FOCUS ON REAL ESTATE

Agricultural Land

BY PETER HOLLAND, CRE; MAURA COCHRAN, CRE; JAMES B. MCCANDLESS

IN THE PAGES OF *REAL ESTATE ISSUES*, WE HAVE EXPLORED many aspects of land use and development including entitlement, valuation, zoning, environmental remediation, urban renewal and urban sprawl. We have examined wide-ranging physical improvements including office, industrial, hospitality, housing, and public sector developments. As described by the Urban Land Institute byline, "Under all is the land," indeed, as Counselors of Real Estate, land is fundamental to the work we undertake on behalf of our clients. This article looks at land in perhaps its most basic and fundamental purpose—that of agriculture. The authors summarize *why* this market segment has become an important asset class for investors and *what* are the historical and future valuation and demand trends. We reference and extracted from a United States Department of Agriculture, Economic Research Service forecast for 2008. This thorough report provides in-depth research on the topic of agricultural commodity and agricultural land prices and trends. The full report may be obtained at *www.ers.usda.gov/briefing/FarmIncome/NationalEstimates.*

GLOBALIZATION

The Economist's food-price index is higher today than at any time since it was first established in 1845. The magazine's view is that "agflation" is supported by important longer-term trends that will continue to influence the market for at least the next seven to 10 years. And it argues that historically high commodity prices are occurring during a time of abundance. The surging economies in China and India are overpowering the normal economic consequences of strong supply. At the same time, for example, the United States, long the largest

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exporter of corn, now consumes more corn domestically for ethanol than it sells abroad.

Everywhere, the cost of food is rising sharply. Whether the world is in for a long period of continued increases has become one of the most urgent issues in economics.[1] Global stores of grain have fallen to their lowest levels in decades, and there are compounding factors contributing to sharply higher price levels.

Increased consumer wealth in rapidly developing countries and the attendant nature of food consumption in these rapidly expanding economies are powerful drivers of the new economic reality. In recent years, developing countries have evidenced annual economic growth rates in the range of seven percent, a strong rate by any standard. Growth rates at this level mean that hundreds of millions of people are gaining access to more than just the basic necessities and subsistence levels of nutrition. This new wealth allows for not only the ability to acquire cell phones, medicines and bottled water, but also more abundant and nutritious food.

In addition, some governments such as in Russia and Venezuela have imposed price controls in an attempt to manage this politically sensitive upward spiral in food prices. Others are implementing export restrictions. These attempts to manipulate commodity markets have led only to higher price levels as local farmers respond by curtailing production of price-constrained crops. Farmers from around the world are producing at full capacity and expanding their tillable soil with sometimes detrimental environmental consequences.

In 2007, net farm income was at record levels, and the year ended with key economic indicators at favorable levels. Exports were strong as the weak dollar made U.S. commodities more competitive in international markets, and ending-year stocks of many commodities were low. Consequently, the outlook for the farm economy as a whole is for a very good year in 2008, driven by strong demand for feed crops, oilseeds and food grains.

UNITED STATES PERSPECTIVE

Exports from the U.S. are expected to increase by 23 percent this year to a record $101 billion, resulting in further consolidation of America's status as the world's largest agricultural exporter. [2] This increase in export value is even more remarkable in that net farm income in 2007 was $87 billion, or 50 percent more than the average income over the past 10 years. In addition to increasing global consumption, agricultural commodity prices (and agricultural land values) in the U.S. are influenced by:

- weakening dollar;
- federal mandates and incentives that encourage the production of ethanol;
- U.S. price support and farm subsidy legislation.

Farm income creates the economic support to establish and drive agricultural land valuations. It is important to note, however, that agricultural pricing trends and valuations are neither uniform nor consistent across all crop groups. While overall trends indicate further potential for price appreciation, this is not uniformly the case across all crops. There are also variations among varieties within any particular crop. This is especially true with permanent crops such as apples or nut-bearing trees that typically require years to mature. Consumer tastes, for example, have reduced demand for red delicious apples over other more newly popular varieties.

Current trends, of course, are subject to a variety of threats including energy prices (utilities, fuel and fertilizers), the quality and availability of water for irrigation, crop diseases and pests, climate change, uncertain price support and energy legislation, exchange rates and changing consumer tastes. For example, a dollar that continues to fall, while beneficial to exports, also increases the costs of imported units of production such as fuel and fertilizers.

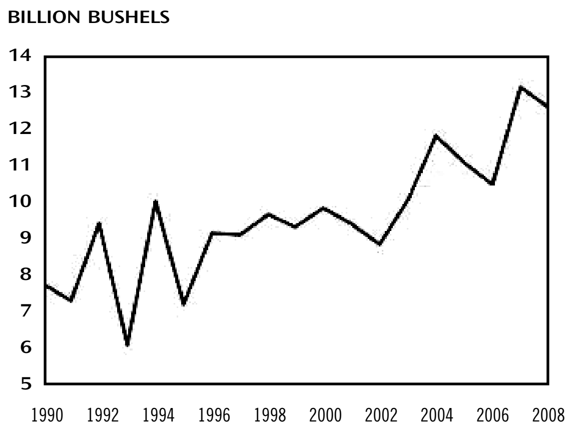
COMMODITY PRICES BOOST FARM INCOME

In general, 2008 is projected to be another exceptional year for U.S. crop producers, particularly for feed crops, oil seeds and food grains. In the livestock sector, the prices available to producers for cattle and milk are expected to remain well above their average over the last 10 years. Again, these higher prices are the result of strong demand from the domestic biofuels industry and foreign buyers. As a result, farmers have lots of production to sell at high prices.

