Emerging Issues in Agricultural Law*

—by Neil E. Harl**

Agriculture in the United States faces four major problems in the new century—(1) formulation and reformulation of price and income policy, including meaningful limitations on farm program payments; (2) the structural transformation of the agricultural sector; (3) consumer acceptance of genetically modified foods; and (4) bioterrorism. All four problem areas are discussed in papers posted at www.econ.iastate.edu/faculty/harl. The discussion following focuses only on the more pressing aspects of price and income policy.

As with most sectors of the world economy, agriculture in recent years has been a sector of great change. Closed markets are giving way to free trade, open democratic systems with decentralized decision making are gaining ascendancy over despotic regimes, technology is revolutionizing every facet of production and distribution and competition is assuring that consumers everywhere are elevated to a high pedestal faintly reminiscent of the kings of old.

It is assumed that the governing policy goals for the food and agriculture sector will continue to include—(1) availability of an abundant supply of food, at reasonable prices; (2) maintenance or enhancement of the productivity and environmental integrity of natural resources; and (3) a prosperous and productive economic climate for producers (including family farmers).

A. Payment limitations under the 2002 farm bill


   a. Under the 2002 Act, the total direct and counter-cyclical payments to a “person” for corn, grain sorghum, barley, oats, wheat, soybeans, minor oilseeds, peanuts, cotton and rice per crop per year may not exceed $40,000 and $65,000, respectively. Act §§ 1103, 1104. The legislation does not impose a limit on the use of commodity certificates (which effectively avoids the payment limitations of $75,000 on marketing benefits) or forfeitures of commodities under loan to the federal government. Act § 1603(a), amending 7 U.S.C. § 1308. The 2002 legislation provides for a separate marketing loan gain and loan deficiency payment limitation for peanuts, wool, mohair and honey of $75,000 per person. Act § 1603(a), amending 7 U.S.C. § 1308.

   b. Key policy questions—

      (1) An important issue is whether government program payments should be viewed as an entitlement for producers on the basis of a uniform amount per unit of output for a particular commodity regardless of size or scale. The fact that payment limitations have existed for three decades suggests strongly that Congress does not view farm program payments as an entitlement but rather as a supplement to farm income for family-sized operations.

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(2) It is also readily apparent that the current level of farm program payments is not sustainable in the current fiscal climate. As reductions are made in farm program spending, it is important that payments be maintained, insofar as possible, for family-size operations.

(3) It is our view that payment limitations should be—

(a) meaningful and not easily avoided;

(b) transparent to producers and the general public; and

(c) administrable at a reasonable cost.

(4) Under the architecture of the current farm bill, with payments authorized in the form of direct payments, counter-cyclic payments and payments linked to the repayment of CCC loans, payment limitations should be set at a level of income support and supplementation for family-size operations.

(a) There is no public interest in using federal funding to provide benefits in excess of a reasonable level of income support and supplementation for family-sized operations.

(b) If effective payment limitations are not imposed, political support for federal farm program payments will surely decline in the long term.


(1) Under existing law, a “person” is defined to include an individual, corporation, joint stock company, association, limited partnership, limited liability partnership, limited liability company, irrevocable trust, revocable trust combined with the grantor of the trust, estate or charitable organization, including any such entity or organization participating in the farming operation as a partner in a general partnership, a participant in a joint venture, a grantor of a revocable trust or as a participant in a similar entity. 7 C.F.R. 1400.3. See 11 Harl, Agricultural Law § 91.03[1][e][ii][A] (2003).

(a) To be considered a separate person, an individual or entity must—

[1] have a separate and distinct interest in the land or the crop involved,

[2] exercise separate responsibility for the interest, and

[3] maintain funds or accounts separate from that of any other individual or entity for the interest. Id.

(b) A cooperative association of producers which markets commodities for producers is not considered to be a person with respect to the commodities marketed for the producers. Id.

(c) The concept of a “permitted entity” is used to deal with patterns of multiple ownership and with layers of ownership in entities. 7 C.F.R. § 1400.3.
[1] Individuals or entities eligible to receive payments subject to payment limitations must designate annually a “permitted entity” which would be eligible to use their payment limitation.

