



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

Papers downloaded from AgEcon Search may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

The Midwest Land Market: Will We Repeat the Boom-Bust Cycle?

by Michael Boehlje and J.H. Atkinson

Higher prices for corn, soybeans, and wheat suggest a more positive outlook for the grain sector than has been experienced in recent years. Discussions in the coffee shop in rural communities include such questions as: Should I continue to hold 1995 crop, or should I sell it? What about 1996 crop corn, soybean and wheat – when should I price it? Is this export demand for real?

Some skeptics and/or students of history are more focused on longer term trends in prices and profitability. They argue that we appear to be entering a boom period similar to the mid-1970s, and wonder aloud why a bust similar to that of the 1980s won't logically follow. Will history repeat itself? Are we headed for a boom-bust cycle much like the 1970s-1980s in Cornbelt country?

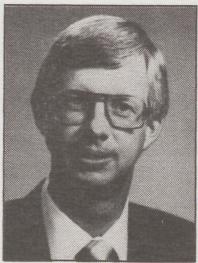
One way to answer this question is to assess the similarities and the differences between today and the 1970s-80s. That is the focal point of this discussion.

Similarities

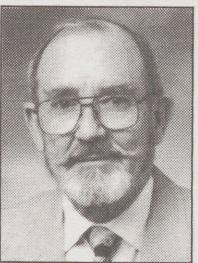
If you listen to the agricultural news on the radio or read the stories on agriculture in the newspaper, what would lead you to believe that you were living in 1973-75 rather than 1995-97? We see seven similarities between today and the boom environment of the mid-1970s.

- **Increased acreage.** Set asides for crop year 1996 in the U.S. are zero percent. Land in the CRP program may be allowed an "early out." High prices are encouraging production on additional land – in some cases acres of only marginal productivity – around the world. Like in the 1970s producers are being encouraged and have price incentives to plant "fence row to fence row."

- **Maximize yield.** High prices encourage not only additional acreage, they also encourage the use of more inputs. Even though environmental regulations may tend to reduce the use of some inputs, a continuation of grain prices anywhere near present levels likely will result in higher yields through more efficient use of fertilizer, variety selection, pesticide



Boehlje



Atkinson

Michael Boehlje and J.H. Atkinson are professors in the Department of Agricultural Economics, Purdue University, West Lafayette, Ind.

use, and timeliness in machine operations. This is a real contrast to the emphasis on cost control in recent years when commodity prices have been lower.

• **Strong domestic demand.** Poultry, pork and cattle inventories are at or near record highs. And industrial uses of grain are expanding as well. Domestic demand from both the livestock sector and industrial uses have provided a solid and growing domestic demand base for agricultural products.

• **Exports.** Like in the 1970s, the real spurt in demand growth has come from the export markets. Export sales have grown a third, from \$43.5 billion in 1994 to a projected level of \$58 billion in 1996, and tonnage has grown by almost 25% during the same period of time. Recent discussions have emphasized the growing Chinese market, but exports to traditional markets such as the Pacific Rim and Latin America also have grown or remain strong.

• **High prices.** Prices for major food and feed grains have increased significantly during 1995-96, setting 14 year highs for wheat and 8 year highs for corn and soybeans. These strong prices parallel those of the 1970s, although they are not as high in either real or nominal terms as the peak prices during that period.

• **Low carryover.** Projected carryovers of corn and wheat in particular are expected to set new record lows – lower than the 1970s when some expressed concern about insufficient food to feed the people in the U.S., let alone the rest of the world. Even with increased acreage and average yields in 1996, stocks will not be replenished substantially and carryover of inventories into the 97-98 crop season are not expected to be burdensome.

• **Rising land prices.** Land prices increased modestly during the early 1990s, but have risen more rapidly in recent years. Indiana farmland prices increased by more than 10% from 1993 to 1994 and nearly 7.5% from 1994 to 1995. Prices are projected to increase by 8% to 10% in 1996. Coffee shops are again buzzing with discussions of land with yield potential averaging 125 to 130 bushels per acre selling as high as \$2,500 to \$2,700 per acre.

Differences

But what is different today compared to the 1970s? And will these differences support or dampen the boom-bust cycle? Six important differences between the 1970s and the 1990s can be identified.

• **Role of governments.** Governments played a much larger role in the commodity markets in the 1970s than they play today. In fact, the government agencies of both the Soviet Union and the U.S. were the key participants in the growing export markets of the 1970s during the periods of rising prices. And U.S. government policy with respect to embargoes and credit availability are alleged to have played a significant role during periods of declining commodity prices. Today, governments play a less important role in the markets, and consequently the markets are less disrupted by changes in government policy.

