INTERACTIVE BROKERS LLC
DISCLOSURE DOCUMENTS FOR
INSTITUTIONAL & HEDGE FUND ACCOUNTS

The documents in this package contain important information regarding the risks and characteristics of the securities, commodities and other investment products that may be traded in your Interactive Brokers LLC account. Please read all of these documents carefully.

This package contains:

- **Options Clearing Corporation Characteristics and Risks of Standardized Options**
- **Important Information About Equity, Options and Futures Exchange Rules**
- **Disclosure of Risks of Margin Trading**
- **Portfolio Margin Risk Disclosure Statement**
- **Risk Disclosure Statement for Futures and Options Pursuant to CFTC Rule 1.55(c)**
- **Disclosure Regarding IB's Procedures for Allocating Equity Option Exercise Notices**
- **Day Trading Risk Disclosure**
- **Risks of After-Hours Trading**
- **Disclosure Regarding IB's Business Continuity Plan**
- **Interactive Brokers Group Privacy Statement**
- **Interactive Brokers' Customer Information Policies and Procedures**
- **Important Information About Interactive Brokers' Penny Option Pricing System**
- **Required Disclosures and Supplemental Agreement for Security Futures Trading at Interactive Brokers**
- **NASD/NFA Disclosure for Security Futures Trading**
- **Disclosure for Bond Trading**
- **Electronic Trading and Order Routing Systems Risk Disclosure Statement**
- **ISE Disclosure for Option Orders Over 500 Contracts**
- **Disclosure Regarding Floor/Pit Based Exchanges**
- **Order Routing and Payment for Order Flow Disclosure**
- **Notice Regarding Pre-Arranged Trades on U.S. Futures Exchange**
- **Interactive Brokers LLC Financial Services Guide**
- **Interactive Brokers LLC Product Disclosure Statement for Futures and Futures Options Traded on the Sydney Futures Exchange**
- **Interactive Brokers LLC Product Disclosure Statement for Options Traded on the Australian Stock Exchange Limited**
- **Agreement for Customers Trading Sydney Futures Exchange Products**
- **Supplemental Agreement & Disclosures for Trading on the Australian Stock Exchange Limited**
- **Euronext Liffe Risk Disclosure**
- **Hong Kong Additional Provisions**
- **Hong Kong Risk Disclosure Statements**
- **Hong Kong Client Standing Authorities**
- **Notice Regarding NFA's BASIC System**
- **FINRA Investor Protection Information Resources**
- **Risk Disclosure Statement for Forex Trading and IB Multi-Currency Accounts**

CHARACTERISTICS AND RISKS
OF STANDARDIZED OPTIONS

February 1994
1997 through 2007
Supplements Included

CHARACTERISTICS AND RISKS OF STANDARDIZED OPTIONS

TABLE OF CONTENTS

CHAPTER I

INTRODUCTION

This booklet relates solely to options issued by The Options Clearing Corporation ("OCC"), and all references to "options" in this booklet are applicable only to such options. As of the date of this booklet, options are traded on the United States markets listed on the inside front cover page and on the European Options Exchange in Amsterdam, The Netherlands. In the future, options may be traded on other markets within or outside the United States. The markets on which options are traded at any given time are referred to in this booklet as the "options markets."

OCC is a registered clearing agency, and each U.S. options market is a national securities exchange, that is subject to regulation by the Securities and Exchange Commission ("SEC") under the Securities Exchange Act of 1934. Foreign options markets, and their members, are not generally subject to regulation by the SEC or to the requirements of the securities or other laws of the U.S. and may not be subject to the jurisdiction of U.S. courts.

What is an option? An option is the right either to buy or to sell a specified amount or value of a particular underlying interest at a fixed exercise price by exercising the option before its specified expiration date. An option which gives a right to buy is a call option, and an option which gives a right to sell is a put option. Calls and puts are distinct types of options, and the buying or selling of one type does not involve the other.

EXAMPLE: An option to buy 100 shares of common stock of the XYZ Corporation at a specified exercise price would be an XYZ call option. An option to sell 100 shares of common stock of the XYZ Corporation at a specified exercise price would be an XYZ put option.

There are two different kinds of options—physical delivery options and cash-settled options. A physical delivery option gives its owner the right to receive physical delivery (if it is a call), or to make physical delivery (if it is a put), of the underlying interest when the option is exercised. A cash-settled option gives its owner the right to receive a cash payment based on

the difference between a determined value of the underlying interest at the time the option is exercised and the fixed exercise price of the option. A cash-settled call conveys the right to receive a cash payment if the determined value of the underlying interest at exercise—this value is known as the exercise settlement value—exceeds the exercise price of the option, and a cash-settled put conveys the right to receive a cash payment if the exercise settlement value is less than the exercise price of the option.

Each options market selects the underlying interests on which options are traded on that market. Options are currently available covering four types of underlying interests: equity securities, stock indexes, government debt securities, and foreign currencies. Options on other types of underlying interests may become available in the future.

Most options have standardized terms—such as the nature and amount of the underlying interest, the expiration date, the exercise price, whether the option is a call or a put, whether the option is a physical delivery option or a cash-settled option, the manner in which the cash payment and the exercise settlement value of a cash-settled option are determined, the multiplier of a cash-settled option, the style of the option, whether the option has automatic exercise provisions, and adjustment provisions. These standardized terms are generally described in Chapter II. Each U.S. options market publishes specification sheets setting forth the particular standardized terms of the options traded on that options market. (The options markets may also provide for trading in options whose terms are not all fixed in advance. Rather, subject to certain limitations, the parties to transactions in these options may designate certain of the terms. These flexibly structured options are discussed in Chapter VII of this booklet.)

Options having the same standardized terms are identical and comprise an options series. The standardization of terms makes it more likely that there will be a secondary market in which holders and writers of options can close out their positions by offsetting sales and purchases. By selling an option of the same series as the one he bought, or buying an option of the same series as the one he wrote, an investor can close out his position in that option at any time there is a functioning secondary options market in options of that series.

In some instances, options of the same series may be traded on more than one options market at the same time. Options that are so traded are called multiply-traded options. Options traded on a U.S. options market may also be traded on a foreign options market. These options are referred to as internationally-traded options. Multiply-traded and internationally-traded options can ordinarily be purchased and written, and positions in these options can ordinarily be liquidated in offsetting closing transactions, in any of the options markets in which the options are traded. However, because premiums are affected by market forces, the premiums for identical multiply-traded or internationally-traded options may not be the same in all markets at any given time.

