



Crop Value and Volatility in a New Era

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FOOD FUTURES

Record oil could give corn prices another boost

By [Moming Zhou](#), MarketWatch

Last update: 4:45 p.m. EDT May 22, 2008 | [Comments: 14](#)

Floods push U.S. corn prices to records

Reuters, Bloomberg News

Published: June 16, 2008

11/20/2008

COMMODITIES BOOM GOES BUST: A MISSED OPPORTUNITY

Filed under: [prairie musings](#) — Peg Britton @ 8:23 pm

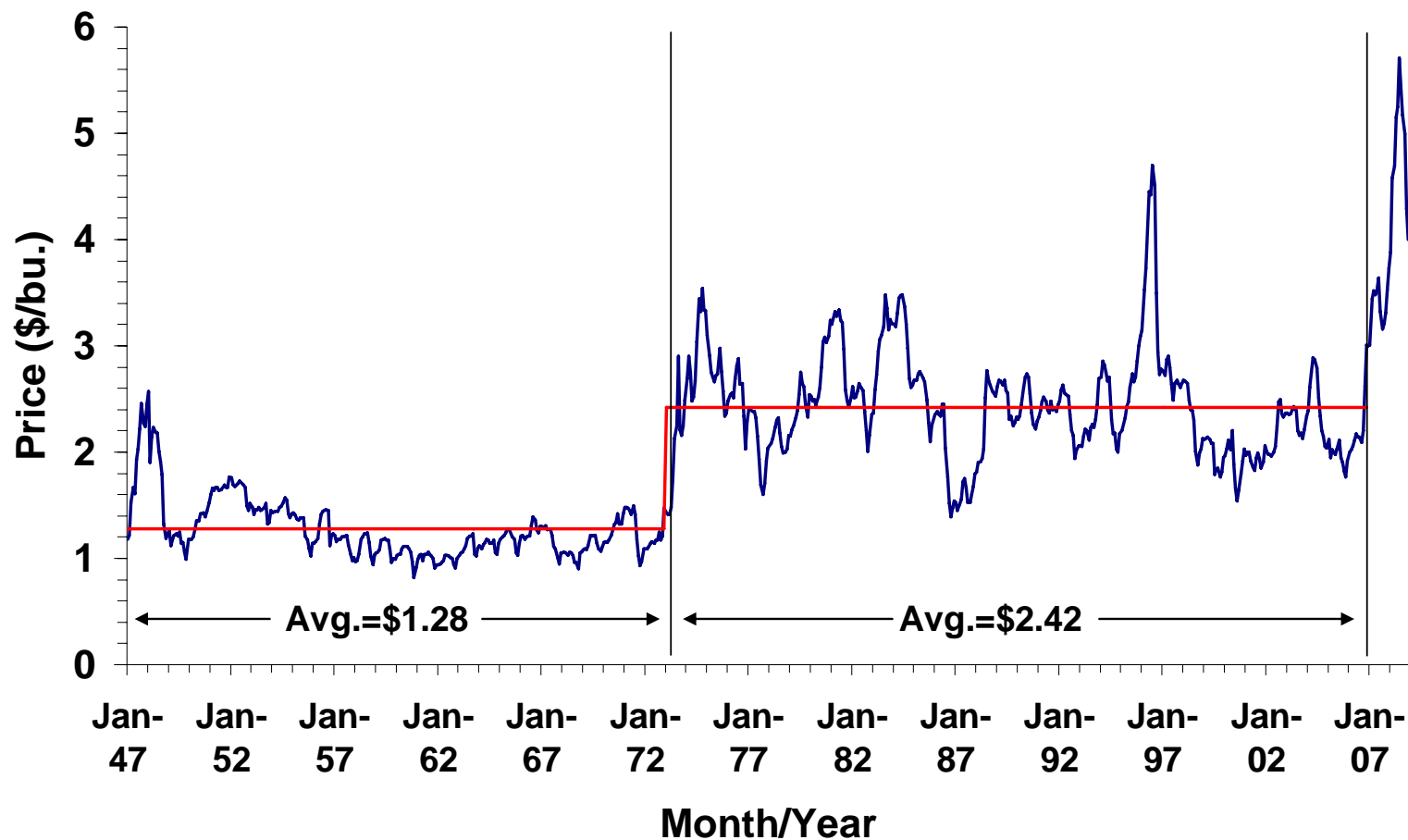
Corn market breaks \$3, could fall more

Fri Dec 5, 2008 3:41pm EST

“Prices have changed so much for what we sell and buy that it is almost impossible to feel confident in the decisions you make.”

***-- Agriculture Online,
July 5, 2008***

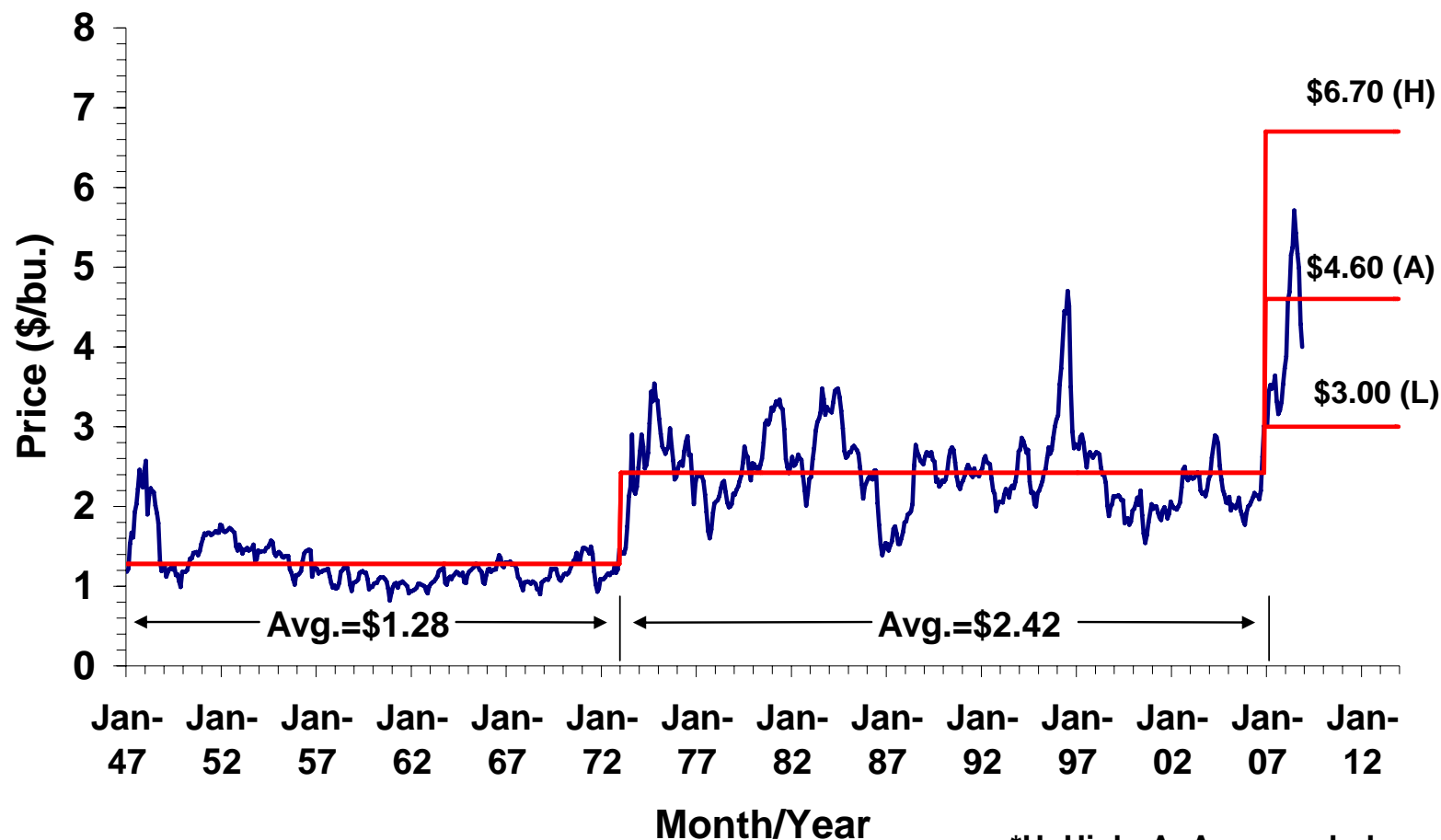
Monthly Farm Price of Corn in Illinois, January 1947- November 2008*



