



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

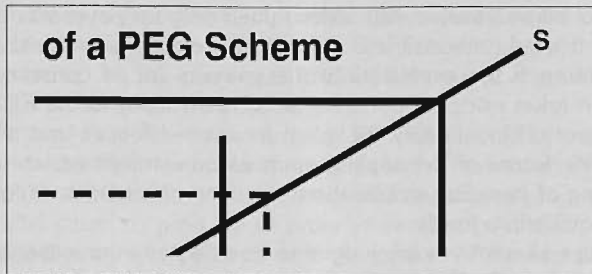
**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

# LETTERS *From You...*



**From: Professor K. J. Thomson**  
*Aberdeen School of Agriculture*  
Re: Blandford, et al, PEGs  
(First Quarter 1989)

There are a number of unresolved problems with the Production Entitlement Guarantee (PEG) idea suggested by Blandford, de Gorter, Gardner and Harvey (BdGGH) for the GATT Round. First, there is the question as to whether PEGs would be voluntary or mandatory amongst governments. BdGGH appear to suggest the former ("governments would have the option of tying payments to production"), but this ignores the multilateral aspect of the GATT. BdGGH clearly envisage substantial flexibility in the way governments could operate PEG schemes within GATT-agreed national quantities of production for each commodity.

Second, the support given to farmers on the limited quantity set per farm would mean that, although "total production will be determined by free market prices," those prices, and the level of total production, will reflect the continued incentive towards high fixed costs offered by this support, and the low marginal costs of additional output per farm until critical land and labour constraints are met. While the marginal cost curve may slope up for the industry, the econometric evidence for this at the individual farm level is hard to find, and the more relevant feature is likely to be the structural constraints of primary factors.

Third, how would the quantity eligible for support be determined in an individual case? At times, BdGGH appear to insist on physical production ("payments would be earned through producing farm products"), at others, not ("governments need not require producers to supply the PEG quantity in order to receive payments"). Moreover, the distinction between quantity *produced* and the quantity *marketed* is not made clear. Since in the EC, about a third of all cereals are used on farm of origin, and about 10 percent of milk supplies likewise, the scope for confusion is large in at least one major world trader. In the livestock sector, PEGs are apparently consistent with breeding stock headage (rather than production) payments, which tend to give rise to problems of quality standards, eligibility and over-grazing.

Fourth, although the efficiency of income transfer might appear to be improved by such direct payments as PEGs, the attraction diminishes if most farmers eventually find themselves paying substantial amounts for PEGs purchased or leased from the original holders. Again, as Harvey has not been slow to point out elsewhere, in the EC, milk quotas now cost several times the value of a dairy cow.

Fifth, while the use of a historical base would ease the application of PEGs in the first instance, the experience of milk quotas suggests that considerable problems would still arise. Fea-

tures such as part-time and company farming, farm fragmentation and de-specialisation (in order to qualify for several PEGs) are not addressed.

Finally, for at least the EC, and perhaps within other federal GATT parties, major problems would arise between member states in terms of determining (a) a Community PEG for each quantity, (b) national PEGs, and (c) farm PEGs within each country. Experience with the existing "maximum guarantee quantities" for cereals, milk, sugar and other products suggests that Community and national PEGs would tend to be set too high, while the huge intra-Community variation in, for example, average farm and dairy herd sizes would confront the Council in Brussels with massive problems at a time when the "1992" initiative is aimed at eliminating national distinctions in EC agricultural policy.

Thus, while the concept of PEGs as a 'pure' income transfer is attractive (if undefended on equity or social grounds by BdGGH), and certainly offers hope of reduced international trade distortions caused by high domestic prices and oversupply, a considerable amount of further detail is required before a workable scheme can be envisaged. In practice, too, governments would have to consider PEGs alongside other features of current agricultural policy, such as small-farmer exemption from producer levies (the 'mirror image' of PEGs), payments for non-production such as set-aside, extensification, soil conservation and wildlife enhancement, and other direct payments such as early retirement pensions and regional supplements.



**From: Carl Zulauf**  
*Ohio State University*  
Re: Blandford, et al, PEGs

Blandford, *et al*, propose to replace all current trade barriers and internal farm support programs with a direct income payment. The payment to an individual farmer would be tied to a level of production that is less than the quantity produced in a free market. They refer to the program as a production entitlement guarantee (PEG).

Direct income supports long have been the darling of economists, who have proposed numerous variations. Some even reach the political arena. But, invariably they run into a budget constraint. The authors acknowledge this constraint but fail to indicate its severity in the U.S. situation.

- The PEG program would convert current price support programs for sugar, dairy, tobacco, and peanuts into direct income support programs through target prices. This costs money.
- The authors suggest the supported PEG production level should be set at less than 80 percent of 1986 production. Seventy-five percent of 1986 U.S. production approximately equals the volume of grains and cotton which received deficiency payments in 1987, a year of large surpluses and very high participation in farm programs. Since payment would supposedly be made on the PEG quantity each year, money could be saved only if per unit payment was cut substantially below average per unit payment under current programs.

- The current base acre system provides a benefit to producers of non-base acre commodities by limiting resource mobility. However, under PEG, farmers could plant any crop after planting the acres necessary to produce their PEG amount. Thus, some marginal resources will probably be used to produce soybeans and current nonprogram crops, such as hay, fruits, and vegetables. Returns for these commodities would decline, leading their producers to decide whether to fight the PEG initiative or demand their own PEG compensation. Compensation could be costly, especially for soybeans.

As with all direct income support programs, the question becomes federal dollars, a commodity currently in short supply. The authors suggest cost could be reduced by targeting payments. However, given the potential costs of PEG, the amount of targeting needed would represent a revolutionary change in farm programs, not the evolutionary change the authors desire. In short, until the budget question associated with direct income programs is explicitly resolved, the political world and farmers will remain skeptical that direct income payments are only an attempt to reduce farm supports.



**From: Fred H. Sanderson**

*National Center for Food and  
Agricultural Policy Resources for the Future*

**Re: Blandford, et al, PEGs**

The idea of limiting quantities eligible for price support at the farm level appeals to economists because it would expose producers, at the margin, to international competition while avoiding the "welfare stigma" of payments unrelated to production.

The advantages claimed for this approach depend heavily on the efficacy of price cuts at the margin in reducing uneconomic production. However, the effects are bound to be very slow, for at least two reasons: (1) large fixed investments have already been made and farmers will be able to continue to cover their variable costs; (2) at least for this generation of farmers, farming represents the best use of their acquired skills. Consequently, farmers will accept a price cut on a small proportion of their output while continuing to produce up to present capacity (or close to it). In fact, there will be a continuing motive to increase production to protect the farm payments base so long as there is any expectation that the base may be changed.

