Until We Meat Again

The great thing about being omnivorous is you can eat anything, although I still think my long-ago junior high school cafeteria pressed the issue a bit too often. In economic terms, we have a high elasticity of substitution when we strap on the old feedbags. This means we will move quickly from one food choice to another for reasons of price, convenience and taste, subject to the constraints of preferences such as vegetarianism or religious prohibitions such as kashrut or helal.

One of the best definitions of a bull (bear) market is all news is bullish (bearish). The physical commodity markets certainly were in this bullish frame of mind for much of 2003's second half, and for good reason. A combination of a weakening dollar and low interest rates along with global industrial recovery was pushing against production sectors that had received little in the way of new capacity for the better part of a decade. Against this economic background, commodity prices would have risen anyway; the stories of late-summer drought and aphid infestations in soybeans or various mine strikes in copper, etc., did not create this bull market so much as reinforce it in the public mind.

With so much attention focused now on Mad Cow disease and its impact upon the global beef industry, let's turn to the interplay between various meat markets in search of tradable opportunities.

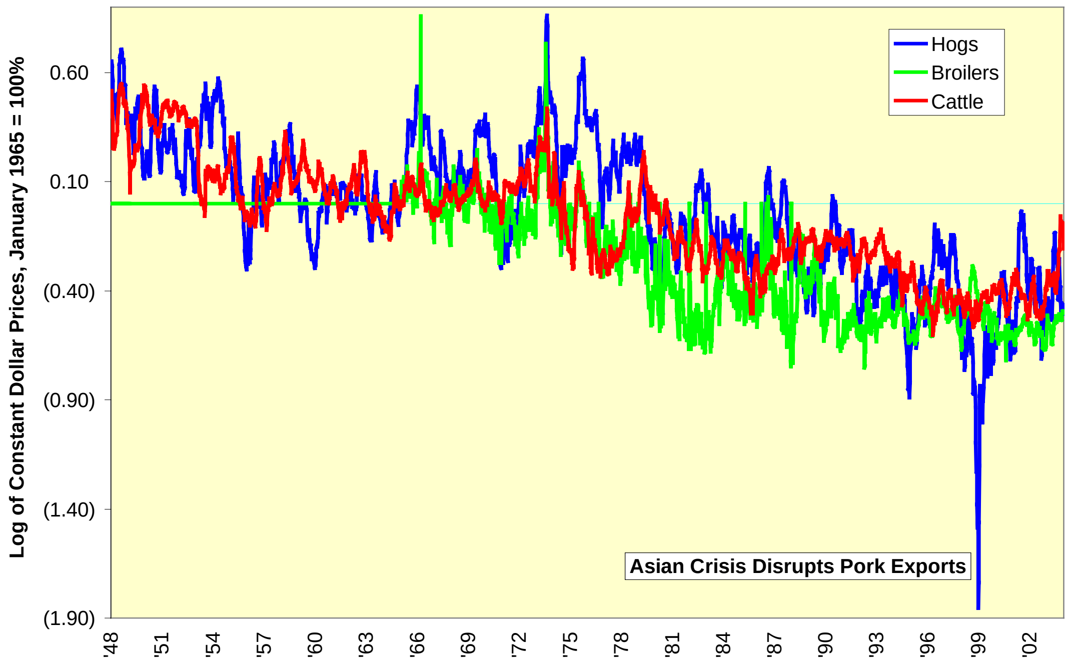
Let Us Now Praise Famous Hogs

The recovery in grain and livestock prices could not have come too soon for the American farmer, a group like the steel and textile industries always in search of new government handouts despite the fact the last umpteen handouts did no good. Such are the ways of welfare dependencies.

The real story behind American livestock markets has been and should be their astonishing leaps in productivity since the end of World War II. As discussed here in November for cattle, where I forecast lower cattle prices by virtue of narrower feeding margins, and in July for chickens, wherein I forecast lower prices for poultry in two years based on then-low corn and soymeal prices, the long-term trends for livestock prices have been downward. Whether the factory-like techniques used in lowering production costs have contributed to the spread of Mad Cow disease and to the rise of antibiotic-resistant bacteria - more than half of all antibiotics produced go into livestock feed - will not be addressed further here beyond the obvious answers.

The economics of substitution become apparent quickly when we look at a long-term chart of inflation-adjusted cash market prices for Iowa-Southern Minnesota hogs, Texas Panhandle-Oklahoma cattle and a 12-city average of broiler chickens; the data are displayed on a logarithmic basis to highlight percentage changes. The three main livestock markets tend to move together despite their different breeding cycles. Price spikes, such as occurred in March 1966 or July 1973, tend to disappear quickly as consumers shift to alternate protein sources.

Consistent Trends Lower



The most dominant feature on the chart is the 1998 collapse in hog prices. While the poultry industry is regarded as the paragon, for better or worse, of increased productivity in livestock market, its large price declines ended by the early 1980s; until the next quantum leap in production technology, they have hit a limit on lowering costs. Hog producers picked up the baton, metaphorically speaking, from the mid-1970s onwards, with the construction of industrial-scale hog factories.

