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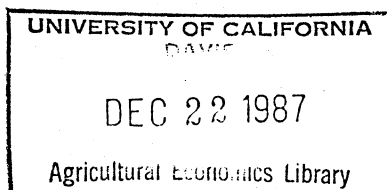
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Agricultural Adjustments in Response to Government Intervention and Excess Capacity



By

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Stillwater

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Agricultural Policies

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Daryll E. Ray

The agricultural economics profession's reaction to the changing economic conditions for agriculture has greatly affected how agriculture has adjusted to its environment including government intervention and excess capacity. The theme of my comments is that agricultural economists have been in touch with one another but not necessarily with reality. The bandwagon has been well maintained and regularly used in our profession. Often a small group of agricultural economists write a script in the policy area and the rest of us blindly parrot the "party line."

Better Analysts: Economists or Farmers?

Farmers are often out-in-front of agricultural economists in analyzing economic environment and policy. For example, when agricultural economists (of all stripes -- government, academic, consultants, agribusiness) were proclaiming a new era for agriculture in the early to mid-seventies based on export trends, farmers tended to be skeptical. High real prices had happened before, they reasoned, but such conditions tend to sow the seeds of their own destruction. They finally succumbed, however, and invested heavily in productive assets.

Also, when agricultural economists were saying in the late seventies that inflation was the major problem in agriculture, farmers agreed that input prices were increasing rapidly which caused cash flow problems. But they pointed out that if they had to choose between deflation and inflation -- they would take inflation, thank you.

Some farmers have also taken an opposing view on exports and its relation to price. They say our competitors' export levels are largely insulated from price changes and have been for decades.

Originally From Our Courses

The ironic part of all this -- many of the those farmers picked-up these ideas about long-term real farm prices, inflation and exports in agricultural policy courses that we once taught. Which of us long-time agricultural policy teachers has not pointed out that, aside from short-term aberrations, over the long-run a primary industry such as U.S. agriculture - - especially one with a low income elasticity and rapid technological advance -- tends to decline as a proportion of GNP and real farm prices also tend to decrease (Heady)?

Which of us has not pointed at the propensity of agriculture for easy money and credit and discussed the detrimental impacts on agriculture during times of deflation?

When talking about the various approaches to alleviate chronic overproduction problems, which of us has not discussed expanding the export market in the same general category as finding new nonfood uses for agricultural commodities -- nice idea but don't bet the farm on it (Cochrane)!

Well, we as agricultural economists figuratively did bet the farm on exports and many farmers literally bet the farm on exports. Most of us have jobs but many of them do not have farms. Farmers have learned their lesson, don't have anything left to bet or are not farming but agricultural economists are still betting on exports. We have hung onto, against all evidence, that the elasticity of demand for exports is extremely elastic -- so elastic it makes overall demand elastic -- and to the idea that exports above all other considerations must be maximized.

When it is all said and done, the current havoc in agriculture probably will be blamed partially on domestic macroeconomic causes but to a much larger extent on whipsaw exports (Ferris) including: (1) the political reasons for the run-up in exports such as the change in domestic policy of the USSR, mammoth increases in foreign exchange in underdeveloped countries generated from loans using recycled petrodollars; (2) the way politicians and agricultural economists interpreted and acted upon the upswing in exports including convincing farmers that a new era had arrived and, in the case of Congress, raising loan

rates and target prices in the early eighties because it was thought both would be inoperable anyway; (3) the U.S. producers' response to the euphoria as well as the response by governments around the world with the response by the latter fueled by fear of shortages and unreliable suppliers; (and continuing on the downside) (4) the debt repayment problems of the LDC's; and (5) a weakened global economy accompanied by better than average weather and crop yields. *The current excess capacity in U.S. agriculture is largely due to failed expectations for the export market and agricultural economists were a major force in generating those expectations.*

As the Song Says: Still Crazy After All These Years

I think one could argue that we are still somewhat off center in terms of providing *useful* policy direction and information. Just as in the early days of price and income programs, excess capacity is being described as a short-term problem -- demand happens to be down at the moment but it will pick up real soon now. Or that by decoupling payments from production, farmers will produce the equilibrium quantity. Or that adjustments in the 1980s would have been easier and farm incomes would have been higher if farm programs had been eliminated during the peak of grain prices in the 1970s.

Let's consider the last point. Removal of farm programs in the seventies would not have prevented the collapse in the export markets in the 1980s. Reductions in spendable funds in importing countries, worldwide recession and good weather in selected importing and exporting countries reversed the export market. The decline in the U.S. share of grain exports since 1982 was caused by a reduction in the total export market not by increased exports by our competitors. Wheat harvested acreages in Canada, Argentina, Australia and EC-12 were remarkably stable from 1981 to 1986 (Table 1). Hence, our competitors' wheat acreage did not increase markedly during the high price support days of the early 80s or decline in the last year or two with reduced price levels and expectations.

The price and policy considerations of the seventies determined the productive capacity of world agriculture in the early 80s. Net exports from our competitors has changed very little during this decade. But with a smaller total export demand, our competitors' relatively constant level of exports results in increased shares for them while we bear the full reduction in the total market and a proportionally larger reduction in share. Thus, it follows that lower prices during the early eighties resulting from eliminating farm programs in the seventies would have had little impact on export quantities in the 1980s. The implication of this is that farmers would have had to voluntarily reduce production to the extent of current programs just to receive the current market price and associated cash receipts. Would farmers in the heart of the U.S. wheat and corn-soybean areas reduce production equivalent to the 25 to 30 percent idling of acreage during this period under farm programs? Even if that were accomplished, only the market portion of grain incomes would be retrieved. A one-third reduction in grain exports between 1982 and 1984 was an extremely potent shock.