Moreover, experience with the EC sugar regime and the U.S. tobacco program suggests that commodity groups will find ways of shielding their members from marginal exposure to world prices. They may tax their members to subsidize exports. They may resort to blend pricing. They may resist transferability of the PEGs. Such seemingly uneconomic behavior can be explained by the desire to maintain employment of marginal producers (and sometimes processor as well). To indirectly finance such activities, commodity groups will press for increased payments on the quantities eligible for support. Indeed, they will almost certainly succeed in securing income maintenance through increased payments on the 80 percent of their base production that will remain eligible for price supports.

It follows that "decoupling at the margin" would not result in free market levels of production and of world prices. Uneconomic production would persist, particularly where subsidies on production eligible for support are high—unless the output-stimulating effects of such subsidies are offset by production controls. This casts doubt on the "Gattability" of the approach, and also on its claimed budget savings. Nor is there reason to believe that the adoption of PEGs would head off new demands for gov-

ernment assistance in the event of droughts or other adverse developments. In fact, it may stimulate demands for coverage of non-program commodities.

The authors soft-pedal the drawbacks of their proposal. It would legitimize dumping, condemned in Article VI of the GATT. It would require individual farm quotas, with all their political and administrative difficulties, albeit only for payments purposes. It would discriminate against new entrants. It would further entrench the exploitation of taxpayers (or of consumers, where market price supports are used, as is likely in the EC). It would put off indefinitely the quest for more effective and more equitable forms of decoupling such as adjustment assistance, targeting of benefits, stabilization of prices or incomes at long-term equilibrium levels.

If these alternatives are judged to be politically unrealizable at present, a preferable interim approach could build upon the "stabilizers" introduced in the EC for grains and oilseeds (and in the U.S. for milk) that trigger automatic support price cuts on the entire output whenever it exceeds a specified quantity. That approach also lends itself to negotiated reductions, but is more likely to benefit consumers and taxpayers and to avoid the creation of permanent entitlements.



**From: D. Blandford, H. de Gorter,  
B. Gardner and D. Harvey**

*Cornell University, University of Maryland,  
and University of Newcastle-upon-Tyne*

**Re: The Authors Respond**

Sanderson, Thompson, and Zulauf raise a number of interesting points on our proposal for Production Entitlement Guarantees (PEGs) as an alternative form of farm income support. In essence, their concerns boil down to three issues: (1) whether the introduction of the scheme would result in the desired market adjustments towards free trade; (2) whether all the operational details of national PEG schemes have to be specified and approved by the GATT; and (3) whether a PEG scheme is an affordable alternative to existing support programs.

Fred Sanderson argues that price cuts at the margin under a PEG scheme will have little effect on production because of large fixed investments and the previously acquired skills of farmers. He also implies that producers will find some way to blend PEG payments and free market prices so that they will fail to operate at the margin. The asset fixity argument would apply to any cut in prices, even under free trade. There will inevitably be some rigidity in the adjustment to lower prices, regardless of the way this is achieved. We agree that a "cold turkey" approach in which all producers live with world free-trade prices would cause the fullest and fastest adjustment. The value of PEG is that it provides a minimally distorting alternative when the complete elimination of support is not politically possible. With respect to price blending, if PEG payments are made directly to producers so that they actually face two distinct prices, the higher PEG price on a limited quantity, and the lower market price on an additional production, a decision to produce based on a blended average will lead to a reduction in profits. If this is the way farmers behave then financial advisors and the extension service have an education role to show that when the return on an additional unit of production is negative you can't "make it up on volume"!

The second issue, which concerns Ken Thompson in particular, is whether all the details of a PEG scheme have to be worked out in advance for its adoption as part of GATT, and what specif-

ic restrictions have to be placed on national schemes in order to minimize trade distortions. As far as the elimination of distortions is concerned we are very clear in stating the requirements: (1) a fixed limit on the national quantity of production eligible for support; (2) the elimination of all other supply-side and demand-side distortions. In practice this means that the national payment base will be bound in the GATT, and an agreement will be reached on the phasing out of existing support policies and their replacement by a PEG scheme.

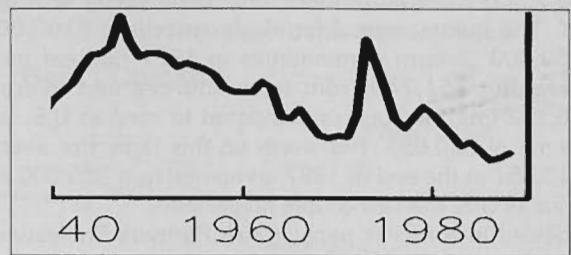
Beyond this, substantial national flexibility would be permitted on how the PEG is implemented. This is the reason why we suggest that PEG could be run entirely as a decoupled program with no obligation to produce in order to receive payment, or as a coupled program, perhaps with the option of transferability of the PEG base between farmers in order to reduce potential trade distortions. We are not unaware of the additional issues Ken raises, nor do we suggest that they are insignificant, simply that these have to be worked out nationally rather than in the GATT. If countries accept the basic conditions for PEG and implement it under the auspices of the GATT, most of the gains from free trade will be realized and the scheme will achieve its desired result. This is far less certain if countries are allowed to use a variety of ill-defined, supposedly decoupled alternatives to current policies.

Finally, can we afford it? Carl Zulauf and Fred Sanderson are both concerned by this, Zulauf because taxpayers now have to pick up the bill rather than taxpayers and consumers, and Sanderson because he believes that it will perpetuate rent-seeking behavior on the part of producers. We argued in our article that PEG would be affordable because of the low transfer efficiency of existing support programs. Some figures for the United States in 1986 will illustrate why. In that year, the total costs (consumer plus taxpayer) of agricultural support were roughly \$36 billion. Under the most optimistic assumptions about the efficiency of the "trickle down" of transfers made through higher output prices and the "percolate up" of transfers through subsidized inputs, producers picked up roughly \$26 billion. Of this, more than \$11 billion simply offset the depressing effects of trade-distorting policies in other countries on prices and producer incomes.

Thus (optimistically) producers received \$15 billion net, roughly 40 percent of the gross costs to producers and taxpayers, and \$11 billion less than the taxpayer costs of support alone! If additional leaks in the percolator and the evaporation of the support stream are taken into account, the actual transfer to producers would be even less, and the savings to taxpayers even greater.