*November: mid-month



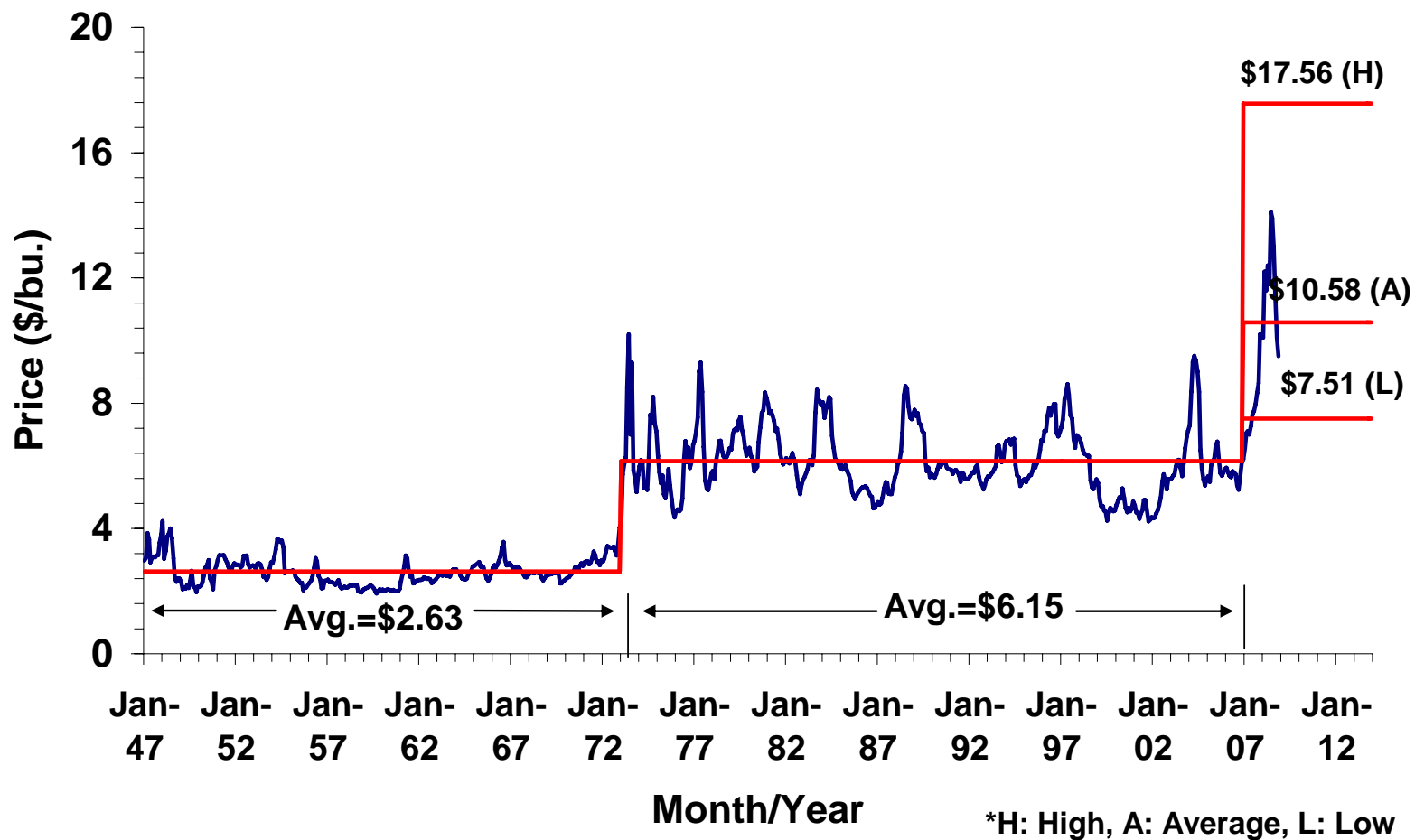
Monthly Farm Price of Corn in Illinois, January 1947- November 2008 and Projected Future Range*