If an options market learns that a particular underlying interest no longer meets its requirements for options trading or is not eligible for trading in all U.S. jurisdictions, or if an options market decides to discontinue trading in a particular options series for another reason, the options market may stop introducing new options on that underlying interest and may in certain circumstances impose restrictions on transactions that open new positions in options series that have been previously introduced, although trading in the options series will ordinarily continue on at least one options market until its expiration.

Options generally are traded on U.S. options markets during normal day-time business hours of U.S. securities exchanges and for a short period afterward. However, trading in options may not be confined to those hours. Trading in evening and night trading sessions occurs in options on foreign currencies and may in the future occur in other types of options. Moreover, when there are unusual market conditions, an options market may authorize trading to continue for a substantially longer period than under normal conditions. Trading in an expiring option may close at an earlier time than trading in other options. Trading hours for options are also subject to change from time to time. Readers should ascertain the trading hours of the particular options they are interested in trading from the options markets where those options are traded. Readers should also be aware that trading in underlying interests is not confined to normal exchange trading hours. For example, underlying foreign currencies and debt securities are traded in international markets on virtually an around-the-clock basis, and underlying equity securities may be traded in foreign markets when U.S. markets are closed and in some U.S. markets after the close of their normal trading hours.

Readers should be aware that this booklet has been written to meet the requirements of an SEC rule that requires the U.S. options markets to prepare, and brokerage firms to distribute, a booklet that briefly and generally describes the characteristics of options and the risks to investors of maintaining positions in options. Options are versatile instruments that can be used in a wide variety of investment strategies. They give the investor the ability to create positions that reflect the investor's opinion of an underlying interest and to select investment strategies that reflect the investor's tolerance for risk. This booklet is not designed to describe the various potential benefits of options or how investors may use options to enhance their investment strategies or to reduce risk. Numerous other publications, including some prepared by the U.S. options markets that are available upon request, contain discussions of the uses and potential benefits of options and of the various trading and investment strategies that can be employed with options. Readers who wish to balance the general discussion of risks that is contained in this booklet with a discussion of options uses, benefits and strategies should consult one or more of these other publications.

Readers should read and understand this booklet in its entirety, since a number of the separate chapters will be relevant to every reader interested in buying or writing options. For example, a reader who is interested in options on equity securities should fully read not only Chapter III, but also should read Chapters II, VIII and IX, as well as the discussion of risks in Chapter X. Readers should also be aware that, although this booklet seeks to describe the various characteristics of options and the risks that are unique to being an investor in options, there are many matters which are beyond the scope of this booklet that are not discussed. Chapter XI contains a discussion of the scope and limitations of this booklet.

CHAPTER II

OPTIONS NOMENCLATURE

This chapter contains a description of the standardized terms, and of some of the special vocabulary, applicable to options. Most of the nomenclature is the same for options on the various types of underlying interests. Differences that are applicable to options on a particular underlying interest will be described in the chapter devoted to that underlying interest.

Certain terms—options, options markets, call options, put options, physical delivery options, cash-settled options, options series, multiply-traded options and internationally-traded options—have been defined in Chapter I. Readers interested in those definitions should consult that chapter.

OPTION HOLDER; OPTION WRITER—The option holder is the person who buys the right conveyed by the option.

EXAMPLE: The holder of a physical delivery XYZ call option has the right to purchase shares of XYZ Corporation stock at the specified exercise price upon exercise prior to the expiration of the option. The holder of a physical delivery XYZ put option has the right to sell shares of XYZ Corporation at the specified exercise price upon exercise prior to the expiration of the option. The holder of a cash-settled option has the right to receive an amount of cash equal to the cash settlement amount (described below) upon exercise prior to the expiration of the option.

The option writer is obligated—if and when assigned an exercise—to perform according to the terms of the option. The option writer is sometimes referred to as the option seller. An option writer who has been assigned an exercise is known as an assigned writer.

EXAMPLE: If a physical delivery XYZ call option is exercised by the holder of the option, the assigned writer must deliver the required number of shares of XYZ common stock. He will be paid for the shares at the specified exercise price regardless of their current market price.

If a physical delivery put option is exercised, the assigned writer must purchase the required number of shares at the specified exercise price regardless of their current market price. If a cash-settled option is exercised, the assigned writer must pay the cash settlement amount.

No certificates are issued to evidence options. Investors look to the confirmations and statements that they receive from their brokerage firms to confirm their positions as option holders or writers. An option holder looks to the system created by OCC's rules, rather than to any particular option writer, for performance of the option he owns. Similarly, option writers must perform their obligations under the OCC system and are not obligated to any particular option holder. Since every options transaction involves both a holder and a writer, it follows that the aggregate rights of option holders under the system are matched by the aggregate obligations of option writers.

The OCC system is designed so that the performance of all options is between OCC and a group of firms called Clearing Members that carry the positions of all option holders and option writers in their accounts at OCC. To qualify as a Clearing Member, a firm must meet OCC's financial requirements. In addition, Clearing Members must provide OCC with collateral for the positions of option writers that they carry and must contribute to Clearing Funds that protect OCC against a Clearing Member's failure. The Clearing Members' guarantees of the performance of options writers' obligations, the financial strength of the Clearing Members, the collateral that they deposit, the obligations of correspondent clearing corporations, and the Clearing Funds together make up the OCC system backing the performance of options. This system is discussed in more detail in the OCC prospectus referred to in paragraph 1 of Chapter XI.

EXERCISE PRICE—In the case of a physical delivery option, the exercise price (which is sometimes called the "strike price") is the price at which the option holder has the right either to purchase or to sell the underlying interest.

EXAMPLE: A physical delivery XYZ 40 call option gives the option holder the right to purchase 100 shares of XYZ stock at an exercise price of $40 a share. A physical delivery XYZ 40 put option gives the option holder the right to sell 100 shares of XYZ common stock at an exercise price of $40 a share.

The exercise price of a cash-settled option is the base for the determination of the amount of cash, if any, that the option holder is entitled to receive upon exercise (see the discussion of "Cash Settlement Amount and Exercise Settlement Value" below).

Exercise prices for each options series are established by the options market on which that series is traded at the time trading in the series is introduced, and are generally set at levels above and below the then market value of the underlying interest. The options markets generally have authority to introduce additional series of options with different exercise prices based on changes in the value of the underlying interest, or in response to investor interest, or in unusual market conditions, or in other circumstances.

