

July 9, 2001

HOW TO INVEST IN THE COMING GLOBAL FOOD CRISIS

Are Grain and Crop Prices – At 20-Year Lows – Making A Long-term Bottom?

A Reversal In The Dollar Could Cause A Surge In Commodity Prices

Agriculture is one of world's largest industries, employing 1.3 billion people worldwide and producing \$1.3 trillion worth of goods per year.

It is also one of the great productivity success stories. Food output per head has increased 25% during the past 40 years, even though land use has grown by only 10% and the world's population has risen 90%. Average corn yields have increased from 20 bushels per acre in 1920 to 120 bushels per acre in 1999.

The "Green Revolution" of the 1960's and 1970's, whereby new scientific innovations such as fertilizers and pesticides greatly expanded agriculture production, is generally accepted to have saved over 1 billion people from starvation.

But several factors are combining to make the next 40 years a much greater challenge to meet human agricultural needs. Cropland area per person is shrinking. The amount of irrigation water per person is dropping. And crop yield response to additional fertilizer is declining. Fish farming, a fast growing industry, as discussed in our June 15, 2001 report, will address only a fraction of the need.

The result may be the beginning of a secular bull market in agriculture-related businesses. The theme appears to possess three key elements for success: (1) Growing Demand; (2) Limited Supply; and (3) Attractive Valuation. Consider the following:

GROWING DEMAND

- **World population may double during the next 40 years to 12 billion people.**
 - World population has more than doubled from 2.5 billion in 1950. The U.N. has estimated the Earth's carrying capacity to be 14.2 billion people.

- **The global agriculture industry will have to supply, as much food as has been produced during all of human history, to meet human nutritional needs over the next four decades.**
 - Hunger is a problem for roughly 1 billion people today – over 95% of them in developing countries. *Indeed, 34,000 humans die each day from starvation.*
 - **A 50% jump in population would double the world's food demands**, in part because a fast growing middle class in Asia and South America are buying more beef, poultry, and pork. A doubling in global population could quadruple the world's food needs.
 - Thirty-seven percent of 1.87 billion tons of grain harvested worldwide in 1998 was fed to livestock and poultry to produce milk, eggs and meat. Seventy percent of harvested crops are fed to livestock in developed countries.
 - Meat production is increasing 2x as fast as population growth.
- **Improved nutrition will be increasingly important to prevent the spread of disease accelerated by global warming.** This will lead to a growing need and demand for greater diversity of nutritional foods.
 - Five billion people live in the global equivalent of New York City's 1890 tenements, with inadequate nutrition, housing, urban sewage and water systems.
 - The immune system is vitally dependent on nutrition. As nutritional input declines, these vital cells literally run out of fuel and fail to perform their disease-fighting tasks.
 - Infectious disease and environmental factors are to blame for more than 75% of all deaths in the world. Densely populated urban environments, particularly those without adequate sanitation and nutrition, are breeding grounds for epidemic disease.
 - *In developing countries, water-borne diseases account for 9 out of 10 deaths due to infectious disease.* This will become more prevalent in a warmer more polluted and

crowded Earth. Only 8 of 3120 towns and cities in India have full wastewater treatment facilities.

CONSTRAINED SUPPLY

- **Thirty percent of the world’s arable land will be unusable by 2020 due to excessive salt in the soil. *Fifty percent may be unusable by 2050.***
 - About 40% of the world’s food is produced from irrigated land.
 - Worldwide, about 25% of irrigated land presently suffers some degree of irrigation-induced salinization. Productivity has dropped significantly on about 10% of irrigated land.
 - *Humans divert about 25% of the world’s freshwater supply from rivers, lakes, and groundwater, two-thirds of which is used for irrigation (5x the flow of the Mississippi).*
 - *In arid areas of the western U.S., irrigation can consume over 75% of developed water resources.*
 - **Nearly 40% of the crop dollar value is raised on 15% of the cropland that is irrigated. Most of the world’s fruits and vegetables are grown with irrigation. Indeed, much of the “Green Revolution” of the past 30 years could really be considered a “blue” revolution, as it was highly dependent on irrigated agriculture.**
 - Maintaining current world food production would require 1 billion acres of new land for cultivation. Much of the additional land would need to be taken from rain forests in South America. Conversion could mean the loss of about one-third of remaining tropical and temperate forests, savannas and grasslands. This would severely impact biological diversity and the global CO2 balance with potentially significant implications for global warming.
 - Roughly 1.5 billion hectares is used for cropland presently worldwide. Theoretical estimates for the potential amount of cultivable land on earth range from 2-4 billion hectares.

However, most high-quality agricultural land is already in production. Converting much of the remaining forest, grassland, and wetland habitats to cropland may have high environmental costs, and the soil is relatively less productive and more fragile; thus its contribution to future world food production would be more limited.