The growing use of major crops such as corn in the production of biofuels has increased the demand for these commodities and contributed to overall upward pressure on commodity prices. While corn producers are the primary beneficiaries, soybeans are also used for producing biodiesel. Prices of other feed crops and oil seeds also have risen as corn and soybean consumers have looked to substitute commodities to offset the effects of rising corn and soybean costs. Reduced yields resulting from inadequate rainfall in other countries and increased international consumption (from growth in population and rising incomes) have reduced world supplies and inventories for corn and soybeans.

Figure 1

U.S. Corn Production 1990-2008



Source: National Agricultural Statistics Service (NASS)

AGRICULTURAL LAND AS AN INVESTMENT

As indicated, there are significant risks to sustained high land valuations. The value of agricultural land can be adversely influenced by changes in farm legislation, energy prices, the availability and quality of water, disease and pests, quality and availability of labor and suitable tenants, export restrictions on genetically modified crops, the cost of infrastructure, weather, exchange rates and market demand for certain crops.

These risks, while numerous, are mitigated by the fact that, overall, land has steadily increased in value over the past 20 years. The rate of increase, however, has accelerated significantly since 2004, averaging 16.6 percent per year compared to an average of 4.84 percent per year during the previous 15 years. The drivers of increasing land valuations, in our view, are long-term and structural. In addition, as politicians scramble to get reelected, no major changes in federal policy are likely, and so long as our trade imbalance, interest rates and slow economy persist, so too will the weak dollar. However, the availability and cost of good water for irrigation remains a concern in certain areas (the west and southeast). Properties in other regions with access to an abundant supply—such as exists in the Mississippi Delta—will, by comparison, be highly advantaged.

We expect that investment-grade land, or land with good soils, high productivity, adequate water, and of a desirable size and topography for mechanization and economies of scale outside of areas influenced by urban growth, will outperform the market for more marginal agricultural land.

INSTITUTIONAL FARMLAND INVESTMENT

Farmland can be found in all 50 states; however, there are 24 states that are considered to have high percentages of investment-grade land. The combined value of all farmland in those states is approximately $1 trillion. While not all of this land is "for sale," this still represents a sizeable investment universe and allows sufficient geographic and crop type diversification for institutional investors. Pension funds, which began their farmland investment activity in the early 1990s, own only about $1 billion of farmland. Some institutions have recently expressed interest in farmland investments, yet they remain a small factor in the market. Historically, the largest single group of farmland buyers has been, and is today, farmers increasing their land holdings.

AGRICULTURAL LAND VALUE HIGHLIGHTS

Farm real estate values, a measurement of the value of all land and improvements on agricultural properties, averaged $2,160 per acre on Jan. 1, 2007, up 14 percent from 2006. The $2,160-per-acre figure is a record high, and is $260 higher than the previous year. In our experience, most improvements, with some exceptions, do not significantly contribute to the value of a typically sized farm in most regions.

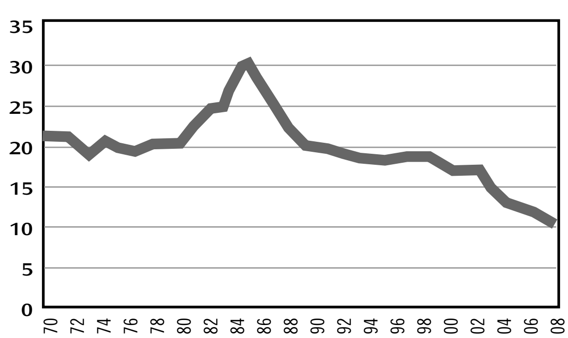
Both cropland and pastureland values for 2007 are at record highs. Cropland values rose 13 percent to $2,700 per acre, up from the previous high of $2,390 in 2006. Pasture values rose 16 percent to $1,160 per acre.

The increase in farm real estate values continues to be driven by farm income, which indicates demand by farmers expanding their land holdings. Though we have also observed that until 2007, commercial and residential development of farmland produced a surge in 1031 tax-free exchange buyers seeking farms to replace that land sold to developers. Livestock production and recreational use remain the predominant drivers that influence pastureland values.

Gains in farmland prices have not been accompanied or fueled by excessive debt financing as occurred in the late 1970s and early 1980s. In fact, as Figure 2 demonstrates, the debt/equity ratio of the farm sector has declined steadily since the mid-1980s.

Figure 2

Farm Debt/Equity Ratio



Source: UBS Global Asset Management, Global Real Estate Research based on data obtained from USDA as of December 31, 2007. Ratio represents total farm debt divided by equity in land, buildings, equipment, crops and livestock. 2007 ratio is preliminary and 2008 ratio is forecast by the USDA.

