

# Timing Sales for High Returns

By Gene A. Futrell and Robert N. Wisner

**P**rice variability is a characteristic of most agricultural commodities and products. It can result from a number of things — short-term changes in market supply or demand conditions, developments that might impact on longer term supplies or demands (such as weather, government policies, international developments, economic conditions), seasonal supply and demand patterns or tendencies, and year-to-year or cyclical changes in production. While prices have long been somewhat variable, they have become more volatile in recent years.

A greater international dimension to agricultural markets has made crop and livestock production around the world increasingly important market factors, along with world economic conditions, trade policies, and any other factors that might affect U.S. exports. Demand growth, variable weather conditions, and smaller world stocks of grains (relative to usage) have made markets more sensitive to changes in supply/demand influences and have contributed to price volatility. Some of the variation in price is fairly predictable, some is not. From whatever the source, price changes can have a big impact on cash receipts and on bottom line results in the farm busi-

ness. Timing of pricing and selling is an important part of marketing management and one of the keys to success or failure in modern farming.

Effective use of market news and outlook information can help improve the timing of marketings and aid in managing price and financial risks. Understanding and making appropriate use of marketing and pricing alternatives, including forward pricing options, can add some flexibility to the timing of sales. An understanding of seasonal production and price patterns and of cyclical production patterns for some commodities also provides useful guides to production, storage, and marketing decisions. Some things to consider in timing sales of both crop and livestock products are discussed in this chapter.

In a normal marketing year, prices for most major U.S. crops show distinct seasonal patterns. Lowest prices of the year usually occur at or near harvest, when supplies are abundant. After storable crops have been moved into storage facilities, farmer marketings usually diminish and prices begin an uptrend that frequently continues until 2 or 3 months before the next harvest. For fall harvested crops, the uptrend may temporarily halt in late winter and early spring as farmers

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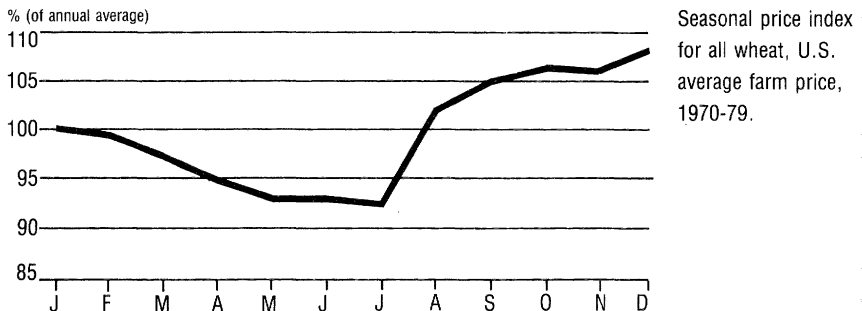
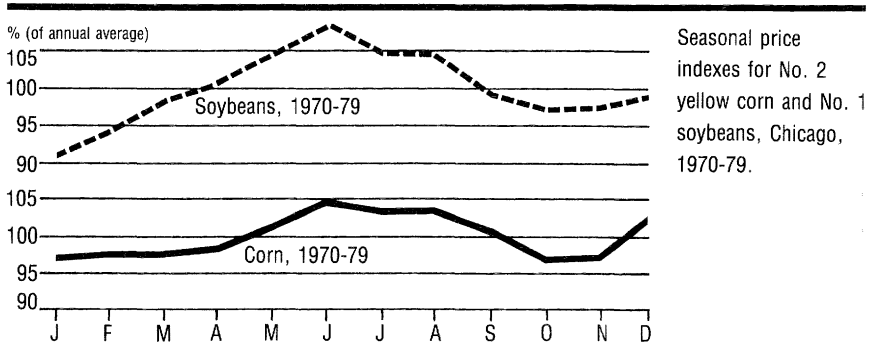
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expand sales from the previous year's crop to meet income taxes, farm payments, and spring planting expenses.

Many crops also exhibit price strength at planting time, when farmer marketings slacken as growers place top priority on getting the crop seeded. Planting time price strength is most noticeable for crops such as corn, cotton and soybeans, but often is less noticeable for wheat. Price strength during the U.S. winter wheat planting season may be tempered by sales of newly harvested U.S. and Canadian spring wheat. Conversely, price strength in the spring wheat planting season may be tempered by the approaching winter wheat harvest in the Southern Plains.