EXPIRATION DATE—This is the date on which the option expires. If an option has not been exercised prior to its expiration, it ceases to exist—that is, the option holder no longer has any rights, and the option no longer has any value. The expiration dates for the various options series are fixed by the options market on which the series trades. Readers should learn the expiration date of each option they wish to buy or write.

STYLE OF OPTION—The style of an option refers to when that option is exercisable. At the date of this booklet there are three different styles of options—American-style, European-style and capped. Subject to certain limitations prescribed in the rules of OCC or the options markets and subject to applicable law, these three styles are exercisable at the following times:

An American-style option may be exercised at any time prior to its expiration.

A European-style option may be exercised only during a specified period before the option expires. Every European-style option being traded at the date of this booklet is exercisable only on its expiration date.

A capped option will be automatically exercised prior to expiration if the options market on which the option is trading determines that the value of the underlying interest at a specified time on a trading day "hits the cap price" for the option. Capped options may also be exercised, like European-style options, during a specified period before expiration.

This period is the expiration date for all capped options traded at the date of this booklet. The special terminology applicable to capped options is discussed at the end of this chapter.

European-style or capped options having an expiration period that is longer or shorter than their expiration date may be introduced for trading in the future.

UNIT OF TRADING; CONTRACT SIZE—The unit of trading (which is sometimes referred to as the contract size) of a physical delivery option is the amount of the underlying interest that is subject to being purchased or sold upon the exercise of a single option contract. For example, the unit of trading for most options on equity securities is 100 shares. Thus, a physical delivery XYZ 50 call will give its holder the right upon exercise to purchase 100 shares of XYZ at $50 per share. If the option is trading at a premium of, say, $4 per share, then the aggregate premium for a single option contract would be $400.

The contract size of a cash-settled option is determined by the multiplier that is fixed by the options market on which the options series is traded. The multiplier determines the aggregate value of each point of the difference between the exercise price of the option and the exercise settlement value of the underlying interest. For example, a multiplier of 100 means that for each point by which a cash-settled option is in the money upon exercise, there is a $100 increase in the cash settlement amount. Similarly, if an option with a multiplier of 100 is trading at a premium of, say, $4, then the aggregate premium for a single option contract would be $400.

EXERCISE—If the holder of a physical delivery option wishes to buy (in the case of a call) or sell (in the case of a put) the underlying interest at the exercise price—or, in the case of a cash-settled option, to receive the cash settlement amount—his option must be exercised. In order to exercise most options, option holders must give exercise instructions to their brokerage firm in accordance with the firm's procedures prior to the firm's exercise cut-off time. The exercise process is discussed in Chapter VIII. Every option holder should understand this process and should learn his brokerage firm's procedures concerning exercise, and its exercise cut-off time, for each option he may buy.

Although an option holder must assure that action is taken to exercise most options, capped options and

certain cash-settled options provide for automatic exercise in specified circumstances. Other options having automatic exercise provisions may be introduced for trading in the future.

The rules of the options markets generally limit the total number of puts or calls on the same underlying interest that a single investor or group of investors acting in concert may exercise during a specified time period. Information concerning the exercise limits for particular options is available from the options market on which those options are traded or from brokerage firms.

The right to exercise an option may be restricted in certain circumstances. This is discussed under "Risks of Option Holders" in Chapter X.

When an option has been exercised, OCC will assign the exercise in accordance with its rules to a Clearing Member whose account with OCC reflects the writing of an option of the same series. The Clearing Member may, in turn, assign this exercise to one of its customers who is a writer in accordance with the Clearing Member's procedures, and the assigned writer will then be obligated to perform the obligations of the option—that is, to sell (in the case of a physical delivery call) or buy (in the case of a physical delivery put) the underlying interest at the exercise price, or, in the case of a cash-settled option, to pay the cash settlement amount. The assignment process is discussed further in Chapter VIII.

CASH SETTLEMENT AMOUNT, SETTLEMENT CURRENCY and EXERCISE SETTLEMENT VALUE—The cash settlement amount is the amount of cash that the holder of a cash-settled option is entitled to receive upon exercise. It is the amount by which the exercise settlement value of the underlying interest of a cash-settled call exceeds the exercise price, or the amount by which the exercise price of a cash-settled put exceeds the exercise settlement value of the underlying interest, multiplied by the multiplier for the option.

EXAMPLE: Assume that a holder of a cash-settled call on the XYZ index that has an exercise price of 80 exercises it when the exercise settlement value of the index is 85. If the multiplier for XYZ index options is 100, the assigned writer would be obligated to pay,

and the exercising holder would be entitled to receive, a cash settlement amount of $500 ($85 minus $80 multiplied by 100 = $500).

The currency in which the cash settlement amount is payable is called the settlement currency. The settlement currency for all cash-settled options with standardized terms that are trading at the date of this booklet is U.S. dollars. It is possible that another currency will be the settlement currency for some options introduced in the future.

The manner of determining the exercise settlement value for a particular option series is fixed by the options market on which the series is traded. The exercise settlement values for options on a particular underlying interest traded in one options market will not necessarily be determined in the same manner as the exercise settlement values for options or futures on the same underlying interest that may be traded in other markets.

Options markets may change the method of determining exercise settlement values for particular options series on specified days or on all days. These changes may be made applicable to series outstanding at the time the changes become effective. Alternatively, an options market might phase in a change in the method of determining exercise settlement values by opening new series of options identical to outstanding series in all respects other than the method for calculating exercise settlement values. Such new series would trade alongside the old series until both series expire, but the two series would not be interchangeable. In the future, options markets may, subject to regulatory approval, introduce options whose exercise settlement values may not exceed a specified maximum amount.

ADJUSTMENT and ADJUSTMENT PANEL—Adjustments may be made to some of the standardized terms of outstanding options upon the occurrence of certain events. Adjustments that may be made to a particular type of options are discussed in the chapter relating to that type.

The determination of whether to adjust outstanding options in response to a particular event, and, if so, what the adjustment should be, is made by a majority vote of an adjustment panel. An adjustment panel for an options series consists of two representatives of each U.S. options market on which the series is traded and one representative of OCC, who votes only to break a tie. Every determination by an adjustment panel is within its sole discretion and is binding on all investors.

