Controlling The Cycle
By Robert A. Bailey
CONTROLLING THE CYCLE
(In Cattle Prices, with Analogies to Insurance Prices)

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THE PROBLEM

There is a well known cycle in the prices of cattle. This cycle causes serious risks for producers, leading occasionally to bankruptcy of producers, packing houses, and their lenders. It also leads occasionally to shortages and high prices for consumers. The uncertainty of the cycle raises costs for everyone. Lenders must charge higher rates to cattle producers to reflect the possibility of bankruptcy due to unforeseen and untimely reductions in prices. Producers must either hedge against price declines to the extent possible by use of the futures markets, or must bear the full risk themselves. In all cases, producers must pass along the costs of borrowing, hedging and risk bearing to the consumers if they are to survive and remain profitable over the long run.

BENEFITS OF CONTROLLING THE CYCLE

If the cycle were controlled and prices were stabilized, all segments of the cattle market - producers, lenders, packers, and consumers - would benefit from lower costs, lower and more stable prices, and more stable supplies.

IMPORTANCE OF IDENTIFYING THE CAUSE OF THE CYCLE

How we try to control the cycle will be greatly influenced by what we perceive to be the causes of the cycle. Much controversy and speculation has arisen over various theories of what causes the cycle. Indeed, the fact that the cycle has continued untamed for centuries - as long as there are records of cattle prices and markets - suggests either that we have not yet discovered the true cause of the cycle or that we have not yet applied adequate controls.

Realizing that many theories have already been advanced, nevertheless, I propose to advance another hypothesis (which may not be entirely new) on what causes the cycle and then to suggest controls appropriate for that hypothesis. I will call this theory the "Uncertainty Due to Time Lag" theory.
THE CAUSE - UNCERTAINTY DUE TO TIME LAG

For cattle, the time lag between breeding and slaughter is about two years. Actually, the time lag can be longer than that because one has to have breeding stock to breed before breeding can commence. But under normal or average conditions, demand can be met with a two-year time lag.

For the producer, the time lag means that he must commit his resources - breeding stock, feed, maintenance, labor, and capital for two years before he knows what he will receive for it. If a producer could know for sure what price he would receive two years later, he would know whether to raise cattle and how many to raise. But the price depends on how many cattle other producers breed concurrently - something he doesn't know in advance. So his decision, and other producers' decisions, on how many cattle to breed reflects their estimate of future supply and prices. If producers are optimistic in the aggregate, supply will be larger and prices lower than expected. If they are pessimistic, supply will be smaller and prices higher than expected.

It is the two-year time lag in creating supply, combined with the uncertainty on what the supply will be, that causes cycles in cattle supplies and prices. When prices are high, producers tend to be optimistic about future prices and tend to breed too many cattle, which depresses prices two years later. And, conversely, pessimism leads to shortages and higher prices.

This is similar to the problem that insurance producers face. They know the price in advance but there is about a two-year time lag before they find out what the costs will be. When producers are pessimistic about costs, supply shrinks immediately and prices rise. When producers are optimistic, supply rises and prices fall. It takes two years, on average, to find out whether the pessimism is justified or not. In the meantime, producers are reluctant to risk their capital unless the price is high enough to overcome their pessimism. It is that time lag in determining costs, combined with the uncertainty on what costs will be, that causes cycles in supply and prices.

REMEDY ONE - SHORTEN THE TIME LAG

If the time lag could be shortened, cycles would be shorter and less severe. So shortening the time lag would help tame the cycle. How can we shorten the time lag? There are several options. It has been observed that the time lag for
livestock is related to size. So switching from cattle to hogs or rabbits would significantly shorten the time lag. But even though hogs and rabbits have long been available in the market, are less costly to produce and sell at a lower price, there are still many consumers who prefer beef.

Perhaps an advertising campaign could persuade more consumers that rabbit is better than beef. That should be at least as effective as the efforts of the insurance companies to persuade cattle producers that "claims made" insurance is better than "occurrence" insurance.

REMEDY TWO – RECOGNIZE INVESTMENT INCOME

Inasmuch as part of the price a producer receives represents interest on the capital he has invested in the cattle over the two-year lag in the form of breeding stock, feed, labor, buildings, and equipment, much of which he must borrow, perhaps his risks would be reduced if the amount of interest on his investment could be recognized and defined in advance.

A federal commission could be established to determine how much investment is required, the length of time required for each component of the investment, and a reasonable rate of investment income for cattle production. From this study, a federal rule could be promulgated that would specify what percentage of cattle prices represents a reasonable allowance for interest – more for cattle, less for hogs and rabbits.

Although it would be possible to specify interest allowances at the state level, the federal level is clearly more appropriate because 50 state commissions are unlikely all to reach the same conclusion. That would confuse both the cattle producers and the consumers as to why beef produced in one state but sold in another should have different interest allowances depending on which state it is sold in.

Unfortunately, there are critics who suggest that allocating a fixed proportion of cattle prices for interest will not affect the length of the time lag nor the uncertainty about what the supply will be. And, consequently, the cycle will continue unabated with no effect on prices and no reduction in the cost of risk. But it might help. After all, it has never been tried before. And, everything else that has been tried has been unsuccessful. So why not try it? It may have a beneficial psychological effect by distracting everyone into thinking about interest rates instead of prices. And, it would increase employment – in government, which is more stable than cattle production.
REMEDIY THREE - REGULATE PRICES

Inasmuch as the cycle is caused by uncertainty over what the prices will be when the cattle are ready to be sold, we could tame the cycle by fixing the prices by government regulation. This is such an effective remedy that it has been adopted many times in many industries. One of the important benefits of price fixing by government (it is illegal and unfair for anyone else to do it), is that questions of "fairness" (defined by majority vote) are allowed to override cold, hard economics. The result is either that prices are too high and the consumers won't buy all that is supplied, or that prices are too low and producers withdraw from production. The result in both cases is that government gains the opportunity to take up the slack, either by buying the unwanted production or by supplying the unmet demand. Both result in increased government expenditures or obligations, a small price to pay for cheaper beef, more stable prices, and increased employment (in government).

REMEDIY FOUR - GOVERNMENT CONTROL OF PRODUCTION

Government control of production would be even more effective than regulation of prices. This would take the uncertainty out of supply and thereby tame the cycle and eliminate the cost of risk. Although this could be achieved by assigning each cattle producer a quota and penalizing the producer if he exceeds or does not meet the quota, control of production is normally most efficient when government owns and manages the production facilities. That eliminates waste, discrimination, and inefficiency, like the Post Office and Social Security. That would enable government to give every state its fair share of cattle production facilities and end unfair discrimination among the states on the basis of climate, land costs, labor costs, and proximity to feed production.

A world without risk would be a tremendous achievement - even if it might also be a world without incentives.

REMEDIY FIVE - LEAVE CATTLE PRICES ALONE

For those who find fault with all other remedies, the only remaining alternative would be to allow cattle markets to remain uncontrolled and cyclical. But that would be unamerican to leave a known problem in the hands of individuals - to allow consumers to decide what products they prefer, to allow producers to base supply solely on what they think consumers will be willing and able to pay, to
require each consumer to pay for all that he buys even though many are unable to pay for all that they want, to expect politicians running for reelection to turn a deaf ear to pleas for "fairer" prices.

It would also be unfair to allow cycles in insurance prices to be controlled so successfully for so long, and not to extend the same benefits of control to cattle prices.