- **The amount of land actually cultivated has declined slightly over the last two decades, because of land losses to erosion, salt buildup, urbanization and desertification have exceeded the development of new agricultural land.**
 - Between 1970 and 1990, deserts expanded by 120 million hectares, claiming more land than is currently planted to crops in China.
 - By 1990, 562 million hectares, about 38% of the 1.5 billion hectares of global cropland globally had been degraded. Since 1990, 5-6 million hectares of cropland have been lost annually to severe soil degradation.
 - Between 1970 and 1990, 480 billion tons of topsoil, roughly equivalent to the amount of India's cropland, was lost to erosion.
 - **Soil erosion has exceeded soil formation on about a third of U.S. cropland since the late 1970s.**
 - Nature makes soil slowly, requiring from 200 to 1,000 years to form 2.5 centimeters of topsoil.
 - About two-thirds of soil erosion is caused by water washing way topsoil, with the other third cause by wind.
 - One analysis estimates that topsoil is being lost 16 to 300 times faster presently than it can be replaced, depending on the region.
 - A 1994 study estimated that soil degradation between 1945 and 1990 lowered world food production by 17%.

- **From 1950 to 1984, growth in the world grain harvest exceeded population growth. However, since then, growth in the grain harvest has fallen behind population growth, dropping per person output by 7%.** The key culprits are lack of new land and diminishing effectiveness of irrigation and fertilizer.
 - Global wheat yield growth rates have declined from 2.92% per year for the period from 1961 to 1979 to 1.78% for the period 1980 to 1997.
 - Maize yield growth rates have slipped from 2.88% to 1.29% for the same period.
- **Spreading water scarcity is probably the most underrated resource issue in the world today.** Wherever population is growing, the supply of fresh water per person is declining. Countries with fast growing populations, such as China and India, will increasingly have to divert irrigation water to satisfy residential and industrial water needs. (See our 5/17/01 *Water: World's Most Common Resource Could Become Its Most Precious Resource* report for additional information.)
 - Depleting aquifers and diversion of irrigation water to cities and industrial needs could soon force China to become a net grain importer. Lester R. Brown, chairman of the World Watch Institute, believes increasing demands of China's 1.3 billion people will move the country ahead of Japan as the world's largest grain importer.
 - As of June 10, 2001, 28 million hectares of farmland and 1.38 million hectares of paddies were in drought in China.
- **Global warming will exacerbate crop losses from pest insects, plant disease and weeds.** Any benefits in crop production from warmer climates are likely to be outweighed by declines in rainfall in critical crop-growing regions.
 - Global warming creates a favorable climate for disease-producing organisms and plant pests to spread.
- **Distribution and post-harvest inefficiency also play key roles in the amount of food available to the world population.** Some studies have shown that total world food production may actually be high enough to feed everyone a minimal diet if distributed evenly. But getting available food to everyone that needs it is easier said than done.

Also, other studies have estimated that anywhere from 10%-40% of a crop harvest is lost to processing spoilage, insects and rodents, or other factors.

- **Wheat and course grain inventories peaked 3 years ago and consumption continues to exceed production for the third consecutive year, gradually drawing down reserves.**
 - Worldwide ending stocks of wheat peaked at 174.7 million metric tons in the 1998/99-harvest year, and stood at 158.7 million metric tons as of May 10, 2001. The USDA forecasts a decline to 132 million metric tons in a year.
 - Global ending stocks of coarse grain peaked at 220.1 million metric tons in 1998/99 and stood at 193.2 million metric tons as of May 10. The USDA expects a decline in ending stocks to 181 million metric tons by next year.
 - Ending global stocks of rice peaked at 138.3 million metric tons in 1999/00, and is projected to fall to 126.3 million tons in 12-months.
 - Ending world corn stocks peaked at 174.4 million metric tons in 1999/00 and stood at 155.3 million on May 10, 2001. The USDA expects ending stocks to decline to 143.1 million metric tons by next year.

VALUATION SUMMARY

Similar to our water theme, **we believe agriculture will prove to be a secular multi-decade theme, although punctuated with cyclical peaks and valleys providing long-term buying opportunities.**

We think a primary risk to committing funds now may be that we are early in recommending an asset allocation to this sector as the global economy may still have further to weaken than is already discounted by the financial markets. However, if we are at or near the bottom of the economic cycle, the cyclical nature of commodities and securities in this sector will begin to anticipate a recovery.

Wheat, soybean, and corn prices are trading near 20-year lows (see charts on pages 11-13), and many agriculture and farm-equipment related stocks are trading at

below average P/E and price/book multiples – in some cases below book value and at or near historical lows.

Food, agriculture, and farm-related stocks have generally under performed the S&P 500 index during the last decade. The S&P Food index has posted only half of the 88% gain the S&P 500 index has since mid-1996. Archer Daniels Midland, the largest grain processor, has declined 10%, while Deere & Company, the biggest maker of farm equipment, has dropped 3% since mid-1996.