PREMIUM—The premium is the price that the holder of an option pays and the writer of an option receives for the rights conveyed by the option. It is the price set by the holder and writer, or their brokers, in a transaction in an options market where the option is traded. It is not a standardized term of the option. The premium does not constitute a "down-payment." It is simply and entirely a nonrefundable payment in full—from the option holder to the option writer—for the rights conveyed by the option.

The premium is not fixed by the options markets or by OCC. Premiums are subject to continuous change in response to market and economic forces, including changes in the trading conditions on the markets where the particular options are traded. The factors which may generally affect the pricing of an option include such variables as the current value of the underlying interest and the relationship between that value and the exercise price, the current values of related interests (*e.g.*, futures on the underlying interest or other interests related to the underlying interest), the style of the option, the individual estimates of market participants of the future volatility of the underlying interest, the historical volatility of the underlying interest, the amount of time remaining until expiration, cash dividends payable on the underlying stock (in the case of stock and stock index options), current interest rates, current currency exchange rates (in the cases of foreign currency options and options whose premiums or cash settlement amounts are payable in a foreign currency), the depth of the market for the option, the effect of supply and demand in the options market as well as in the markets for the underlying interest and for related interests, the information then available about current prices and operations in the markets for the underlying interest and related interests, the individual estimates of market participants of future developments that might affect any of the foregoing, and other factors generally affecting the prices or volatility of options, underlying interests, related interests or securities generally. Also see the discussion below of "Intrinsic Value and Time Value." Readers should not assume that options premiums will necessarily conform or correlate with any theoretical options pricing

formula, chart, last sale, or the prices of the underlying interest, related interests or other options at any particular time.

The currency in which the premium is payable is called the premium currency. The premium currency for most options is U.S. dollars. However, the premium currency for cross-rate foreign currency options, which are discussed in Chapter VI, is a foreign currency, and other options with premiums payable in a foreign currency may be introduced after the date of this booklet.

OPENING TRANSACTION—This is a purchase or sale transaction by which a person establishes or increases a position as either the holder or the writer of an option.

CLOSING TRANSACTION—This is a transaction in which, at some point prior to expiration, the option holder makes an offsetting sale of an identical option, or the option writer makes an offsetting purchase of an identical option. A closing transaction in an option reduces or cancels out an investor's previous position as the holder or the writer of that option.

EXAMPLE: In June an investor buys a December XYZ 50 call at an aggregate premium of $500. By September the market price of the option has increased to $700. To seek to realize his $200 profit, the investor can direct his broker to sell an offsetting December XYZ 50 call in a closing transaction. On the other hand, if by September the market price of the option has decreased to $300, the investor might still decide to sell the option in a closing transaction, thereby limiting his loss to $200.

Although holders of American-style options have the right to exercise at any time before expiration, holders frequently elect to realize their profits or losses by making closing transactions because the transaction costs of the closing transactions may be lower than the transaction costs associated with exercises, and because closing transactions may provide an opportunity for an option holder to realize the remaining time value (described below) of the option that would be lost in an exercise. The limited period of exercisability of a European-style or capped option means that (except for the possibility of automatic exercise of a capped option) the holder's only means of realizing profit or loss on the option when the option is not exercisable is by selling the option in a closing transaction.

POSITION LIMITS—The rules of the options markets generally limit the maximum number of options on the same side of the market (*i.e.*, calls held plus puts written, or puts held plus calls written) with respect to a single underlying interest that may be carried in the accounts of a single investor or group of investors acting in concert. These limits—which are called position limits—differ for options on different underlying interests. Information concerning the position limits for particular options is available from the options market on which those options are traded or from brokerage firms.

COMBINATIONS; SPREADS and STRADDLES—Combination positions are positions in more than one option at the same time. Spreads and straddles are two types of combination positions. A spread involves being both the buyer and writer of the same type of option (puts or calls) on the same underlying interest, with the options having different exercise prices and/or expiration dates. A straddle consists of purchasing or writing both a put and a call on the same underlying interest, with the options having the same exercise price and expiration date.

LONG and SHORT—The word long refers to a person's position as the holder of an option, and the word short refers to a person's position as the writer of an option.

COVERED CALL WRITER—If the writer of a physical delivery call option owns or acquires the amount of the underlying interest that is deliverable upon exercise of the call, he is said to be a covered call writer.

EXAMPLE: An individual owns 100 shares of XYZ common stock. If he writes one physical delivery XYZ call option—giving the call holder the right to purchase 100 shares of the stock at a specified exercise price—this would be a covered call. If he writes two such XYZ calls, one would be covered and one would be uncovered.

The distinction between covered and uncovered call writing positions is important since uncovered call writing can involve substantially greater exposure to risk than covered call writing. A call option writer who is not a covered writer may hold another option in a spread position and thereby offset some or all of the risk of the option he has written. However, the spread may not offset all of the risk of the uncovered writing position. For example, if the long portion of the spread has a

higher exercise price than the exercise price of the short, or if the long has an earlier expiration date than the expiration date of the short, then the writer may still be exposed to significant risks from his uncovered writing position.

AT THE MONEY—This term means that the current market value of the underlying interest is the same as the exercise price of the option.

IN THE MONEY—A call option is said to be in the money if the current market value of the underlying interest is above the exercise price of the option. A put option is said to be in the money if the current market value of the underlying interest is below the exercise price of the option.

EXAMPLE: If the current market price of XYZ stock is $43, an XYZ 40 call would be in the money by $3.

OUT OF THE MONEY—If the exercise price of a call is above the current market value of the underlying interest, or if the exercise price of a put is below the current market value of the underlying interest, the option is said to be out of the money by that amount.

EXAMPLE: With the current market price of XYZ stock at $40, a call with an exercise price of $45 would be out of the money by $5—as would a put with an exercise price of $35.

INTRINSIC VALUE and TIME VALUE—It is sometimes useful to consider the premium of an option as consisting of two components: intrinsic value and time value. Intrinsic value reflects the amount, if any, by which an option is in the money. Time value is whatever the premium of the option is in addition to its intrinsic value. An American-style option may ordinarily be expected to trade for no less than its intrinsic value prior to its expiration, although occasionally an American-style option will trade at less than its intrinsic value. Because European-style and capped options are not exercisable at all times, they are more likely than American-style options to trade at less than their intrinsic value when they are not exercisable.

EXAMPLE OF A CALL WITH INTRINSIC VALUE: At a time when the current market price of XYZ stock is $46 a share, an XYZ 40 call would have an intrinsic value of $6 a share. If the market price of the stock were to decline to $44, the intrinsic value of the call would be only $4. Should the price of the stock drop to $40 or below, the call would no longer have any intrinsic value.

