

# ag quarterly

Winter 2008

metlife agricultural investments newsletter



## MetLife®

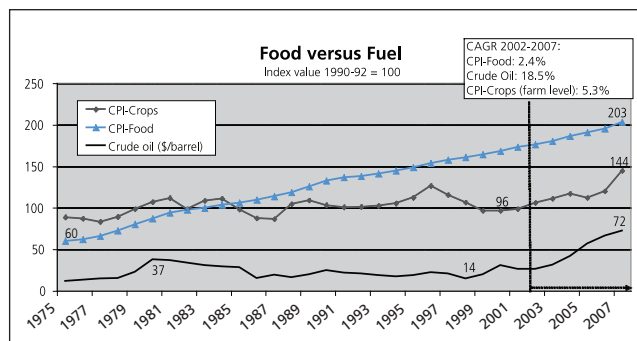
### Food Inflation, More to It Than Corn-Ethanol

Strong Global Meat Demand, But Rising Costs  
P. 2

The United Nations Food and Agriculture Organization reported an impressive 24% jump in global food prices in 2007. With such headlines now more frequent, many may be tempted to blame corn-ethanol as the main culprit behind rising food prices. However, a closer analysis of the effect of high commodity markets on food prices illustrates a relatively weak link between agricultural commodities and consumer food prices. Even when focusing on the volatile past five years, commodity prices play only a secondary role in food inflation, behind larger factors like marketing costs which now account for as much as 80 cents of every dollar spent on food. In the longer term, we should also expect agriculture to respond to such attractive prices via increased production. In the meantime, lofty crop prices cannot be entirely tossed out as they still play a role—albeit moderate—in higher food price expectations again in 2008.

At the farm level, a significant element of volatility for 2008 lies with relative commodity prices and their impact on the acreage mix and production levels. The following table summarizes major crop acreage expectations as of Feb '08. If soybean and wheat prices maintain their advances on corn, it will put downward pressure on corn planting this year. Amid high input costs that show little inclination to weaken because of powerful foreign demand, farmers face market

incentives to shift more acreage into less-intensive crops like wheat and soybeans to contain production expenses. For instance, fertilizer prices further increased in 2007 amid particularly strong Asian fertilizer demand, which bodes for steady or even higher input expenses for U.S. farmers in 2008.



The **chart**, above, shows consumer food prices on a steady upward trend since 1975, while both crude oil and farm crop prices were more or less flat over that period. This is an important divergence indicative of other factors at play—like the rising share of marketing costs linked to higher value food products over time. Since 2002, however, crop and energy prices began to accelerate. Between 2002 and 2007, crop prices rose a significant 5.3% per year, outpacing food inflation at 2.4% per annum over the same period. However, this is far less than crude oil prices gaining an impressive 19% per year over the same period. If we look closer at the chart, though, oil prices posted their largest gains in 2005—due to hurricane Katrina—while crop prices rose the most in 2007 because of recent biofuel mandates and strong global food demand. Overall, steep increases in energy costs have *continued on p2*

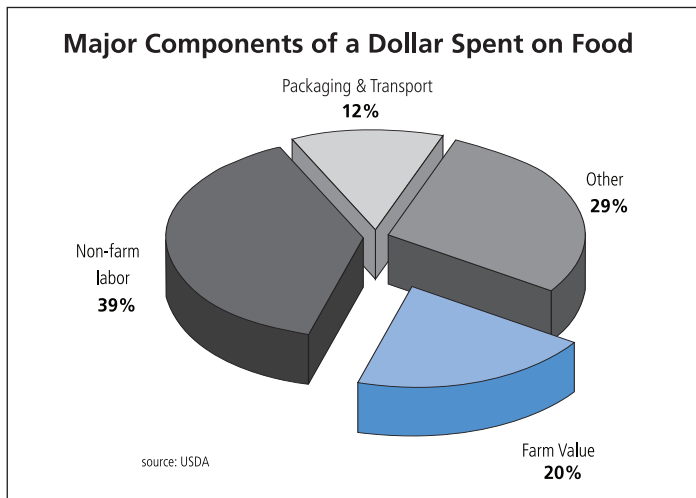
Major crop Acreage			
	Corn	Wheat	Soybeans
<i>million acres planted</i>			
2007	93.6	60.4	63.6
2008 (F)	88	63	72



All information contained herein has been obtained by MetLife from sources believed by it to be reliable. The analysis, opinions, forecasts and predictions contained herein are believed by MetLife to be as accurate as the data and methodologies will permit. However, MetLife makes no representations or warranties, either express or implied, to any person as to the completeness, accuracy and reliability of such information, forecast and/or predictions and expressly disclaims any liability with respect to any of the foregoing.

had a more pervasive impact on the entire food supply chain via higher gasoline prices impacting shipping costs and higher petroleum-based plastics raising packaging costs.