• **Growing real consumer income.** A major and maybe the most important difference between the 1970s and the 1990s in both the domestic, but more importantly the export market, is that the growing demand for food and agricultural products is supported by growing real incomes of consumers. With the exception of the countries of the former Soviet Union, Central Africa, and Japan, consumers in the rest of the world have more real income and thus real purchasing power than they had in the late 1980s and early 1990s.

As consumers in lower income countries such as China experience growing real incomes, they use a significant part of this increased income to upgrade their diet – thus increasing significantly the demand for agricultural products. Increased demand in the 1970s was based primarily on population growth; the increased demand of the 1990s is based both on more people and on higher real per capita income.

• **Cash sales.** Much of the expanding demand for agricultural products of the 1970s was financed through the sales of non-replenishable assets such as gold on the part of the Soviet Union, or credit from the U.S. or oil producing nations. Today, the majority of the sales are for cash or hard currency with few credit or

government subsidized transactions. In essence, the demand of the 1970s was to a large degree implemented by governments' concern about hungry people. This concern resulted in the purchase of food with credit or under subsidized transactions. Today the demand is driven by private sector firms responding to increased real purchasing power of consumers. These firms buy for cash or hard currency with little government subsidy. Most would argue that today's demand is much more sustainable than that of the 1970s.

• **Processed products.** Another very different characteristic of today's export market is the mix of commodities vs. processed or value added products. During the 1970s, almost two-thirds of U.S. exports were in the form of commodities with the remaining one-third in processed foods including meat and animal products. Today, 50% or more of U.S. exports are processed products, with the remainder as commodities. This changing mix of agricultural exports reflects in part the growing incomes and consequent improved diets of many consumers in other countries, as well as the increased competitiveness of the value added/processing industries in the United States in these international markets.

• **Export subsidies.** During much of the late 1970s and early 1980s, competitors in the export markets, particularly the European Union, were providing significant subsidies to their producers to increase production, and further subsidies to export those commodities in international markets. These subsidies made it difficult for the U.S. to maintain its market share of export markets.

In recent years, not only have production subsidies been reduced in the European Union, resulting in decreased agricultural production, but export subsidies have been eliminated to a large degree. In fact, in 1996, the European Union actually implemented an export tax on feed grains and food grains, thus discouraging or penalizing the exports of these commodities. This dramatic shift in production and export policy in the European Union has significantly altered their competitive po-

sition in export markets, leaving much of the recent worldwide growth in demand to other exporting countries. The U.S. has benefited greatly from this change in government policy in the European Union.

• **Inflation.** The high rates of inflation during the 1970s resulted in cost increases of 7% to 10% per year for many producers. Consequently, even with the significant rise in commodity prices during the mid-1970s, costs rising at the rate of 7% to 10% per year rapidly eroded the higher margins from those higher prices. Today, rates of inflation are much more modest, and prices for purchased inputs used in crop production are rising more slowly than during the 1970s. Without a doubt, profit margins will be eroded by rising prices for fertilizer, seed, and chemicals, but lower rates of inflation reduce this rate of erosion compared to the higher inflation rates of the 1970s.

• **Farm programs.** The farm programs of today are significantly different than those of the 1970s and 1980s. Because the level of government payments depended upon commodity prices in the past, government payments declined with the higher prices of the 1970s and increased with the lower prices of the 1980s. This payment scheme stabilized farm income to some degree – when the market provided better prices and incomes, the government provided lower subsidies, and if income from the market was low, government payments increased.

The 1995 Freedom To Farm farm program alters significantly the payment scheme for government subsidies. Payments are a function of past participation in the farm program, and are not tied to market prices, and are scheduled to be phased down over a seven year period. Even though current market prices are relatively high in historical terms, the Freedom To Farm legislation will result in substantial government farm program payments. Since the size of the payment does depend on the acreage base and prior participation in the program, land that qualifies for government programs will generate higher income than land that does not qualify. Given that payments are

not tied to commodity prices, some landlords are viewing these current payments as windfall profits and expect to receive a significant portion of them. Some buyers of land also are capitalizing these "windfall" profits into their bid prices for land.

The fact that this change in government policy is occurring when market prices are high has the potential to ignite a bidding war (or at least fuel the flames that have resulted from strong export demand) for both land rents and land ownership. And at the same time, the gradual phase down in government program payments over seven years suggests that if commodity prices should decline significantly, government payments will not increase to mitigate the reduced income provided by the market. So there is more down-side risk than existed under government policy of the past.

In essence, the timing of this significant change in government programs could very well exacerbate a boom-bust cycle – it could create windfall profits and pressure to bid land values up today when market prices are high. And if and when market prices decline in the future, government program payments will not be there to offset the lower incomes from the market, thus resulting in lower residual returns to land and land values.

So What?