EXAMPLE OF A PUT WITH INTRINSIC VALUE: At a time when the current market price of XYZ stock is $46 a share, an XYZ 50 put would have an intrinsic value of $4 a share. Were the market price of XYZ stock to increase to $50 or above, the put would no longer have any intrinsic value.

EXAMPLE OF TIME VALUE: At a time when the market price of XYZ stock is $40 a share, an XYZ 40 call may have a current market price of, say, $2 a share. This is entirely time value.

An option with intrinsic value may often have some time value as well—that is, the market price of the option may be greater than its intrinsic value. This could occur with an option of any style.

EXAMPLE: With the market price of XYZ stock at $45 a share, an XYZ 40 call may have a current market price of $6 a share, reflecting an intrinsic value of $5 a share and a time value of $1 a share.

An option's time value is influenced by several factors (as discussed above under "Premium"), including the length of time remaining until expiration. An option is a "wasting" asset; if it is not sold or exercised prior to its expiration, it will become worthless. As a consequence, all else remaining the same, the time value of an option usually decreases as the option approaches expiration, and this decrease accelerates as the time to expiration shortens. However, there may be occasions when the market price of an option may be lower than the market price of another option that has less time remaining to expiration but that is similar in all other respects.

An American-style option's time value is also influenced by the amount the option is in the money or out of the money. An option normally has very little time value if it is substantially in the money. Although an option that is substantially out of the money has only time value, the amount of that time value is normally less than the time value of an option having the same underlying interest and expiration that is at the money.

Another factor influencing the time value of an option is the volatility of the underlying interest. All else being

the same, options on more volatile interests command higher premiums than options on less volatile interests.

Time value is also influenced by the current cost of money. Increases in prevailing interest rates tend to cause higher premiums for calls and lower premiums for puts, and decreases in prevailing interest rates tend to cause lower premiums for calls and higher premiums for puts.

The following is a description of the terminology applicable to capped options:

CAP INTERVAL—The cap interval is a constant established by the options market on which a series of capped options is traded. The exercise price for a capped-style option plus the cap interval (in the case of a call), or minus the cap interval (in the case of a put), equals the cap price for the option. For example, if a capped call option with an exercise price of 360 has a cap interval of 30, then the cap price at which the option will be automatically exercised would be 390.

CAP PRICE—The cap price is the level that the automatic exercise value of a capped option must reach in order for the option to be automatically exercised. The cap price of a call option is above, and of a put option below, the exercise price of the option.

EXAMPLE: A 360 ABC capped call index option has an exercise price of 360 and a cap interval of 30. The call option has a cap price of 390.

EXAMPLE: A 310 XYZ capped put index option has an exercise price of 310 and a cap interval of 20. The put option has a cap price of 290.

AUTOMATIC EXERCISE VALUE—The automatic exercise value of a capped option is the price or level of the underlying interest determined in a manner fixed by the options market on which the option is traded for each trading day as of a specified time of that day.

EXAMPLE: A 310 XYZ capped put index option has a cap interval of 20, and therefore has a cap price of 290. Assume that the options market on which the option is traded has specified the close of trading on each trading day as the time for determining the automatic exercise value on the XYZ index, and that the index level reaches a low of 289 during a particular trading day, but is at 291 at the close. The automatic

exercise value has not reached the cap price, and the automatic exercise feature of the option is not triggered, because the index level was not at or below the cap price at the time of day specified by the options market for determining the automatic exercise value.

CASH SETTLEMENT AMOUNT—This is the cash amount that the holder of a cash-settled capped option is entitled to receive upon the exercise of the option. In the case of a capped option that has been automatically exercised, the cash settlement amount is equal to the cap interval times the multiplier for the option, even if the automatic exercise value on the day that the automatic exercise feature is triggered exceeds (in the case of a call) or is less than (in the case of a put) the cap price. If the capped option is voluntarily exercised at expiration, the cash settlement amount is determined in the same manner as for other styles of cash-settled options.

EXAMPLE: A 360 ABC capped call index option has a cap interval of 30 and a multiplier of 100. The automatic exercise value of the ABC index is 396 on a particular trading day. The call option is automatically exercised, and the cash settlement amount is $3000 (equal to the cap interval of 30 times the multiplier of 100).

EXAMPLE: A 360 ABC capped call index option has a cap interval of 30 and a multiplier of 100. The automatic exercise value of the ABC index never equals or exceeds the cap price of 390 during the life of the option, and the exercise settlement value of the option is 367 on the final trading day. Upon exercise of the option, the holder is entitled to receive a cash settlement amount of $700 (equal to the multiplier of 100 times the difference between the exercise settlement value of 367 and the exercise price of 360).

CHAPTER III

OPTIONS ON EQUITY SECURITIES

The term "stock options" is used broadly in this booklet to include not only options on common stocks but also options on all other types of equity securities, such as limited partnership interests, "American Depository Receipts" and "American Depository Shares" representing interests in foreign entities, and preferred stocks. Options are available on exchange-traded equity securities, on unlisted equity securities traded in the NASDAQ stock market and designated as national market system securities, and on equity securities traded both in the NASDAQ stock market and on exchanges. The NASDAQ stock market is primarily an inter-dealer trading system as contrasted with exchange auction markets.

Issuers of underlying equity securities do not participate in the selection of their securities for options trading (although some options markets may determine not to select an underlying security without the consent of the issuer of that security). Issuers of underlying equity securities have no responsibility regarding the issuance, the terms, or the performance of options, and option holders have no rights as security holders of such issuers.

The principal risks of holders and writers of stock options are discussed in Chapter X. Readers interested in buying or writing stock options should carefully read that chapter.

FEATURES OF STOCK OPTIONS

Each stock option generally covers 100 shares of the underlying security, although, as described below, the number of underlying shares may be adjusted as a result of certain events.

The exercise prices of the stock options that are traded at the date of this booklet are stated in U.S. dollars per share. The exercise price of an option must each be multiplied by the number of shares underlying the option in order to determine the aggregate exercise price and aggregate premium of that option.

EXAMPLE: An XYZ 40 call gives the buyer the right to purchase 100 shares of XYZ stock at a price of $40 per share, or a total price of $4,000.

In the future, stock options may, with regulatory approval, be introduced that have exercise prices in a foreign currency.