*H: High, A: Average, L: Low

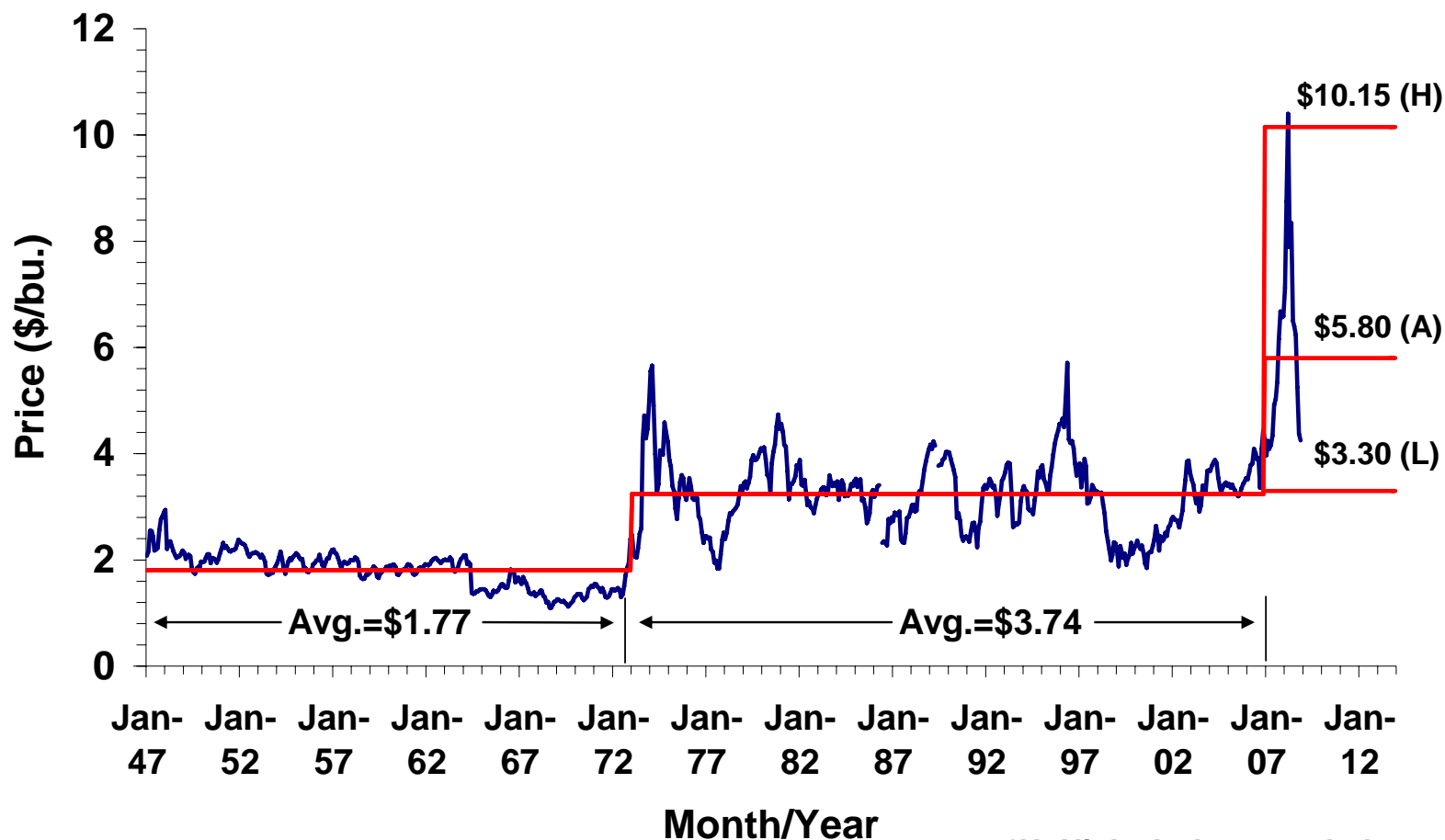


Monthly Farm Price of Soybeans in Illinois, January 1947- November 2008 and Projected Future Range*



*H: High, A: Average, L: Low

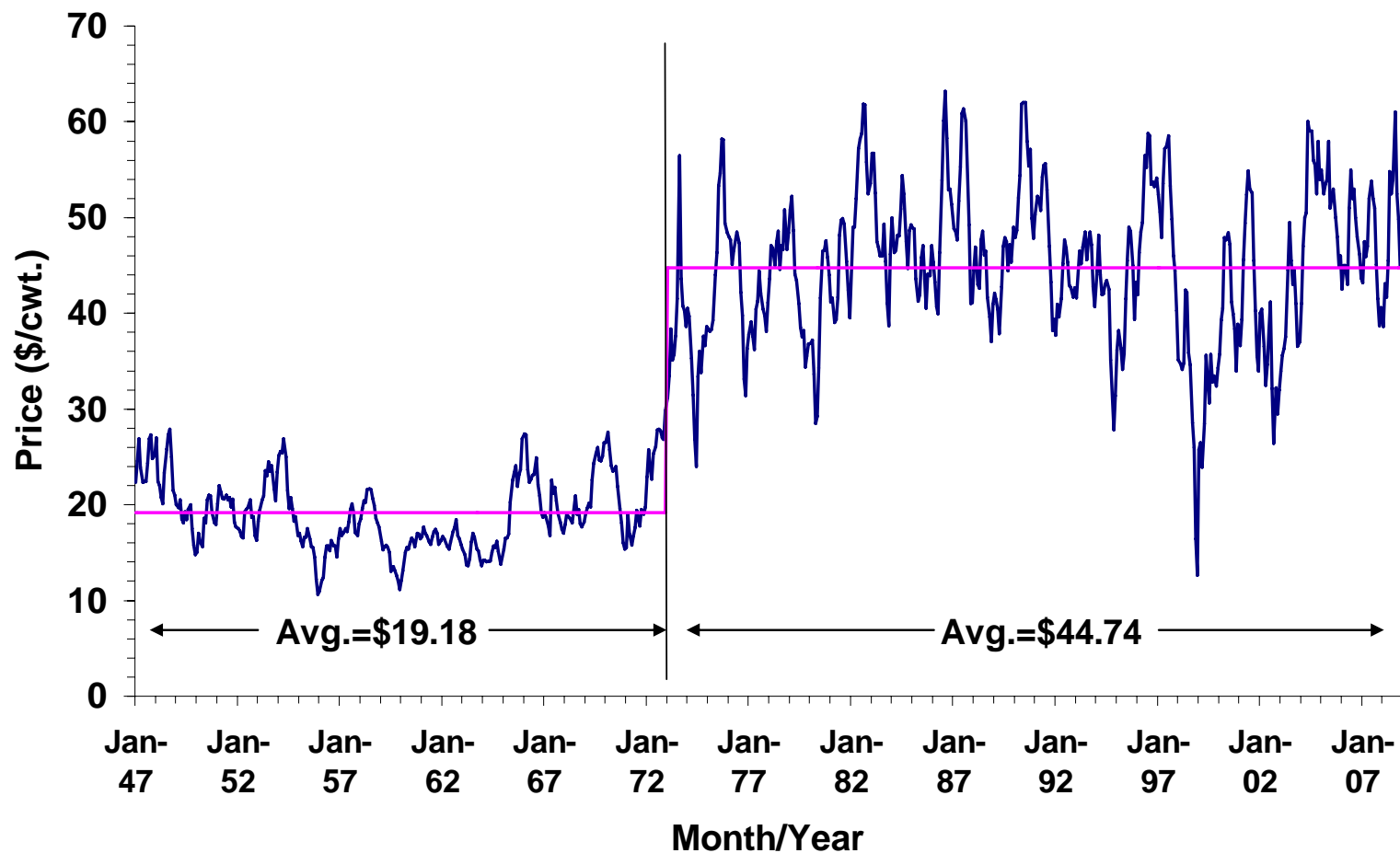
Monthly Farm Price of Wheat in Illinois, January 1947- November 2008 and Projected Future Range*



