Two Immensely Successful Ag Economists: Divergent Approaches to Major Contributions

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Organized Symposium
*Market Structure, Organization, and Performance of the Food System: Greatest Contributions by Agricultural and Applied Economists*
AAEA Annual Meetings, Milwaukee, July 27, 2009
1. William G. Tomek (AAEA Fellow - 1989)

& Gray “Temporal Relationships Among Prices on Commodity Futures Markets: Their Allocative and Stabilizing Roles.” AJAE, August 1970

& Robinson
Agricultural Product Prices
4 editions

and many related works.....

Temporal Relationships Among Prices on Commodity Futures Markets: Their Allocative and Stabilizing Roles*

WILLIAM G. TOMEK AND ROGER W. GRAY

The role that futures markets play in guiding inventories, through hedging, has been emphasized in economic literature. Historically, futures markets first emerged for the annual crops that could be continuously stored (grain and cotton); hence inventory hedging has been important from the outset. But forward pricing which was not attendant upon inventories has long been practiced, and the more recent emergence of futures markets for non-inventory commodities dramatizes this fact. We show here that the model of intertemporal price relationships differs for the two cases and provide evidence for selected commodities. The contrasting implications for allocation and stabilization are also drawn.

Two important functions performed by futures markets—guidance of inventory levels and establishment of forward prices—are typically so closely intertwined that evidence of their separate performance has not been stressed. Futures markets have historically been thought of as facilitating the carrying of inventories but current developments in futures storage supply curve. A major role of futures markets has been this temporal allocation of inventories, and analyses of market performance have stressed this function.

Recent developments, however, have shifted attention to other allocative and stabilizing functions. On the one hand, new futures markets have been successfully established for seasonally non-
**Who has cited this work?**

**Web of Science**
77 citations

**Google Scholar**
120 citations

**Ag Product Prices**
416 citations - Google
Futures prices are simply a reflection of one fundamental S&D

Working would have called these spreads simply carrying charges

- the cash market already contains all of this information
CBOT Daily Closing Futures Prices During April 1969 for:

MAY and DEC Corn

MAY and NOV Potatoes

Source: Tomek and Gray
Some Key Contributions

1. Storable commodity futures can be viewed as forecasts

2. Harvest contract in springtime varies as much as harvest price – no stabilization from routine hedging

3. Introduction of a viable futures, increases price stability

4. Non-storable deferred futures do not follow cash prices

5. Non-storable deferred contracts are forecasts of future S&D

6. Non-storable deferred has less variation than cash
Tomek’s work spawned research on:

- Futures marketing hedging strategies
- Optimal hedge ratios and production risk
- Futures market efficiency
- Futures forecasting accuracy and competing forecasts
- Temporal futures market price relationships
- Supply responses to futures market signals
- Stabilizing role of futures markets
- Price discovery role of futures
- Basis studies
2. Wayne D. Purcell

Founder and Director of

Research Institute on Livestock Pricing

(available at: http://naiber.org/publications.htm)
Purcell’s Great Contribution

Changed deeply held industry paradigms:

1. Beef demand
2. Value of futures markets
3. Vertical market coordination and alliances
4. Packing industry concentration

Dr. Purcell was more successful at educating industry stakeholders on economic principles of markets than any ag economist I know.
Retail Choice Domestic Beef Demand Index
Annual, 1980-2008
“The blunt truth is that consumers are not willing to pay prices for fresh beef sufficient to keep the beef industry in business at anything other than lower levels and smaller market shares.

This has to get fixed, and it is hard for me to see how we will speed that “fixing” unless checkoff dollars are spent on revitalizing the product offering and pushing into new uses and new markets. …

Let’s fix it now; let’s get time, energy, and resources focused on the important and quit wasting time on issues that only appear to be urgent!”
How did Dr. Purcell impact change?

1. Addressed complex issue of immense industry interest
2. Was outspoken and spoke a lot – he didn’t hide in his office
3. Wrote a lot and put writings in stakeholder format
4. Took substantial leadership – e.g., RILP
5. Organized research teams – funded projects
6. Organized and held national industry conferences
7. Delivered
8. ...was seemingly tireless