

FARM PRICE AND INCOME SUPPORT MECHANISMS

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Summary

Agricultural commodity markets are efficient in using all available information to set prices to clear markets. Inefficient redundant resources are culled and improved inputs and practices are attracted to food production.

Many nations that can afford to do so subsidize agriculture to maintain family farms and for other reasons. Markets and the political power of large commercial farmers are difficult to circumvent, however, and programs have had a mixed record at best of preserving family farms and stabilizing food supplies.

Price and income support program transfers come mainly from taxpayers and consumers. Transfers mainly benefit large food producers. Welfare costs (deadweight costs in terms of lost national income) of commodity programs average less than 5 percent of agricultural receipts in most countries but commodity programs have lost much of their economic justification in mature economies. Nations have tried to reform programs to reduce economic costs but inertia, disproportionate political representation, and nostalgia toward family farms by the public have continued to maintain transfers especially to commercial farmers in industrialized countries.

Emphasis is turning from policies to raise farm income to policies that help farmers transfer their own income from favorable to unfavorable years. More family farms could be helped by abandoning price supports (which especially help larger farms) and instead target payments to small family farms. Movement away from high price supports and land diversion combined with movement towards decoupled direct payments and help to farmers shifting income from favorable to unfavorable years can reduce the real cost of programs.

Chances are slim indeed that crop and revenue insurance can be “fixed”. “Fixing”

would mean avoiding incentives to overproduce while providing sufficient public subsidy to induce widespread producer participation and end disaster assistance interventions by the US Congress. As such it may be appropriate to abandon public crop and revenue insurance subsidies and rely instead on a NISA or FARRM type program augmented from time to time by ad hoc disaster assistance.

1. Introduction

This paper briefly reviews the evolution of farm price and income policy before analyzing specific policies. The latter includes a wide array of policies ranging from mandatory controls and direct payments to insurance. A key tension has been over “stabilization” policies: are they designed to reduce variation in or to raise the average level of farm prices and incomes? Other issues include freedom of farmers to make production and marketing decisions, whether to tailor programs to international as well as domestic markets, and how much national income and international markets to sacrifice in transferring income to food producers.

2. Evolution of Farm Price and Income Support Mechanisms

Most traditional and developing economies cannot afford to provide price and income supports for agriculture, hence this paper is mainly directed to developed and mature economies. A developed economy is characterized by a positive but slowing rate of general economic and population growth, and by high income compared to earlier growth stages. The high income elasticity of demand for environmental protection intensifies interest in measures to reduce soil erosion and improve water quality. The United States could be classified as a developed country by the 1920s.

Economic problems of agriculture emerged for several reasons. One is the working of Engel’s Law—spending on food became a smaller proportion of employment and consumers’ overall spending. This phenomenon alone would not cause adjustment problems for the farm sector. But birth rates were higher in agriculture than elsewhere so people needed to leave agriculture to maintain equilibrium in labor markets.

A second problem for agriculture is technological changes either higher or lower than in the nonfarm sector. In the US, the “farm problem” arose from more rapid technological change in agriculture than elsewhere. Rapid labor-saving technological change coupled with an inelastic and slowly increasing output demand and sluggish farm labor adjustments created a surplus of agricultural operator and family labor earning low returns on resources.

In East Asia, the farm problem had opposite origins. Nonfarm industrial productivity increased faster than farming productivity. Rapid growth in nonfarm industry efficiently supplied exports, earning foreign exchange and raising the value of local currency in foreign markets. Coupled with high man-land ratios, small farms, constraints on land markets to slow farm consolidation, and slow productivity gains in local agriculture, the result was falling terms of trade for agriculture. Agricultural exports were expensive to consumers abroad while cheap food imports from abroad competed successfully for domestic food markets. The result was *East Asia Disease*

manifest in chronic low market receipts and redundant labor in agriculture as farm families adjusted slowly to emerging economic disequilibrium. While earnings of farm people lagged behind those of nonfarm people per capita in earlier stages of economic growth, the distinguishing characteristic in developed economies is nonfarm wealth sufficient to transfer income to agriculture from the nonfarm sector through government.

In a *mature economy*, in contrast to a developed economy, agriculture has worked off much of its redundant resources and approaches long-term economic equilibrium (it never reaches that equilibrium). That time arrived in the United States around 1970, but the transition was obscured by oil embargos and inflation of the 1970s. The 1981-86 farm financial crisis, induced by bursting of the petrodollar-led export “bubble” of the 1970s and by Reaganomics (large federal budget deficits and attendant high real interest and exchange rates) of the early 1980s, further obscured the progress US agriculture had made to economic equilibrium. Commodity programs no longer could be justified on economic equity or efficiency grounds by the late-1980s. American farm *and* nonfarm sectors had become affluent. Each had become capable of relying primarily on markets without transfers (see Tweeten, 1989; Tweeten and Zulauf). However, government properly continued to provide public goods, correct externalities, and provide a safety net.