We are in the process of trying to evaluate how much a PEG scheme would actually cost in the United States and the European Community and do not have firm estimates yet, but preliminary calculations suggest that PEG would cost taxpayers no more, and possibly substantially less, than existing programs. We take Fred Sanderson's point that rent seeking will continue, but believe that it will be no greater problem, and perhaps less of a problem under PEG than other alternatives. To help countries hold the line on the per unit PEG level of payments we suggested in our article that the per unit payment be capped, based on historical levels.

We welcome the thoughtful comments that we have received in these and oral communications on the PEG. Our hope is that our proposal will stimulate thinking on what a meaningful reform of domestic policies to reduced trade distortions will really imply, and how domestic policy needs can be met within an environment of freer trade.



**From: Luther Tweeten**

*Ohio State University*

**Re: Edwards' "Real Prices"  
(Fourth Quarter 1988)**

In his article "Real Prices Received by Farmers Keep Falling" Clark Edwards concludes that "farmers likely will continue to experience cost-price squeezes as they have for more than a century." I contend that the article title might be more correct in the form used for this note. It is traditional but highly misleading to use real prices received by farmers for commodities as measures of real terms of trade, buying power, parity, or fairness. A much superior measure is real prices received by farmers per unit of resources.

While Edwards noted the need to adjust for productivity in measuring real prices, he did not do so or elaborate. A farmer with a given bundle of resources which tripled its output (productivity) would require only one-third as high a real commodity price as before to maintain real earnings or buying power. In fact, on average a given real value of farm production resources produced 3.15 times as much in 1987 as in 1910-14 as measured by the USDA's multifactor productivity index. Hence the factor terms of trade (defined as the real price received by farmers per unit of resources) would have remained unchanged if the commodity terms of trade (defined as the real price received by farmers per unit of output) had fallen to  $1/3.15 = 32$  percent of 1910-14 "parity."

In reality, commodity terms of trade were 52 percent of the 1910-14 average in 1987, hence factor terms of trade (the appropriate measure of buying power) were  $52(3.15) = 164$  percent of 1910-14 "parity" in 1987! This factor parity ratio would be even higher if adjusted for government payments to producers.

The figure showing real terms of trade in aggregate for farmers from 1910 to 1987 suggest several conclusions.

- Real prices received by farmers or parity as measured by factor terms of trade were two-thirds higher in the late 1980s than in 1910-14, a standard reference period.
- Factor terms of trade displayed much annual variation due to weather but rose to a new plateau in the 1940s. Since the 1940s, productivity gains have been offset by equally sizable drops in commodity terms of trade so that factor terms of trade have not changed on average.
- Productivity advances from technology and other sources have not disadvantaged producers who have remained in farming. Productivity increased only 20 percent over the three decades from 1910 to 1940 and fully 79 percent over the three decades from 1940 to 1970. Yet, factor terms of trade were lower in 1940 than in 1910 but were 59 percent higher in 1970 than in 1940. Of course, commodity demand and government programs also influence factor terms of trade. And labor-saving technology such as the tractor has displaced many people on farms.
- Maintaining 100 percent of 1910-14 parity in factor terms of trade is not sufficient for economic equilibrium because farm operators' labor-management-risk returns must increase to keep pace with earnings of like resources else-

where. Commercial farmers have done pretty well at this too. The quintessential family farm selling \$100,000 to \$250,000 of farm commodities in 1987 had net income averaging \$51,749 from farm sources and averaging \$66,132 from all sources compared to median U.S. family income of \$30,853. Net worth on this farm size averaged \$713,251 at the end of 1987 compared to a \$55,000 median for all U.S. married couple households.

- I showed in a recent paper ("Are Farmers Predestined to Earn Chronically Low Rates of Return" in Ray Goldberg, ed., *Research in Domestic and Foreign Agribusiness Management*, Cambridge, MA: JAI Press, 1988) that adequate-size, reasonably well-managed farms have earned (and probably will continue to earn) favorable income and rates of return on resources on average, and that they experience severe economic shocks just as do other industries such as lumber and oil from time to time but return to economic equilibrium rather quickly—within about five years. Those who think they find chronic low real prices, low incomes, and low rates of return for the farming industry are misled by failing to account for productivity, hobby (consumption) farming, noncash and nonfarm earnings, tax advantages of farming, and transitory elements. They fail to recognize the great diversity in farming.
- Odds are that farm supply will increase less relative to farm demand in the 1990s than in the 1980s (see my "Agricultural Trade: Prospects for Long-Term Recovery" in *Increasing Understanding of Public Problems and Policies - 1988*, Oak Brook, IL: Farm Foundation). This points to better times on average for U.S. farmers in the 1990s than they experienced in the 1980s given less stocks and excess production capacity today than in recent years. However, historical trends in terms of trade suggest that, while transitory runups in commodity terms of trade may occur, commodity terms of trade will tend to return to the real cost of production which will continue to fall in the 1990s. But parity price defined as it should be in terms of real prices received per unit of input may increase in the 1990s.



**From: Clark Edwards**  
**RE: The Author Responds**

Luther Tweeten is right in saying there is more to measures of fairness in farmers' well being than prices. He suggests that "a much superior measure is real prices received by farmers per unit of resources." His measure (up 3.15 times since 1910-14) confuses the productivity of resources with the volume of resources. Farmers not only have higher yields, they control larger farms. In addition, there are fewer farmers to divide the income.

For some decades now, increases in productivity, larger holdings, and fewer farms have strengthened farm income. However, as can be seen from Luther Tweeten's chart, the commodity terms of trade have been working against the farmer. I am pleased that Tweeten has now recognized that real prices have been falling for over a century and could continue to do so; not too long ago he was among the prominent spokesmen projecting constant real prices.

Nominal and real commodity prices have been important in formulating and carrying out farm policies during the last half century. The hope has been that higher prices would avert low agricultural returns. Accurate recognition of the separate effects of prices, resource levels, productivity, and structure on farmers' well-being will help in developing the 1990 farm bill.

# Revitalizing

**From: William Herr and Vic Wright**

*University of Southern Illinois Carbondale and  
University of New England, NSW, Australia*

**Re: Connor's "Land-Grant Undergraduate Ag Programs"  
(First Quarter 1989)**

Connor deals with a variety of substantive problems related to undergraduate curricula. We do not disagree with much that he proposes to approach a resolution of them.

We wish, though, to take issue with one of his lines of reasoning: the basic incompatibility of 'disciplinary' and 'professional' education. The particular instance of most interest to us concerns his statement that of agricultural economics majors are against agribusiness majors.

Connor says, "In too many instances, departments are mixing disciplinary and professional education [e.g., agricultural economics and agribusiness management] under one major to the detriment of both." We agree with Connor that majors are differentiated by course selection. Some of those differences may be related to "calculus" and "physiology" but a more important part of the agribusiness major is the agricultural economics component which Connor does not discuss.