What does this all mean? Will we repeat the 1970s boom, and set ourselves up for a repeat of the 1980s bust? The discussion thus far suggests continued strong prices and higher incomes for grain farmers. In fact, the fundamentals behind the demand growth may be stronger and more sustainable than in the 1970s. This doesn't mean the current high prices for corn, soybeans and wheat will be maintained over the next three to four years, but the arguments support stronger demand, better prices and higher net incomes than have been experienced during the early part of the 1990s.

So we have the potential of a boom, and surely a bust must follow! Land values will go up dramatically because of the rising incomes, and then fall as dramati-

cally when prices falter or decline and margins are reduced just as they did in the 1980s.

But maybe not! What might mitigate this boom-bust cycle – might keep us from the explosive run up in land values of the 1970s and their precipitous decline of the 1980s? Three forces have the potential to dampen the boom-bust cycle compared to that period of time.

• Conservative lending. Some have suggested that lending practices of the 1970s exacerbated the boom. Lenders' desire to increase loan volume during the 1970s resulted in increased willingness to advance larger and larger loans as a function of collateral values. Loan to value ratios increased significantly during the mid to late 1970s, thus allowing farmers to acquire increasingly more assets with less equity commitment. And as incomes declined in the late 1970s and early 1980s, farmers were able to regularly borrow against appreciated asset values to either expand the business or cover cash flow short falls. By being allowed to monetize their capital gain by borrowing against appreciating asset values, farmers were able to delay longer than they might have otherwise the cash flow and debt servicing problems of lower commodity prices and income. In fact, farm incomes in aggregate begin to fall in 1977, but land values continued to rise until 1981 before their dramatic decline of the 1980s. Credit markets did not have the disciplining impact on investment and borrowing behavior that is traditionally expected, particularly in periods of declining incomes.

In contrast, credit policies today generally remain conservative in spite of rising prices and incomes. Lenders have not adjusted upward their loan to value policies like they did in the 1970s. They generally are not as of yet refinancing and monetizing capital gains. They have continued to impose discipline on investors and borrowers. They have not said that a buyer cannot pay \$2,700 per acre for corn land that has yield potential of 125 to 130 bushels per acre; but they have thus far said that if a buyer wants to do that, he/she needs to have \$1,200 to \$1,300 of

cash or equity to contribute to the purchase. In addition, lenders currently are placing more emphasis on long term repayment ability than they did in the 1970s. Conservative lending policies have the potential to impose financial discipline on borrowers and investors, thus making them more cautious in their buying and bidding behavior.

• **Positive interest rates.** Although nominal interest rates are very similar today to their level of the 1970s, real inflation adjusted interest rates are substantially higher today. Higher real interest rates result in more conservative borrowing behavior by farmers. A combination of low real rates of interest along with the willingness of lenders to refinance and monetize capital gain if debt servicing problems were encountered resulted in relatively low cost or risk of high leverage and increased debt use in the 1970s. The higher cost and risk of borrowing money in the 1990s has resulted in more conservative borrowing behavior. Aggregate debt loads for the agricultural sector have increased very modestly in recent years even with rising incomes and asset values. Aggregate farm real estate debt was \$79 billion in 1995, substantially lower than the \$170 billion real estate debt in 1984. Positive real rates of interest impose further financial discipline in the markets and have the potential to dampen or mitigate over-enthusiastic investment and borrowing behavior.

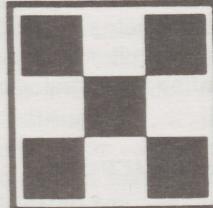
• **Lessons learned.** Both farmers and their lenders remember well the pain of the 1980s, and the excess optimism of the 1970s which created the bubble that eventually burst. They would prefer to not repeat that scenario. Many if not most of those that paid a high price of riding the boom-bust cycle of the 70s and 80s learned their lesson well. To repeat the same mistakes again with such fresh memories of the pain of the recent past seems highly unlikely.

But it could happen again! Optimism about demand growth and rising prices are part of today's agriculture. Cautious optimism is supportable by the fundamentals; but risk is always present and current higher prices and incomes are more subject to downside risk than is the case when prices and incomes are at lower levels. And equally if not more important is the discipline of the financial institutions and the financial markets. Low rates of interest and liberal lending practices are hard to resist even for those who have supposedly learned their lesson – the lending policies and interest rates of the 1970s were very seductive.

It may seem unfair to put such a burden on the lending community and financial markets, but given recent optimistic fundamentals for prices and farm incomes, the discipline imposed by the financial markets may be the key determinant of whether or not we repeat the boom-bust cycle. ▲

In addition to being the agricultural industry leader in animal nutrition, Purina Mills offers a full line of financial services to its customers. Services include financial analysis, cash flows, budgeting plans and assistance with local bank financing for your farm business.

For more information, call us in St. Louis at 800-768-4100.



Purina...
®
**planning tomorrow
with research today.**