[i] A “permitted entity” is an entity designated annually by an individual who is eligible to receive payments which are subject to the payment limitation provisions. Id.

[ii] Each individual or entity holding a “substantial beneficial interest” in more than the number of permitted entities for which a contract or agreement has been submitted to FSA is to notify the FSA office in each county in which they conduct a farming operation as to which entities are considered as permitted entities. 7 C.F.R. § 1400.301(b).

[iii] The remaining entities in which the individual or entity holds a substantial beneficial interest are subject to reductions in the payment limitation. 7 C.F.R. § 1400.301(d).

[2] A person receiving farm program payments may not hold, directly or indirectly, “substantial beneficial interests” in more than two entities engaged in farm operations that also receive payments as separate persons. 7 U.S.C. § 1308-1(a)(1). See 7 C.F.R. § 1400.301(a).

[i] The limit is raised to three interests if the person does not receive farm program payments as a separate person. 7 U.S.C. § 1308-1(a)(1); 7 C.F.R. § 1400.301(a).

[ii] “Substantial beneficial interest” is defined as an interest which, directly or indirectly, results in an ownership interest of 10 percent or more. See 7 U.S.C. § 1308-1(a)(2); 7 C.F.R. § 1400.3. USDA, on a case-by-case basis, can apply the rules to a percentage of less than 10 percent to insure that the purpose of the limitation is achieved. Id.

(2) The Commission on Payment Limitations in Agriculture concluded that the rules currently in effect for determining the number of "persons" in an operation eligible for payments, and rules that differ by type of legal organization of the operation, should be replaced with a system of direct payment attribution to individuals in a farming operation. The Commission was concerned that the flow of payments from the government to and through all entities under current rules is not transparent and creates incentives for producers to organize their operations for payment limitation purposes. Report, p. 12. Attributing payments to individuals reduces those concerns.

(a) The Commission identified two alternatives for implementing direct attribution—

[1] All payments could be attributed directly to individuals and subject to the payment limits for individuals. Entities (such as a trust or corporation) could still qualify for and receive payments. For example, a trust that owns and share rents land would continue to be eligible and receive payments. However, payments to an entity would be limited by the number of individuals actively engaged in farming.

As an example, an individual could receive up to $40,000 in direct payments made straight from the government to the individual. If the individual is in multiple
entities, and is actively engaged in farming in these entities, the individual could receive up to an additional $40,000 in direct payments made to the entities and attributed through to the individual.

[2] All payments could be attributed directly to an individual, but the individual would have separate limits for payments received directly from the government and from payments received through entities. The existing limits would be combined into one limit per individual. As in the alternative above, entities (such as a trust or corporation) could still qualify for and receive payments.

For example, a trust that owns and share rents land would continue to be eligible and receive payments. However, all payments to entities would be tracked through the entities and attributed to the individuals in the entity who are actively engaged in farming.

(3) Eligibility for government payments currently requires that a person be actively engaged in farming with respect to a farming operation which requires that the individual make a significant contribution of capital, equipment or land, or a combination of capital, equipment or land; and active personal labor or active personal management or a combination of active personal labor and active personal management. 7 C.F.R. § 1400.202.

(a) The Commission was concerned that some individuals become eligible for payments even when their active personal management is not contributing in a meaningful way to the farming operation. This occurs because of the difficulty in measuring management and determining compliance. Thus, the criterion of providing management may present a very low threshold for qualifying for payments, thus facilitating the creating of “persons” for payment limitation purposes.

(b) This concern could be addressed, as the Commission states, by combining the active personal labor or management requirement into a single criterion—active labor and management. Active personal labor and management should be explicitly defined to make this criterion more objective and measurable. The Commission discussed but did not recommend, several possibilities including the “material participation” standard which originally related to liability for self-employment tax for those carrying on a trade or business.

