Research Department
Federal Reserve
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FRBSF Weekly Letter

100 Percent of What?

It is just-after sunrise as the army of tractors makes its way through the outskirts of the city. Within a few hours the steps of the state capitol will be crowded with angry farmers—their fists raised in the air as they chant: "no dough, no sow, no grow." If the scene is the nation's capitol, the farmers may opt (as they did last week) for a multimedia presentation with goats and roosters roaming the grounds and halls of Congress. Despite all this, the protests may not match in size and intensity the anti-war demonstrations of the '60's and early '70's—and in the last analysis, they may not be as successful either.

Who are these farmers, why are they so angry, and what do they want? While the protests have involved many types of farmers, the typical participants appear to be younger grain farmers from the Great Plains. The demonstrators are younger than average, not simply because youth is generally more dissatisfied but because the cost-price squeeze has more strongly affected the younger, more recent entrants to agriculture. These new farmers, enticed by the price boom of 1973, paid an entry price (in the form of very high-priced land) that was much too high to be supported by subsequently declining crop prices. Many older, established farmers are still making money, even at today's depressed prices, but those who are trying to pay off mortgages for land acquired since 1974 find their books filled with red ink.

Fortunes are very uneven in farming today. Fruit and vegetable farmers generally did quite well last year. With low feed-grain prices and rising beef prices, the cattle industry is recovering after three very difficult years. But cattle producers are doing well partly because grain farmers are doing poorly. In February, corn was fetching 15 percent less than a year ago and 34 percent less than its 1974 average. And while wheat prices have begun to recover, they are still 37 percent under their 1974 average. Even grain farmers who have diversified by planting soybeans are in no better shape, since soybean prices are roughly 25 percent lower than a year ago.

Demand for parity

In this situation, angry grain farmers are demanding government action to raise their prices. They were dissatisfied with the help they got from the Food and Agriculture Act of 1977, even though that piece of legislation was criticized by many observers for the extra burden it imposed on taxpayers. Instead, they are pushing for "just" treatment in the form of 100 percent of "parity"—a traditional concept which until six months ago had all but disappeared from most discussions of the farm situation.

Parity can be confusing because it is used sometimes as a noun, and sometimes as an adjective modifying such terms as price, ratio, index, and income. Moreover, there are adjusted and unadjusted, original and modernized versions of parity. But the concept basically is quite simple.

Parity refers to the relationship between the prices farmers received for their goods and the prices they paid

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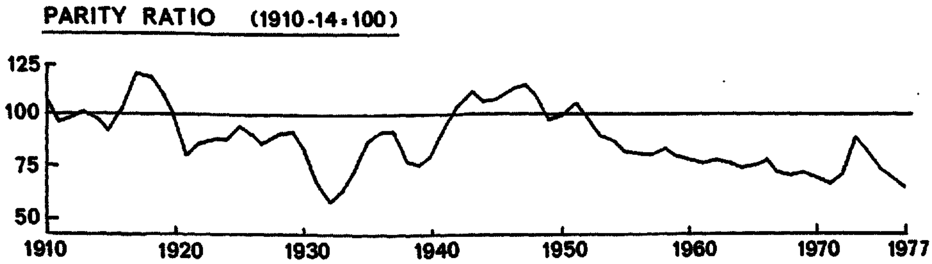
out for their business and living expenses in the "golden age" prior to World War I. During the 1910–14 period, this ratio was about as high as it had been in any other time of the preceding century. And except for the two World Wars and the Korean War, the ratio has never again reached that pre-WWI peak. It fell short even during the massive export-led farm boom of 1973.

According to the concept of parity, a farmer should be able to trade a bushel of wheat or corn or whatever he sends to market for the same quantity of fertilizer, tractors, clothing, and shelter as he did in the 1910–14 period. The *parity price* of any commodity (and note that we are now referring to an individual commodity) is thus the price which preserves the 1910–14 purchasing power of that commodity. It is calculated by multiplying the 1910–14 price of the commodity by the percentage increase over the intervening years in the *parity index*—the index, on the 1910–14 base, of prices paid out by farmers for items they must use in both producing food and living.

Thus, because this parity index of prices farmers pay for production and consumption goods now stands at about 740 percent of its 1910–14 level, the current parity price of wheat is $6.51, or 7.40 times the 88¢ that wheat was fetching in 1910–14. Since the market price of wheat is currently $2.58, wheat farmers could be said to be receiving only about 40 percent of parity. Actually, the figure is closer to 50 percent according to a "modernized" formula, in which the parity prices of specific commodities are adjusted for their movements relative to other agricultural prices during the preceding decade. But even by this new parity calculation, the current market prices of most agricultural commodities are considerably below parity—at 56 percent for both corn and cotton, 65 for soybeans, 66 for cattle, 78 for rice, and 81 for hogs.

For an overall measure of farmers' purchasing power, Agriculture Department statisticians calculate the *parity ratio*—that is, the index of all prices received by farmers divided by the index of prices paid out by farmers. (Don't confuse the *parity ratio* with the *parity index*, the latter simply being a cost index serving as the denominator of the former.) Last month this parity ratio stood at 67, or 33 percent less than protesting farmers seem to think is fair—"fair" being the way things were during the golden age some sixty years ago.