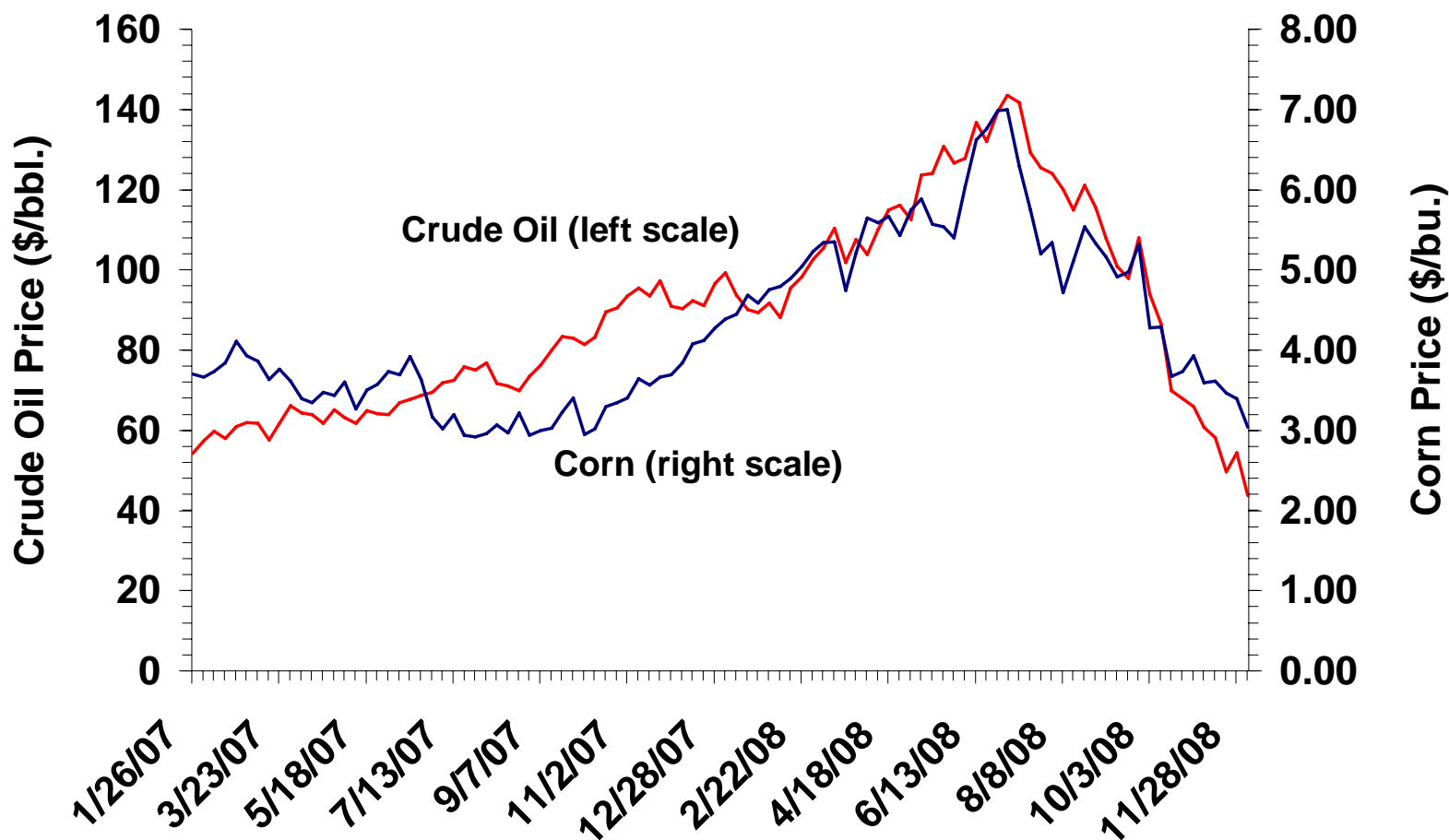
*H: High, A: Average, L: Low

- Evidence suggests that prices are likely establishing a higher average
- \$3 corn, \$8 soybeans, and \$3.50 wheat are not inconsistent with new price range
- Prices can quickly rebound to much higher levels (see 73-75!)
- Concern: Long-lasting, world-wide economic contraction

Monthly Farm Price of Hogs in Illinois, January 1947- November 2008

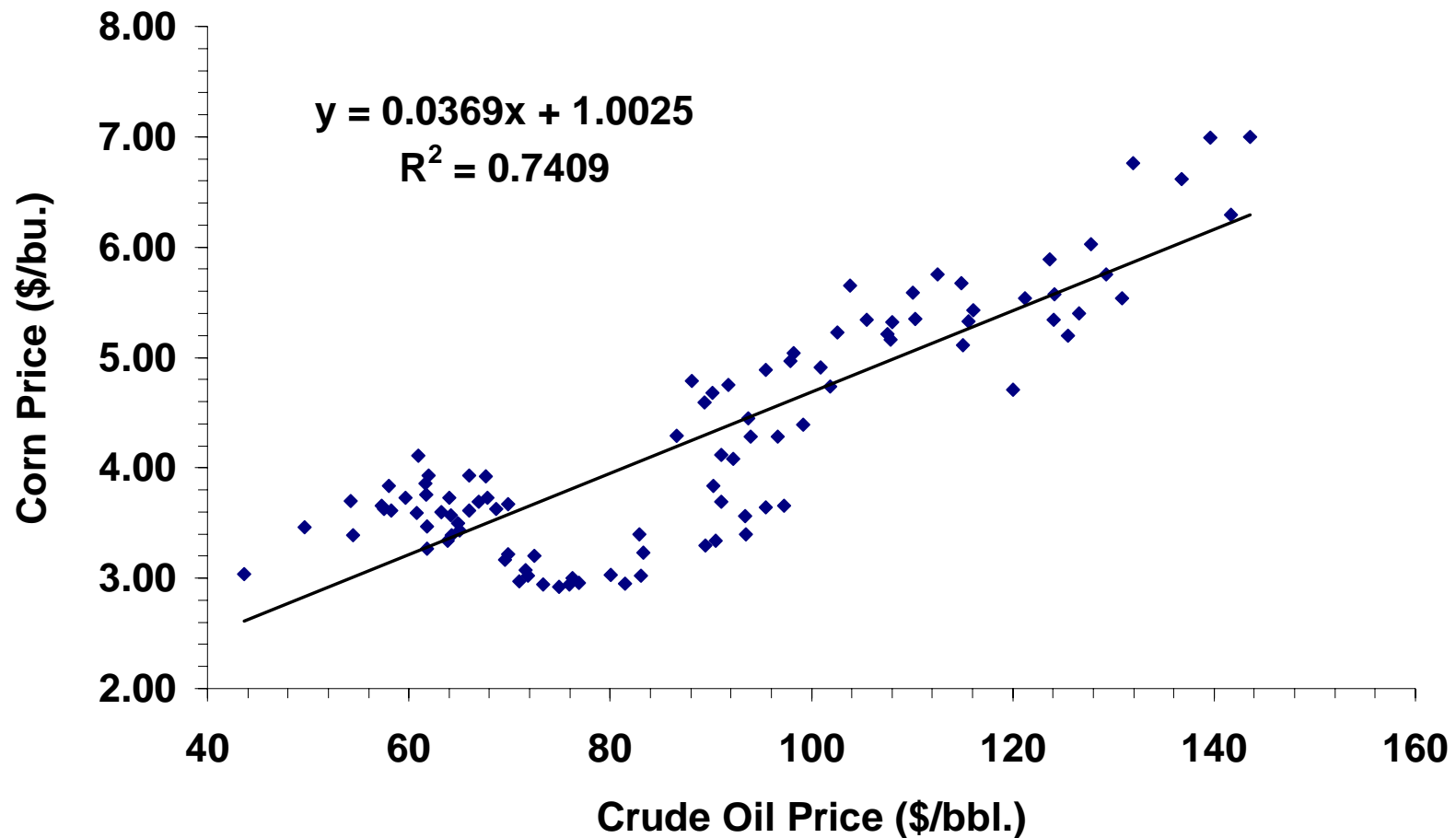


Weekly Crude Oil Futures Price and Corn Price at Iowa Ethanol Plants, 01/26/07-12/05/08





Relationship Between Nearby Crude Oil Futures Price and Corn Price at Iowa Ethanol Plants, 01/26/08-12/05/08