(4) As noted, at the present time, there are four procedures for obtaining marketing benefits (loan deficiency payments, marketing loan gains, CCC loan repayments with commodity certificates and forfeitures of the commodity to the Commodity Credit Corporation). See Act § 1603(a), amending 7 U.S.C. § 1308. Gains from two of the procedures, those from CCC loan repayments with commodity certificates and forfeitures of the commodity to the Commodity Credit Corporation, do not count against the $75,000 payment limitation for marketing loan benefits. Id. Those gains reached a peak in 2001 when gains from commodity certificate repayment of CCC loans reached $1,974,000,000. The availability of those two procedures essentially eliminates the $75,000 limit on marketing loan benefits. It should also be noted that gains from repaying CCC loans with commodity certificates are not reported to IRS as are gains from all of the other three options. See Harl and McEowen, “Inconsistency in Handling Farm Income?” 99 Tax Notes 923 (May 23, 2003).

(5) Although the Commission was not in complete agreement on this issue, one view is that the four ways in which payments linked to CCC loan repayment can be obtained should be
treated comparably and all should count against the payment limitation (currently $75,000) for that type of payment. Thus, loan deficiency payments, marketing loan gains, gains from CCC loan redemption using commodity certificates and gains from forfeiture of commodities should all be limited by the payment limitation for that type of payment. Specifically, CCC loans could only be deemed to be non-recourse up to the amount of the payment limitation.

Under the other view, the nonrecourse loan program is viewed as a fundamental component of the farm safety net and should remain in its current form.

d. The consequences of the above-described changes in government farm program payment limitations should be relatively modest.

(1) **Impact on supply, farm income and land values.** Data presented to the Commission by the Food and Agriculture Policy Research Institute (FAPRI) provide compelling evidence that the impacts on commodity output, farm income and land values should be modest. The FAPRI assumptions as to payment limitations were that each farm operation would receive no more than $40,000 in direct payments, $60,000 in counter-cyclic payments and $175,000 in marketing loan benefits with no use allowed of commodity certificates, commodity forfeitures or “paper reorganizations” to avoid the limits. As shown in Table 3 from the FAPRI report, the net effect on planted acreage for crops other than cotton and rice are small. For 2004, the projected cotton acreage is approximately half a million acres less with the assumed payment limitations in effect and the rice acreage would decline by about 250,000 acres. The payment limitations assumed would have a small negative impact on national average land values. The major impacts would be on cotton and rice producers with the reduction in acres resulting in a significant improvement in price.

The evidence is compelling that a substantial fraction of government payments is bid into cash rents and capitalized into land values. Work by Barnard and Ryan, presented to the Commission, indicates that approximately 25 percent of land values nationally is attributable to government payments. Thus, the ultimate beneficiaries are those who own and control the land. There is some evidence that larger operators bid a greater proportion of government payments into cash rents and land values than is the case with smaller operators. The key issue is whether that phenomenon affects the rental and land markets.

It is acknowledged that larger operators very likely also bid part of their input cost advantage (discounts in obtaining inputs) and any marketing advantage (premiums paid by purchasers of commodities) into cash rents and into land values, also. These economic advantages obtained by larger operators are ostensibly determined by the market.

The key policy question is whether there is a public interest in allowing government payments to be a part of the economic landscape that allows larger operators to influence the land and rental markets to the detriment of smaller operators.

(2) **Impact on firms.** The consequences of more restrictive payment limitations, particularly those on marketing loan benefits, depend heavily upon the configuration of cost curves for the impacted firms. The data are inconclusive on the magnitude of economies of scale. Those resisting more restrictive limitations have argued that economies of scale are substantial enough that limitations on payments would raise commodity prices and make the production
Table 3. Estimated average impacts of stricter payment limitations*

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<td>million acres</td>
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<td>0.493</td>
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<td>Net CCC+conservation</td>
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<td>19,733</td>
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<td>Crop market receipts</td>
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<td>Other income, inv. change</td>
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<td>134,092</td>
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<td>Rent to non-operators</td>
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<td>13,047</td>
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<td>Other production costs</td>
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<td>193,906</td>
<td>205,318</td>
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<td>Net farm income</td>
<td>49,162</td>
<td>48,810</td>
<td>49,437</td>
<td>49,198</td>
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| Land value, end of year   | dollars per acre    | 1335.21 | 1332.71 | -2.50 | -0.19% | 1485.32 | 1479.55 | -5.78 | -0.36% |