The underlying rationale for the offering of agribusiness management majors by agricultural economics faculties and departments rests on the unique need for a relatively sophisticated understanding of the agricultural economy for the effective management of agribusiness organizations impacted by it.

This implies that a core of agricultural economics subjects is needed in agribusiness management majors. Without them, students may have an inadequate understanding of farms as customers or suppliers, of the implications of agricultural policy, of the international trading environment, and of sources of risk in the agribusiness sector.

In our view, it is not the mixing of agricultural economics with agribusiness management that threatens the integrity of both; instead it is the nature of the mix which is important. The breadth and depth of knowledge about agricultural economics, which is integrated into the agribusiness major designed to prepare individuals for sales or managing a small, specialized firm (grain, feed or fertilizer) which is part of a larger organization can be different than that required for the agribusiness curriculum designed for those whose work will be developing and using complex micro and macro models for making decisions. (There are a set of jobs in agribusiness for which the training may be little or no different than for the student interested in graduate education in the agricultural economics discipline). Between these extremes, there is a need for achieving a proper blend and integration of the subject matter areas of agricultural economics and business.

The simple overlaying of business management courses with an agricultural economics core is unlikely to be sufficient; there must be integration. Business schools, in their typical ignorance of agricultural economics, are not well-placed to perform the integration. Nor do they have strong incentives to do so. Moreover, we agricultural economists should not wish them to do it. As the designers of the agribusiness majors it is for agricultural economists to integrate their component parts.

In our view, agribusiness management education does not

logically fall within the brief of agricultural economic departments and faculties unless it requires an integrated mix of courses appropriate to disciplinary education and courses appropriate to professional education. Agribusiness management programs which have no need for disciplinary courses would seem to us to rest squarely in the province of business schools.

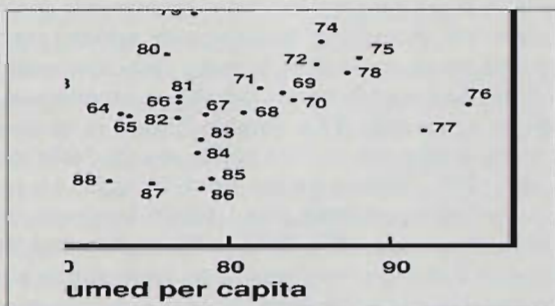
**From: Larry J. Connor**  
**Re: The Author Responds**

Herr and Wright discuss an issue not adequately developed in my article (or probably in the various agricultural disciplines). The issue is mixing disciplinary and professional education under one major (such as agricultural economics and agribusiness). The authors argue that an important part of the agribusiness major is the agricultural economics component which I did not discuss.

As I stated, course selection is particularly important in differentiating these majors. The basic issue is the specific course mix from agricultural economics and other disciplines. Agribusiness and agricultural economics curricula may typically have some common agricultural economics courses. However, agribusiness also needs some different courses from agricultural economics (selling, agribusiness management, managerial accounting, etc). Separate majors cannot have completely identical courses.

Agribusiness courses may also differ from traditional agricultural economics courses with respect to teaching approaches emphasized. Internships, case studies, visiting speakers, field trips, oral communication and business computer applications may be relatively more important for the agribusiness major.

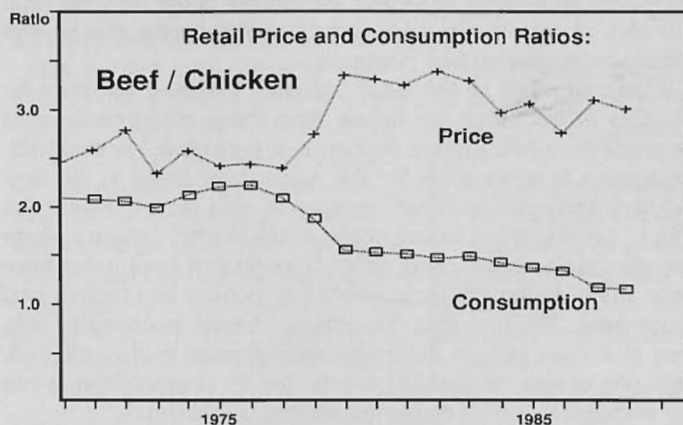
Finally, the question has to be raised as to whether agribusiness should be broken into food marketing and agribusiness majors to better serve the different needs and interests of potential students and employers. Food processing and distribution firms are increasingly looking upon agriculture as just a source of raw materials. Undergraduates with a food marketing focus typically have limited interest in production agriculture.



**From: Roger A. Dahlgran**  
*University of Arizona*  
**Re: Purcell's "Beef Demand"**

Professor Purcell accuses the agricultural economics profession of negligence in not spotting an obvious shift in U.S. beef demand, malfeasance in not warning the beef industry that a demand shift had occurred, and irresponsibility in not formulating viable policies to ease the difficulty of the beef sector's subsequent adjustment. So as not to ignore Chicken Little, a little chicken data is also considered and it is suggested that a prudent research agenda was pursued while the "sky was falling" on the beef sector.

Beef and chicken are close substitutes for most consumers,



and substitution between these two meats depends on relative prices. Figure 1 uses Purcell's plus other USDA data to plot two ratios from 1970 through 1988. The upper line is the ratio of the retail price of beef to the retail price of chicken, and the lower line is the ratio of per capita beef consumption to per capita chicken consumption. Purcell states "...it is difficult to avoid the conclusion that (beef) demand has decreased." The data in figure 1 suggest one reason for the demand shift, namely beef consumption has fallen while chicken consumption has risen (at least partly) because of beef's price increase relative to chicken's price.

Purcell poses two important questions. If it is so obvious that the beef demand curve shifted inward in the mid-seventies, (a) why are agricultural economists in disagreement about this shift, and (b) why did they fail to sound the alarm that the sky was falling on the beef sector? First, agricultural economists assume that the two-dimensional demand curves depicted in economics principles texts shift in response to many forces. The fact that the demand for beef shifted merited no special attention. The interesting research question is, "Why did the beef demand curve shift?" Did the shift result from a significant change in something that systematically influences the demand for beef (i.e., economic conditions as shown in figure 1), or did beef demand shift as a result of demand-structure change (i.e., a change in the parameters of the demand functions)? Most of the meat demand research of the past ten years has focused on detecting a possible change in the structure of demand. The disagreement among agricultural economists is on whether the demand structure changed, not on whether an individual demand curve shifted.