Crude Oil



Gasoline



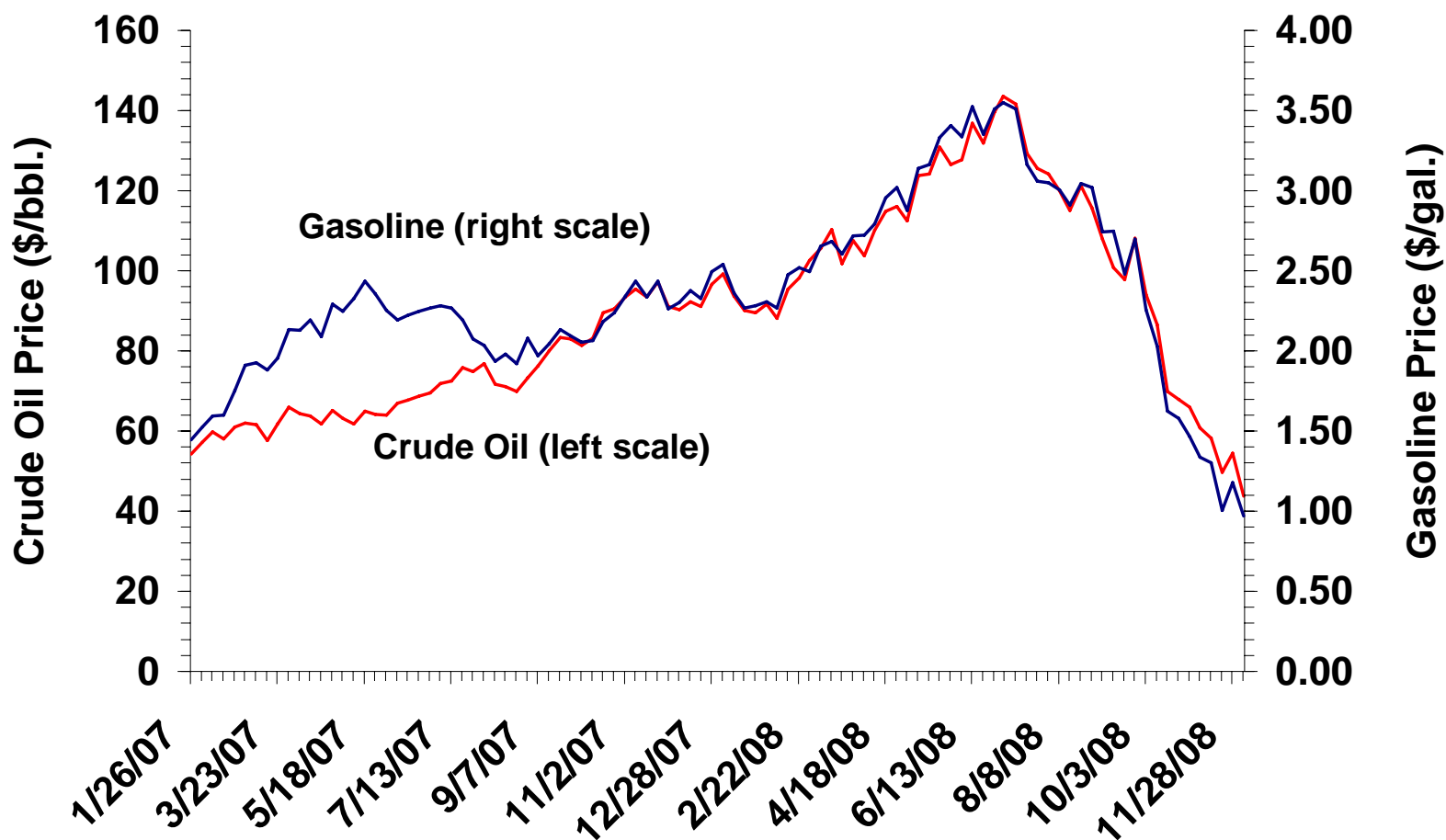
Ethanol



Corn

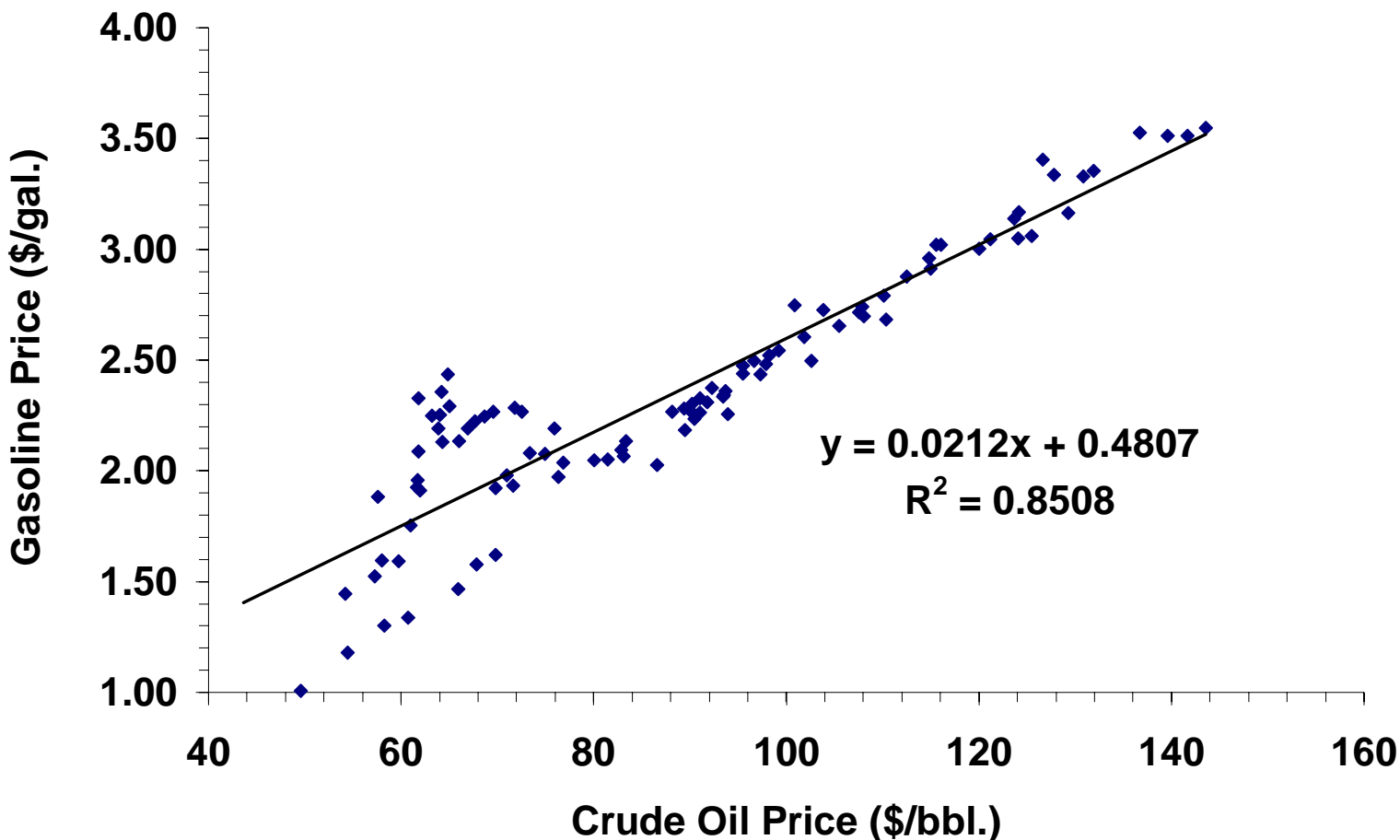


Weekly Crude Oil Futures Price and RBOB Gasoline Futures Price, 01/26/07-12/05/08