There are several ways to invest in the theme:

Grain Commodities: This is probably the most risky way to invest, albeit with tremendous upside leverage. Wheat and coarse grains are probably the most closely linked to growing populations and increasing meat consumption.

As wheat futures hover just above their 20-year low, consumption is expected to reach record levels this year and exceed production for the third consecutive year. U.S. wheat plantings are expected to decline for the fifth consecutive year in 2001.

Lower world production is expected as smaller crops in the U.S., EU, and South Asia more than offset larger crops in Australia, Argentina, Eastern Europe, and the FSU. The U.S. wheat production decline is related to dry weather last fall and a colder-than-normal spring as well as reduced planting by farmers this spring.

However, increased prices this year will be limited by relatively large, but declining supplies in major exporting countries. Nevertheless, long-term fundamentals suggest wheat and coarse grains may be making a long-term bottom and poised to rise, perhaps significantly, over the next several years as ending stocks are worked down and consumption continues to increase.

Food Companies: Food stocks are probably one of the safer ways to invest in the theme as these businesses are typically viewed as defensive investments. Indeed, even though the S&P Food index has posted only half of the gain of the S&P 500 during the last five years, it has outperformed since the NASDAQ peaked on 3/10/00. The S&P Food index is up 47.2% while the S&P 500 is down 12% and the NASDAQ has dropped 57% through 6/29/01.

Nevertheless, the S&P Food index remains at a relatively attractive valuation, trading at 19.5x consensus EPS of \$80.40 this year, only slightly above its 8-year P/E low of 16.7x and well below its 8-year average of 27.8x. The average dividend yield for the index is 2.5% versus 1.3% for the S&P 500.

To the extent the food group is perceived as defensive, a shift in sentiment could lead the group to under perform as investors seek cyclical and faster growth businesses. As a result, we would encourage careful stock selection and buying on any pullbacks. *The food group should be a long-term benefactor of growing agriculture production and population growth.*

Below is a valuation summary of companies comprising the S&P Food group.

S&P Food Index Valuation Summary

Company	Recent Price	Forward P/E	I/B/E/S Expected 5-Yr Growth	Dividend Yield
Campbell Soup (CPB)	27.37	17.0x	8.4%	3.3%
Conagra (CAG)	19.69	14.0x	9.7%	4.5%
General Mills (GIS)	43.77	22.8x	10.7%	2.5%
Heinz (HNZ)	41.99	15.5x	8.2%	3.7%
Hershey Foods (HSY)	61.78	22.4x	9.4%	1.8%
Kellogg (K)	29.91	24.1x	8.1%	3.4%
Quaker Oats (OAT)	91.19	24.3x	10.3%	1.3%
Ralston Purina (RAL)	30.11	26.1x	10.8%	0.9%
Sara Lee (SLE)	19.49	14.6x	9.5%	2.9%
Unilever (UN)	60.05	19.8x	8.4%	2.1%
Wrigley (WWY)	47.95	30.0x	10.3%	1.5%
Average		19.5x	9.4%	2.5%

Precision Farming: The old system of small, low-tech farming is slowly becoming obsolete. In 10-years, all farmers are expected to use precision farming technology – the computerized management of crops to suit variations in land characteristics.

A precision farming equipped tractor receives satellite data on its precise location, soil composition, water levels, infestations, and other key factors as it moves across fields. The tractor's computer then delivers differing amounts of irrigation water, seed, fertilizer, and pesticides to optimize cropland production *yard by yard*. Precision farming can reduce costs, increase yields, and decrease environmental impact.

The two leaders in the field are **Deere & Company (DE, 36.23, www.deere.com)** and Case, a division of **CNH Global N.V. (CNH, 6.0, www.cnh.com)**. The technology is only in the initial stages of implementation with *less than 3%* of global combines utilizing it. In addition to the growth engine of precision farming, farm equipment manufacturers are a cyclical play on an upturn in the agriculture industry.

Please refer to the attached research brief on Deere & Company for additional information.

Ag-biotech: Utilization of genetically engineered plants, vegetables, and fruits to be more pesticide and herbicide resistant, or to contain higher nutrition value, has witnessed a strong consumer backlash, primarily in Europe.

A debacle last year occurred when Aventis SA's pest-resistant "StarLink" corn was approved only for livestock feeding in the U.S., but found its way into hundreds of food products, resulting in numerous recalls. Indeed, traces of "StarLink" were recently found in "Kash n' Karry brand corn chips sold at a Florida store.

Although testing of people who said they became sick after eating "StarLink" related corn products showed the cases were not tied to "StarLink", the gene in the modified corn seed is suspected of having the potential to cause allergic reactions. The EPA is planning to hold two days of hearings this month to consider a request by Aventis to allow trace amounts of StarLink in corn. The EPA regulates StarLink as a pesticide.

