#### SIMON FRASER UNIVERSITY

Faculty of Business Administration

## **BUS 316 Derivative Securities**

### The Futures and Options Trading Game

The objective of the game is to develop understanding of various speculative trading strategies which apply to futures, forwards and options. The game is set up to be paper-traded without any computer intervention. This description assumes there is one lecture/tutorial per week, in this case Thursday are taken to be the relevant class date.

Every Thursday, a specific trading strategy will be described (12 weeks minus 1 week for introduction minus 1 week for the midterm exam minus 1 week for roundup = 9 trades). The game involves submitting, on the following Thursday, your "ticket" for a number of designated trades. You will be responsible for recording the prices used for the trade which will be based on the previous Wednesday closing prices. (The Wall Street Journal, Globe and Mail and the New York Times are all accessible sources for the quotes, as well as the exchange website). All trades will be reevaluated on the following Thursday, at which time you will either close out the trade or continue the trade for another week. In other words, all outstanding trades must be marked-to-market weekly. The student will be responsible for keeping a cumulative profit record of all trades. Evaluation will be based on a combination of participation (number of trades submitted) and execution (accurately specifying the trade and doing accurate accounting). Prizes are awarded to individuals with the highest cumulative profit record at the end of the game, who have successfully completed all the listed trades.

#### **Rules for the Futures and Options Game**

Starting Values: \$25,000 cash

**Procedure**: Every Thursday, the trade you select will be entered in the "clearinghouse" log book under your name. The value of the position will be calculated using the closing prices for the previous Wednesday (or previous business day if Wednesday was a holiday). To enter your trade you must identify: 1) the commodity or commodities involved; 2) the type of trade selected, e.g., long, short, spread; 3) the number of contracts involved; 4) the values of these contracts based on the previous Tuesday prices. A sample of the desired format is given below. The value of the position will be marked to market *weekly*. Trades can only be placed on Thursday. If you are absent and you have violated the maintenance margin level, you will be closed out and a \$50 penalty assessed. Transactions costs are assessed upon initiation of the trade.

#### **Parameters for Futures:**

Initial Margin: i) Naked positions: \$5000/contract

ii) Spreads: \$250/spread

Maintenance Margin: i) Naked positions: \$3000

ii) Spreads: \$150

Round-trip Transactions costs: i) Naked positions: \$250/contract

ii) Intra-commodity Spreads: \$25/spread

No interest to be paid on margin balances.

#### **Parameters for Options:**

Margins: No margin on purchased options positions. Margins the same as futures for written options positions.

Transactions Costs: \$40 commission per option.

### Weekly Trades and Associated Readings:

- 1) 1 naked position (Long or Short) each in a currency future
- 2) 1 naked position in a stock index future
- 3) 20 one-to-one spreads in a metal futures
- 4) A tailed T-bond spread
- 5) A currency tandem spread
- 6) A soy crush spread
- 7) Naked Position in a currency option
- 8) Vertical Spread in foreign stock index futures option
- 9) Straddle in a oil complex option

Note: All trades are to be executed using prices from US exchanges, i.e., CBOT, CME, COMEX, NYMEX

# EXAMPLE OF TRADE SHEET WEEK 1

Name and Trade Date: Professor ABC, May 15, 1999

			Position Size	Starting Balance		
Beginning Position	<u>Delivery Date</u>	<u>Price</u>		\$0 MarginAcct.	\$25,000 Cash	
Short Peso	Mar 2000	.0980	500,000 Pesos	5000	<5000> <250>	
				\$5000	\$19750	
				Ending Balance		

## EXAMPLE OF TRADE SHEET WEEK 2

Name and Trade Date: Professor ABC, May 22, 1999

				Starting Balance		
				\$5000	\$19,750	
Beginning Position	<u>Delivery D</u>	ate Price	Position Size	MarginAcct.	Cash	
Short Peso	Mar 2000	.0988	500,000			
(Continue)			Pesos	<400>		
Short Dow Jones IA	Dec. 1999	10,960	\$10/pt	5000	<5000> <250>	
				\$9600	\$14500	
				Ending Balance		

Profit on Peso = (.0980 - .0988) (500,000) = <400>