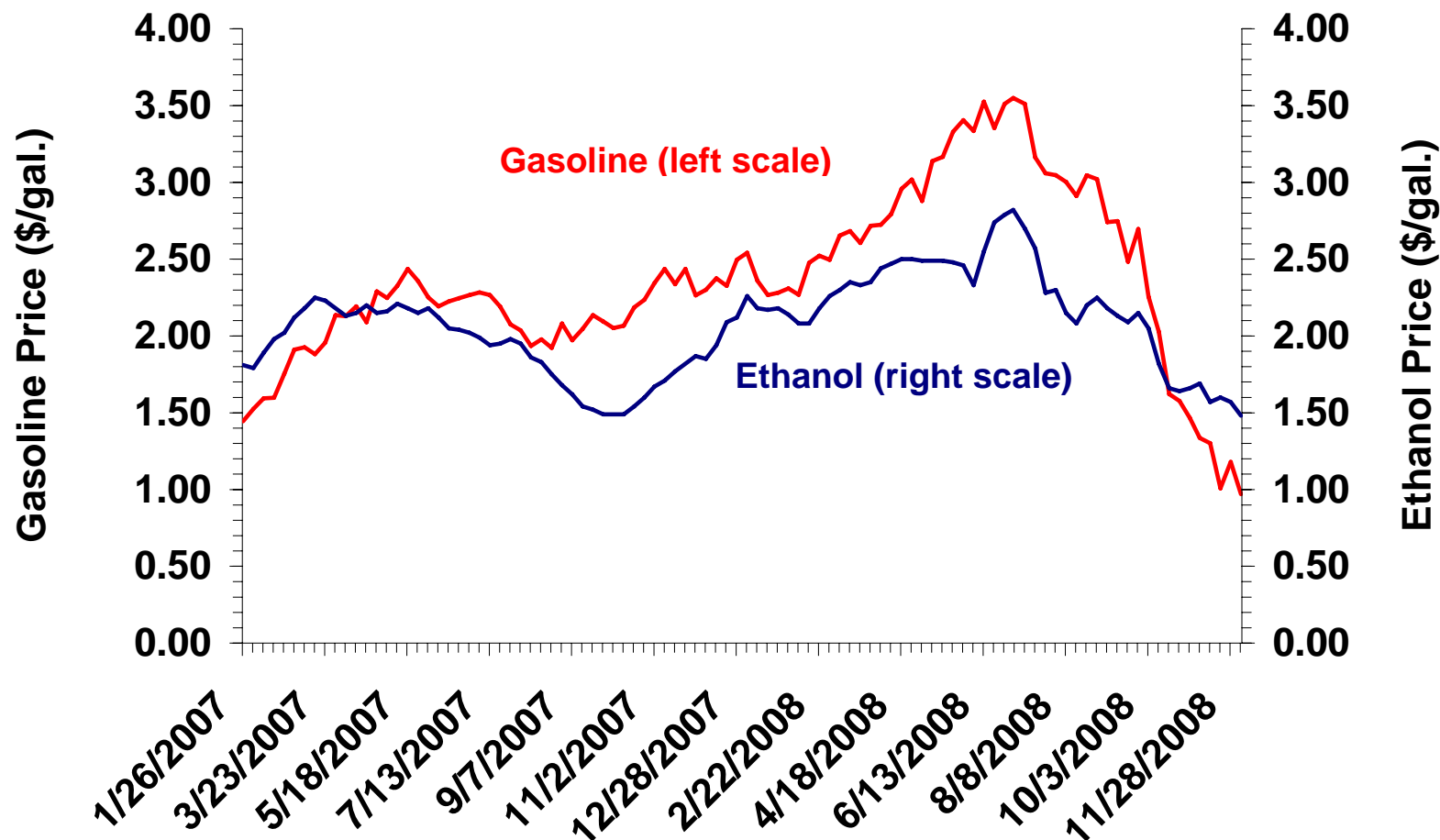


Relationship Between Weekly Crude Oil Futures Price and RBOB Gasoline Futures Price, 01/26/07-12/05/08