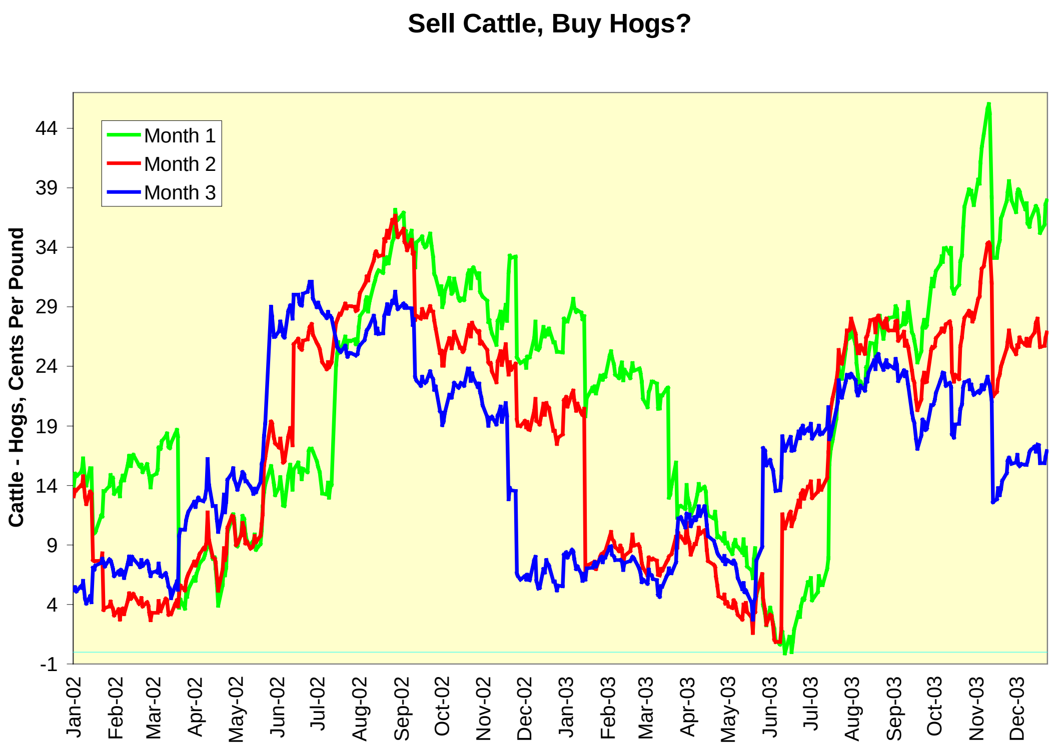
Commodities are not pretty. I have seen some of these operations in action, and they are a frame out of Fritz Lang's 1926 classic *Metropolis*. The incoming animals are weighed, scanned by an array of lasers to determine the optimal cut, and processed. Operations in Alberta and Saskatchewan - their vast tracts of open land are one way of dealing with what we economists might describe delicately as negative olfactory externalities - have been financed by East Asian pork importers. Genetic engineering and selective breeding have allowed for customized cutout arrays for each importing market.

All of this was great for both parties until the Asian crisis of 1997-1998 decimated East Asian purchasing power. By the late fall of 1998, nominal hog prices in parts of the United States fell below 10 cents a pound, levels not seen since the late 1940s, when Truman Capote had a character dubbed Queen of the Pig People vamp through *Breakfast At Tiffany's*.

A Lesson For Cattle?

Just as the Asian crisis affected hogs and the Canadian bout with Mad Cow propelled U.S. cattle prices higher in the second half of 2003, the disruption of U.S. beef exports will have an effect on U.S. cattle prices unless all matters related to Mad Cow are resolved quickly. Regardless of what we think of the validity of the science behind the political decisions, the rest of the world has become suspicious of U.S. agricultural exports involving such enhancements as bovine growth hormone treatment for cattle or genetically modified soybeans and corn. The quick leap to the podium by Secretary of Agriculture Ann Veneman to declare "The risk to human health from BSE is extremely low" may reinforce the perception that the U.S. is willing to play fast and loose with food safety. The consequences for firm such as McDonald's, Tyson Foods, ConAgra may take a little longer to resolve than last Wednesday's market action would suggest.

Should cattle prices plunge, the spread between cattle and hogs on the Chicago Mercantile Exchange will widen in favor of hogs as demand shifts. These spreads are not for the faint of heart, mind you: Both contracts have daily prices limits - 2 cents for hogs, 1.5 cents for cattle - that impede trade even though they can be expanded after being hit on multiple days. Neither producing nor consuming commercial interests employ the contracts heavily, and neither can be arbitraged well as they are delivered physically, and most of us simply do not have 40,000 pounds of live steers or hogs hanging around. Each cattle-hog spread requires an initial margin of $1,485 and a maintenance margin of $1,100.



Cattle trade on a two-month cycle (Feb-Apr-Jun-Aug-Oct-Dec) and while hogs trade on these same six months, they also have a contract for July delivery to reflect their different cycles. Each contract month reflects a different "pipeline" of animals and the intermonth spread between these contract months is devilishly difficult to analyze. Each month is treated best as a unique entity. As a result, the continuous spread over various contract months is marked by abrupt discontinuities.

At present, the longer-term economics favor selling cattle and buying hogs until a resolution of the Mad Cow situation becomes apparent. But get yourself some good advice before wading into these markets: They, too, are omnivorous and would not mind eating your account for lunch.