The EU has recently withheld approval of some genetically modified crop varieties until a regulatory system is in place and exhaustive trials are done. Some large supermarkets in the EU have refused to stock ag-biotech products. As a result, the EU has increasingly been looking to non-genetically modified suppliers, such as Brazil.

Over the last year, this has led many of the big drug and chemical companies to spin-off their ag-biotech businesses. Although the industry has fallen out of favor with many consumers and Wall Street, **most industry observers believe human society will simply not be able to meet future global food supply needs without the use of genetically modified crops that can increase yields up to 25% in some cases.**

- *A 50% increase in population will require 75% more food per acre under current conditions.*

Despite the consumer backlash in Europe, **use of genetically modified crops are gaining ground.** The USDA recently reported that 68% of total U.S. soybean acreage (vs. 54% last year), 26% of corn, and 69% of cotton acreage (vs. 51%) planted this spring were planted with genetically engineered seeds.

Ninety percent of Argentina's soybeans were genetically modified species as is 10% of China's cotton crop. Commercial biotech cotton acreage increased 41% globally last year, according to the International Service for Acquisition of Agribiotech Applications organization.

The National Center for Food and Agricultural Policy is conducting a comprehensive study of 30 genetically engineered crops. The study will be completed in September but the results for the first 8 crops were presented at a recent biotech conference. The conclusion was that **U.S. farmers are already saving billions of dollars a year through a combination of lower inputs and increased yields.**

The leading company in the field is Monsanto, **Monsanto (MON, 36.77, www.monsanto.com)**, a pioneer in the field. **Of 109 million acres that were planted with genetically modified crops last year worldwide, 103 million acres were Monsanto seeds.** MON is up 84% from its October 2000 IPO but is trading only at 1.3x book value and its historical low P/E of 20x (20x-38x range), based on consensus EPS.

Please refer to the attached research brief on Monsanto for additional information.

Grain Processors: Grain processors will benefit from increasing agriculture production, and are also a cyclical play on an upturn in the agriculture industry. Archer Daniels Midland (**ADM, 13.83, www.admworld.com**) is the largest publicly traded grain processor (primarily corn, soybeans, and wheat). ADM is trading at 9.3x cash flow and 1.4x book value, below its 10-year respective averages of 11.9x and 1.6x.

Please refer to the attached research brief for additional information.

Fertilizer Producers: Producers of phosphate fertilizers, such as diammonium phosphate (DAP) and potash are cyclical investments that benefit from an upswing in the farm economy. The leaders in this sector are **Potash Corporation of Saskatchewan (POT, C\$86.4, www.potashcorp.com)**, and **IMC Global (IGL, \$9.9, www.imcglobal.com)**.

We would recommend investors exercise caution if considering an investment now as the current weak global economy is leading to EPS disappointments, in part because of inventory overhangs. However the sector is generally very cheap on a valuation basis, indicating there may not be much downside risk in the stocks despite the potential for further EPS disappointments.

Potash of Saskatchewan is trading at 10.4x free cash flow and IMC Global is selling at a 15-year low and 4.6x 2000 free cash flow and 0.57x trailing sales, only slightly above its 10-year absolute low of 0.56x.

* * * *

Wheat Futures Historical Chart



Soybean Futures Historical Chart

S 1 **↓490** **+1½** ---/491½ **64 Comdty GPL**
 At 11:25 Vol 6,358 Op 489½ Hi 493 Lo 488 OpInt 11,025y
LOGARITHMIC SCALE for **S 1 Comdty** 1/5
 Range **7/ 5/81 - 6/29/01** Period **Monthly**
 Upper Chart: **3** Line Chart Moving Averages **20 50 200**
 Lower Chart: **N** No additional graph(s) Moving Average **1) News**



Australia 61 2 9777 8655	Brazil 5511 3048 4500	Europe 44 20 7330 7575	Germany 49 69 92041210
Hong Kong 852 2977	Japan 81 3 3201 8880	Singapore 65 212 1234	U.S. 1 212 318 2000

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Corn Futures Historical Chart

C 1 ↓196 +1½ 64 Comdty **GPL**
 At 11:26 Vol 16,934 Op 193¾ Hi 199½ Lo 193½ OpInt 15,408y