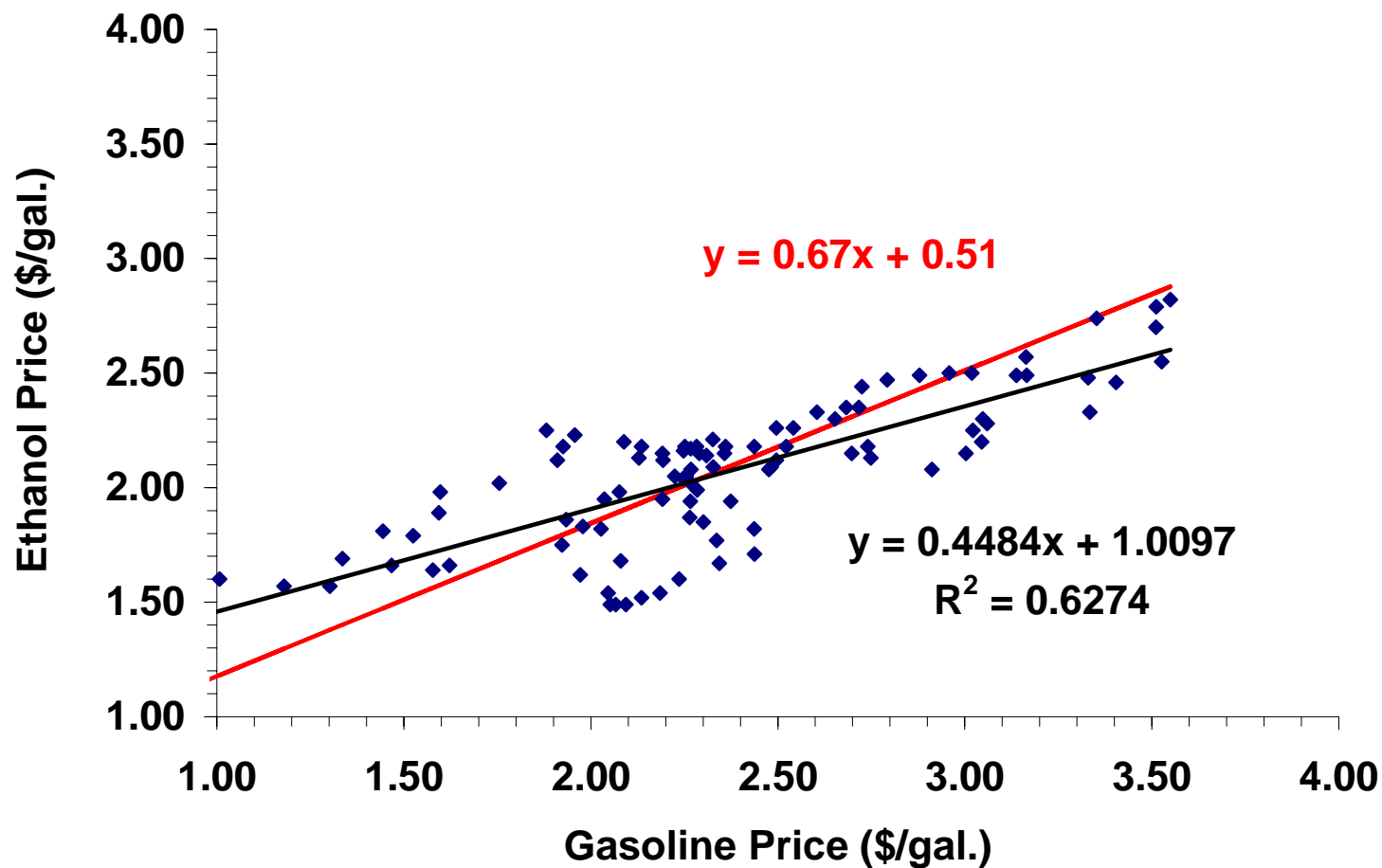


Weekly RBOB Gasoline Futures Price and Ethanol Price at Iowa Plants, 01/26/07-12/05/08



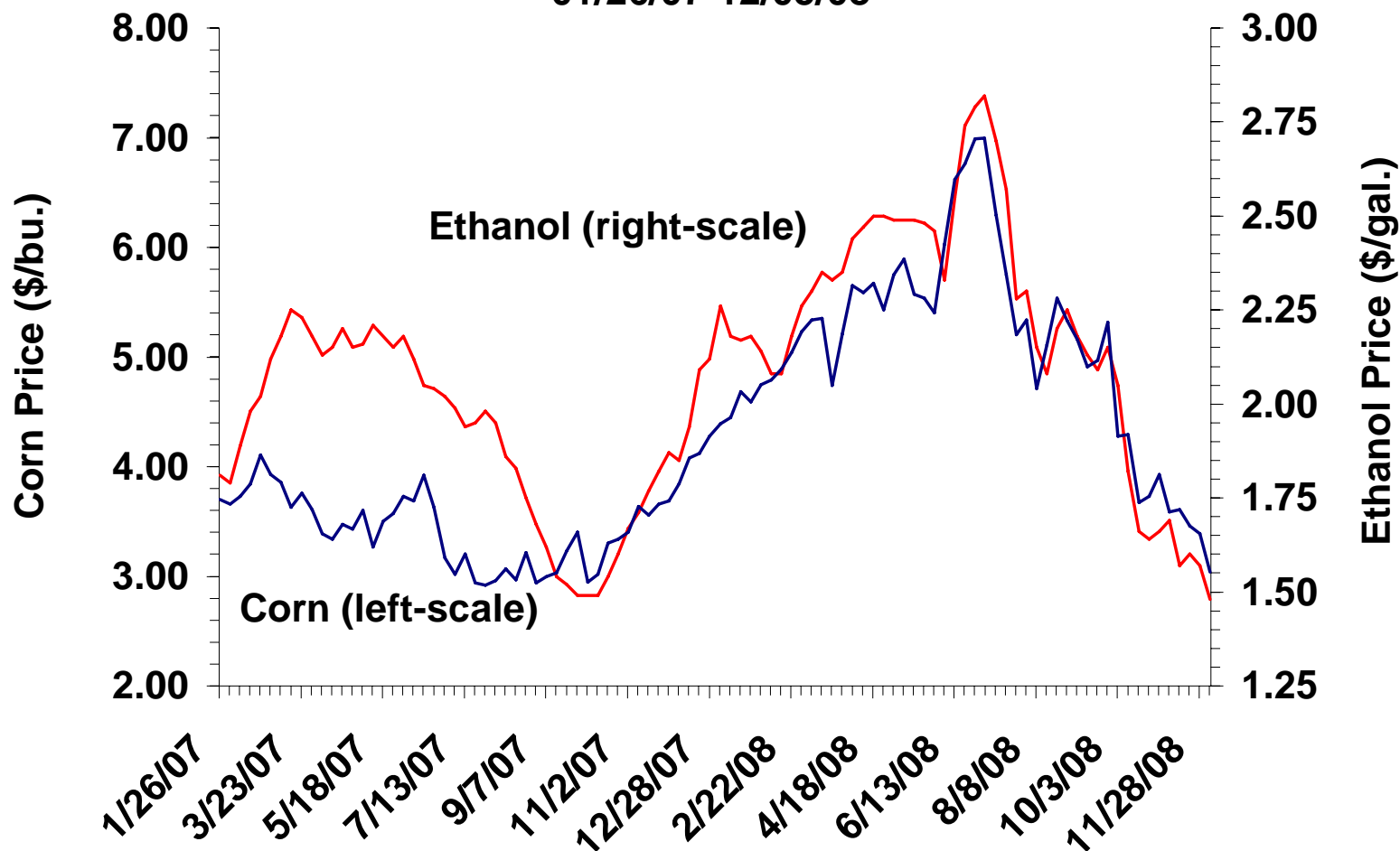


Relationship Between Weekly RBOB Gasoline Futures Price and Ethanol Price at Iowa Plants, 01/26/07-12/05/08