The emphasis of the profession on the structure of demand instead of on individual demand curves, while seemingly misplaced, is actually quite useful. First, if economic forces cause a demand curve to shift, it is possible that the same forces may later reverse the shift. One who discovers a demand shift, and formulates policy to deal with it, only to have the shift later reverse itself, will look foolish, much like Chicken Little who proclaimed the sky was falling based on empirical raindrops.

A more prudent approach is to discover the cause of demand shifts and then to formulate policy. For beef, if the demand curve shifted due to rapid technological advancement in poultry production and a relative cheapening of chicken, the beef industry's response should focus on lowering its cost of production. This may require biotechnological innovations. If, however, demand shifted due to changes in consumers' preferences for beef, then advertising and image-changing promotions are in order. Finally, if demand shifts due to advancements in chicken packaging and merchandising techniques, then the appropriate response is to compete by altering product characteristics and packaging. The prudent allocation of research dollars requires detecting the source of the demand shift. The publications cited

by Purcell all attempt to identify the causes of the demand shift. The lack of unanimous conclusions probably means that several factors have affected beef demands.

If adjustments in the beef industry are necessitated by changes in economic conditions, then those adjustments must be made in a free market economy. If agricultural economists' negligence is responsible for the adjustment pains in the beef industry, then perhaps their negligence also played an implicit role in creating the financial health of the poultry industry which has also had to adjust. And, let's not forget that consumers have been made better off by advances in poultry production and processing. The fact that consumers choose to consume less beef at a lower price is not a hardship because beef is, after all, only one of several possible meats and its consumption is not the standard by which consumer welfare is measured.

While Purcell implies that the profession should provide service to the beef industry, other interest groups, in particular, the poultry sector, taxpayers, and consumers seem equally deserving of the profession's services. If consumers collectively decide that they want to eat more chicken, the publicly supported agricultural economist's mission should not be to subvert this decision.

In summary, the agricultural economics profession has not "failed" in this issue. They have performed responsibly in trying to determine the sources of demand changes so as to better identify the appropriate policy action. Unlike Chicken Little, who concluded the sky was falling when it was only raining, agricultural economists are attempting to first understand the phenomenon that they are observing.



**From: Chuck Lambert**  
*National Cattlemen's Association*  
**Re: Purcell's "Beef Demand"**

Purcell has raised some interesting and valid points. I would agree that for the most part "the beef industry is not well informed on basic economic issues." And, I concur with "agricultural economists *have* failed to educate and, maybe even more importantly, to develop an appreciation about economic issues within the beef industry."

Having been in the beef industry for 20 years—10 as a producer, seven as an emerging economist (student/research assistant) and three as a professional economist, in that order, I have witnessed the beef industry's change and adaptation from both sides of the fence. Indeed, I am a product of that adjustment.

As seen from this unique viewpoint, a blanket stereotyping of either profession is not justified. Economists cannot educate those not willing to learn. On the other hand, economic messages not couched in terms of relevance to the producing sector should be expected to fall on deaf ears. Between the economics profession and the beef industry, there has been ample arrogance and disdain on both sides for the failure in communication to be deemed a two-way street.

In self-defense, I would point to at least two demand-related articles (in *Directions* 1988, and *Directions* 1989 – forthcoming) as indication that there is at least recent rudimentary understanding of Purcell's topic within the beef industry. In defense of the beef industry, there appears to be an evolving understanding and appreciation of economic and business principles during the 1980s that was not present a decade ago.

The beef industry has been whipsawed during the past two decades by at least two economic "forces of change" not addressed by Purcell:

- The rapid rise in feed prices resulting from increased export demand—related to the floating of exchange rates and dollar devaluation in the early 1970s—was, in part, responsible for increased per capita beef supplies during the mid-1970s. As average total costs (variable plus fixed) exceeded price (marginal revenue), herd liquidation began and supplies temporarily increased. It is axiomatic in the short run that we consume all we produce—at some price. A large portion of the increased per capita consumption in 1975-77 can be explained by increased cow liquidation fostered by rising feed grain costs.
- The tightening of monetary policy to combat inflation during 1979-81 resulted in upward spiraling interest rates. This was the crowning blow for producers operating on borrowed capital. Thus, I agree with Purcell that "a generation of cow-calf producers has seen their neighbors forced out of business." However, even Purcell fails to realize why the "liquidation that began in 1976 lasted for so long and why resources were forced to exit the industry on such a sustained basis."

"Low cattle prices and record low 'real' retail beef prices" were not solely responsible for related losses by producers as Purcell indicates. Spiraling feed grain and interest costs related to macroeconomic policies made an equal, if not greater, contribution.

The economics profession also was conspicuously absent as these macroeconomic policies were being discussed prior to implementation. Voluminous analyses were published three to five years post-implementation. Had the agricultural public (beef industry included) been forewarned prior to the 1980 elections that "stopping inflation" meant a tripling of interest rates and a halving of capital asset values, the "Reagan mandate" might not have been nearly so great.

True to tradition, the economics profession was more than vocal in analyzing events after the fact. The "agricultural financial crisis" served as editorial fodder for the better part of five years. However, the profession was relatively silent in presenting even tentative implications for the agricultural sector from proposed policies prior to their implementation. This tendency of the profession is, no doubt, partly related to past criticism of economic research as "unscientific" unless validated by 20 years of time-series data and extensive econometric analysis.

I do agree with Purcell that declining beef demand contributed to lower beef prices. In addition to rising costs discussed above, declining demand contributed to conditions experienced by the beef industry in the mid-1970s through 1985. It is relatively easy to look at the scatter plot in 1988 and to say the "data told us so shortly after 1980." Without the benefit of hindsight, it is more difficult to say whether realization that a definite trend was emerging should have occurred in 1981, 1982, 1983, or sometime later.

I also agree that there may have been some shift in structural beef demand that can be attributed to changing consumer tastes and preferences. However, Purcell's statement "that changes in prices of competing meats cannot explain the dramatic drop in inflation adjusted beef prices since 1979" causes concern. The statement may be technically true in that own-price, cross-price and income effects may not fully explain *all* of the decline in beef demand. I would hope that Purcell does not want to leave the impression that traditional economic factors of demand have been "repealed."

Beef currently sells for 1.5 times the price of pork and 3 times the price of chicken. No matter how painful the truth, to say that those price differentials will not continue to influence consumer purchasing decisions away from beef to lower-priced alternatives is economically naive and a disservice to beef producers.

In a system with relatively cheap feed grain, beef cattle are

not competitive with other species in producing animal protein. The primary competitive edge of beef cattle is the ability to utilize otherwise wasted roughage. Biological differences in feed conversion rates and numbers of offspring produced per female work to beef's competitive disadvantage.

If price is the only factor, beef cannot be competitive with other meats in the near future. Beef must continue to rely on continued consumer preference for taste or other characteristics, while striving to lower costs of production.