*Limitation of $40,000 in direct payments, $60,000 in counter-cyclical payments, and $175,000 in marketing loan benefits per Census of Agriculture operation. Figures represent average of stochastic results for 500 alternative futures.
of commodities less efficient. That is unlikely. If economies of scale are substantial, more restrictive payment limitations could be absorbed with little restructuring needed. On the other hand, those resisting more restrictive payment limitations have also argued that the consequences would be severe economic distress for larger firms in light of the modest economies of scale. That is also doubted. Definitive data are unavailable to determine which scenario would likely occur (if either one were to occur)

The configuration of cost curves determines the level of “superprofits” or producer surplus produced by economies of scale and has virtually nothing to do with the cost of food in a sector where the firms with the lowest costs do not produce all of the output demanded by the market. The price of commodities, for firms in perfect competition, is determined by the price required to induce the output demanded.

Assume first, a subsector of agricultural production where all n firms have identical cost curves, as shown in Figure 1.

![Figure 1](image_url)

The firms would all produce at output $x_1$ where $MC^n = MR$ with price $y_1$. All factors of production (land, labor, capital and management) would earn ordinary profits.

Now, assume $n-m$ firms have lower costs from economies of scale (from internal firm efficiencies, lower cost for inputs or a premium price for the sale of commodities). Those lower cost firms would produce at $MC^{n-m} = MR$, at price $y_1$, and would produce $x_2$ output as shown in Figure 2.

That would produce “superprofits” represented by the shaded area. Those superprofits would be bid into the price of whichever factor of production is most limiting—usually land. However, at various times and circumstances it has been water, management, labor, capital (in eras of severe capital rationing) and even technology (for early adopters).

However, unless all demanded output can be satisfied by the lowest cost firms ($n-m$), the price (and the presence of super profit) induce other firms, some with higher costs, to enter production until, at the margin, there are no superprofits. Therefore, in a stylized manner, the lowest cost firms would be represented by average total cost curve $ATC^{n-m}$ and the last firm to enter production (with $ATC$ tangent to the price line) would have an average total cost curve of $ATC^m$ (for the n firms in production that are not the least cost firms). The lowest cost
firms (n-m) would still be earning super profits, as before, and the highest cost firms would just be covering their costs as shown in Figure 3. Those firms would be producing at $MC^n = MR$ and producing at output level $x_3$ with each factor of production earning normal returns to the factor with no superprofits.

The lowest cost firms would be producing at $MC^{n-m} = MR$ at output level $x_4$. Those firms would be generating superprofits shown by the shaded area.

Thus, price generally rises to the level needed to induce marginal firms into production. The economies of scale of the low cost firms are relevant in determining the level of superprofits. That is why strict payment limits would tend to reduce the value of factors of production (usually land) into which superprofits have been bid. The economies of scale are not relevant for purposes of determining the price of food (unless all firms that can and do enter production have the same cost curves).
After imposition of strict payment limitations, (at \( L_1 \) in Figure 4), there would be some change in costs but the major impact would be on the effective “price” received for program commodities by the larger, presumably lower cost, firms. As shown in Figure 4, the effective price line could be above, tangent with or below the minimum point on the long run average total cost curve for the lower cost firms.

If the effective price line (\( p^3 \)) were tangent with \( ATC^{n-m} \), no structure adjustment would be necessary. Factors of production would earn normal returns but no superprofits would be generated. If the effective price line (\( p^2 \)) were above the point of tangency with \( ATC^{n-m} \), some superprofits would be generated. In the event the effective price line (\( p^4 \)) were below the point of tangency with \( ATC^{n-m} \), some structural adjustment would be expected, long-term. That would depend heavily upon the expected probability that \( p^4 \) would lie below the point of tangency with \( ATC^{n-m} \) and for how long a period. Utilization of risk management strategies could reduce or eliminate the need for structural adjustment with respect to marketing benefits unless the period of price adversity is prolonged.

