4 percent below last year's level and 1 percent below the level of the last report. The March inventory of market hogs, at 52.2 million head, is 2 percent below last year and 3 percent below the December inventory, which is indicative of lower marketings this spring and summer compared with last year. Consistent spring and summer farrowing intentions reported by U.S. hog producers are both 3 percent below the actual farrowings at these periods last year, suggesting that marketings this fall and winter will also fall considerably lower than last year's levels.

However, the report had little positive impact on prices, as markets waited for further symptoms of moderating hog slaughter in light of the recent discrepancy between the actual slaughter numbers and the numbers calculated from the official reports. Market observers speculate that the projected lower beef and poultry production is likely to help sustain the hog price rebound. Pork stocks in cold storage continue to exceed last year's levels but are expected to decline in the future. Having achieved significant rates of growth in pork exports, the pork industry is now more exposed

to volatile international markets, as well as foreign meat safety regulations, trade barriers, foreign competition, and freight costs. Accounting for changes in productivity, strong demand for bacon, and new pork products, prices are expected to reach levels profitable for producers this summer before declining in the fall, according to some estimates.

In Iowa, the inventory of market hogs was estimated at 14.9 million head, down 1.3 percent from March 2002, a bit lower than the nationwide level. However, the state's breeding herd showed a significant drop of 7.1 percent, indicating a higher number of out-of-state feeder pigs.

FARM INCOME

Statewide cash receipts, at \$11.16 billion, fell slightly in 2002 compared with last year's receipts but are nearly on a par with the five-year average. While the revenues in the crop sector rose 11 percent, cash receipts for livestock fell 14 percent below last year's income. The increase in crop cash receipts has been reflected in rising cash rental rates for cropland. Iowa cropland rates averaged \$120 per acre, up \$3 from last year. Fiscal year government payments for Iowa fell from \$2.302 billion in 2000 to \$1.972 billion in 2001, mostly because higher grain prices reduced payments under marketing loan programs. ♦

Payment Limitations
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limits? Opponents and proponents of stricter payment limits will argue endlessly about the fairness of large payments to farmers. But this argument misses the point. Just because large payments are made to individual farmers does not mean that the objectives of farm programs are not being met. Congress has demon-

strated repeatedly that it wants to subsidize a particular subset of U.S. crops. And it is difficult to subsidize a heterogeneous sector of the economy without bestowing the largest portion of subsidies on the largest firms in the sector. Furthermore, it could be argued that farm programs exist precisely because they make large payments to wealthy farmers. That is, the potential for large subsidies gives the largest farmers a rea-

son to lobby Congress to continue farm programs.

So, what we are left with is a political decision about who gets what portion of farm program benefits and the purpose of the programs. Given that current farm policy works like an industrial policy for chosen commodities, there is no economic efficiency rationale for payment limits. Political and equity concerns will decide the issue. ♦

Meet the Staff: Silvia Secchi

Silvia Secchi came to CARD after obtaining her first economics degree in Italy and a master's degree in agricultural economics at the University of Reading in the United Kingdom. She came to Iowa State University to pursue her doctorate and became a graduate assistant for CARD director Bruce Babcock. When a position opened up in the Resource and Environmental Policy (REP) Division of CARD, it seemed a perfect fit for the newly graduated Dr. Secchi. "I am really interested in biology," she says, "and if I had not gone into economics, I would have become a biologist. Environmental economics is a great way to combine the two disciplines."

In the REP division, Silvia works as part of a team of scientists and specialists under the direction of division head Cathy Kling. She says she has found the environment at CARD to be supportive. "I think it's great that there are so many high-quality researchers in the REP division, she says, "and Cathy really deserves credit for this."

Silvia complements the economics modeling of her colleagues on such issues as water quality related to agriculture by making sure the models are grounded in the realities of the natural sciences, and by managing spatial issues and Geographical Information Systems analysis. Currently, the division is working on a

large-scale project to model the effects of agricultural practices on the water quality of the Upper Mississippi and Gulf of Mexico. "We are also adapting these large-scale models to smaller-scale watersheds to analyze problems of water quality in several watersheds in Iowa," she says.

Another project, in collaboration with Iowa State University professor of economics Joe Herriges, attempts to assess how residential property values in rural Iowa are affected by the residences' proximity to livestock facilities. This kind of scientific study is an example of how research at CARD draws from other disciplines on campus in order to address high-profile problems both within and outside the state of Iowa. Silvia says this multidisciplinary approach is important to her. "Environmental and resource economists really need to have some grasp of the natural sciences or their modeling makes no sense," she says, "so I am glad there are so many people here, both within CARD and across campus, who know about the way the natural world works. I really like working with them."

Silvia's graduate work at CARD included analysis of antibiotic resistance issues, and she says the topic continues to interest her. "As we use antibiotics to improve our health, we cause bacteria resistant to antibiotics to develop," she says,



Silvia Secchi

"and so we reduce the efficacy of future antibiotic treatment. The more antibiotics we use today, the less effective they'll be in the future." Silvia says that the problem has implications for research and development in public health, for livestock production (since antibiotics are used on livestock, too), and for international agreements (since bacteria move across state and national boundaries).

Silvia is originally from the Italian island of Sardinia. She met her husband, Steve, at Iowa State when they were both students. The couple is expecting their first child, a girl, in June. She says that "BB" (before baby), she and her husband enjoyed traveling, birdwatching, and shopping for antiques. But her pregnancy may slow her down a bit this spring. "These days I am not very mobile, so outside of work I enjoy cooking, playing with my cats, or reading a novel." ♦

Recent CARD Publications

WORKING PAPERS

- Carrquiry, Miguel, Bruce A. Babcock, Roxana Carbone. Optimal Quality Assurance Systems for Agricultural Outputs. March 2003. 03-WP 328.
- Corrigan, Jay, Catherine L. Kling, Jinhua Zhao. The Dynamic Formation of Willingness to Pay: An Empirical Specification and Test. March 2003. 03-WP 327.
- Hayes, Dermot J., Sergio H. Lence, Andrea Stoppa. Farmer-Owned Brands? March 2003. 02-BP 39 (Revised).
- Hennessy, David A., John Miranowski, Bruce A. Babcock. Genetic Information in Agricultural Productivity and Product Development. April 2003. 03-WP 329

- Kurkalova, Lyubov A., Catherine L. Kling, Jinhua Zhao. Green Subsidies in Agriculture: Estimating the Adoption Costs of Conservation Tillage from Observed Behavior. April 2003. 01-WP 286 (Revised).
- Kurkalova, Lyubov A., Catherine L. Kling, Jinhua Zhao. Multiple Benefits of Carbon-Friendly Agricultural Practices: Empirical Assessment of Conservation Tillage. February 2003. 03-WP 326.
- Roosen, Jutta, David A. Hennessy. Testing for the Monotone Likelihood Ratio Assumption. February 2003. 03-WP 325.

MATRIC RESEARCH PAPERS

- Barone, Michael J., Thomas E. DeCarlo. Emerging Forms of Competitive Advantage: Implications for Agricultural Producers. March 2003. 03-MRP 5.
- Lence, Sergio H., Sanjeev Agarwal. Assessing the Feasibility of Processing and Marketing Niche Soy Oil. February 2003. 03-MRP 6.

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