Long-term themes for grain and soybeans prices

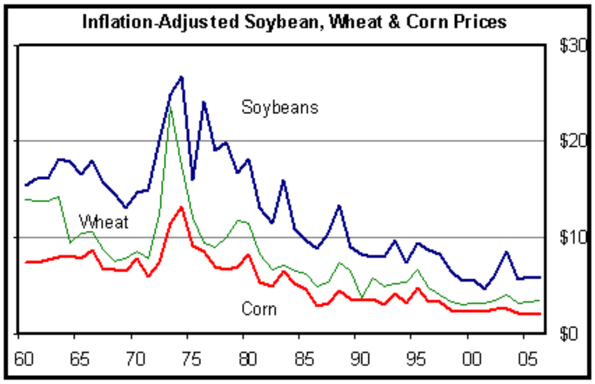
The main long-term theme for corn, wheat and soybean prices is that prices on an inflation-adjusted basis have been trending lower since the 1960s. The nearby chart shows real grain and soybean prices back to 1960, with the historical price history adjusted with the CPI so that the price history is in terms of 2006 dollars.

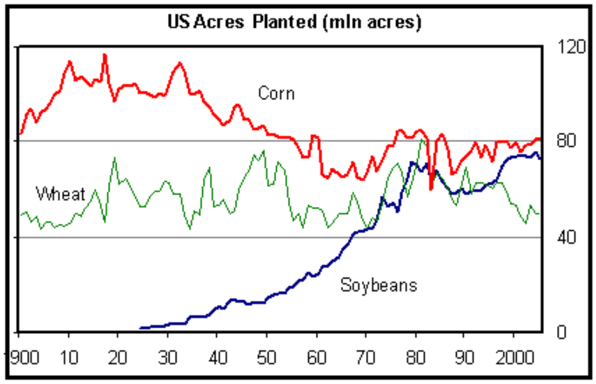
The current soybean price near $5.75 per bushel is about one-third of the $15.40 price (in 2006 dollar terms) seen back in 1960. The current wheat price of $3.50 is about one-quarter of the $14.00 price (in 2006 terms) seen in 1960. The current price of corn near $2.40 is about one-third of the $7.86 price (in 2006 dollars) seen back in 1960.

The downward trend in the inflation-adjusted price of grain and soybean prices attests to the success of the world agriculture market in producing enough food to feed the world's growing population. The downward trend in real grain and soybean prices is a clear rejection of the Malthusian nightmare of global food shortages (Thomas Malthus in 1798 wrote: "the power of the population is indefinitely greater than the power in the earth to produce subsistence for man").

In fact, world agricultural producers are more than keeping up with demand. There is enough supply and competition among producers to force prices downward on an inflation-adjusted basis. Looking ahead, crop yields and output are likely to continue to grow with new advances in genetics and bio-engineering. Indeed, corn production in the central Midwest during the summer of 2005 surprised observers on the upside because drought-resistant corn was able to come through the summer drought much better than any corn in the past could have. In any case, high production and low real prices constitute welcome news for world consumers and for the governments that are ultimately responsible for feeding their people.

The downward trend in real grain and soybean prices, by contrast, offers pain for the world's farmers. Lower grain and soybean prices bring lower revenues to farmers. At the same time, the cost of production continually rises in the form of higher costs for labor, fuel, fertilizer, pesticides, irrigation and other inputs. This has put a tight squeeze on agricultural profits, particularly in the US and other industrialized countries where labor costs are high. Indeed, the squeeze on profitability has driven many small family farms out of business and turned US agriculture into an industry that is increasingly dominated by large corporations. Corporations can achieve lower costs and generate better profitability with economies of scale. Yet there is a sense of sadness as the US loses the family farms that through the 1800s and 1900s helped build the US agricultural industry into the global powerhouse that is it is today.