Adjustments may be made to certain of the standardized terms of outstanding stock options when certain events occur, such as a stock dividend, stock distribution, stock split, reverse stock split, rights offering, distribution, reorganization, recapitalization, reclassification in respect of an underlying security, or a merger, consolidation, dissolution or liquidation of the issuer of the underlying security. In the following discussion, there is a brief description of a number of general adjustment rules applicable to stock options that are in effect at the date of this booklet. Such rules may be changed from time to time with regulatory approval. An adjustment panel has the authority to make such exceptions as it determines to be appropriate to any of the general adjustment rules.

As a general rule, no adjustment is made for ordinary cash dividends or distributions. A cash dividend or distribution by most issuers will generally be considered "ordinary" unless it exceeds 10% of the aggregate market value of the underlying security outstanding. The options markets are considering an amendment to the general rules which, if adopted and approved by the regulators, would provide that a cash dividend or distribution by an issuer that is a closed-end investment company may not be considered to be "ordinary" if it exceeds 5% of such aggregate market value. Determinations whether to adjust for cash dividends or distributions in excess of those amounts are made on a case-by-case basis.

Because stock options are not generally adjusted for ordinary cash dividends and distributions, covered writers of calls are entitled to retain dividends and distributions earned on the underlying securities during the time prior to exercise. However, a call holder becomes entitled to the dividend if he exercises the option prior to the ex-dividend date even though the assigned writer may not be notified that he was assigned an exercise until after the ex-date. Because call holders may seek to "capture" an impending dividend by exercising, a call writer's chances of being assigned an exercise may increase as the ex-date for a dividend on the underlying security approaches.

As a general rule, stock dividends, stock distributions and stock splits can result in an adjustment in the number of underlying shares or the exercise price, or both.

EXAMPLE: An investor bought an XYZ 60 option—either a call or a put—and XYZ Corporation subsequently effected a 3 for 2 stock distribution. Instead of covering 100 shares of stock at an exercise price of $60 a share, each outstanding option could be adjusted to cover 150 shares at an exercise price of $40 per share.

However, when a stock distribution results in the issuance of one or more whole shares of stock for each outstanding share—such as a 2 for 1 stock split—as a general rule the number of underlying shares is not adjusted. Instead, the number of outstanding options is proportionately increased and the exercise price is proportionately decreased.

EXAMPLE: Before a 2 for 1 stock split, an investor holds an option on 100 shares of XYZ stock with an exercise price of $60. After adjustment for the split, he will hold two XYZ options, each on 100 shares and with an exercise price of $30.

An adjustment panel may make an exception to the general rule to adjust for stock dividends. For example, in cases where the issuer of the underlying security announces or exhibits a policy of declaring regular stock dividends that do not individually exceed 10% of the amount of the underlying security outstanding, an adjustment panel may determine to treat the stock dividends as though they were ordinary cash dividends and to make no adjustment for them.

As a general rule, adjustments in exercise prices are rounded to the nearest 1/8 of a dollar, and adjustments in the number of underlying shares are rounded down to eliminate fractional shares. In the latter case, the exercise price may be further adjusted to compensate for the elimination of the fractional shares.

Distributions of property other than the underlying security may require different adjustments. For example, outstanding options might be adjusted to include the distributed property.

EXAMPLE: If XYZ "spins off" its subsidiary ABC by distributing to its stockholders 2.5 shares of ABC

stock for each share of XYZ stock, outstanding XYZ options might be adjusted to require delivery of 100 shares of XYZ stock plus 250 shares of ABC stock.

Alternatively, the exercise prices of outstanding options might be reduced by the value, on a per-share basis, of the distributed property, as determined by the adjustment panel.

Events other than distributions may also result in adjustments. If all of the outstanding shares of an underlying security are acquired in a merger or consolidation, outstanding options will as a general rule be adjusted to require delivery of the cash, securities, or other property payable to holders of the underlying security as a result of the acquisition.

EXAMPLE: If XYZ is acquired by PQR in a merger where each holder of XYZ stock receives $50 plus 1/2 share of PQR stock for each share of XYZ stock held, XYZ options might be adjusted to call for the delivery of $5,000 in cash and 50 shares of PQR stock instead of 100 shares of XYZ stock.

When an underlying security is wholly or partially converted into a debt security or a preferred stock, options that have been adjusted to call for delivery of the debt security or preferred stock may, as a general rule, be further adjusted to call for any securities distributed as interest or dividends on such debt security or preferred stock.

When an underlying security is converted into a right to receive a fixed amount of cash, options on that security will generally be adjusted to require the delivery upon exercise of a fixed amount of cash, and trading in the options will ordinarily cease when the merger becomes effective. As a result, after such an adjustment is made all options on that security that are not in the money will become worthless and all that are in the money will have no time value.

As a general rule, adjustments are not made for tender offers or exchange offers, whether by the issuer or a third party, and whether for cash, securities (including issuer securities), or other property. This presents a risk for writers of put options, because a successful tender offer or exchange offer (whether by the issuer or by a third party) may have a significant effect on the market value of the security that the put writers would be obligated to purchase if the put options are exercised after the expiration of the offer.

As a general rule, adjustments will not be made to reflect changes in the capital structure of the issuer where all of the underlying securities outstanding in the hands of the public (other than dissenters' shares) are not changed into another security, cash or other property.

As a general rule, an adjustment that is made in an option will become effective on the ex-date established by the primary market for trading in the underlying security.

CHAPTER IV

INDEX OPTIONS

ABOUT INDEXES

As referred to in this booklet, an index is a measure of the prices of a group of securities* or other interests. Although indexes have been developed to cover a variety of interests, such as stocks and other equity securities, debt securities and foreign currencies, and even to measure the cost of living, indexes on equity securities (which are called stock indexes) are among the most familiar, and they are the only indexes that underlie options trading at the date of this booklet. The following discussion refers only to stock indexes and stock index options.

Stock indexes are compiled and published by various sources, including securities markets. An index may be designed to be representative of the stock market of a particular nation as a whole, of securities traded in a particular market, of a broad market sector (*e.g.*, industrials), or of a particular industry (*e.g.*, electronics). An index may be based on the prices of all, or only a sample, of the securities whose prices it is intended to represent. Indexes may be based on securities traded primarily in U.S. markets, securities traded primarily in a foreign market, or a combination of securities whose primary markets are in various countries.