### Storage Expenses

In taking advantage of seasonal price patterns to increase returns for storable crops, farmers should keep in mind both the costs of storage and their individual ability to bear the risk of declining prices later in the marketing year. For most crops, one of the largest costs of storage is interest on the value of the crop inventory. For 8 months' storage, interest costs can easily amount to 20 cents per bushel of corn, 30 cents for wheat, and 50 cents per bushel of soybeans. These costs occur either through interest expenses that could have been avoided by selling the crop at harvest and paying off operating loans, or through potential interest earnings from the money invested in crop inventories. Other storage ex-



penses include extra handling and drying costs to make the crop safe for longer term storage, and commercial charges if production is stored off the farm.

In years of normal U.S. crop production, risk of declining prices is low during the first few months after harvest. However, market risk increases substantially after about 6 or 7 months of storage. Sharp downward price adjustments often occur in the last month or two before harvest as domestic and foreign users cut inventories to minimal levels in anticipation of lower cost new-crop supplies.

In years when adverse weather reduces U.S. production below anticipated market requirements, crop prices generally follow a contraseasonal pattern. In this case the highest price of the marketing year often comes at or near harvest, with gradually declining prices as the season progresses. High early-season prices reflect aggressive bidding by users for the limited supplies. Ample storage space and limited farmer marketings may also contribute to price strength at harvest in years of short crops.

A good rule in crop marketing is to store when crops are large, and to sell a significant part of your production at harvest when the U.S. crop is short of expected market requirements. In years of short crops, favorable forward pricing opportunities may also be available for delivery later in the year and for pricing the next year's production.

### **Perishables** — Seasonal price patterns

*Vegetable prices are under pressure at harvest time because of the perishable nature of production and the need to encourage increased use to avoid spoilage. Lettuce, which is being harvested here in California, is among the most perishable.*

for perishable crops such as fruits and vegetables are similar to those for readily storable crops, except that price movements may be greater. Prices are under pressure at harvest time because of the perishable nature of production and the need to encourage increased utilization to avoid spoilage. Where possible, harvest-time prices also encourage processing and storage activities. Later in the year when prices rise enough to cover processing and storage expenses, these supplies are returned to the marketplace.

In the last 25 years improved handling, processing and storage technology, and



more uniform demand throughout the year have tended to reduce seasonal variation in crop prices. But these developments likely have been offset by high interest costs on product inventories, which tend to be reflected in increased seasonal price movements for storable commodities.

**Crop Cycles** — Unlike livestock, it is difficult to find longer term price and production cycles for major U.S. crops. In the last 2 decades, world demand for most U.S. crops has trended steadily upward, with production varying from year to year as a result of weather, government farm programs and relative prices

for various crops. One objective of U.S. Government farm programs has been to reduce year-to-year variations in commercial supplies, thus tending to remove cyclical tendencies that might otherwise be present.

Since the late 19th century, grain prices have traced out what might be considered a 26- to 28-year cycle from peak to peak. Every 26 to 28 years since the 1890's a period of high and volatile grain prices has occurred, and has been followed by a return to lower and more stable prices. But this pattern is due primarily to the influence of wars, inflationary periods, and other world events rather than



Christopher Springman

to biological or economic characteristics of agriculture. With only three such periods in this century, statisticians have limited evidence for projecting that prices will follow a similar cyclical pattern in the years ahead.

Production of most livestock and poultry products is at least somewhat cyclical. Periods of increased production in response to favorable profits are eventually followed by production downturns when prices become unprofitable. Production cycles may range from 2 years or less on some products to 10 years or more on others, depending in large part on how quickly increased production is biologically possible.

The production cycle for beef cattle has been quite regular and is typically 10 to 12 years from peak to peak. The hog cycle is less consistent but often varies from 3 to 5 years in length. Production cycles tend to be shorter for eggs and

turkeys and are usually about 2 years from peak to peak. Broilers, milk and sheep production have not shown a regular cyclical pattern but have been dominated more by longer term production trends. Some livestock and poultry products have fairly regular seasonal variations in supplies and prices. These patterns generally reflect either seasonal changes in costs of production or the technical or biological efficiency of production.

