FEDERAL RESERVE BANK OF CHICAGO

AGRICULTURAL LETTER

ISSN 0002 - 1512

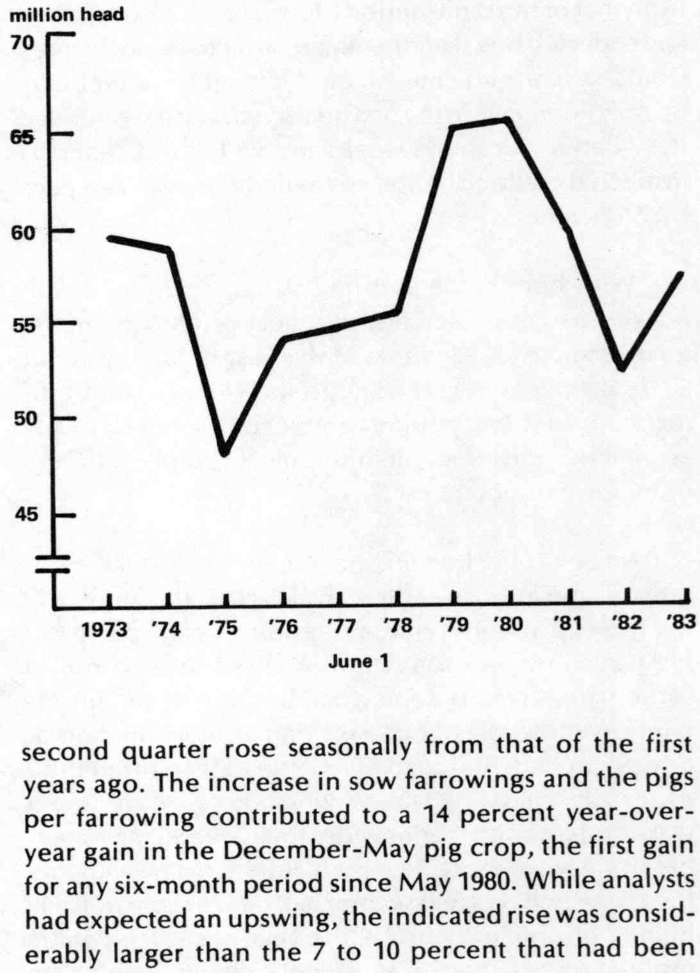
Number 1606 June 24, 1983

RETURNS TO LIVESTOCK PRODUCERS have varied widely over the past few years. The combination of low slaughter animal prices and relatively high feed costs led to negative returns for most hog farmers and cattle feeders in the late 1970s and early 1980s. The situation turned favorable early last year particularly for hog farmers. But the recent weakening in livestock prices and rising feed costs have again cut operating margins substantially. These issues are of particular concern since livestock production is again on the upswing while consumer preferences for meat have apparently shifted from red meats to poultry.

Livestock prices have registered contrasting trends this quarter, with cattle prices holding at the highest levels in nearly a year and hog prices plunging to the lowest levels since 1981. So far this quarter, prices of choice 900 to 1,100 pound steers at Omaha have ranged from the recent lows of $66 per hundredweight to $68. The range portends a quarterly average that will be up considerably from the first quarter average of $61.50 per hundredweight, but down from the $70.50 average of a year ago. Hog prices, however, have fallen sharply since mid-February with weekly average prices of barrows and gilts at seven major markets this quarter ranging from the recent lows of $46 per hundredweight to $48. The recent trends suggest that the second quarter average for hog prices will be well below both the first quarter average of $55 per hundredweight and the year-ago average of $56.60 per hundredweight.

An upswing in hog production accounts for much of the sharp decline in hog prices since mid-February. The *Hogs and Pigs* report released by the USDA this week confirmed that a substantial upturn in hog production occurred over the past six months. The report indicted that sow farrowings in the six months ending with May were up 11 percent from the year before. In addition, mild weather and the increased use of confinement facilities helped boost the number of pigs saved per farrowing to 7.53, up 3 percent from the year before and up 2 percent from the previous record of two

Hog and pig numbers rebound this year



second quarter rose seasonally from that of the first years ago. The increase in sow farrowings and the pigs per farrowing contributed to a 14 percent year-over-year gain in the December-May pig crop, the first gain for any six-month period since May 1980. While analysts had expected an upswing, the indicated rise was considerably larger than the 7 to 10 percent that had been anticipated.