Figure 4.

(3) **Importance of not blocking economic adjustment.** While not directly related to payment limitations, policy makers are cautioned that the income support program should not be employed to reduce or eliminate the need for commodity production adjustments to occur where competition for land and water are increasing and pose increasing costs as is occurring in some parts of the country. Thus, an investor in farmland paying $15,000 per acre in eastern Dallas County, Iowa, should not expect the farm program to assure profitability. The same is true in California and elsewhere.

e. Adjusted gross income limit.

The 2002 Act also contains a limitation based on “adjusted gross income” which specifies that an individual or entity is not eligible for any program benefit during a crop year if the average adjusted gross income of the individual or entity exceeds $2,500,000 unless not less than 75 percent of the adjusted gross income of the individual or entity is derived from farming, ranching or forestry operations. *Act § 1604, adding 7 U.S.C. § 1308-4.* The benefits affected by the AGI
limitation are direct payments, counter-cyclical payments, marketing loan gains and conservation. 

(1) For benefits made in a crop year to an entity, general partnership or joint venture, the amount of the benefit is reduced by an amount which is commensurate with the direct and indirect ownership in the entity, general partnership or joint venture of each individual who has an average adjusted gross income in excess of the $2,500,000 limitation for the average of the three preceding crop years. *Act § 1604, adding 7 U.S.C. § 1308-4.*

(2) To comply with the limitation, an individual or entity must provide to the Secretary a certification by a certified public accountant “or another third party that is acceptable to the Secretary” that the average adjusted gross income of the individual or entity does not exceed the limitation. *Act § 1604, adding 7 U.S.C. § 1308-4.*

**B. Benefit-cost analysis**

The apparent trend in thinking in recent years has been to evaluate farm policy solely on the basis of the cost of food at the farm gate and by the amount of resources utilized in the production of food and fiber. Regardless of which school of welfare economics one belongs, it would seem appropriate for policy reform in agriculture to embrace a greater range of policy objectives at least to the extent the expenditure of public monies is concerned.

For well over a half century, the expenditure of public funds for improvements in waterways, cancer research, environmental cleanup and numerous other federally-funded project areas has been subjected to the discipline of a benefit-cost calculus. In general, the benefits and costs considered have been all of those reasonably stemming from the project. That has not been the case with farm policy. As a consequence, *the anticipated impacts on producers, rural communities, the environment, consumers and taxpayers have not been taken into account.* Moreover, relatively little effort has been made to provide useful policy-making information as to the impact on consumers in an increasingly concentrated world of input supply and output processing and handling firms.

It is disheartening to see the singular focus on the issue of how to squeeze the costs for commodities to first purchasers to the lowest possible level with no attention whatsoever to the other consequences which are both real and visible. Moreover, when federal funds are involved, as they most certainly are, it seems not only appropriate but essential that funds be expended in such a manner as to produce the greatest possible benefit to the human family. Seventy years ago, flood control projects were selected heavily on political bases. Legislation in 1936 and later has elevated the decision making process to a higher level such that political considerations, although still present, do not dominate the process as was once the case.

The same brand of discipline should be imposed on farm policy. Indeed, there is little reason not to do so. The great surprise is that farm policy has continued to be a highly political process, dominated in recent years by agribusiness firms with huge amounts of cash to influence the policy process. As Schertz and Doering stated, in their recent book, *The Making of the 1996 Farm Act,* a consortium of agribusiness firms amassed a huge war chest to influence the analysis, shape the message and convince members of Congress to support their farm policy agenda.