Long-term US acreage planting trends

The nearby chart of US planting trends, which incorporates data from the *CRB Commodity Yearbook 2006*, shows how corn a century ago in 1900 was the dominant crop in the US, with corn acreage about twice that of wheat acreage. Acres planted with wheat have fluctuated in a wide range but have moved basically sideways in the past 100 years and current wheat planting acreage in the US isn't much different than it was back in 1900.

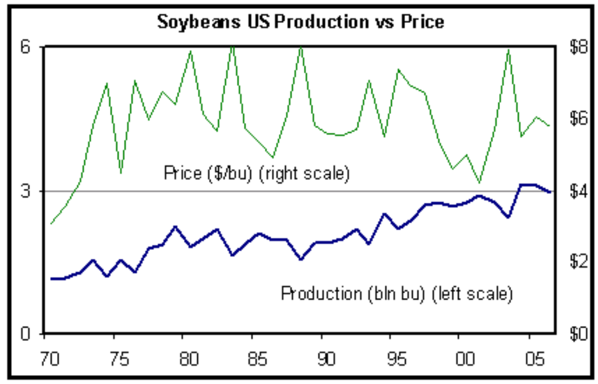
The most striking aspect of the chart is the rise of soybeans as a US crop in the 1930s and 1940s, and particularly after World War II. In fact, US acres planted with soybeans is now only mildly below that of corn. Corn acres fell from 1930 through the 1970s to accommodate the higher acres planted with soybeans.

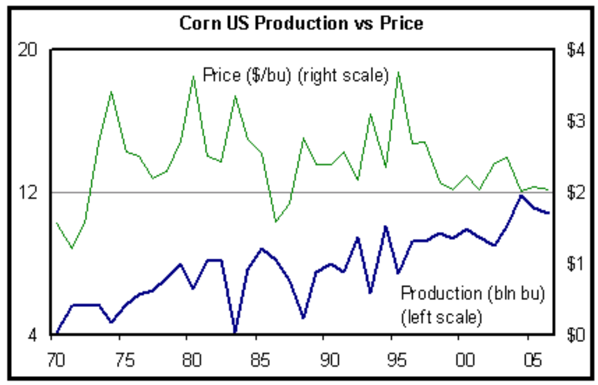
Soybeans after World War II became known as the "Miracle Bean." Soybean prices were higher than corn prices and soybeans were generally easier to grow. Demand for soybeans quickly surged due in part to the high protein content in soybeans. Soybean meal, with its high protein content, could be used as a super-charger for animal feed. Soybean oil found very strong demand since it is nearly tasteless and colorless and is ideal for use in processed foods.

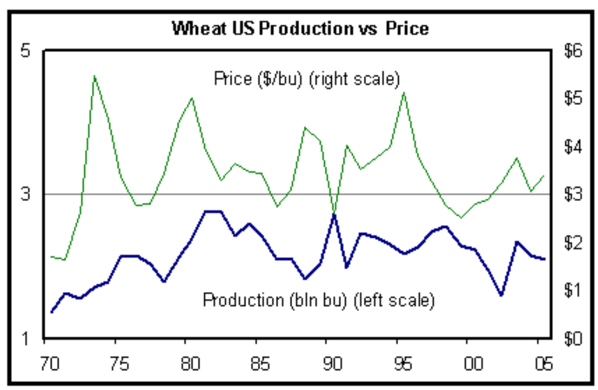
Grain & Soybean Price History

Grain and soybean prices during the 1950s and 1960s were undoubtedly considered at the time to be volatile by farmers and market participants, as prices were buffeted by the usual fluctuations in supply due mainly to the weather. The US government tried to support and stabilize prices in order to support US farmers. However, by modern standards of volatility, grain and soybean prices during the 1950s and 1960s were remarkably stable. That stability ended in the early 1970s, however, when grain and soybean prices soared to levels that were unimaginable at the time.