LOGARITHMIC SCALE for **C 1 Comdty** 1/5

Range **7/5/81** - **6/29/01**

Period **Monthly**

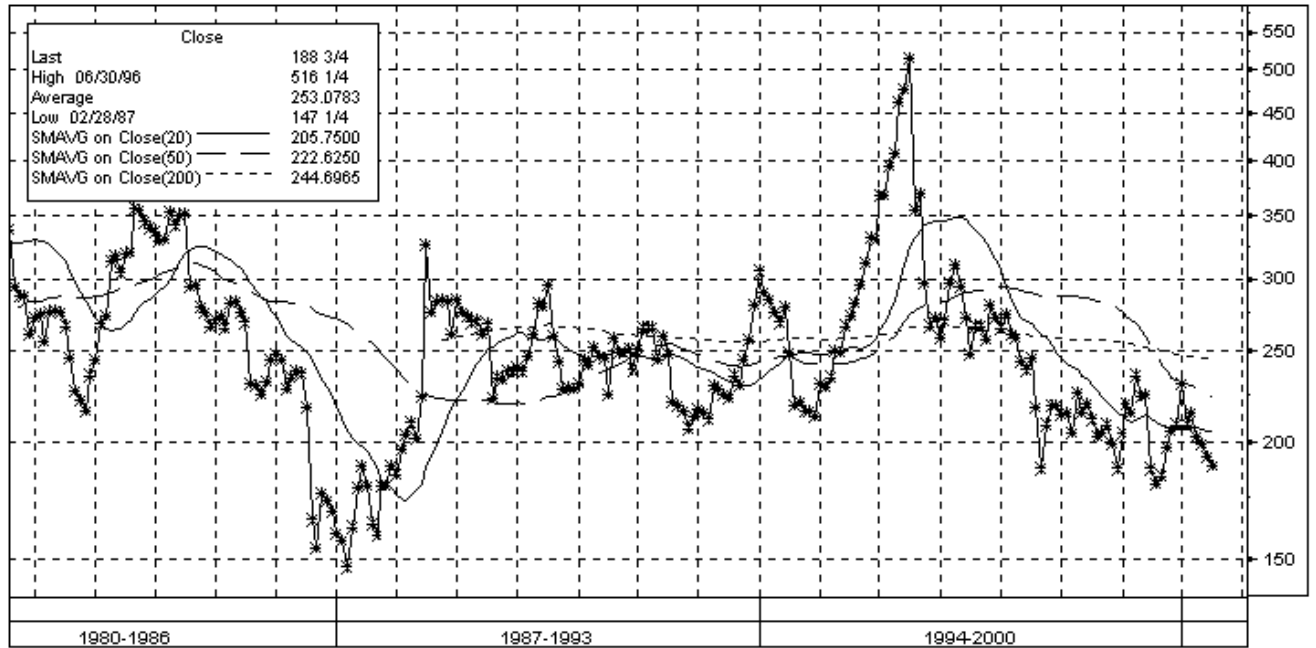
Upper Chart: **3** Line Chart

Moving Averages **20 50 200**

Lower Chart: **N** No additional graph(s)

Moving Average **200**

1) News



Australia 61 2 9777 8655 Brazil 5511 3048 4500 Europe 44 20 7330 7575 Germany 49 69 92041210
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Archer-Daniels-Midland Company (ADM, 13.83)

ADM is one of the world's largest processors of oilseeds, corn, and wheat, typically holding a 30%-35% market share in its various products. ADM is also the largest producer of ethanol, a gasoline substitute, in which it holds a 50% market share. ADM's leading products are soy meal and oil, ethyl alcohol, high fructose corn syrup, and flour.

In Fiscal 2000 (ended 6/30), oilseeds represented 56% of revenue, corn products accounted for 15% and wheat and other milled products represented the remaining 11%. Foreign sales represented about 36% of total revenue in FY2000. The company generates about \$20 billion in annual revenue and has over 23,000 employees and 368 processing plants.

In 1997, ADM settled with the Department of Justice for allegedly fixing the price of lysine and citric acid. Since the settlement, ADM's new CEO, Allen Andreas, nephew of company founder Dwayne Andreas, has been emphasizing profitability over market share. Initiatives include reducing milling capacity, moving production operations overseas, cost cutting, and reduced capital spending.

Allen Andreas is also trying to grow sales of new health and nutritional products, ranging from veggie burgers to vitamins, to 25% of total sales in five years from less than 10% presently.

Earnings from operations in FY3Q rose 22% to \$183 million, driven by oilseed crushing, ethanol, and bioproducts. ADM continues to try to control costs as SG&A rose only 1% in the quarter as revenue drove ahead 15%.

However, bottom line EPS was 34% below expectations at \$0.15, 1 cent per share below the same quarter in the previous fiscal year, due to higher energy costs at its soybean processing plants.

Ethanol production rose 25% in the most recent quarter from increased oil refiner demand and rising gasoline prices. Management believes industry ethanol sales could double as some states and oil refiners are starting to phase out MTBE, a gasoline additive linked to groundwater contamination.

Ethanol presently represents about 6% of revenue. Although ADM does not release margin figures for ethanol, it is generally believed it costs \$1 to \$1.10 per gallon to produce ethanol. Ethanol sells for about \$1.40 per gallon, indicating a 21%-28% operating margin on the product.