As the authors stated—

“The idea that farm programs had gone too far in withholding cropland from production was given a substantial boost with the preparation and astute promotion of a study sponsored by the National Grain and Feed Association through their foundation. The study, released in May 1994, concluded that ‘American
farmers and the U.S. economy stand to reap substantial benefits from expanding crop area and production. Over 185 companies, most of whose profits are geared substantially to volume of commodities handled or processed, were involved in supporting the study prepared by Abel, Daft, & Earley, a consulting firm in the Washington, D.C., area. …

The key conclusion of the study was that 38 million of the then 65 million acres of cropland held out of production at that time under the Acreage Reduction Program (ARP), the Conservation Reserve Program (CRP), and other, but smaller, programs could, under expected demands and yields, be brought back into production between 1994 and 2002 and commodity prices would not be less than they were at the time of the study. Politically, that is a powerful conclusion for there is a strong preference among politicians not to be accused of taking action which leads to lower producer prices. Central to this proposition was the conclusion that demands for U.S. farm commodities would increase enough so that farm commodity prices in the prospective future would not drop below then current levels, even if U.S. farm production increased as hypothesized. The implication for farm income was obvious—more production at the same or higher prices meant more income.” (Emphasis added).

If a proposed flood control project were to decimate a community, that would be viewed as a project cost. However, if a rural community is diminished economically by the farm bill, or farmers are harmed by the legislation, those costs are ignored and left to be dealt with, if at all, by other programs. The result is a dissociation of benefits and costs which distort economic reality. The country deserves better in the area of farm policy just as it deserved better before the landmark 1936 legislation on flood control.

C. A global food and agriculture policy

Farm policy debate in the United States in the 1920s was largely about whether it was appropriate to have a national food and agriculture policy. To a considerable extent, the decision was in the negative until 1933.

In many respects, farm policy today poses a similar question: should efforts be directed toward a global food and agricultural policy? In the opinion of this commentator, the answer is yes.

The globalization of food supply and demand and the position of the United States suggest that food and agriculture policy analysis should shift to a new level to encompass global food and agriculture issues. Such a policy would likely take years to accomplish and would require skillful diplomatic efforts, but the logic behind such an approach to policy is clear.

A global food and agriculture policy should have several components—

• First, and probably foremost, is support for Third World economic development. With relatively high income elasticities of demand for food (70 percent or more of each additional dollar of income is likely to go for food purchases in some of the countries), it is clear that the last frontier for increasing food demand is the Third World. Moreover, adequate nutrition, worldwide, has the support of a wide array of groups and individuals.

If the poorest countries could be nudged into the development queue, with investment in education, health care and infrastructure, plus progress in implementing more open and democratic governance systems, the long-pursued goal of elimination of world hunger could be within reach. Gifting food to low income countries, while laudable from a humanitarian point of view, destroys their internal agricultural economy.

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• The issue of food safety, including animal diseases as well as genetic modification of foods, should be addressed in a global food policy.

• Food security should be a component of a global policy.

• Fair and equitable sharing of germ plasm should be assured. This could help allay fears of some countries that their germ plasm is being appropriated without compensation by First World countries.

• Trade in agricultural products and commodities is an obvious candidate for inclusion in a global food and agriculture policy as a supplement to negotiated trade agreements. The robust debate now occurring over trade issues is indicative of the fact some, including many Third World countries, view trade policy as impediments to economic growth and development.

• Agreed-upon policies committing major food producing countries to managing excess inventories could be a part of a global food and agriculture policy. Countries would be urged to take action in unison whenever disastrously low food prices occur worldwide with comparable steps taken to reduce food production. The flow of development funds from the United States into the World Bank and IMF and in the form of direct assistance could be used to leverage such responses from other countries.

D. The structural transformation of agriculture

Concentration. With the dramatic increases in concentration in recent years of input supply and output processing firms and with striking increases in the level of vertical integration, it is important to assess the implications for producers. Such a structural transformation of a subsector is not unknown—the broiler industry went that direction several decades ago—but it is a first for the Middle West.

The critical question: is it important to farmers—and to society—whether agriculture is populated by independent entrepreneurs or serfs? The structural change now occurring will determine which direction agriculture takes. A producer without meaningful competitive options is a relatively powerless pawn in the production process.

The evidence is overwhelming that the agricultural sector is undergoing the greatest structural transformation in the history of the sector. Without much doubt, low commodity prices have contributed to the structural transformation of the sector. A low risk, low return choice looks attractive if the alternative is bankruptcy.