The next pie chart adds some perspective by illustrating the share of non-farm cost components in consumer food spending. Interestingly, it shows that merely 20 cents of every consumer dollar spent on food goes back to the farmer. The remaining 80 cents goes to so-called marketing-related expenses, including packaging, advertising, transportation and off-farm labor costs. Hence, if farm prices increase 25%, it translates into a corresponding 5% increase in food prices based on a 20% farm share of the average food dollar. However, this assumes that other cost components are constant, but this isn't the case since we know that already-high energy costs rose another 9% last year alone, boosting packaging and transport cost components. Therefore, with food inflation currently running at 5% per annum pace, it suggests that not all cost increases have been passed along to consumers yet. Therefore, further gains in food prices should be expected in 2008 amid the lag effect of rising food production costs and "rediscovered" pricing power by an industry benefiting from strong global demand. One caveat, however, is a global economic downturn potentially impacting consumers' willingness to pay more for food. Economic weakness may not cool food prices immediately, but if prolonged and significant in magnitude, it could very well trickle down the food chain and slow food inflation.



In all, food is a basic need, so concerns about food inflation can have a disproportionate influence on the consumer psyche. Clearly, we remain in a high-commodity price environment. As such, food inflation is still running well above trend—near 5% per annum—making the topic a headline contender again in 2008. Going forward, we can expect upward pressure on food prices to remain. However, an important element is expected to moderate gains in the longer term—beyond the cooling effect of an economic slowdown. It is the supply response from production agriculture. At such attractive commodity prices, market incentives to boost output are clear. It can

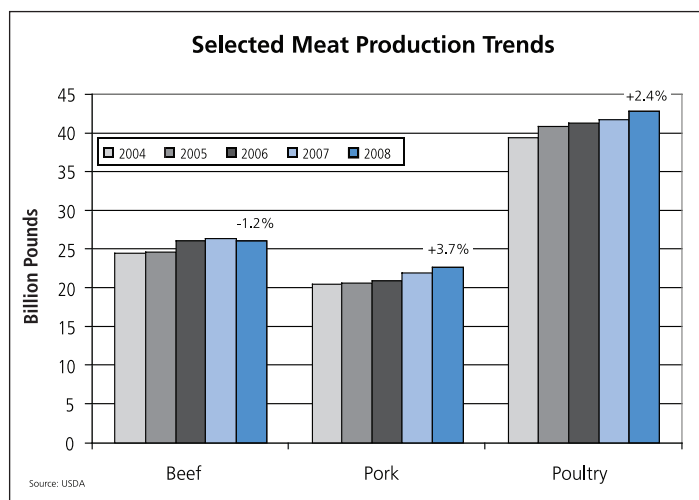
involve CRP (Conservation Reserve Program) acreage reverting to commercial production, underdeveloped farmland in many large producing countries—especially Brazil, or further embrace of seed technology and fertilizers to increase yields in many parts of the world. Hence, it could be beyond 2008 before prices moderate, but it should be expected to happen. In the meantime, commodity markets remain particularly appealing to agricultural producers even if it means renewed media attention on food inflation again this year.

## Strong Global Meat Demand, But Rising Costs

The steady uptrend in emerging markets' disposable incomes remains a major growth driver for the North American livestock and meat industry. China and India—with one-third of the world's population combined—are still experiencing GDP growth near the impressive 10% per year-mark. As foreign consumers' incomes rise, they incrementally shift from grain to meat-based diets, thus providing huge opportunities to meat exporters like the U.S. and Canada. Exports account for 11% and 35% of major meat output for the U.S. and Canada, respectively. However, this is not without challenges. Soaring production costs, mad cow disease and emerging environmental issues associated with meat production can still pose significant business constraints. Such challenges are not unique to North America, but are becoming global issues facing livestock and meat producers around the world. Amid sturdy demand, it will likely spur meat and livestock prices to remain at attractive levels as global supplies try to keep up with demand.

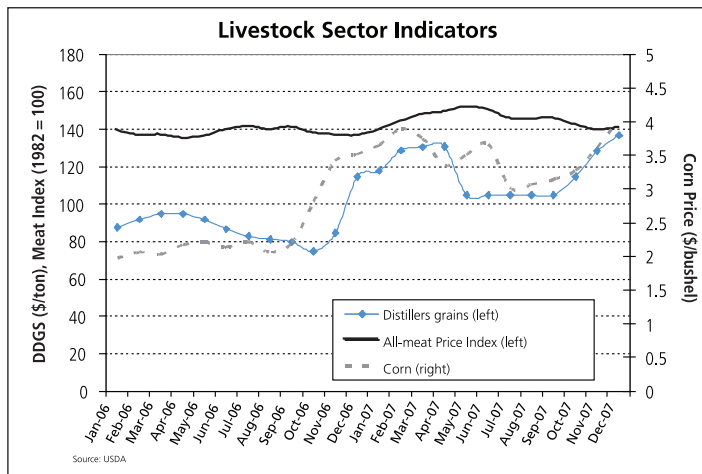
The U.S. consumer typically eats 220 pounds of poultry and red meat in a year, which is more than twice the 100 pounds of meat consumed by the average world citizen. However, foreign consumers are steadily consuming more meat while their U.S. counterparts consume roughly the same amount year over year. For example, global meat production rose 400% from 71 million tons in 1961 to an estimated 284 million tons in 2007 to meet rapid growth in global meat demand. Such diverging trends between domestic and export demand channels can offer opportunities for a livestock and meat industry looking to grow beyond the profitable, but mature domestic market.