Beef could lose the battle for consumer preference. It is still presented as a fresh, chilled or frozen (uncooked) product. The only innovations have been in cutting or packaging, not in preparation and presentation.

Alternative meat industries have adapted more rapidly to consumer requests for added service and convenience, including development of precooked and new products for the food service sector. I agree with Purcell that the beef industry must increase innovation in product development, microwave cookery and convenience foods or fall further behind the competition.

The industry must search for more efficient ways to produce, market, process and merchandise its products. Economies of scale, efficiencies of operation and changes in structure will be a part of that process. Efforts to stop change driven by economic forces to achieve efficiency will ultimately place beef at a greater competitive disadvantage relative to alternative meats which are rapidly achieving those efficiencies.

To improve beef's cost-competitive position, production factors must be addressed. The industry has made progress in increasing beef cow productivity. In 1970, a beef cow produced approximately 450 pounds of beef. By 1988, Cattle-Fax estimates show nearly 530 pounds of beef produced per cow. While cattlemen are making strides, the industry must become truly a "cost-oriented" competitor.

Contractual integration and reduced marketing margins may very well contribute to a lower-cost structure in the beef industry because of the economic efficiency involved. Plus, reduced genetic variability could ultimately provide a more uniform quality product consistent with consumer preferences.

The agricultural economics profession, in academia and the private sector, can jointly contribute to producer understanding and acceptance of competitive changes in the meat industry and structural changes in the beef sector.

Contrary to Purcell's perception, the leaders of the beef industry may not be confused. On the other hand, the other 99 percent of the producers will provide an ample challenge for us all.

Purcell's "Final Observations" and suggestions for change make intuitive sense. As a professional economist in the private sector, I'm willing to coordinate or participate in further activities to increase the two-way flow of information between the economics profession and the beef industry as Purcell has proposed.



**From: Wayne D. Purcell**

*Virginia Polytechnic Institute & S.U.*

**Re: The Author Responds**

The emphasis in Professor Dahlgran's letter on the importance of analyzing why the demand for beef has shifted is correct. But there will not be much attention to the "why" until there is at least something approaching a consensus that significant shifts have occurred. In Professor Dahlgran's 1987 article "Complete Flexibility Systems and the Stationarity of U.S. Meat Demands," *Western Journal of Agricultural Economics*, December 1987, he acknowledged that no such consensus was present. Professor Dahlgran concluded that the departure from long-term

consumption trends is likely due to changing supply conditions and that meat demands have been stable.

Total meat demand may well have been stable, but that ignores the dramatic adjustments forced on the beef sector by changes in demand for beef. And it will not do, as suggested in Professor Dahlgran's 1987 article and in his letter, to attribute the beef industry's problems to rising beef prices relative to alternatives such as chicken. Since the late 1970s, the inflation-adjusted price of chicken has been *increasing* relative to beef. We cannot allow our analyses to be so controlled by the need for long-term data sets that we ignore the evidence of the most recent 10 years. The private sector cannot wait on a decade of observation before it starts its adjustment processes.

Professor Dahlgran is right in sounding the need for technological adjustment if one of the problems is lower costs of production for a substitute product such as chicken. Across the past 10 years, the beef industry has moved to a position of producing as much beef from a herd of 99.5 million head as it was producing from herds in excess of 110 million head in the last 1970s. Across the same time period, the farm-retail price spreads have trended lower if the impact of inflation is removed, suggesting technological progress in processing as well. But the industry was not able to generate and adopt enough technology to offset a reduction of over 30 percent in the inflation-adjusted price of Choice beef at retail in the presence of essentially constant per capita supplies. When all the discussion is over, that price statistic stands firm as a blunt indicator that something dramatic happened to the level of demand for beef.

Abstracting for the moment from the question of whether we recognized what was happening, we still have to deal with the issue of whether what we knew was effectively communicated to the private sector. In my judgment, the answer is "no" and we then have to face the issue of whether we have the forums, the established credibility, and the rapport that is needed to facilitate effective communication. And if we do not, there is reason to discuss whether we have the incentive programs in place that would be required to encourage effective public-private sector interaction. Again, my answer would have to be "no."

Chuck Lambert points to some voids in my article that came with a focus, perhaps overly so, on the demand side as a "force of change." Feed costs and interest rates obviously made a difference. Had the demand surface been at least constant during the period, however, I suspect the impressive progress in increased productivity across the past 10 years would have overcome the impact of volatile corn prices and volatile interest rates. Perhaps it is the case that the declines in demand were the proverbial straw that broke the camel's back.

Overall, Dr. Lambert and I appear to be in basic agreement. We both understand, I think, that the basic economic rules have not been repealed. It appears we both agree that the problems that emerged in the late 1970s are more nearly attributable to a shift in preferences, and that the preference "demand shifter" is tough to model. And as I read his response, we both heartily agree that the "lines of communication" between the university research community and the private sector could stand some improvement. That will mean working to restore lost credibility, and that will not be easy. But we both agree, it appears, that we have to try.

In the final analysis, we at the universities are in the education business. Hopefully, spending some time on the beef sector as a "case study" will encourage us all to think about how effective our research and related educational efforts have been. And in that context, I appreciate the fact that Roger Dahlgran and Chuck Lambert have taken the time to think about this overall issue and to respond to my rather critical article.



# FARM POLICY

**From: Wayne A. Boutwell**

*President*

*National Council of Farmer Cooperatives*

**Re: Paarlberg's "Farm Policy Agenda"**

Don Paarlberg is right in his assessment that there are farm policy topics of importance beyond the traditional commodity programs that need attention, such as rural development, environmental concerns, and wholesomeness of food.

Actually, as we enter the debate on the 1990 Farm Bill, these issues are already receiving prominent attention in the early hearings, with a rural development bill presently moving through Congress and other bills pending in the area of environmental concerns.

A major issue not mentioned by Don that has implications for agriculture is food safety. At issue is the cost and availability of productive inputs such as pesticides. The outcome could have a greater impact on the farm and food system than all other issues combined depending on how it is handled. Because of the implications for future gains in productivity, and thus the cost and availability of food, it is imperative that farm and commodity organizations pay attention to and participate in the debate and ultimate solution.

The real danger facing agriculture is that these issues will be micro-managed, without understanding what the cumulative effect will be on our ability to meet this country's food policy goal (i.e., provide consumers with a safe, wholesome and dependable supply of food at reasonable prices).

This is particularly true when you consider the awesome responsibility agriculture faces in meeting food needs over the next 50 years with a world population expected to nearly double to 10 billion people.

The question is: how do we meet our food policy goal and provide for a clean environment—which we all desire—with a dwindling resource base?