Competition is the most critical element of a price oriented, market economy. Without competition, firms become complacent, are less likely to innovate, tend to become arrogant and indifferent and are inclined to produce less and obtain a higher price for their output.

To a considerable extent, structure will be driven by economic considerations. This country has been committed for some time to the notion that if someone can develop ways to produce goods or services at a lower cost, barriers are unlikely to be erected to prevent that from happening. In large part, the consumer is king and generally rewards the best value with purchases. However, for the economic system to function properly, it is critical to have—

• Policies in place to deal with cost externalities such as odors and stream and groundwater pollution, and
• A system of market protection (or antitrust) to penalize collusion and to prevent undue concentration of economic power.
While a major concern is over concentration in seeds and chemicals, there is also concern over concentration in livestock slaughter, grain handling and shipping, farm equipment manufacture and food retailing. Indeed, rapidly rising concentration in food retailing may be the most worrisome development in recent years.

Recent research by Hendrickson and Heffernan\(^3\) indicates that the top four firms have 60 percent of terminal grain handling, 80 percent of soybean crushing and 61 percent of flour milling. The top three firms control 81 percent of corn exports and 65 percent of soybean exports. Cargill and ADM are in the group for all five categories of concentration.

One of the drivers in the trend toward greater concentration in almost all sectors of the U.S. economy is increasing concentration in markets into which products are being sold. Thus, the rising tide of concentration in food retailing leads to consolidation by suppliers to match the buying power of the retailers. The driving force is an increase in negotiating power, not necessarily an increase in efficiency.

Just how concentrated is food retailing? In 1992, the five leading food retail chains controlled 19 percent of U.S. grocery sales. By 1998, the five largest chains (Safeway, Albertson’s, Kroger, Ahold and Wal-Mart) controlled about 33 percent of U.S. grocery sales with that figure at 42 percent in 2000 and expected to approach 50 percent this year. Unless mergers are curbed, that figure is expected to reach 60 percent within three years.

Thus, a major issue is whether a shift in market power occurs between input suppliers and producers, whether that shift in market power is translated into enhanced bargaining power and whether the enhanced bargaining power is employed to siphon a greater proportion of the economic return generated by the sector into the hands of input suppliers and output suppliers.

The “deadly combination.” Without much doubt, the greatest economic threat to farmers as independent entrepreneurs is the deadly combination of concentration and vertical integration. Producers are vulnerable to a combination of high levels of concentration in input supply and output processing and high levels of vertical integration from the top down.

Example: let’s assume concentration in hog slaughter continues to increase (the four largest firms now control about 60 percent of hog slaughter compared to more than 80 percent for steer and heifer slaughter, as show in Table 2.) and the hog slaughtering firms vertically integrate in the manner pioneered by Smithfield. Before dropping the Tyson merger, Smithfield would have controlled about 68 percent of its hog slaughter. Let’s say we’re down to two huge firms and each is 90 percent integrated. A producer with a five-year contract with one of the two major firms comes to the end of the contract. The new contract is considerably less attractive than the expiring contract. The producer is told—take it or leave it. If the closest competitive option is 900 miles away—and is also heavily integrated—the producer seeking another option for hogs is highly vulnerable. If the producer had made a heavy commitment to facilities, the vulnerability is greater yet with significant barriers to exit. Clearly, a producer in that situation is likely to be squeezed.

Whoever controls the limiting factor or controls the “hold-up” points in any process is in a position to exert influence over the entire process and, if the level of concentration is high, exact a hefty charge against the fruits of production. In hogs the limiting factor is not capital or labor or buildings; the limiting factor is slaughter capacity or “shacklespace.” In food generally, an important limiting factor is shelf space.

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\(^3\) University of Missouri-Columbia.
Vertical integration. The moves made by the major players, both input suppliers and output processors and handlers, could lead one to conclude that the objective is to vertically integrate the sector. Such an objective could be pursued for several reasons—(1) to gain and maintain greater control over patented products or products subject to intellectual property protection otherwise; (2) to apply economic pressure on producers to relinquish functions in favor of the integrator (such as risk management) or to merely provide an opportunity for risk to be off loaded onto the integrator; (3) to reduce costs (particularly acquisition costs for raw materials) of the integrating firm; (4) to achieve greater market share on an assured basis; or (5) to deliver with greater precision what consumers want. The latter point is debatable. In an early example, seed/chemical companies misjudged consumer acceptance of genetically engineered foods and stumbled badly in the process.