We like ADM as a cyclical play on a strengthening agricultural commodities industry. The stock is presently trading at 12x 1995 peak EPS of \$1.15 and 8x peak cash flow per share of \$1.73.

The stock is trading at 22.7x trailing free cash flow and below its 10-year multiple averages on a book value (1.4x vs. 1.64x), cash flow (9.3x vs. 11.9x), and sales basis (0.49x vs. 0.74x). ADM could trade to \$23 a share applying its FY02 consensus cash flow per share estimate of \$1.96 a share to its 10-year average cash flow multiple.

Allen Andreas served as vice president and council before taking the CEO position after Dwayne and his son, Michael, were forced to relinquish their positions. Although nepotism is a valid concern, Allen Andreas was generally considered somewhat of an outsider before taking the position.

ADM still faces several civil suits stemming from the price-fixing settlement with the government in 1997. One class action suit, brought by food and beverage makers involving price-fixing of corn syrup, is scheduled to begin in September. Although we believe these risks have largely already been discounted in the stock, we would encourage investors to establish positions on pullbacks and overtime.

ADM US \$ 13.77 **-0.06 N** n13.75/13.77N 50x22 **Equity GPL**
 At 10:40 Vol 186,500 Op 13.78 N Hi 13.83 N Lo 13.66 N ValTrd 2568759
LOGARITHMIC SCALE for **ADM US Equity** 1/4
 Range 7/ 6/00 - 7/ 6/01 Period **D** Daily Base Currency: **USD**
 Upper Chart: **3** Trade Line Moving Averages **20 50 200**
 Lower Chart: **N** No additional graph(s) Moving Average **█** 1) News



Australia 61 2 9777 8655 Brazil 5511 3048 4500 Europe 44 20 7330 7575 Germany 49 69 92041210
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Monsanto (MON, 36.77)

Monsanto is a leading producer of agricultural products and genetically modified seeds to farmers, generating about \$5.5 billion in annual revenue. Agricultural products, such as herbicides, accounted for about 70% of revenue last year. Overall, Monsanto makes about 100 different herbicides to control weeds (mostly different formulations of Roundup), wild oats, and growth of annual grasses in crop fields. Seeds and Genomics represent the remaining 30%.

Fifteen percent of Monsanto was IPOed from Pharmacia in October 2000 by Goldman Sachs at \$20 a share. Pharmacia may reduce its remaining 85% stake in Monsanto over the next couple of years.

Monsanto markets the most successful genetically modified seeds, its “Roundup Ready” oilseeds, which are highly tolerant to its own flagship weed killer Roundup herbicide. As a result, **farmers only have to apply Roundup once or twice to kill all weeds, whereas non-genetically modified soybean seeds require 3-4 applications of the weed herbicide.**

The National Center for Food and Agricultural Policy estimates **U.S. farmers realize an average saving in weed control of \$15 per acre, or \$735 million overall.** Monsanto markets Roundup Ready seeds for corn, cotton, and canola. Monsanto produces several genetically modified seeds to help farmers fight insects.

First quarter profit from operations rose 58% to \$67 million from \$43 million on increased sales of Roundup Ready soybean seeds and reduced interest expense from debt pay down. However, overall sales fell 1% to \$1.3 billion. Adjusted for currency fluctuations, sales rose 2%.