This question becomes compounded when you consider, as Don pointed out, that there are many variables which substantially impact agriculture such as taxes, interest rates, exchange rates, inflation and deflation.

It's achieved with an economically viable farm sector, which must have some protection from the inherent instability associated with the conditions under which farmers must produce and market their products. Traditionally this has been the role of the commodity programs, and I don't see any reason that they should be eliminated or even substantially altered from the structure of the 1985 Farm Bill.

As usual, Don has done an excellent job pointing out that there are many other issues important to agriculture and rural America that should be considered.

I wish he had put his comments in the context of overall food, environmental and rural policy goals, and then asked what the appropriate response of government and industry should be to achieve these goals, given the environment in which agriculture must operate.

**From: Frank S. Bouis**

*Vice President*

*Florida Fruit & Vegetable Association*

**Re: Mellor's "Food, Poverty, Aid, Trade, Nexus"  
(First Quarter 1989)**

John Mellor's article in the latest issue reminded me again that when economics leaves the mathematical relating of prices, costs, and volumes, it starts to resemble sociology, philosophy, or politics.

Dr. Mellor observes that developing countries are producers of "tropical" and "labor-intensive agricultural commodities" for "which they have a comparative advantage for exporting to other (developed) countries" and "for which demand is still only mildly inelastic."

He says food aid from developed countries can be used by the developing countries to subsidize construction of roads and other infrastructures. Logically, he assumes food aid will be surplus crops from developed countries, corn, wheat, and so forth. Happily, these western staples are essential to the people of the underdeveloped countries since they don't have them.

He then suggests that, to facilitate the export of these staples by developed countries to developing ones, GATT should "modify the trade regimes of the developed countries so they can import more of the labor intensive agricultural commodities" produced by the developing countries.

## The...Nexus

In other words, the U.S., Canada, Western Europe, and Japan should import more of their fruits and vegetables from Central and South America and Africa so that these latter can import more wheat, corn, and soybeans from the U.S.

There is a large agricultural industry in Florida and California that is based on supplying these very foods to these very developed countries. This industry is made up of landowners, farmers and workers, supplied by a large agri-industry which packages, processes, transports and markets. And this industry is being offered to be traded away.

If the developing countries have a "comparative advantage," the developed countries must have a "comparative disadvantage." The principal comparative disadvantage of developed countries producing labor intensive crops is high labor cost. This is caused by social programs requiring minimum wage, employment insurance, housing standards, field sanitation, etc. Other production comparative disadvantages do exist.

Without the economic jargon, this is recognizable as politics, not economics.

### National Policy Workshop

**Food and Agricultural Policy Issues—Alternatives for the 1990s**  
November 16 & 17, 1989—Washington, DC

Sponsored by NCR 151 Policy Research Committee, AAEA, Farm Foundation, Kellogg Foundation, National Center for Food and Agricultural Policy, and the Economics Research Service.

Contact: Bob Spitze, Chairman, University of Illinois, Department of Agricultural Economics, 1301 W. Gregory Dr., Urbana, IL, 61801

# Aflatoxin

**From: W. Kirk Miller**

*Administrator*

*Federal Grain Inspection Service, USDA*

**Re: Martin's "Aflatoxin Crisis!"**

The letter from Mr. Hugh Martin entitled "Hello! Is Anybody There? We Have An Aflatoxin Crisis!" asked several good questions but left the reader believing no one is concerned nor working to help. Fortunately, this is not so.

In response to the greater occurrence of aflatoxin in corn during 1988, universities, state departments of agriculture, U.S. Department of Agriculture (USDA), Food and Drug Administration (FDA), industry associations, and others began working together. Affected states conducted surveys immediately prior to harvest to determine the extent of contamination. The grain industry, states, and USDA prepared for the challenge of detecting the aflatoxin tainted corn and ensuring that excessive aflatoxin levels are prevented from entering the nation's food and feed supply. Moreover, viable alternatives for producers and handlers of contaminated corn were explored, implemented, and widely publicized.

In October 1988, FDA, the regulatory agency with surveillance and enforcement responsibilities for aflatoxin, issued updated guidelines for corn contaminated with aflatoxin. The guidelines provided acceptable uses for corn based on the level of contamination.

USDA agencies also reacted to the aflatoxin crisis. The Agricultural Stabilization and Conservation Service (ASCS) established requirements for testing corn and corn-based products for the presence of aflatoxin. The Federal Crop Insurance Corporation (FCIC) implemented a program to compensate producers having contaminated corn. The Federal Grain Inspection Service (FGIS) informed industry associations about the availability of official testing services.

The Federal Government, universities, and the corn industry have researched and continue to research ways of preventing the occurrence of aflatoxin. USDA's Agricultural Research Service (ARS) is currently involved with a project that shows real promise at controlling aflatoxin. Scientists are exploring the possibility of removing or altering genes in the mold responsible for the production of aflatoxin.

Alternative uses for aflatoxin contaminated corn may include using it as a component of fertilizer or for ethanol production. ARS research indicates an acceptable use for contaminated corn is fermentation resulting in alcohol production. The remaining mash, however, must be tested before it is used for feed.

We think federal and state governments, universities, and industry associations have reacted well to the crisis at hand.



**From Tom Kriegel**

*University of Wisconsin*

**Re: Hugh Martin's Aflatoxin Crisis**

Since aflatoxin was a relatively new problem in our state in 1988, I and several of my fellow agents collected corn samples for aflatoxin testing last fall at the direction of Plant Pathologist Dr. Gayle Worf in an effort to predict the level of aflatoxin pres-

ence in the months to come. Our UWEX specialists also worked with the Wisconsin Department of Agriculture, grain handlers, and dairy plants—all of whom engaged in routine testing.

Small levels of aflatoxin were detected in a couple of instances but to my knowledge no animals or humans were exposed to significant levels in Wisconsin. As a county agricultural agent, I relayed information about the survey as well as other information provided by our Cooperative Extension specialists to the roughly 1800 farmers and agribusinesses in my county via one of the drought newsletters I sent in 1988.

I can't speak for other states and I don't have answers for all of Mr. Martin's good questions. However, I can say in Wisconsin that the University and other agencies and organizations acted quickly, responsibly, efficiently, and effectively to meet a new problem head on. My impression was that neighboring states reacted similarly. If so, effective reaction relatively free of fanfare could give the impression that little was done.



**From: Hugh Martin**

*Martin Farms of Little York, Inc.*

**Re: The Author Responds**

The farmers in Western Illinois no longer have an aflatoxin crisis. While waiting for some authoritative suggestions, some information, advice and psychological support, the farmers took matters in their own hands and solved the problem.