Regional increases in the average value of farm real estate ranged from nine percent in the southeast to 18 percent in the Mountain Region. The highest farm real estate values remained in the northeast, where development pressure continued to push the average value to $5,000 per acre. The Northern Plains had the lowest farm real estate value, at $961 per acre, up 14 percent from the previous year.

The Lake Region had the highest percentage increase in cropland values, up 15.7 percent from 2006. In the Corn Belt, cropland values rose 15 percent to $3,720 per acre. Values in the Southern Plains increased 15 percent from the previous year, up to $1,330 per acre.

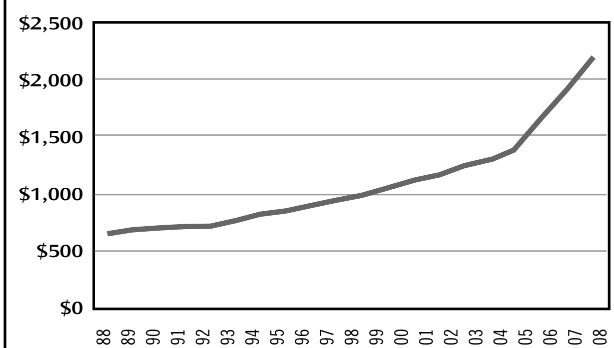
The Pacific Region had the highest average percentage increase in pasture value, 29 percent above 2006. In the Southern Plains and Mountain regions, which account for more than half of the pasture in the U.S., values per acre increased 25 percent and 18 percent, respectively.[3]

As demonstrated in the following chart (Figure 3), farmland prices have increased annually since 1988.

Figure 3

U.S. Average Farm Real Estate Value

DOLLARS PER ACRE 1988-2007



Source: USDA

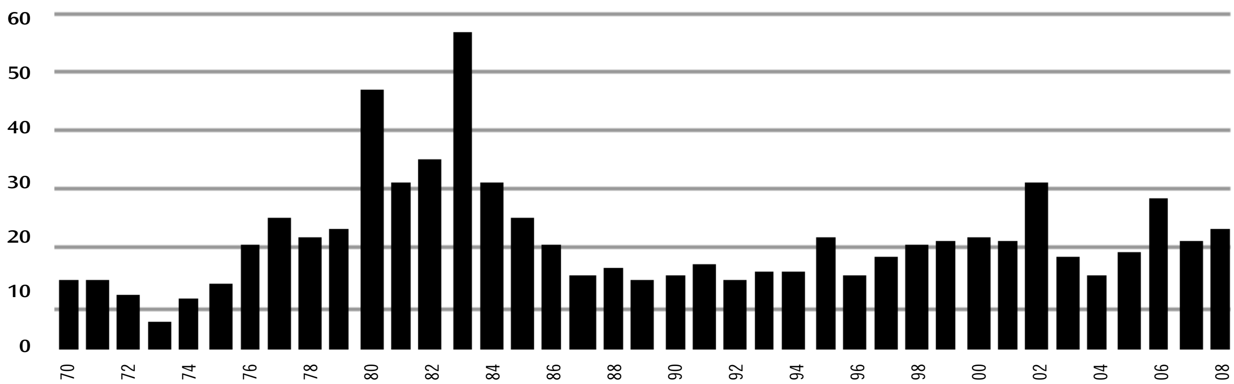
As depicted in Figure 4, the debt/equity ratio reveals that farmland values in the late 1970s and early 1980s were not justified by the income generated from farming. However, the current farmland price/earnings ratio is in line with the historic averages, and farmland gains over the past 20 years have been supported by farm income.

Always bear in mind that broad-based data, while interesting, may not be relevant to specific properties in any given portfolio. Different crops are subject to different consumer, crop maturation and economic cycles. Other site-specific issues such as water rights, topography, growth patterns, easements and restrictions, soil type, etc., also determine value within a general agricultural region.

Local property and agricultural experts we interviewed noted that farm values are increasing faster than most appraisers, brokers and farmers themselves had anticipated. Many said that although they had declared market peaks one or two years ago, and though they are pleased about present valuation levels, they are cautious, if not

Figure 4

Price/Earnings Ratio



Source: UBS Global Asset Management, Global Real Estate Research based on data obtained from USDA as of December 31, 2007. Ratio represents land and building value divided by net farm income. 2007 ratio is preliminary and 2008 ratio is forecast by the USDA.

nervous. Others we interviewed expect values to plateau or rise modestly in the future, while some knowledgeable people in the Mississippi Delta market remain bullish, expecting to see as much as 50 percent appreciation over the next five years.

Agricultural land and related properties such as timber-producing properties will likely continue to attract increasing investor interest. Whereas local demand and 1031 exchanges had driven many agricultural transactions in the past, we believe that investment and pension funds acquiring land as a component of their overall investment portfolio will accelerate. As such, knowledge of this real estate asset class will become increasingly important to real estate professionals. ■

ENDNOTES

1. *The New York Times,* March 9, 2008
2. *The Economist*, Dec. 8-14, 2007 – "Briefing Food Prices"
3. USDA Land Values and Cash Rents 2007 Summary