Although vertically integrating a sector or subsector may produce economies—including reduced costs for acquisition of raw materials—vertical integration by powerful integrators can have decidedly negative consequences. Among those negative outcomes is the demolition of open, transparent, competitive markets and replacement of those markets with negotiated prices. With a huge difference in bargaining power, as between the parties, the outcome is predictable. The party with the weaker market power tends to be the loser. Unless producers act collectively, producers tend to be the weaker party.

Are economies from vertical integration likely to be passed on to consumers? With a high level of concentration, that’s doubtful. Actually, several possible outcomes could be occurring in the merger/vertical integration movement.

- If the structural transformation now being observed reflects efficiencies, lower costs could be passed to consumers if competition is present and the competitive system is functioning well.

- In the event gains from efficiency are not passed to consumers, but are passed to shareholders or used to pad costs within the firm, the trend is objectionable even though some would argue that system-wide gains in efficiency should be permitted even in the face of anti-competitive conditions.

- The third scenario, which is concerned with the distributional effects of competition policy, does not recognize gains from efficiency as a positive offset to an otherwise anti-competitive merger unless the gains are passed on to consumers.

Clearly, the higher the level of concentration and vertical integration, the greater the risk of unacceptable market conduct.

What all of this adds up to is this—if farming is to be made up of independent entrepreneurs as producers, it is absolutely essential for producers to be assured of meaningful competitive options. To assure that outcome, it is necessary to—(1) limit concentration in input supply and output processing or handling and (2) possibly limit the extent of vertical integration.

Reform of contract practices. The great disparity in market power tends to lead to contracts with oppressive features (as viewed by the weaker party), retaliatory practices by the stronger party and vulnerability of the weaker party in terms of securing payment. The Producer Protection Act, which has been proposed and endorsed by 17 State Attorneys General, would take several steps as a matter of state law towards providing full information to the producer and lien protection to the producer to secure payment of amounts due and reducing the probabilities of economic retaliation in producer-processor contract relationships.

The proposed legislation contains six parts—

- Require contracts to be stated in plain language and disclose material risks;
• Provide contract producers with a right to review and a three-day cancellation period;
• Prohibit confidentiality clauses;
• Provide producers with a first priority lien for payments due under the contract;
• Prevent capricious or retaliatory termination of the contract; and
• Prevent retaliation against producers who participate in producer organizations.

Although the proposal has been criticized, the provisions all have precedent in other areas of the law, such as consumer protection legislation and trade regulation, and all are based on basic principles of fairness, full information and equity which are common throughout the law.

The Family Farmer Cooperative Marketing Amendments Act of 2001, which was introduced in the U.S. House of Representatives, would have addressed some of the same issues at the federal level.

The 2002 farm bill (The Farm Security and Rural Investment Act of 2002) contains a section dealing with confidentiality provisions in contracts for the production of livestock or poultry or in any marketing agreement with a term of one year or more. The 2002 Act also includes “swine contractors” as a covered entity under the Packers and Stockyards Act of 1921.

**Conclusion**

The new century promises to bring unprecedented reliance on law in the allocation of resources and distribution of income. As free, open, competitive and transparent markets are replaced with negotiated pricing; as concerns about cost externalities, including odors, overwhelm rural communities; as gene flow, through pollen drift and otherwise, becomes an even more serious problem than presently for the production of commodities; and as bioterrorism comes to be viewed as a serious problem in food production and distribution, law is the last bastion of protection for citizens and consumers. The challenge, for all, is to protect, maintain and improve the capacity of the legal system to produce rational solutions to society’s most pressing problems.

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8 Id., Act § 10503.
9 Id., Act § 10502, amending Sec. 2(a) of the Packers and Stockyards Act of 1921, 7 U.S.C. § 182(a).