In theory, the volatility of grain and soybean prices should be trending lower. The rise of South America as a major producer now provides a counter-cyclical harvest supply during the winter season in the Northern Hemisphere and also diversifies world production from a weather standpoint. Yet a quick look at the charts shows that grain and soybean prices remain about as volatile now as they were back in the 1980s and 1990s.







1972 Soviet Grain Purchases and Inflation

Starting in the summer of 1972, grain and soybean prices started to rally sharply. Soybean prices nearly quadrupled from $3.50 per bushel to a record high of $12.90 per bushel (nearest-futures) in early 1973. Corn prices more than tripled from $1.20 per bushel in mid-1972 to nearly $4 in 1973. Wheat prices more than tripled to as high as $6 per bushel from about $1.60 in mid-1972.

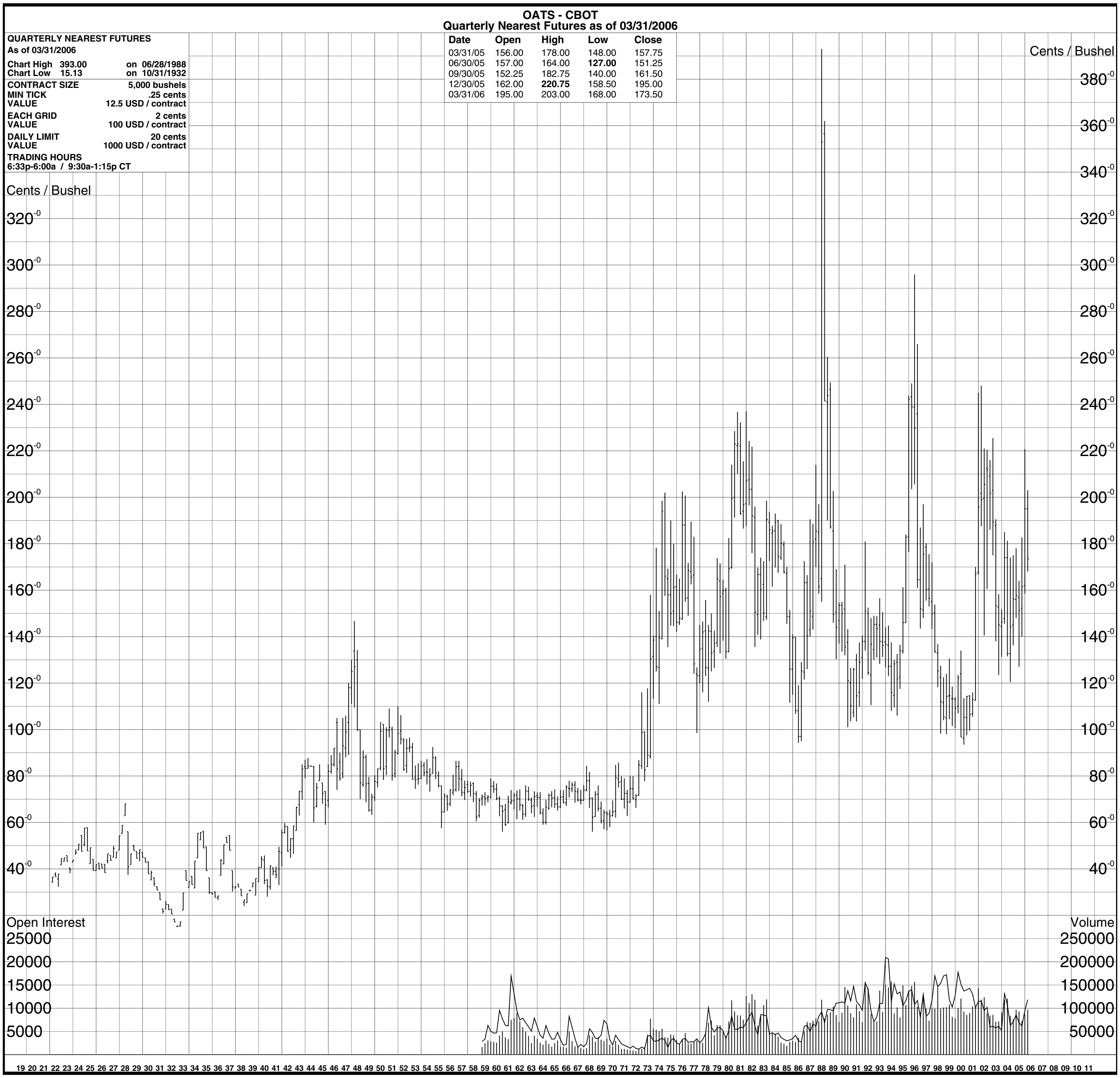
The main factor driving that rally was the fact that the Soviet Union secretly purchased 24 million metric tons of wheat, corn, soybeans and soybean meal during the summer of 1972. The Soviets were forced to make the purchases because of domestic shortages caused by poor crops in the Soviet Union starting in 1970. When the Soviet purchases came to light in late 1972 and early 1973, grain and soybean prices soared. Soybean inventories were so depleted that President Nixon had to impose an embargo on soy meal exports so that the US would have enough soy meal for its own needs.