In most cases the tainted corn is now being mixed with good corn and voila! The rejection rate which was as high as 70 percent-plus is now down to the 10-20 percent level. And at some elevators, if one will accept 25 cents per bushel less than market price, they forget to turn on the "black light," which is the first test for the presence of aflatoxin.

I hope that the mixing of tainted corn with good corn does not upset many of our foreign friends who pay money for our grain. I'd hate to discover that our markets overseas had evaporated because of shoddy standards.

You know, something like this could be serious to a farmer. If we can't sell last year's crop, we could go broke this year. If we can't sell abroad, we could go broke in some future year. It is important that Mr. Miller's "federal and state governments, universities and industry associations" be more aggressive with the next crisis. Muddling through, as was done this time, runs too big a risk.

## AAEA FOUNDATION

### International Travel for Young Agricultural Economists

Dialogue and scholarly exchange among agricultural economists working in diverse areas of the world contributes to professional development. Meetings of the International Association of Agricultural Economists every three years provide special opportunities for this type of exchange. An intent of the Foundation is to assist 20 young AAEA members to attend these meetings.

**The FOUNDATIONS GOAL IS A \$100,000 ENDOWMENT.**

Contributors of \$20,000 may name the travel grants supported with their tax-deductible contribution.

See the Foundation's announcement on the back cover for a list of other Foundation projects and how you can send today your tax-deductible contribution/pledge to The AAEA Foundation.

**From: Wyche Fowler, Jr.**

*U.S. Senator*

**Re: Rural Development  
(Second Quarter 1989)**

Let me commend you for your efforts to put the problems of rural development in perspective in the Second Quarter edition of *CHOICES*. There were a number of disturbing facts in that series of articles that demonstrate a compelling need for action.

One that stood out in particular was the annual figure for rural outmigration in the latter part of this decade: 500,000 a year. Rural areas that *have* grown and developed are largely the beneficiaries of urban sprawl—which is most definitely not the answer for most of rural America. We must find a way for small towns to generate their own development while maintaining their basic rural character.

The series correctly points out that one of the obstacles to a more effective approach to these issues is the fragmentation of our efforts. Ever since I have been a member of the Senate Agriculture Committee I have argued, along with a number of my colleagues, for a more comprehensive and coordinated policy toward rural America.

We are trying to make the case that the agricultural economy, as important as it is, is not the sum total of our small towns and countryside. We need an approach that addresses entire rural communities—in which our farmers are interdependent with a variety of small town professionals, service providers, small businessmen and teachers.

These communities depend on many of the same factors for successful development as any other community: access to financing, transportation, communications and education.

I believe that modern communications technology holds out the greatest promise for rural communities. This technology can eliminate distances and overcome geographical barriers. In this age of satellite uplinks and computer messaging, there is no reason that rural communities have to remain isolated from commerce and information available to the rest of the country.

This opens many career, business and—especially—educational opportunities to rural Americans. I have introduced Star Schools legislation intended to bring improved course offerings, both advanced and remedial, to our high school students, even in the most remote areas, through satellite communications.

Other components of the Rural Partnerships Act, a package of legislation developed by Senator Leahy and other members of the Senate Agriculture Committee, reinforce rural business development, financing and health care.

I am also supporting rural housing legislation offered by Senator Sanford of North Carolina. It does not take an expert to know that our rural areas suffer from shortages and substandard housing. An obvious need of young people who wish to stand by their roots and remain in rural communities is a place to live.

This housing initiative will therefore complement our efforts in business development, communications and education. These legislative initiatives, taken together, form the genesis and the core of a comprehensive rural development policy.

We are not likely to see immense rural initiatives on the order of rural electrification and the land grant colleges in these times of two-and-a-half trillion dollar national debts. There is no doubt, however, that we must target more of our efforts and use our available resources more effectively for the benefit of rural Americans.

**From: David L. Debertin**

*University of Kentucky*

**Re: Knutson and Fisher's Rural Development Policy**

Knutson and Fisher raise important issues regarding future rural development policy in the U.S. Although I agree with much of what they say, there are several points to which I taken exception.

Their argument that the cause of rural community problems is largely unrelated to depressed conditions in agricultural and natural resource-based industries is true in some states under certain conditions, but certainly not a general truth that applies in every state. Consider some counter examples. In North Dakota, cash receipts from the sales of crops and livestock in many recent years has exceeded the total value added for all manufacturing in the state. Furthermore, manufacturing in the state largely consists of value added by processors of agricultural commodities, producers of farm machinery, and producers of other inputs purchased by farmers. There is very little manufacturing value added in the state that is not somehow linked to the well-being of the state's agriculture and natural resource industries. I wonder what the study cited by the authors would have revealed had it been conducted in North Dakota!

Try to tell someone from Eastern Kentucky that their well-being is not closely linked to the health of the coal-producing industry and see how far you get. The economy of Eastern Kentucky has for decades been boom or bust depending on the price of coal and activity in the mines. There is no question but that economic activity within Eastern Kentucky is closely linked to the well-being of the coal industry. Knutson and Fisher have attempted to make some general statements about how rural economies operate all over the U.S. based on evidence from two states. But statistical evidence from two states does not warrant the general conclusion about the importance of agriculture and natural resources to economic development in the economies of the other 48 states. Unfortunately, the statistical relationships need to be examined in each state or region individually.

The authors argue that the best rural development policy is not necessarily a strong farm policy. I agree, but I would turn the statement around and suggest that, indeed, the best farm policy might very well be a strong rural development policy. Fortunately, that is where some members of Congress and other key national policy-makers who shape rural policy appear to be headed. Unfortunately, the commodity groups and general farm organizations appear to be little interested in a comprehensive rural development policy if a component of that policy does not involve increasing prices for major agricultural commodities for the primary benefit of commercial producers. It will be interesting to see who comes forward to advocate a strong general rural development policy that increases the well-being of rural residents, whether or not they derive most of their income from off-farm employment. There has been strong support by farm organizations and commodity groups over the years for agricultural policies designed to increase incomes for commercial farmers. Federal funds for improving the well-being of rural residents, whether or not they derive most of their incomes from the sales of crops and livestock, are not unlimited. Programs aimed specifically at low-income farmers, part-time farmers, or low-income rural non-farm residents will be funded primarily through a reduction in spending on price-support programs whose benefits are primarily aimed at commercial farmers. My hunch is that, despite the rhetoric, in the next five years there will be increasing federal funding for research and pilot extension efforts aimed at developing public policies for improving rural life, but no major programs that would cost the federal government enough money to place continued political support and funding for commodity-oriented price-support programs in jeopardy. 