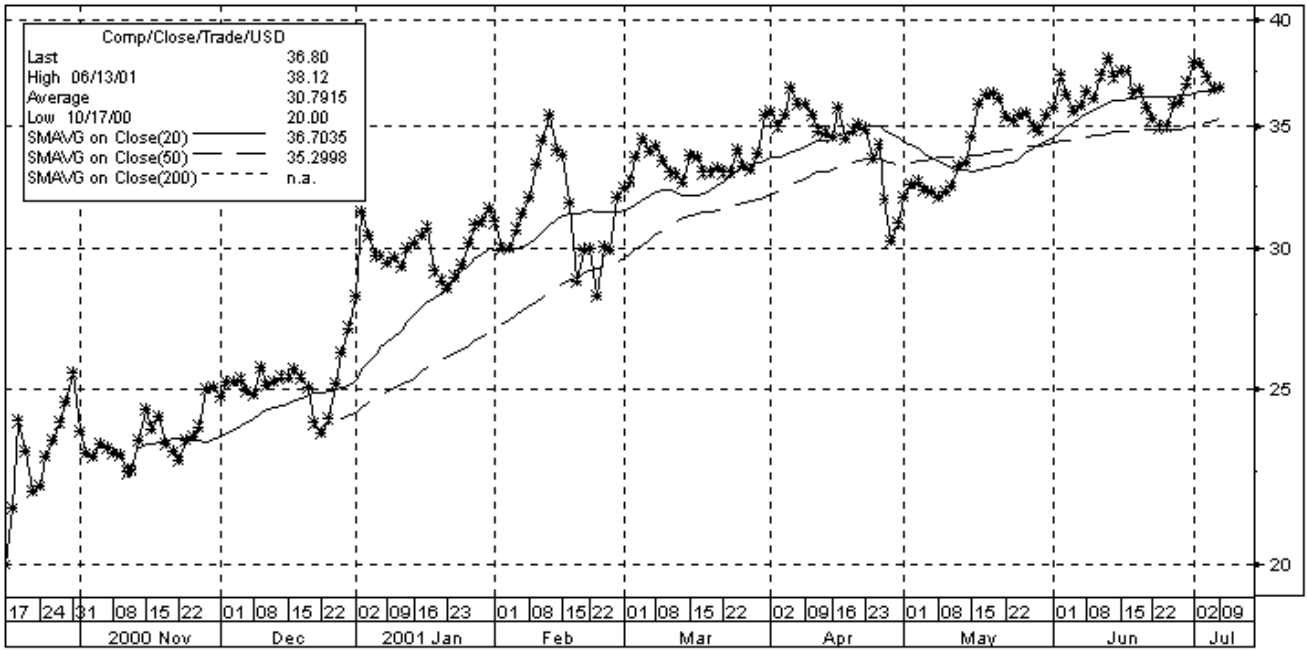
Seeds and genomic segment sales rose 2% while Agricultural Productivity segment sales declined 3% on an 8% decrease in herbicide Roundup sales. Seeds and genomics segment EBIT improved by \$45 million to a loss of \$21 million, while Agricultural segment EBIT declined 22% to \$152 million, due to the decline in sales.

Monsanto is expected to post a 5% increase in revenue for the full year as proforma net income rises between 9% and 13%, driven by increased sales of Roundup, seeds, and continued cost management. Second quarter EPS is expected to be flat to up 4%, excluding special items, to \$1.56.

Although the stock has provided a steady return to investors (up 84%) since the IPO, Monsanto trades at a relatively modest 9.5x 2001 consensus cash flow per share of \$1.82, 1.3x book value, and 1.73x trailing sales. We believe increased use of genetically modified seeds will drive long-term growth and a strengthening farm economy will provide a cyclical boost to its agricultural herbicide division. Japan recently approved the importation of a new version of Roundup Ready Corn.

Other agricultural companies trade at about 2.5x sales. Applying this multiple to Monsanto’s current year consensus revenue of \$5.75 billion indicates a potential 50%-plus upside. We believe improving profits from sales growth and cost control will drive potential multiple expansion.

MON US \$ ↑ 36.80 +.10 N N36.76/36.80N 27x4 Equity GPL
 At 10:42 Vol 53,200 Op 36.48 N Hi 36.80 N Lo 36.15 N ValTrd 1938837 X
LOGARITHMIC SCALE for **MON US Equity** 1/5
 Range **10/17/00 - 7/9/01** Period **D** Daily Base Currency: **USD**
 Upper Chart: **3** Trade Line Moving Averages **20 50 200**
 Lower Chart: **N** No additional graph(s) Moving Average **█** 1) News



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Deere & Company (DE, 36.23)

Deere is the undisputed leader in agricultural equipment (45% of revenue), and precision farming systems. The company is also a major producer of construction and forestry equipment (17%). Deere’s commercial and consumer segment (23%) makes golf course equipment, handheld products (i.e. chain saws, lawn trimmers, etc.), mowers and small tractors. Deere also has a credit finance operation (10%), an HMO and a licensed third party administrator of benefit services (5%) serving 1,600 other firms and agencies.

Fiscal second quarter EPS dropped 38% to \$0.54 from \$0.87, 18% below the consensus of \$0.66, on essentially flat overall revenue. Agricultural equipment revenue rose 6% but segment-operating profit declined 17.6% to \$131 million due to increased R&D, higher

SG&A related to growth and other initiatives, and manufacturing inefficiencies associated with tractor production cutbacks.

Deere is expecting flat revenue for the full year and an 11% decline in the third quarter. Adjusting for acquisitions, physical volume is expected to decrease 3% for the full year and 15% in the third quarter.

Deere recently announced plans to reduce its salaried workforce by 8% (1,250 employees) by offering early retirement to 2,500 employees with the expectation that half will accept. Deere expects a \$90 million permanent reduction in expenses from the action and will take a \$140 million charge in its fiscal fourth quarter ending in October.

Despite weak conditions and below expectation profits in its core divisions for the last three quarters, the stock appears to be maintaining a trend line of higher lows (see chart) and is above its recent low of \$34.6 on April 3, 2001 and its September 2000 low of \$31.06. This leads us to believe all of the bad news may be in the stock price.