Prices were also boosted in the first half of the 1970s by the general surge in inflation seen in response to the Federal Reserve's expansionary monetary policy and the surge in crude oil prices caused by the Arab Oil Embargo in October 1973 (US inflation reached 11% in 1975).

The surge in grain and soybean prices in 1972-73 caused the US government to drop its former policy of trying to restrict production in order to support prices. Instead, the US government adopted policies encouraging US farmers to plant as much acreage as they could to meet demand. In addition, Brazil during the early 1970s quickly ramped up its soybean production to take advantage of high prices. Brazilian soybean production soared by roughly six-fold from about 2 million metric tons in 1970-71 to 12.5 million metric tons just 6 years later in 1976-77. This burst of world production created a production surplus of grain and soybeans, which led to extremely volatile prices through the 1970s.

1979 Soviet Grain Embargo

The Soviet Union in the latter half of 1979 entered the market again to make huge purchases of US grain and soybeans, thus pushing prices higher. However, in January 1980, President Carter announced a grain embargo against the Soviet Union in retaliation for its invasion of

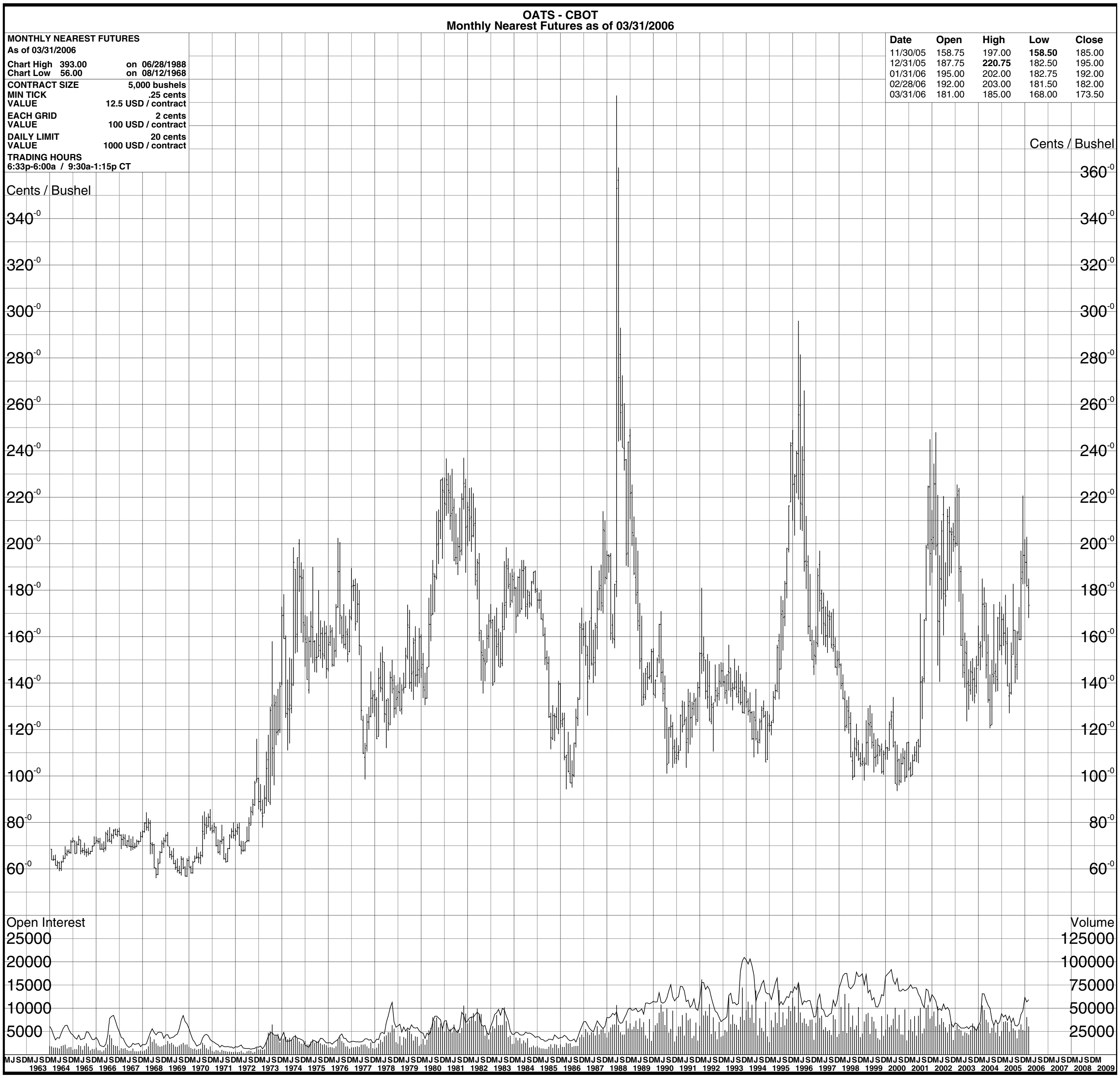


Annual High, Low and Close of Oats Futures In Cents per Bushel

Year	High	Low	Close	Year	High	Low	Close	Year	High	Low	Close
1929	50.38	43.25	45.00	1942	59.75	44.75	58.50	1955	88.50	57.50	71.50
1930	44.75	32.50	33.63	1943	87.00	56.50	83.25	1956	86.50	65.00	84.00
1931	32.38	20.75	24.75	1944	87.75	60.00	75.00	1957	86.50	69.63	73.25
1932	24.63	15.13	15.38	1945	85.00	59.00	82.00	1958	77.50	60.50	69.38
1933	39.25	15.13	34.63	1946	105.00	74.00	79.00	1959	81.75	67.25	75.63
1934	55.75	31.75	55.75	1947	130.00	79.00	125.00	1960	77.75	56.00	64.88
1935	56.25	29.00	29.25	1948	146.75	70.00	88.13	1961	74.00	58.50	71.75
1936	50.38	26.63	50.38	1949	89.13	63.25	77.63	1962	76.00	61.13	73.63
1937	54.38	30.25	32.38	1950	103.25	75.13	99.50	1963	75.38	62.38	70.75
1938	33.50	24.00	29.25	1951	110.00	78.00	98.38	1964	73.00	59.00	71.63
1939	40.75	28.75	40.75	1952	106.25	81.25	92.50	1965	74.25	65.13	70.88
1940	45.75	28.00	41.25	1953	94.25	74.50	84.25	1966	78.00	67.13	76.13
1941	57.00	33.00	55.50	1954	92.50	73.25	88.00	1967	77.75	67.75	73.88