In a mature economy, farming becomes a business. It becomes technologically advanced, large-scale, scientifically based, capital intensive, and managerially demanding. Because resources to efficiently operate farming units in such an economy are in short supply, those resources demand a competitive economic return for producing food. Agricultural commodity markets in a mature economy are competitive, transparent, rival, and exclusionary; hence, they “work”. That is, they are efficient, using all publicly available information to direct resources and products to their highest value uses.

This efficient-market conclusion applies also to stabilization tools for an agriculture subject to the vagaries of weather and other forces of nature and man. That is, private markets provide storage, forward contracting, insurance, diversification, and other tools for efficient stabilization. Furthermore, as business persons, agricultural producers in a mature economy have higher net worth than average citizens. It follows that commodity program interventions transferring income to farmers can no longer be justified on grounds of economic equity or efficiency.

Economic equilibrium provides returns comparable to nonfarmers only on a reasonably well managed commercial farms, hence small and less well managed farms that constitute the majority of farms will not earn satisfactory returns in the eyes of their operators. Thus smaller operations mostly are part time or retired operators who are on the farm for hobby, tax, rural amenity, and other “consumption” reasons. They are willing to pay for farm living out of savings or off-farm income. Earlier stages of development are likely to be characterized by populist charges of market failure and resource disequilibrium. As economic equilibrium is approached (it is never fully reached in a dynamic economy), farm income per household becomes a function of income of households in the massive nonfarm sector. This stands in stark contrast to the

structure in earlier stages when resource returns and living standards of the nation depend on agriculture. It follows that rising prosperity of farmers in a mature economy depends on rising prosperity of nonfarmers.

Welfare economics discussed later makes no case on equity or efficiency grounds for transfers to farmers in this stage, but *political economics* may continue commodity program transfers to farmers. Several factors are involved.

- *A supportive public.* In the US, farm people comprised only 1.7 percent of the US population in 1997 (Council of Economic Advisors, 1999, p. 441). The 210,000 commercial farms (sales over \$10,000 per year) that received two-thirds of all government payments in 1997 accounted for only 0.2 percent of the nation's population. This tiny fraction of the population cannot dictate policy based on the farm vote alone. Fortunately for farmers, four-fifths of Americans subscribe to the idea that "the family farm must be preserved because it is an essential part of our heritage" (Jordan and Tweeten). Without nonfarm acquiescence, commodity programs could not be continued in a mature economy. All constituencies ask for government favors; successful governments are known for being able to turn down self-serving demands. A few media events featuring the tragic story of financial failure of farm families is difficult for politicians to ignore, however.
- *Inertia.* Government transfers to farmers continue long after an economic justification for continuation has vanished (Wright and Gardner, p.62). Benefits of past government programs long ago were bid into land value and hence lost to the current renters and landowners. Although current programs do not raise real prices, incomes, or rates of return above free market levels in the long run, terminating the programs would deflate land prices and, during an adjustment period, cause financial hardships for farmers and merchants who depend on them.
- *Political asymmetry.* Economic losses from termination of commodity programs would be concentrated among relatively few landowners; gains would be scattered among millions of taxpayers and consumers. Although *collective* losses would be much less than *collective* gains, in the political arena a few determined big losers are more than a match for millions of small gainers who aren't aware of what they will gain.
- *Organization.* People fight much harder to keep from losing a government benefit than to seek a new benefit of equal amount. It is said that people "don't miss what they never had". Also, the government has a long history of responding to farm appeals for continued assistance. Not surprisingly, farmers are among the best organized of all interest groups in industrialized countries. Farm organizations maintain communication between politicians and farmers (or their spokespersons). Farmers are known to be "switch voters"—they have demonstrated their responsiveness in the voting booth to generous governments. That responsiveness can be decisive in elections often won by margins of 1 or 2 percentage points.
- *Representation.* Farmers tend to be overrepresented in legislatures because representation is often based on geographic territory as well as on population. Because farmers occupy much geographic territory, a few dollars go farther to

buy a US senator from a farm state than from an urban state. Farmers are also widely scattered. Every state has a farm constituency.

- *Food security.* It is easy to arouse concern, especially in affluent societies where people can afford to indulge even remote insecurities, that failure to transfer income to farmers will threaten food security. Even loss of family farms can be viewed as a threat to food security, whether those threats are real or, as is usually the case, imagined.

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