Maximize Exports and Free Markets

With the emphasis on increasing exports, agricultural economists have been oscillating between recommending (1) maximizing export tonnage by providing export subsidies and reducing commodity prices to well below the world equilibrium levels if necessary; and (2) moving to competitive markets and free trade.

Apparently, export maximization was supported because many thought U.S. export demand was sufficiently elastic that the combined domestic and export demand for major grains would also be elastic. Export demand may be elastic as prices rise but with price decreases it appears to be very inelastic in the short-run and in the long-run its elasticity is probably as related to *political objectives* as to economic considerations.

Recommending competitive markets and free trade is not surprising in one sense since the global economic benefits of competitive markets and free trade are drilled into

economists beginning in AGE 101. What is surprising, however, is how conveniently all the fundamental aspects of agricultural policy are being ignored.

As we all know, if only competitive markets and free trade were involved, there would be no need now nor in the past for agricultural policy. In the final analysis, society, not agricultural economists, determines farm policy. And indeed the values and goals of U.S. society have been brought to bear on agriculture and the collective decision has been to modify the free market solution.

Back to Basics

As I look over the list of conditions that have long been used to justify farm programs or explain why agricultural economists tolerate farm price and income programs (Hathaway, p. 241), it is not immediately evident that these conditions have changed. The list includes: (1) Agricultural markets are inherently unstable; (2) Farmers acting alone cannot influence price so they adopt new technology to lower per unit costs; (3) Except for short-term bulges in export demand and weather caused aberrations on domestic supply, adoption of new -- often publicly generated -- technologies shift the supply of agricultural products to the right faster than population and income growth expands demand; (3) Demand for agricultural products is extremely inelastic so prices decline substantially with increases in output; (4) Due to lack of opportunities for using farmland, machinery, etc., for anything but agricultural use and farmers' natural tendency to prefer agricultural living, the elasticity of supply is low; (5) U.S. society, including urban dwellers, values our agricultural heritage and agrarian ideals and are willing to help preserve and support agriculture; and (6) The characterization of farm programs by agricultural economists as a means of transferring a portion of the consumer benefits from reduced real food prices generated from publicly funded technological advances back to farmers as compensation for lowered farm prices and high costs of adjusting to new resource mixes.

Obviously, farm programs are not without their problems. Those problems, including distribution of farm program benefits among farm sizes, total cost of farm programs, excessive accumulation of stocks, etc., are very real and need to be addressed constructively.

Our mission then, which I would argue we have decided not to accept lately, is to come forth with analysis consistent with the constraints that society puts on the policy solution set. I don't think free markets are in the solution set nor is reliance on export markets if that reliance is predicated on an incredibly large elasticity of demand.

Just like the poker player would prefer to be sitting with a full house, agricultural economists might prefer a world with free trade, perfectly competitive markets, a highly price elastic export market and agricultural supply functions that respond quickly to reduced prices. But we all must do the best we can with the cards we are dealt. Not to do so ensures losing money in poker and relegation of agricultural economists to ivory towers.

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Table 1.
Wheat: Supply/Disposition for Major Export Competitors

	Area Harvested	Yield	Production	Domes. Use	Net Exports	End Stocks
	<i>mil ha</i>	<i>T/ha</i>	- - - - - million tonnes - - - - -			
Canada (Aug/Jul)						
1981/82	12.4	2.00	24.8	5.2	18.4	9.8
1982/83	12.6	2.13	26.7	5.1	21.4	10.0
1983/84	13.7	1.94	26.6	5.6	21.8	9.2
1984/85	13.2	1.61	21.2	5.2	17.6	7.6
1985/86	13.7	1.77	24.3	5.7	17.7	8.5
1986/87 *	14.2	2.24	31.9	5.7	18.9	15.9
EEC-12 (Dec/Nov)						
1981/82	15.7	3.71	58.1	49.6	10.2	9.8
1982/83	16.0	4.04	64.7	50.2	11.8	12.5
1983/84	16.1	3.97	63.8	56.0	11.5	8.8
1984/85	16.2	5.13	82.9	59.6	15.4	16.7
1985/86	15.3	4.70	71.8	58.7	12.4	17.4
1986/87 *	15.6	4.59	71.6	59.5	12.1	16.9
Australia (Dec/Nov)						
1981/82	11.9	1.38	16.4	2.6	11.0	4.8
1982/83	11.5	0.77	8.9	4.1	7.3	2.3
1983/84	12.9	1.70	21.9	3.4	13.3	7.5
1984/85	12.1	1.55	18.7	2.9	14.7	8.6
1985/86	11.7	1.38	16.1	3.0	16.0	5.8
1986/87 *	11.3	1.55	17.5	3.1	14.3	6.2
Argentina (Dec/Nov)						
1981/82	5.9	1.40	8.3	4.3	3.6	0.8
1982/83	7.3	2.05	15.0	4.8	9.9	1.0
1983/84	6.9	1.85	12.8	4.7	7.8	1.3
1984/85	6.0	2.22	13.2	4.6	9.4	0.5
1985/86	5.3	1.61	8.5	4.4	4.3	0.3
1986/87 *	5.0	1.80	9.0	4.5	4.7	0.4
Total (marketing years)						
1981/82	45.9	2.34	107.6	61.7	43.2	25.2
1982/83	47.4	2.43	115.3	64.2	50.4	25.8
1983/84	49.6	2.52	125.1	69.7	54.4	26.8
1984/85	47.5	2.86	136.0	72.3	57.1	33.4
1985/86	46.0	2.63	120.8	71.7	50.4	32.2
1986/87 *	46.2	2.81	129.7	72.8	49.8	39.3

Source of Historical Data: "World Grain Situation and Outlook," USDA, FAS, February 1987

*Chase Econometrics Projections.