Source: Chicago Board of Trade

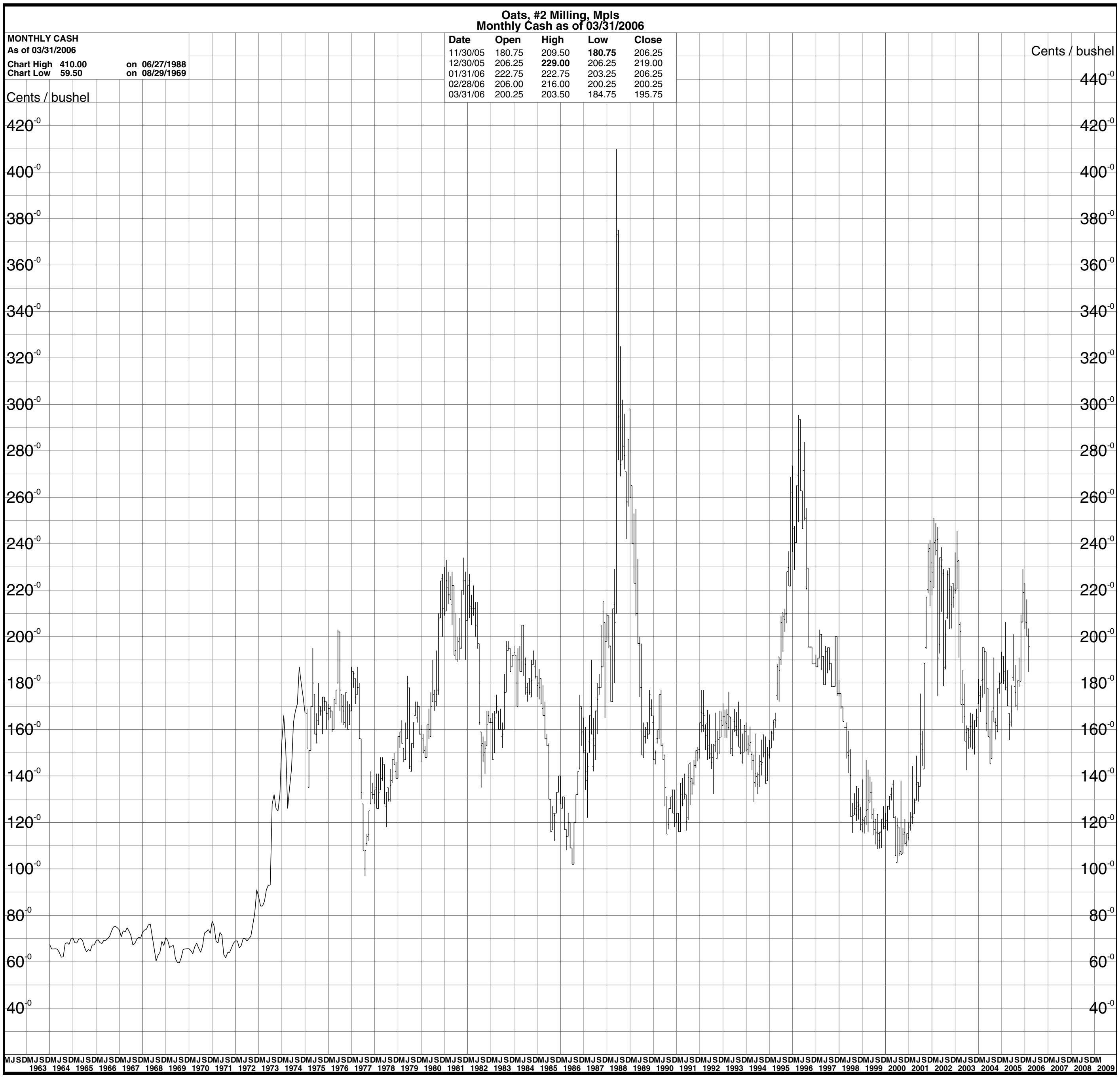

OATS - INFLATION ADJUSTED
Quarterly Nearest Futures as of 03/31/2006
QUARTERLY NEAREST FUTURES
As of 03/31/2006
Chart High 1253.02 on 03/31/1948
Chart Low 107.55 on 09/29/2000
Date Open High Low Close
03/31/05 156.00 178.00 148.00 157.75
06/30/05 157.00 164.00 127.00 151.25
09/30/05 152.25 182.75 140.00 161.50
12/30/05 162.00 220.75 158.50 195.00
03/31/06 195.00 203.00 168.00 173.50
Cents / Bushel
2100
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11



Annual High, Low and Close of Oats Futures   In Cents per Bushel

Year	High	Low	Close	Year	High	Low	Close	Year	High	Low	Close
1968	84.38	56.00	72.13	1981	237.00	186.50	207.00	1994	144.75	106.00	121.75
1969	75.88	56.50	63.63	1982	224.25	135.50	166.75	1995	243.75	117.50	242.25
1970	85.75	58.00	77.25	1983	198.50	138.75	186.00	1996	296.00	143.50	152.00
1971	80.00	62.75	74.50	1984	193.00	161.50	180.25	1997	197.00	143.25	149.75
1972	116.00	66.25	98.75	1985	181.00	111.50	139.50	1998	153.75	98.25	105.50
1973	158.00	77.75	138.50	1986	172.50	94.25	163.25	1999	130.50	98.00	109.25
1974	202.00	111.00	166.00	1987	214.00	126.00	185.50	2000	134.00	93.50	114.25
1975	190.00	135.50	146.25	1988	393.00	155.00	243.75	2001	245.00	99.50	195.75
1976	202.50	145.00	168.50	1989	249.50	130.25	153.50	2002	248.00	140.50	201.75
1977	189.50	98.50	134.50	1990	171.00	101.00	110.25	2003	225.50	123.50	146.25