A stock index, like a cost of living index, is ordinarily expressed in relation to a "base" established when the index was originated.

EXAMPLE: On the starting or "base" date for a new value-weighted index, the total market values of the component securities (market price times number of shares outstanding) is $50 billion. The publisher of the index will assign an arbitrary index level—say 100—to that base value. If the total market value of the component stocks increases by 2% the next day (*i.e.*, to $51 billion), the index level would rise to 102 (102% of the base level of 100).

*Some indexes reflect values of companies, rather than securities, by taking into account both the prices of constituent securities and the number of those securities outstanding.

The base may be adjusted from time to time to reflect such events as capitalization changes affecting the constituent securities of the index (*e.g.*, issuance of new shares) or to maintain continuity when securities are added to or dropped from the index. These adjustments are generally designed so that the index level will change only as a result of price changes of constituent securities during trading.

Securities may be dropped from an index because of events such as mergers and liquidations or because a particular security is no longer thought to be representative of the types of stocks constituting the index. Securities may also be added to an index from time to time. Adjustments in the base level of an index, additions and deletions of constituent securities, and similar changes are within the discretion of the publisher of the index and will not ordinarily cause any adjustment in the terms of outstanding index options. However, an adjustment panel has authority to make adjustments if the publisher of the underlying index makes a change in the index's composition or method of calculation that in the panel's determination, may cause significant discontinuity in the index level.

Different stock indexes are calculated in different ways. Accordingly, even where indexes are based on identical securities, they may measure the relevant market differently because of differences in methods of calculation. Often the market prices of the securities in the index group are "capitalization weighted." That is, in calculating the index value, the market price of each constituent security is multiplied by the number of shares outstanding. Because of this method of calculation, changes in the prices of the securities of larger corporations will generally have a greater influence on the level of a capitalization weighted index than price changes affecting smaller corporations.

Other methods may be used to calculate stock indexes. For example, in one method known as "equal-dollar weighting," the index is established by establishing an aggregate market value for every constituent security of the index and then determining the number of shares of each security by dividing such aggregate market value by the then current market price of the security. The base level of the index is established by dividing the total market value of all constituent securities by a fixed index divisor. Thereafter, the number of shares of the constituent securities and the index divisor are adjusted at periodic intervals in order to have

each constituent security continue to represent an approximately equal dollar value in the index without distorting the level of the index.

Another method of calculation is simply to add up the prices of the securities in the index and divide by the number of securities in the index, disregarding numbers of shares outstanding. Another method measures daily percentage movements of prices by averaging the percentage price changes of all securities included in the index.

Investors should keep in mind that an index can respond only to reported price movements in its constituent securities. An index will therefore reflect the stock market as a whole, or particular market segments, only to the extent that the securities in the index are being traded, the prices of those trades are being promptly reported, and the market prices of those securities, as measured by the index, reflect price movements in the relevant markets. The index level will be affected by all of the factors that may at the time affect prices in the relevant markets for the constituent securities of the index, including, among other things, applicable laws, regulations and trading rules, the market-making and order processing systems of those markets, the liquidity and efficiency of those markets, and the prices and price behavior of futures contracts on that index or a related index.

Certain trading strategies involving purchases and sales of index options, index futures, options on index futures or portfolios of certain of the securities in an index can affect the value of the index, the prices of the index futures, and, therefore, the prices of index options. These transactions and the resulting impact may occur at any time—and may accompany significant changes in the prices or volatilities of the stock and derivative markets—including at or shortly before an expiration. For example, traders holding positions in expiring index options or futures contracts hedged by positions in securities included in the index may attempt to liquidate their securities positions at or near the time for determining the final exercise settlement value of the options or futures contracts. The resulting orders to liquidate these securities might result in significant changes in the level of the index. Index options investors should be aware of the potential impact that these trading strategies can have on index levels at or near expiration, and the possibility that the values of index option positions will be affected accordingly.

Readers who intend to trade index options should familiarize themselves with the basic features of the underlying indexes, including the general methods of calculation. Readers who are attempting to follow a precise and sophisticated strategy involving index options may wish to inform themselves about the exact method for calculating each index involved. Information regarding the method of calculation of any index on which options are traded, including information concerning the standards used in adjusting the index, adding or deleting securities, and making similar changes, is generally available from the options market where the options are traded.

The value level of every index underlying an option—including the exercise settlement value—is the value of the index as reported by the reporting authority designated by the options market where the option is traded as the official source for determining that index's value. Unless OCC directs otherwise, every value as initially reported by the reporting authority is conclusively presumed to be accurate and deemed to be final for the purpose of calculating the cash settlement amount, even if the value is subsequently revised or determined to have been inaccurate.

Most indexes on which options are traded are updated during the trading day, and updated index levels are disseminated at frequent intervals. Investors may determine current index levels from their brokerage firms; in addition, the closing levels of many underlying stock indexes are published in daily newspapers such as "The Wall Street Journal." However, an index option may be traded in the options markets at a time when some, or even a substantial portion, of the constituent securities of the underlying index are not trading or when there is a lag in the reporting of prices in some or all of the constituent securities. In those circumstances, the current reported index level will be based on non-current information, since its calculation will be based on the last reported prices for all constituent securities even though trading or price reporting in some of those securities is not current.

FEATURES OF INDEX OPTIONS

All index options that are traded at the date of this booklet are cash-settled. Cash-settled index options do not relate to a particular number of shares. Rather, the "size" of a cash-settled index option contract is determined by the multiplier of the option. If the option market on which an option series is traded should decrease the multiplier for the series, an adjustment panel may adjust outstanding options of that series.

The exercise prices and premiums of the index options that are traded at the date of this booklet are expressed in U.S. dollars. Subject to regulatory approval, trading in index options whose exercise prices or premiums are expressed in a foreign currency may be introduced in the future. The total exercise price for a single option is the stated exercise price multiplied by the multiplier.

Premiums for index options are expressed in points and fractions of points. Each point of premium of the options trading at the date of this booklet represents an amount equal to one U.S. dollar. In order to determine the aggregate premium for a single index option, the quoted premium must be multiplied by the multiplier.

EXAMPLE: An investor purchases a December 110 index call at 2⅛. The multiplier for that option is 100. The aggregate dollar amount of the premium is $212.50 ($2⅛ times 100 = $212.50). Had the options market used a multiplier of 200, a premium of 2⅛ would have meant an aggregate premium of $425.00.