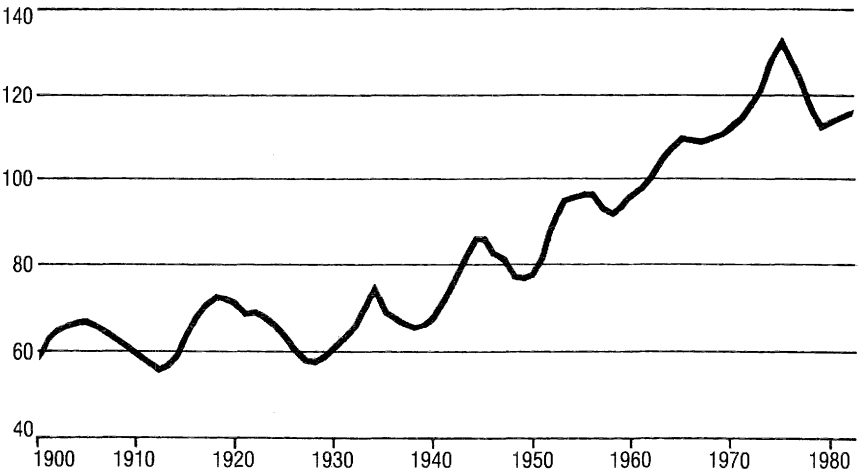
### **Hogs, Cattle, Eggs**

Hog prices are typically lowest during late winter-early spring and again during the fourth quarter. Prices at these times reflect seasonal increases in slaughter, resulting from larger farrowings during both the late summer and spring months. Smaller farrowings in December-February result in a seasonal decline in third quarter pork supplies which usually bring higher prices. Slaughter cattle prices show less seasonal variation than hogs,

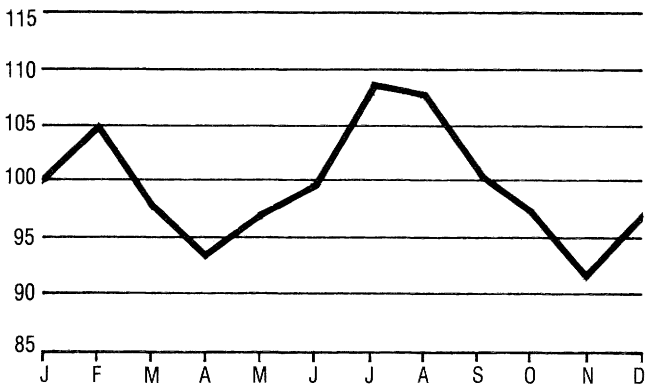
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## ***Cattle and Calves on Farms, 1900 to 1982***

Mil. animals

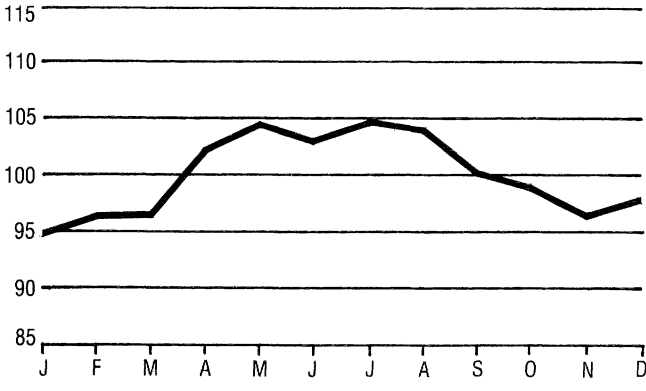


% (of annual average)



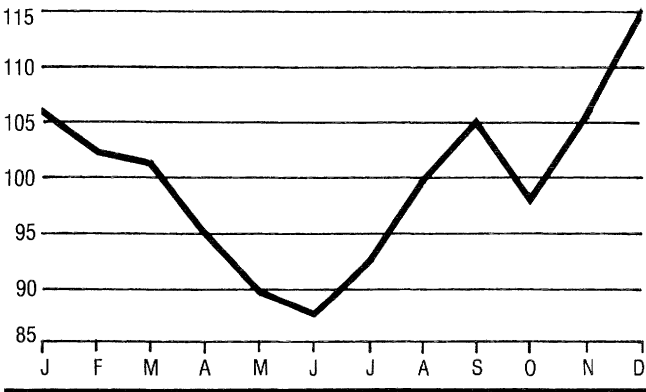
Seasonal index of hog prices, average of barrows and gilts at seven markets (Sioux City, Omaha, Kansas City, St. Louis, South St. Paul, Indianapolis, and South St. Joseph), 1970-79.

% (of annual average)



Seasonal price index for Choice grade slaughter steers, Omaha, 1970-79.

% (of annual average)



Seasonal index of egg prices, U.S. farm average, 1970-79.

and the pattern is less predictable from year to year. But prices do tend to be somewhat higher in spring and summer than at other times of year. Egg prices are typically lowest during peak production in spring, then rise seasonally in summer and fall as production declines.

Seasonal price tendencies and the cyclical stage of production for a particular product can be useful as general guides to timing pricing or sales. In some cases these patterns may also be a major consideration in production decisions, such as when to farrow sows, purchase feeder livestock, or buy replacement chicks or turkey poults. Seasonal price patterns also can be used in decisions on the weight at which to market livestock.