The larger pig crop helped boost the inventory of hogs and pigs on U.S. farms to 57.4 million head as of June 1. Relative to other pertinent benchmarks for that date the past ten years, the latest measure represents an increase of 10.5 percent from a year ago, an increase of 20 percent from the 1975 low, and a shortfall of 12 percent from the 1980 peak. The bulk of the inventory will be marketed for slaughter later this year. However, some 8.1 million head are held for breeding purposes. The inventory of hogs held for breeding purposes is 9 percent more than on June 1 of a year ago, paralleling producers' intentions of farrowing 9 percent more sows in the June-November period than in the same months a year ago.

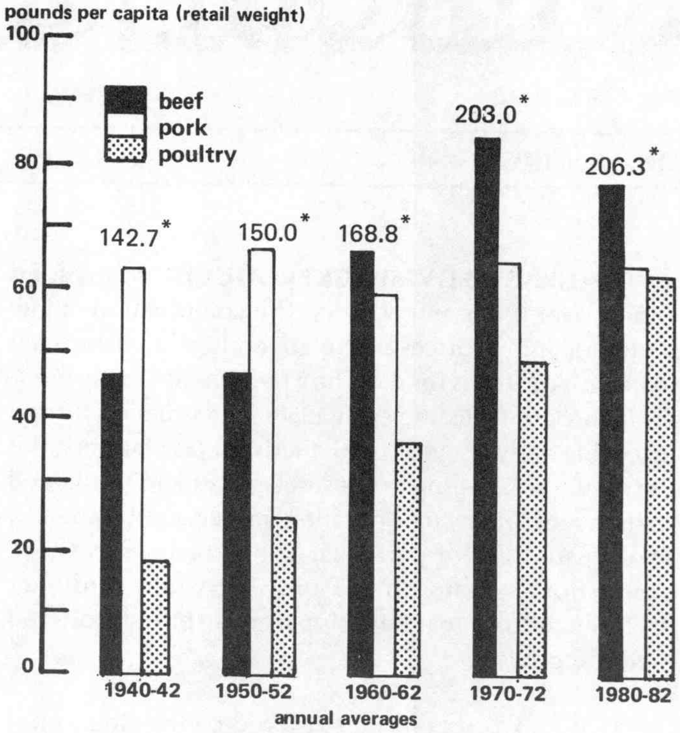
Meat production so far this year has slightly exceeded last year's pace, also contributing to the weakening in livestock prices. The increase has been particularly apparent in the current quarter, in part because of an unexpected rise in hog slaughter. After lagging the year-earlier pace by 7 percent in the first quarter, preliminary data from federally-inspected plants show that second quarter hog slaughter may have been up 3.5 percent from that of the same period of a year ago. Most analysts had expected hog slaughter this quarter to be unchanged from the year-earlier level. Cattle slaughter, after being up only nominally in the first quarter, has also rebounded this quarter. For the 11 weeks ending June 18, federally inspected cattle slaughter exceeded the year-ago pace by 2.5 percent.

With both cattle and hog slaughter up, and with heavier slaughter weights, red meat production in the quarter and exceeded that of the year before by about 3.5 to 4.0 percent, according to the UDSA's latest estimates. In addition, poultry production was up by nearly as much, providing plentiful meat supplies to the domestic consumers.

Meat production in the second half is likely to remain above year-earlier levels. Hog slaughter will likely be up about a tenth, portending nearly comparable gains in pork production. Analysts' projections of cattle slaughter vary somewhat, because of the uncertainty over the mix of cattle moving through feedlots or directly to slaughter markets. Cattle in feedlots in the 7 major cattle feeding states—which account for about two-thirds of the nationwide total—were marginally below the year-earlier level as of June 1. In line with this, the USDA believes that second half beef production will hold at or nominally below the year-ago level. Poultry production is expected to be only slightly larger than year-earlier levels as higher feed costs have temporarily reined in broiler production. Overall, it appears total meat production in the second half will be up about 2 percent from the same period last year.