Although sales of farm equipment are weaker in Asia and Europe, due to concern over foot and mouth disease, sales in North America are up for the first six months. Deere is believed to be gaining market share with a new line of tractors.

We like Deere because it holds a dominant franchise in farm equipment and is gaining market share in North America during the current downturn. The company is a leading producer of precision farm equipment, which will become industry standard over the next several years as the cost of equipment comes down. Presently, an entry-level precision farming system costs \$6,000.

Farm equipment producers, such as Deere, also generally anticipate economic recovery by 6-9 months and are a leveraged cyclical play on a recovery in the agricultural industry.

DE is trading at 13.4x trailing free cash flow of \$2.79 a share, and 0.66x trailing sales, below its all-time high price/sales multiple of 1.24x during the last cyclical peak as well as below its 10-year average of 0.75. DE's absolute low price/sales ratio was 0.38x.

DE last peaked at \$62.875 in March 1998 on peak earnings of \$4.16 a share that year. If the agriculture sector continues to weaken significantly above expectations, there appears to be downside support at the \$30 a share level.

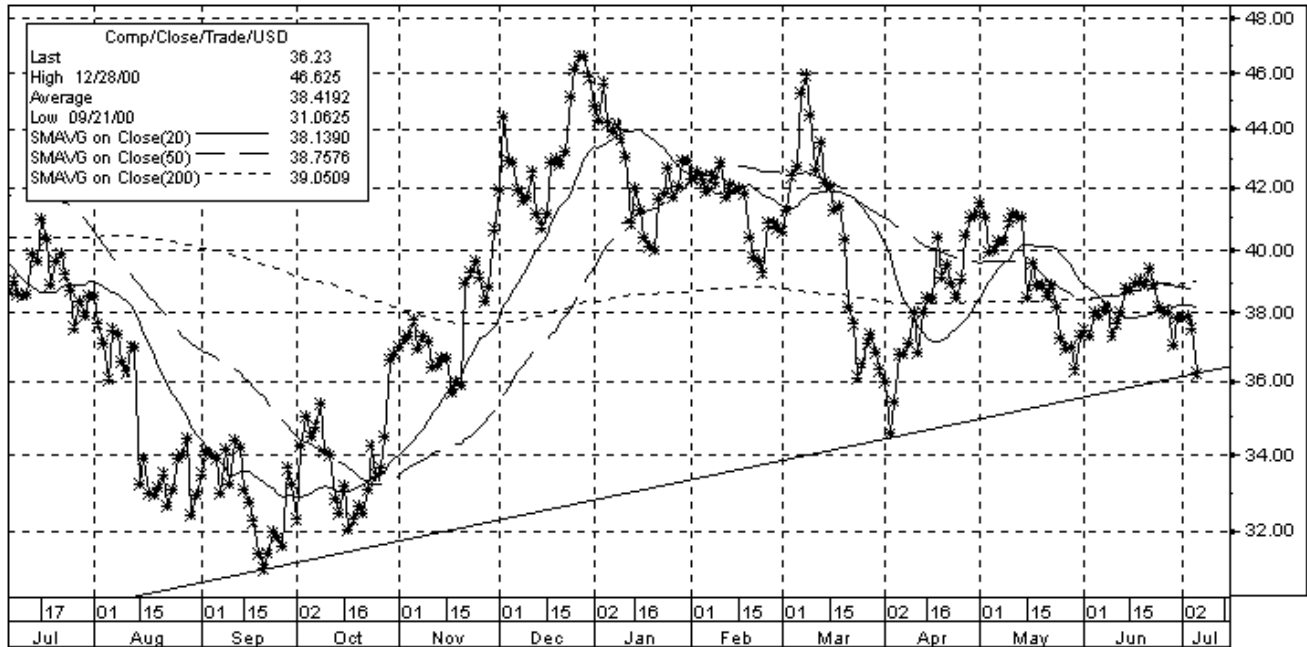
DE US \$ ↑ 37.3 +1.07 N 18s N 37.3/37.32 N 10x19 Equity GPL
 At 10:45 Vol 198,900 Op 36.55 N Hi 37.4 N Lo 36.52 N ValTrd 7354205

LOGARITHMIC SCALE for **DE US Equity** 1/4

Range **7/ 6/00 - 7/ 6/01** Period **D** Daily Base Currency: **USD**

Upper Chart: **3** Trade Line Moving Averages **20 50 200**

Lower Chart: **N** No additional graph(s) Moving Average **█** 1) News



Australia 61 2 9777 8655 Brazil 5511 3048 4500 Europe 44 20 7330 7575 Germany 49 69 92041210
 Hong Kong 852 2977 Japan 81 3 3201 8880 Singapore 65 212 1234 U.S. 1 212 318 2000 Copyright 2001 Bloomberg L.P.
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Woodley B. Preucil, CFA
woody@13d.com

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