1978	155.75	112.00	133.00	1991	140.50	103.50	138.00	2004	185.00	120.50	156.25
1979	173.75	126.50	159.75	1992	181.00	110.50	145.25	2005	220.75	127.00	195.00
1980	228.50	130.50	223.00	1993	156.50	126.75	136.75	2006	203.00	168.00	173.50

Source: Chicago Board of Trade



Annual High, Low and Close of Oats In Cents per Bushel

Year	High	Low	Close	Year	High	Low	Close	Year	High	Low	Close
1968	76.25	60.38	67.00	1981	234.00	189.00	207.00	1994	163.00	128.75	149.00
1969	70.38	59.50	65.63	1982	227.00	135.00	163.00	1995	268.75	147.50	262.25
1970	73.88	63.50	72.25	1983	198.00	147.00	192.00	1996	295.50	188.25	188.25
1971	77.50	61.75	68.00	1984	205.00	170.00	183.00	1997	203.00	174.50	175.50
1972	91.00	66.00	91.00	1985	186.00	112.00	140.00	1998	181.25	115.50	116.75
1973	132.00	84.00	132.00	1986	175.00	102.00	159.00	1999	147.00	108.50	118.25
1974	187.00	126.00	174.00	1987	215.00	122.00	198.00	2000	138.25	102.75	115.25
1975	195.00	135.00	167.00	1988	410.00	172.00	285.00	2001	241.50	112.25	223.75
1976	203.00	159.00	168.00	1989	298.00	148.00	166.00	2002	251.00	174.50	216.75
1977	187.00	97.00	132.00	1990	177.00	115.00	120.00	2003	245.50	142.50	165.25
1978	150.00	118.00	139.00	1991	152.50	116.00	151.50	2004	195.50	145.25	179.75
1979	183.00	139.00	158.00	1992	177.00	132.25	163.75	2005	229.00	155.50	219.00
1980	227.00	146.00	212.00	1993	176.25	145.50	161.75	2006	222.75	184.75	195.75