With meat production turning up this year following two years of decline, concerns about the strength of consumer demand and shifting consumer meat preferences are certain to mount. Circumstantial evidence regarding these issues is reflected in the declining share of disposable income spent on meat and the changing

Uptrend in poultry consumption continued in the 1970s; beef consumption declined and pork production held steady



*Pounds of all meat consumed per capita.

trends in per capita meat consumption. Although per capita expenditures on meat have continued to rise, expenditures as a percent of disposable income have trended lower since the early 1970s. Expenditures on beef last year were equivalent to only 2.0 percent of disposable income, down from 2.4 percent in the late 1970s. The percentage for pork was 1.09 last year—down from 1.23—while for poultry the percentage was .48—down from .55 in the late 1970s. On a per capita basis, expenditures for meat exceeded $334 last year. Expenditures for beef accounted for 56 percent of the total, while pork and poultry absorbed 31 and 13 percent, respectively.

Per capita consumption of meats, particularly for beef, has exhibited contrasting trends in recent decades. Since the beginning of the 1970s, the rise in per capita consumption of all meats has slowed significantly. On a retail weight basis, per capita consumption of all meats averaged 206 pounds annually the past three years. Although marking a new high, the most recent three year average represents a rise of only 1.6 percent from the annual average in 1970-72. By comparison, average annual meat consumption rose 19.3 percent from 1960-62 to 1970-72 and by 13.2 percent from 1950-52 to 1960-62.

Beef has been the most important factor contributing to the slower growth in total meat consumption. Per capita beef consumption averaged 77 pounds annually the past three years, the lowest for any three year average since 1965-67. The recent level of beef consumption represents a decline of nearly 9 percent from the 1970-72 average and a decline of 16 percent from the peak three year average in 1975-77. Moreover, the recent decline in beef consumption contrasts sharply with the gains of 29 percent in the 1960s and 37 percent in the 1950s.

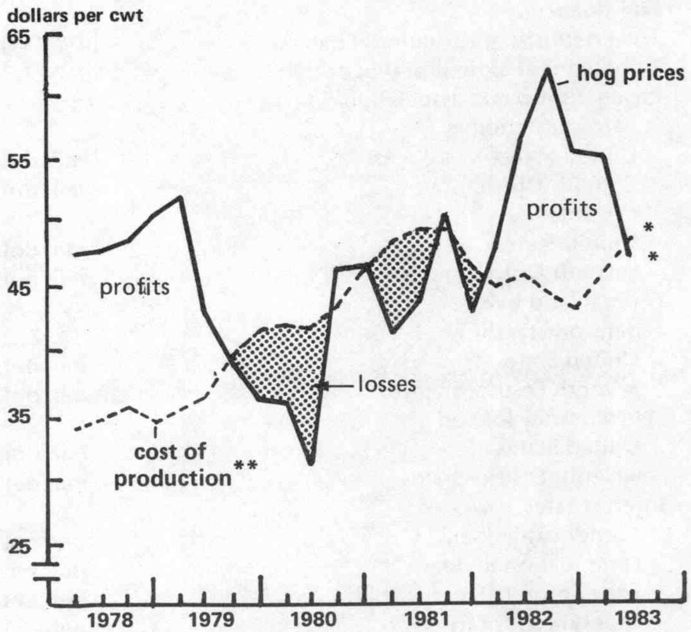
Per capita consumption of pork, although at times varying considerably from one year to the next, has held relatively stable over the long run. Over the past three years, per capita pork consumption averaged 64 pounds annually. That compares with annual averages of 64.5 pounds in 1970-72, 59.0 pounds in 1960-62, and 66.2 pounds in 1950-52.

