

Name _____ *

* By signing or printing your name in the above blank, you legally transfer power of attorney over to Bailey Norwood. All of your possessions, time, and vital organs are now the property of Bailey Norwood.

You will be given 55 minutes to take Exam 2, after which we will trade.

There are 38 questions worth a total of 42 possible points.

Questions 1-9 must be answered without help from the book. The remaining questions may employ the use of the book, except for the answers at the back of the book.

Four students will be randomly chosen to submit their book for my perusal to check for writing in the book.

To the right are energy futures prices as reported in the *Tulsa World* on March 26, 2009. Use these prices to answer questions 1-9. For these questions, you may not use your book.

(1) [1 Point] On March 25-26, 2009, what was the best prediction of heating oil prices for June, 2009?¹

\$_____ per gallon

(2) [1 Point] On March 26, 2009, between April and July of 2009, the price of heating oil was expected to² (circle all correct answers)

- (a) rise
- (b) fall
- (c) stay the same
- (d) cannot tell from the information given

(3) [1 Point] *The Dollar Store* is a company whose profits rise during recessions and whose profits fall when the economy is growing. To “hedge” their profits, *The Dollar Store* would (you may assume the stock market rises, meaning the price of stocks rise, when the economy is growing and falls during recessions).³ (circle all correct answers)

- (a) purchase a lot of different stocks
- (b) sell a lot of different stocks
- (c) buy a contract that makes money when stock prices fall, and loses money when stock prices rise
- (d) buy a contract that loses money when stock prices fall, and makes money when stock prices rise

| ENERGY FUTURES | | | | | |
|---|--------|--------|--------|--------|-------|
| EXP. | OPEN | HIGH | LOW | SETTLE | CHG |
| HEATING OIL (NYMX) | | | | | |
| 42,000 gal, cents per gal | | | | | |
| Apr 09 | 146.50 | 150.05 | 144.69 | 146.47 | -3.49 |
| May 09 | 147.61 | 151.24 | 145.77 | 147.53 | -3.85 |
| Jun 09 | 149.62 | 152.67 | 147.69 | 149.28 | -4.20 |
| Jul 09 | 152.06 | 155.00 | 150.00 | 151.63 | -4.35 |
| Est. sales 52,263. Tue's sales 68,443 | | | | | |
| Tue's open int. 266,131, -727 | | | | | |
| LIGHT SWEET CRUDE (NYMX) | | | | | |
| 1,000 bbl.- dollars per bbl. | | | | | |
| May 09 | 52.76 | 54.18 | 51.86 | 52.77 | -1.21 |
| Jun 09 | 54.31 | 55.58 | 53.50 | 54.19 | -1.44 |
| Jul 09 | 55.40 | 56.80 | 54.85 | 55.47 | -1.53 |
| Aug 09 | 56.91 | 57.62 | 56.05 | 56.52 | -1.56 |
| Est. sales 352,604. Tue's sales 390,451 | | | | | |
| Tue's open int. 1,160,240, -1,519 | | | | | |
| NATURAL GAS (NYMX) | | | | | |
| 10,000 mm btu's, \$ per mm btu | | | | | |
| Apr 09 | 4.295 | 4.360 | 4.241 | 4.329 | -.018 |
| May 09 | 4.410 | 4.456 | 4.330 | 4.416 | -.026 |
| Jun 09 | 4.525 | 4.570 | 4.457 | 4.540 | -.027 |
| Jul 09 | 4.647 | 4.699 | 4.587 | 4.671 | -.027 |
| Est. sales 54,355. Tue's sales 151,576 | | | | | |
| Tue's open int. 636,183, -7,749 | | | | | |

Futures prices for March 25, 2009 as reported in the *Tulsa World*.

¹ From Homework 6; Practice Questions for Exam 1, Set D; and Chapter 9 pages 260-262.

² From Homework 6; Practice Questions for Exam 1, Set D; and Chapter 9 pages 260-262.

³ From Homework 6; class notes on 2/26; and Chapter 9 pages 262-266.

(4) [1 Point] It is March 26, 2009. Suppose that you **sell** natural gas, and wish to lock-in a price for gas you will sell in June of 2009. To hedge, you will ____ June 2009 natural gas futures on March 26, and will ____ June 2009 natural gas futures in June 2009, after which you sell your natural gas in the ____ market.⁴

- | | |
|----------------------|-------------------------|
| (a) buy, sell, spot | (a) buy, sell, futures |
| (b) sell, buy, spot | (b) sell, buy, futures |
| (c) buy, buy, spot | (c) buy, buy, futures |
| (d) sell, sell, spot | (d) sell, sell, futures |

(5) [1 Point] **Following from previous question...** You expect the basis (of the June 2009 natural gas futures contract) in June 2009 to equal \$0.2 per 10K mmbtu. If you hedge on March 26, what is your expected hedge price?⁵

Exp Hedge Price = \$ _____ / 10k mmBTU

(6) [1 Point] **Following from previous two questions...** Suppose that in June of 2009, the price of a June 2009 natural gas futures contract equals \$5.000 per 10k mmbtu, and the spot price is \$5.050. What is the realized hedge price?

Hedge Price = \$ _____ / 10k mmBTU⁶

(7) [1 Point] The basis equals the spot price _____ futures price at contract expiration. The basis tends to be _____.⁷

- | | |
|----------------------------|----------------------------|
| (a) plus, hard to predict | (c) plus, easy to predict |
| (b) minus, hard to predict | (d) minus, easy to predict |

(8) [1 Point] It is March 26, 2009. A **buyer** of natural gas needs to make a purchase in July 2009. She expects the basis of a July 2009 natural gas futures contract to be -\$0.500 per 10k mmBTU. If she executes a hedge today, what is her expected hedge price?⁸

Exp Hedge Price = \$ _____ / 10k mmBTU

(9) [1 Point] **Following from the previous question...** If the basis ends up being -0.750 per 10k mmBTU, what is her realized hedge price?

Hedge Price = \$ _____ / 10k mmBTU⁹

⁴ From Homework 6; class notes on 2/26; and Chapter 9 pages 262-266.

⁵ From Homework 6; class notes on 2/26; and Chapter 9 pages 262-266.

⁶ From Homework 6; class notes on 2/26; and Chapter 9 pages 262-266.

⁷ Class notes on 2/26 and Chapter 9 pages 262-266.

⁸ Class notes on March 3 and Chapter 9 pages 262-266.

⁹ Class notes on March 3 and Chapter 9 pages 262-266.