The following **chart** illustrates recent trends in beef, pork and poultry production in the U.S., which typically exhibit growth in the 1% to 3% range per year. Going forward, the single most important factor to influence the livestock cycle is likely to be cost. For instance, total feed expenses in 2007 rose an estimated 23% (y-o-y) to an estimated all-time high of \$37 billion. With no declines expected in 2008—driven by strong global food demand and biofuel mandates—meat production growth is likely to be modest this year, especially beef. The bar chart illustrates USDA’s 2008 production forecast for beef declining 1.2% amid high feed costs and lower carcass weights, while pork and poultry production respectively manage a 2.7% and 2.4% growth forecast. Overall, broad-based increases in production costs can actually facilitate producers’ ability to recoup them via high product prices. Agriculture remains a highly competitive industry where producers have limited pricing power individually, but collectively, they can wield enormous influence through restricted supply growth, forcing prices higher. As a result, the U.S. and foreign meat markets are gradually adjusting to the new, higher cost, market environment.



Last year, chicken breast prices realized an impressive 30% year-over-year gain, leg quarters jumped 55%, cattle and beef cutout values experienced a nearly 10% gain while hogs and pork experienced flat pricing, due to production expansion and pricing pressure in the latter part of 2007. Overall, high prices are expected to prevail again in 2008 since the current momentum towards expansion in the livestock sector does not appear deeply rooted. In the U.S., dairy and beef cattle producers were the most restrained, short-circuiting production expansion due to poor pasture conditions and overall high feed costs. The net result helped agricultural profitability, with net farm income estimated at a record \$88 billion in 2007 and only modestly lower for 2008. Nonetheless, livestock producers still need to contain spiraling production costs. Dry distillers’ grain, a by-product of ethanol, has gained popularity as a cheaper and increasingly more available source of feed, pushing prices near the \$140/ton mark in late 2007. However, distillers grain can still be a value relative to \$5 corn and

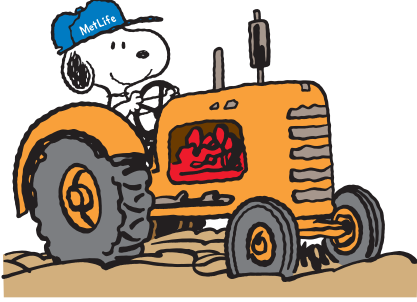
is in increasingly larger supplies providing livestock producers an alternative to contain feed costs.



While high disposable incomes and away-from-home consumption patterns support favorable sales mix at home, the strength of foreign meat demand will be key to the livestock industry’s ability to grow and to continue passing along higher costs onto buyers. Based on fast GDP growth in large emerging economies like China and India, the outlook still augurs for meat prices to remain elevated. Amid relatively tight meat inventories globally, U.S. poultry and pork exports are bound to stay strong again this year. In 2007, the industry exported 5.7 billion pounds of poultry (+8% over 2006) and 3.2 billion pounds of pork (+5.4%). Meanwhile, beef exports, which are still recovering from the 2003 collapse due to mad cow disease, reached an estimated 1.45 billion pounds last year (+25%), and should continue to recover to 1.7 billion pounds in 2008.

In summary, major meat output is expected to grow a mere 1.6% this year while exports can grow by 10% in volume, again supported by the weak dollar making U.S. products cheaper to foreigners whose incomes continue to rise. A significant market risk, though, is the U.S. economic slowdown and its potential impact—whether isolated or contagious—in emerging markets. There is also a risk that consumers in rich countries like the U.S., Canada and Japan would “trade down” to less expensive food options e.g., moving down from casual dining to fast food. Typically, this is more likely with cyclical goods like electronics or appliances, but increasing consumer spending on higher value food categories, like organic or convenient foods, could force consumers to rethink their buying habits. In any event, a pervasive economic downturn is not expected to reduce meat consumption, but it could still make a dent in prices paid and received, especially if foreign buyers are impacted through an economic slowdown of their own. The silver lining for livestock producers, though, would be a long-awaited cooling of commodity markets that has continued unabated, and could finally signal a reprieve from steadily higher production expenses.

Hugues Rinfret, CFA, FRM  
MetLife Agricultural Investments



A Driving Force in Agriculture®

[www.metlife.com/ag](http://www.metlife.com/ag)

- Consistent agricultural real estate lender for over 90 years
- Long-term fixed, floating or adjustable rate financing
- Competitive interest rates
- Flexible terms and structuring
- Internal underwriting, appraisal and approval process

Farm and Ranch  
Permanent Plantings  
Food and Agribusiness  
Timberland

*Turn to MetLife for your agricultural  
and timberland real estate loans*

metlife agricultural investments newsletter

ag quarterly

MetLife®