The recent decline for beef and the prolonged downtrend in lamb and veal consumption have pulled the most recent three-year average of per capita consumption of all red meats to the lowest level since the mid-1960s. However, poultry consumption has continued to register rapid growth. Last year, per capita consumption of chicken and turkeys approached 64 pounds, surpassing for the first time per capita pork consumption. In terms of the beginning three year averages for each decade, per capita poultry consumption rose 26 percent in the 1970s, 36 percent in the 1960s, and 39 percent in the 1950s.

The contrasting growth trends have altered the market shares of meat consumption rather dramatically. Beef has accounted for 37 percent of all meat consumption the past three years, down from the mid-1970s peak of 45 percent, 42 percent a decade ago, and the lowest share for beef since the early 1950s. Pork, which dominated meat consumption with a 44 percent share in the early 1950s, has seen its share erode to 31 percent in recent years. Poultry has been the big gainer as its market share reached 30 percent the past three years, up from 24 percent in the early 1970s and 17 percent in the early 1950s.

Per capita consumption figures, in and of themselves, do not provide a definitive answer to the question of whether consumer meat demands have weakened. Since imports account for only a small portion of

Recent declines in prices have led to operating losses for many hog farmers



*Preliminary.
** Iowa State University estimates.

domestic meat supplies (less than 5 percent in recent years) and since inventories at any time represent a fairly small proportion of total supplies, changes in per capita consumption over a short period of time mostly reflect changes in production. But over longer periods of time, per capita consumption statistics also incorporate shifts in consumer preferences. In light of the shifts in per capita consumption over the past decade, it seems clear that the consumption of red meats, and particularly beef, has lost the glamour that it enjoyed in the 1950s and the 1960s. A number of factors are involved, including the maturing age distribution of the U.S. population and the dietetic issues concerning red meat consumption that, rightly or wrongly, emerged in the past decade. Other factors include the relatively high feed grain prices that prevailed in the 1970s and the escalation in food and energy prices. Because broilers are more efficient at converting grain to meat, the poultry industry, fortified by a major expansion in efficient production facilities, was better able to make inroads at the meat counter as rising food and energy prices constrained consumer budgets in the 1970s.

Gary L. Benjamin

Selected agricultural economic developments

Subject	Unit	Latest period	Value	Percent change from Prior period	Percent change from Year ago
Farm finance					
Total deposits at agricultural banks†	1972-73=100	June	282	+ 0.9	+11
Total loans at agricultural banks†	1972-73=100	June	289	+ 1.3	+ 6
Production credit associations					
Loans outstanding					
United States	mil. dol.	May	19,813	+ 1.0	– 7
Seventh District states	mil. dol.	May	N.A.	N.A.	N.A.
Loans made					
United States	mil. dol.	May	2,507	–12.4	– 9
Seventh District states	mil. dol.	May	N.A.	N.A.	N.A.
Federal land banks					
Loans outstanding					
United States	mil. dol.	May	47,710	+ 0.2	+ 4
Seventh District states	mil. dol.	May	N.A.	N.A.	N.A.
New money loaned					
United States	mil. dol.	May	333	– 5.0	–36
Seventh District states	mil. dol.	May	N.A.	N.A.	N.A.
Interest rates					
Feeder cattle loans††	percent	1st Quarter	14.00	– 6.4	–18
Farm real estate loans††	percent	1st Quarter	13.86	– 7.0	–17
Three-month Treasury bills	percent	6/16-6/22	8.84	+ 6.0	–30
Federal funds rate	percent	6/16-6/22	9.14	+ 4.8	–35
Government bonds *(long-term)*	percent	6/16-6/22	10.82	+ 1.2	–24
Agricultural trade					
Agricultural exports	mil. dol.	April	2,981	– 6.5	–14
Agricultural imports	mil. dol.	April	1,469	+ 6.8	+23
Farm machinery sales[p]					
Farm tractors	units	May	12,251	– 0.1	+ 9
Combines	units	May	359	–33.4	–40
Balers	units	May	761	+50.7	+13

†Member banks in Seventh District having a large proportion of agricultural loans in towns of less than 15,000 population.

††Average of rates reported by District agricultural banks at beginning and end of quarter.

[p]Preliminary.

N.A. - Not available.

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