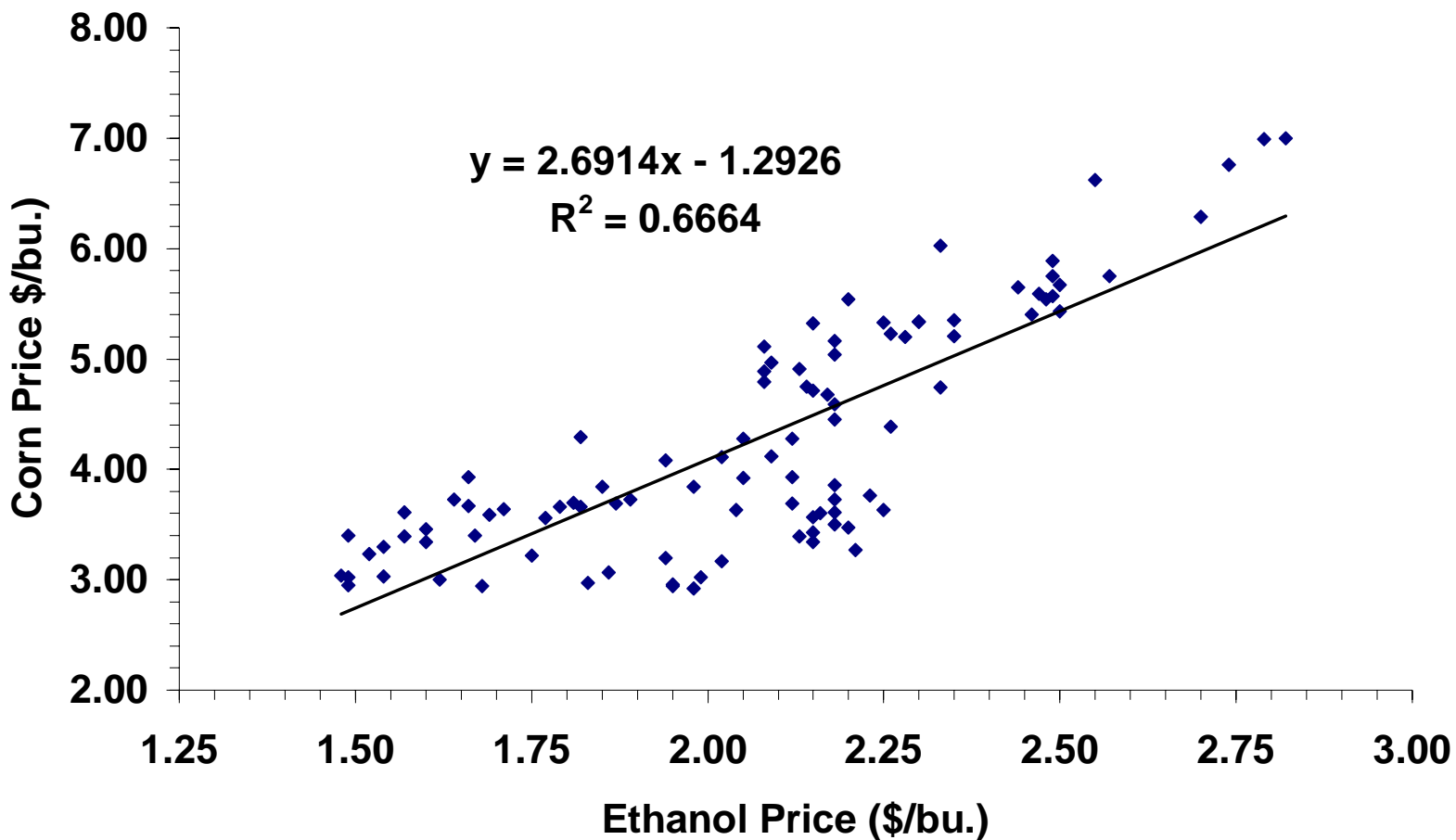


**Weekly Ethanol and Corn Prices at Iowa Plants,
01/26/07-12/05/08**





**Relationship between Corn and Ethanol Price at Iowa Plants,
01/26/07-12/05/08**



Computing the Maximum Price that an Ethanol Processor Can Bid for a Bushel of Corn

Gross Revenue:

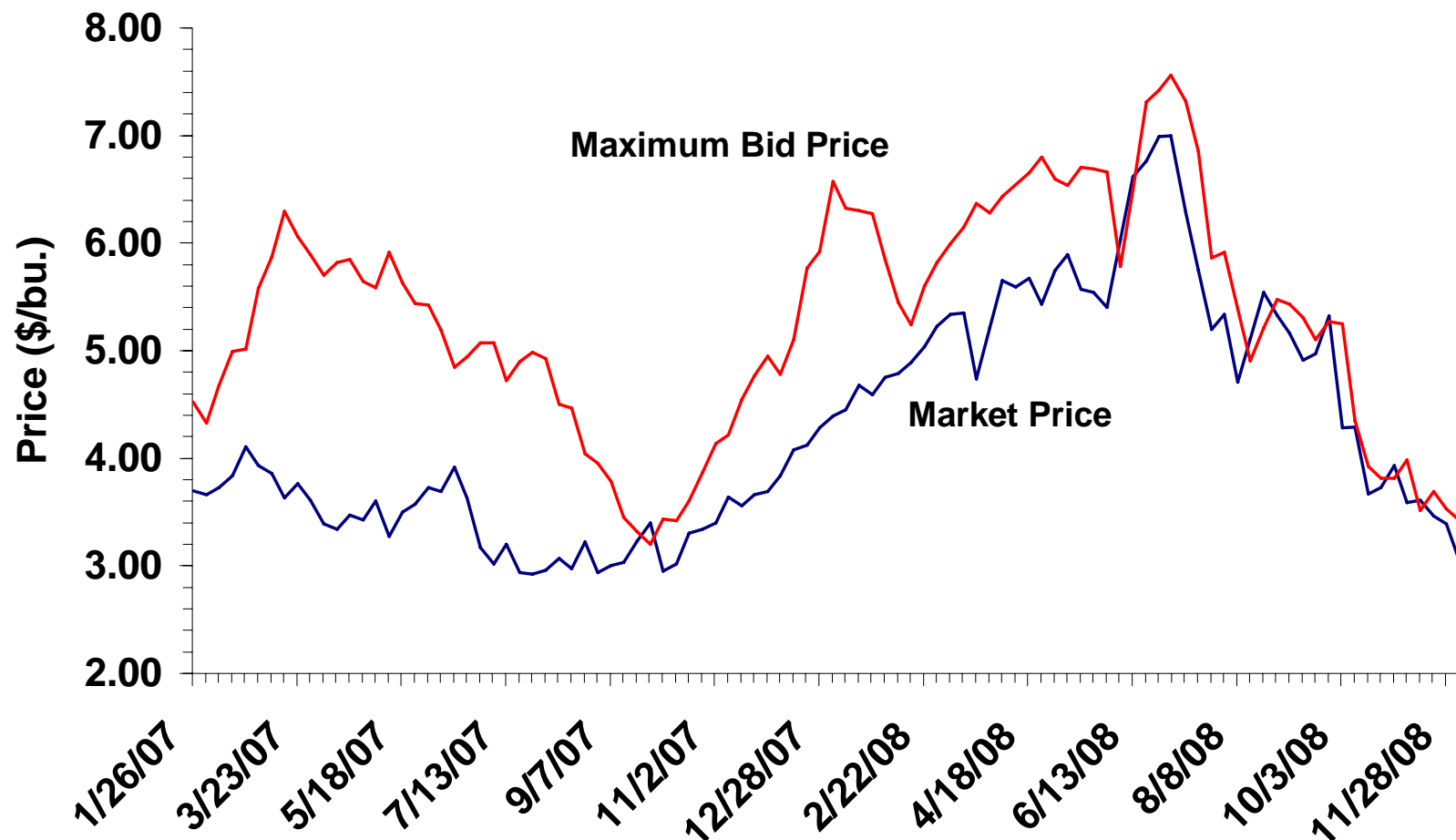
Ethanol: \$1.50/gal x 2.8 gal./bu. =	\$4.20/bu.
DDGS: \$120/ton/2,000 x 17.75 lbs./bu. =	<u>\$1.06/bu.</u>
Total	\$5.26/bu.

Non-Corn Costs

Variable	\$1.34/bu.
Fixed	<u>\$0.56/bu.</u>
Total	\$1.90/bu.

Maximum Bid Price for Corn \$3.36/bu.

Weekly Price of Corn and Maximum Bid Price at Iowa Ethanol Plants, 01/26/07-12/05/08



Fundamental Values Relative to Ethanol

Ethanol Price \$/gal.	Corn Price \$/bu.	Soybean Price \$/bu.	Wheat Price \$/bu.
1.20	2.11	5.16	2.63
1.30	2.52	6.16	3.14
1.40	2.93	7.17	3.66
1.50	3.34	8.17	4.17
1.60	3.75	9.18	4.68
1.70	4.15	10.18	5.19
1.80	4.56	11.18	5.71

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1.80	4.56	11.18	5.71

10¢

40¢

100¢

50¢

- Ethanol processors are the marginal bidders for corn in the short- to intermediate-run
- Volatility in energy markets is transmitted directly into agricultural markets
- Each step of the energy chain between crude oil and corn is a source of risk
- Energy policies will play a key role in determining ethanol prices in 2009