Expensive idea
Should farmers receive 100 percent of parity? A recent Harris Poll found that 80 percent of the American public were sympathetic to the protesting farmers, in some cases even if a rise in food prices were to result from meeting farmers' demands. About 54 percent were willing to accept a 5-percent rise in food prices to guarantee farmers 100 percent of parity, and about 19 percent were willing to go along with a 10-percent rise in food prices. However, to move from 67 to 100 percent of parity would require a farm-price increase of 50 percent, and since farm prices account for about 40



percent of retail food prices, shoppers would end up paying about 20 percent more for their food. Mr. Harris didn't ask who would be willing to pay a 20-percent food premium, but one can guess that a positive response would be rare.

Even in the days when the farm lobby was very strong, farm prices were never supported at 100 percent of parity. Legislation typically supported commodities at 60 to 90 percent of parity, with tobacco farmers usually doing better than most. When today's consumer lobby realizes what full parity would actually cost, the idea probably won't get very far in Congress.

If farmers confined their activities to the market-place and actually did strike in the sense of not planting this spring, prices would skyrocket as buyers bid for the scarce supplies. However, given the debt burden faced by most farmers, they could not afford to skip a growing season. Besides, farmers would benefit from high prices only if they had products to sell. According to a January 1 planting survey, farmers generally intend to plant almost as much as last year's very large acreage; so there is little sign of the tractor demonstrations translating themselves into substantive market action.

Wrong idea?
A more basic issue involves the validity of the parity concept itself. Should society attempt to freeze the terms of trade between any two sectors in the economy? Relative prices change in response to short-run shifts in supply and demand, but also in response to longer-term changes in technology and productivity. Between 1910 and 1970, output per man-hour rose 5.3 times on the farm but only 4.3 times in the total economy, so that the labor cost of farm goods has fallen relative to other goods. If other factor costs did not move in an offsetting fashion, competition would have caused farm prices to fall relative to non-farm prices, with no reduction in the relative rate of return to farming. If one sector of the economy fails to earn an adequate long-term rate of return, then too many resources are being devoted to that sector. Left to its own devices, the market will encourage those resources (including people) to leave that sector for others offering higher rewards, the result being a rising rate of return to the sector experiencing this resource outflow. Ensuring an artificially higher rate of return to that sector means that too many resources will remain in it and, at the same time, other sectors will have to be taxed in order to subsidize its rate of return.

Farm legislation held prices artificially high in the 1950's and 1960's, with the result that too many farmers systematically produced too much food. When the constantly rising stocks of grain became too burdensome, more Federal funds were required to persuade farmers to hold down production. The result was very costly. Few people, farmers included, want to begin that cycle again, yet that is precisely what high support prices would do. For all of its nice-sounding connotations of economic justice, 100 percent of parity could be a dangerous path to tread.

Michael Gorham

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 3/8/78	Change from 3/1/78	Change from year ago Dollar	Change from year ago Percent
Loans (gross, adjusted) and investments*	107,856	+ 1,907	+ 14,477	+ 15.50
Loans (gross, adjusted)—total	84,545	+ 628	+ 13,070	+ 18.29
Security loans	1,990	+ 191	+ 484	+ 32.14
Commercial and industrial	26,104	+ 94	+ 2,867	+ 12.34
Real estate	28,378	+ 107	+ 6,285	+ 28.45
Consumer instalment	14,969	+ 6	+ 2,571	+ 20.74
U.S. Treasury securities	8,930	+ 1,214	− 65	− 0.72
Other securities	14,381	+ 65	+ 1,472	+ 11.40
Deposits (less cash items)—total*	105,351	+ 2,115	+ 12,543	+ 13.51
Demand deposits (adjusted)	29,642	+ 1,343	+ 2,874	+ 10.74
U.S. Government deposits	219	− 360	− 47	− 17.67
Time deposits—total*	73,526	+ 1,009	+ 9,199	+ 14.30
States and political subdivisions	6,456	− 64	+ 954	+ 17.34
Savings deposits	31,503	+ 150	+ 131	+ 0.42
Other time deposits‡	32,816	+ 776	+ 7,340	+ 28.81
Large negotiable CD's	14,647	+ 723	+ 5,818	+ 65.90

Weekly Averages of Daily Figures	Week ended 3/8/78	Week ended 3/1/78	Comparable year-ago period
Member Bank Reserve Position			
Excess Reserves(+)/Deficiency (−)	+ 113	− 8	+ 65
Borrowings	9	23	1
Net free(+)/Net borrowed (−)	+ 104	− 31	+ 64
Federal Funds—Seven Large Banks			
Interbank Federal fund transactions			
Net purchases (+)/Net sales(−)	+ 1,328	+ 1,132	+ 140
Transactions with U.S. security dealers			
Net loans (+)/Net borrowings (−)	+ 657	+ 370	+ 108

*Includes items not shown separately. ‡Individuals, partnerships and corporations.

Editorial comments may be addressed to the editor (William Burke) or to the author. . . .
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