Normally it would not be advisable to carry cattle or hogs to heavier-than-normal weights during months when the seasonal tendency is for prices to decline. But heavier than normal weights may be warranted when prices are rising seasonally. These decisions, however, should also consider the expected cost of additional weight gains in relation to the expected selling price.

While seasonal and cyclical patterns are fairly consistent for some livestock products, there's no certainty that every cycle will be the same or that the seasonal pattern will be "normal" every year. These patterns can only be starting points and each year must be examined for any evidence of unusual conditions. In some years cyclical changes in production may offset normal seasonal price tendencies. At other times, weather or other influences on production or weight gains may moderate seasonal patterns. Or unusually high or low feed prices, high interest rates, or other cost factors may

alter a production cycle from the typical pattern.

In developing a sales or pricing plan for any particular year, keep well informed on domestic and foreign production, general demand conditions and prospects, governmental policies that may affect markets, and day-to-day developments in livestock markets. How is slaughter or production running relative to earlier periods and to usual seasonal patterns or expectations? Are there unusual factors on the demand side of the market such as abnormally large or small supplies of competing products or new sources of demand? Keeping up on current market conditions and prospective price developments requires lots of information: market news reports, crop and livestock production estimates, and market analysis and outlook information. Careful use of this information can help guide production decisions and sales strategies.

### ***Getting, Using Market Information***

The U.S. Department of Agriculture (USDA) is a major source of information and data needed to guide decisions on timing of marketing. The market news network for collecting and disseminating information on market supplies and prices, often through cooperative Federal-State programs, provides information needed for day-to-day marketing and pricing decisions. Price information from the Nation's major commodity futures exchanges is also an important source of current market news. USDA programs in crop and livestock data estimating, and economic and commodity analysis, provide benchmarks used worldwide in forecasting prices for agricultural commodities. The USDA system provides current estimates and projections of U.S. and world crop and livestock supplies and utilization several times during the year.



Jack Schreyer

*USDA is a major source of information and data needed to guide decisions on timing of marketing. Here at Chicago's fruit and vegetable market, a USDA market newsman (right) interviews one of the commission merchants.*



Season average price forecasts for most major crops and quarterly livestock price forecasts from this network are available through outlook and situation reports and USDA newsletters. These forecasts can be used by farmers in evaluating current cash prices, in setting annual price goals for their production, in making decisions about forward contracting or hedging through use of futures markets, and in deciding whether to store their crops.

For example, if current prices are moderately below the season average price forecast, growers might decide to store their crops and wait for higher prices. Cash prices or contracting prices for later delivery that are moderately above the predicted season average price would be a signal to sell at least part of the production and reduce exposure to price risk. Listings of various USDA outlook reports, crop estimates and livestock production reports, and information on how to obtain them, are available from USDA in Washington, D.C.

**Other Sources** — In addition to USDA outlook reports, economic newsletters and other materials are regularly published by many land-grant universities.

These sources of outlook information provide more localized market conditions and prices that relate more closely to a producer's own area. Other sources of market outlook reports include commercial advisory services, farm magazines, farm management firms, and commodity brokerage companies. Types of reports and services available from these sources vary widely in content, depth of analysis, and cost.

Some advisory services offer specific recommendations on the percentage of production to be sold at various times during

the year. In using these recommendations, farmers need to judge how their costs, financial risk-bearing ability, and production risks differ from the average producer and to make appropriate allowances for such differences.

### ***Marketing Orders, Agreements***

Marketing orders and agreements are tools used primarily in marketing dairy products, fruits, vegetables, and nuts to improve the level and stability of producer prices and incomes. Marketing agreements are voluntary agreements between producers and handlers of a commodity and the Secretary of Agriculture which specify how the commodity will be marketed. Most marketing agreements are supported by marketing orders. A marketing order is established by majority vote of producers of the commodity and becomes binding on all producers and handlers of the commodity covered by the order. Marketing orders and agreements usually cover the flow of the commodity to market including the timing and quality specifications, and sometimes involve pooling or averaging of returns to producers, marketing allotments, providing of market information and product advertising.

Many marketing orders operate in conjunction with marketing cooperatives. The Secretary of Agriculture is required to authorize and supervise marketing orders, and has responsibility for seeing they meet the public interest. Authority for marketing orders and agreements has its origins in the Agricultural Adjustment Act of 1933 and the 1937 Agricultural Marketing Agreement Act. Use of these tools is specifically prohibited for several major commodities including grains, soybeans, and livestock.