Minneapolis. *Source: Chicago Board of Trade*

Quarterly High, Low and Close of Oats Futures In Cents per Bushel

Quarter	High	Low	Close	Quarter	High	Low	Close	Quarter	High	Low	Close
09/1996	266.00	161.00	164.50	12/1999	114.00	100.50	109.25	03/2003	225.50	175.00	189.25
12/1996	187.00	143.50	152.00	03/2000	123.50	107.00	122.25	06/2003	190.50	138.00	153.25
03/1997	197.00	148.00	175.50	06/2000	134.00	96.75	96.75	09/2003	158.25	123.50	145.00
06/1997	180.25	155.50	160.25	09/2000	113.50	93.50	105.25	12/2003	151.75	131.25	146.25
09/1997	175.50	153.00	156.50	12/2000	114.50	97.50	114.25	03/2004	185.00	145.50	174.00
12/1997	172.00	143.25	149.75	03/2001	114.75	99.50	106.50	06/2004	181.25	131.50	132.75
03/1998	153.75	133.00	133.50	06/2001	116.00	105.50	113.00	09/2004	174.00	120.50	144.25
06/1998	136.75	118.25	125.25	09/2001	170.00	112.50	167.00	12/2004	175.00	136.25	156.25
09/1998	127.50	98.25	112.00	12/2001	245.00	166.75	195.75	03/2005	178.00	148.00	157.75
12/1998	122.50	104.00	105.50	03/2002	248.00	187.50	199.00	06/2005	164.00	127.00	151.25
03/1999	124.00	98.00	114.25	06/2002	221.00	140.50	205.50	09/2005	182.75	140.00	161.50
06/1999	130.50	104.50	114.50	09/2002	220.50	160.50	211.75	12/2005	220.75	158.50	195.00
09/1999	118.50	101.50	113.25	12/2002	216.00	186.00	201.75	03/2006	203.00	168.00	173.50

Source: Chicago Board of Trade

Quarterly High, Low and Close of Oats In Cents per Bushel

Quarter	High	Low	Close	Quarter	High	Low	Close	Quarter	High	Low	Close
09/1996	283.75	195.50	195.50	12/1999	127.00	108.75	118.25	03/2003	245.50	191.00	205.25
12/1996	195.50	188.25	188.25	03/2000	131.25	116.50	131.25	06/2003	206.25	155.00	155.00
03/1997	203.00	187.00	201.00	06/2000	138.25	105.75	105.75	09/2003	167.25	142.50	161.50
06/1997	201.00	179.25	193.50	09/2000	137.75	102.75	106.25	12/2003	169.00	149.25	165.25
09/1997	195.25	178.50	178.50	12/2000	121.50	106.75	115.25	03/2004	195.50	167.50	181.50
12/1997	200.00	174.50	175.50	03/2001	144.25	112.25	122.00	06/2004	195.25	157.00	157.00
03/1998	181.25	163.50	163.50	06/2001	148.75	123.75	135.50	09/2004	191.00	145.25	163.25
06/1998	163.00	141.25	150.75	09/2001	188.50	135.50	188.50	12/2004	184.50	155.75	179.75
09/1998	151.50	115.50	126.00	12/2001	241.50	194.75	223.75	03/2005	206.25	177.00	177.00
12/1998	135.75	116.75	116.75	03/2002	251.00	217.75	237.00	06/2005	185.50	155.50	168.00
03/1999	147.00	115.25	125.25	06/2002	247.25	174.50	233.00	09/2005	201.00	168.25	180.50
06/1999	142.75	116.00	123.50	09/2002	229.00	178.75	226.75	12/2005	229.00	178.75	219.00
09/1999	126.00	108.50	115.25	12/2002	229.50	203.25	216.75	03/2006	222.75	184.75	195.75

Minneapolis. *Source: Chicago Board of Trade*