The exercise settlement values of stock index options are determined by their reporting authorities in a variety of ways. The exercise settlement values of some index options are based on the reported level of the index derived from the last reported prices of the constituent securities of the index at the closing on the day of exercise. The exercise settlement values of other options are based on the reported level of the index derived from the opening prices of the constituent securities on the day of exercise. If an option is exercised on a day that is not scheduled as a trading day for the constituent securities of the index, the exercise settlement value is based on the reported level of the index derived from the opening or closing prices (depending on the options series) of the constituent securities on the last prior day that is scheduled as a trading day. If a particular constituent security does not open for trading on the day the exercise settlement value is determined, the last reported price of that security is used. Other means for determining the exercise settlement values of some index options series have been, and may continue to be, established. For example, the exercise settlement values for options on an index of foreign securities may be fixed in relation to a value fixed by a foreign exchange.

Investors should be aware that the exercise settlement value of an index option that is derived from the opening prices of the constituent securities may not be reported for several hours following the opening of trading in those securities. A number of updated index levels may be reported at and after the opening before the exercise settlement value is reported, and there could be a substantial divergence between those reported index levels and the reported exercise settlement value.

Investors should also be aware that there is no single opening or closing price for securities primarily traded in the NASDAQ stock market. A price of a NASDAQ security that is used in determining the level on a particular day of an index that includes the security will not necessarily be the price at which a majority of opening or closing trades in that security were effected on that day.

The principal risks of holders and writers of index options are discussed in Chapter X. Readers interested in buying or writing index options should carefully read that chapter, particularly the discussions under the headings "Risks of Option Holders," "Risks of Option Writers," "Other Risks," and "Special Risks of Index Options."

CHAPTER V

DEBT OPTIONS

Two kinds of debt options have been approved for trading at the date of this booklet. One kind, called price-based options, are options which give their holders the right either to purchase or sell a specified underlying debt security or to receive a cash settlement payment based on the value of an underlying debt security (depending on whether the options are physical delivery or cash-settled options). The other kind, called yield-based options, are options that are cash-settled based on the difference between the exercise price and the value of an underlying yield. The distinctions between price-based and yield-based options are fundamental and should be understood by readers interested in investing in debt options.

At the date of this booklet, only yield-based options are being traded. Although price-based options have traded in the past and may be traded in the future, no price-based option is traded at the date of this booklet.

The principal risks of holders and writers of debt options are discussed in Chapter X. Readers interested in buying or writing debt options should not only read this chapter but should also carefully read Chapter X, particularly the discussions under the headings "Risks of Option Holders," "Risks of Option Buyers," "Other Risks," and "Special Risks of Debt Options."

RATES, YIELDS AND PRICES OF DEBT SECURITIES

To understand debt options, an investor should understand the relationship between the rates or yields, which are different ways of expressing return on debt securities, and prices of debt securities. (Coupon interest rates of a debt security express return as a percentage of the principal amount (par value) of the security. Yields express return (or projected return) as a percentage of the amount invested.) This relationship, simply stated, is that prices of debt securities move inversely to changes in rates. Declining rates, whether

on long-term bonds or money market instruments, will generally cause prices of outstanding debt securities to increase. Conversely, rising rates across a particular maturity spectrum will generally cause the prices of outstanding debt securities of that maturity to decline.

EXAMPLE: A 30-year Treasury bond pays interest at a 12% coupon rate. The only time prior to maturity that investors will pay a price of 100 (that is, 100% of par value) for the bond is when the prevailing yield on such long-term Treasury bonds is exactly 12%. Should rates move higher to, say, 14% for such Treasury bonds, the price of an outstanding 12% bond would have to decline to about 86 in order for the bond to yield 14%. If rates on such bonds subsequently decline to 10%, the price of the 12% bond could be expected to rise substantially above par, since it would yield 10% at a price of 120.

Price-based call options become more valuable as the prices of the underlying debt securities increase, and price-based puts become more valuable as the prices of the underlying debt securities decline. The relationship between interest rate changes, prices, and the value of price-based debt options can be expressed as follows:

Interest Rates (Yields) ↓ = Prices ↑ = Call ↑ / Put ↓

Interest Rates (Yields) ↑ = Prices ↓ = Call ↓ / Put ↑

In contrast, the exercise settlement value of a yield-based option is based on the difference between the value of an underlying yield and the exercise price of the option. Since the underlying yields of yield-based options will increase as interest rates increase, and vice-versa, it follows that yield-based calls become more valuable as yields rise (*i.e.*, as the prices of the debt securities from which the underlying yield is derived decline), and puts become more valuable as yields decline (and prices of such securities increase). These relationships can be expressed as follows:

Interest Rates (Yields) ↓ = Prices ↑ = Call ↓ / Put ↑

Interest Rates (Yields) ↑ = Prices ↓ = Call ↑ / Put ↓

TREASURY SECURITIES

The underlying debt securities of price-based options and the debt securities from which the underlying yields of yield-based options are derived are all Treasury securities—*e.g.*, 30-year Treasury bonds, 10-year Treasury notes, 5-year Treasury notes and Treasury bills.

Treasury bonds and notes are direct obligations of the United States that pay a fixed rate of interest semi-annually. Bonds are issued for maturities of more than ten years (although many issues are callable prior to maturity). Notes are issued for maturities of one to ten years, and are non-callable. New issues of bonds and notes are sold periodically by the Treasury, usually on an auction basis. The auction price is established by bidding and may be above or below par value. Occasionally the Treasury will "reopen" an outstanding issue by auctioning additional principal amounts. Government securities dealers make secondary markets in virtually all outstanding issues, but market activity and liquidity tend to center on the most recently auctioned issues.

Unlike Treasury bonds and notes, Treasury bills do not pay interest. Instead, the Treasury sells bills at a discount from their principal amount (par value). The investment return consists of the difference between the discounted purchase price and the principal amount payable at maturity. Treasury bills are issued in maturities of 13, 26 or 52 weeks.

Return on Treasury bills is commonly expressed in terms of a discount rate which represents an annualization (based on a 360-day year) of the percentage discount at which the bills are sold.

EXAMPLE: If a 13-week (91-day) Treasury bill with a principal amount of $1,000,000 is sold for $970,000, the actual discount would be $30,000 or 3% and the discount rate would be approximately 11.9% (360/91 times 3%).

Bills are auctioned by the Treasury on a regular basis, typically at weekly intervals for 13-week and 26-week bills and every four weeks for 52-week bills. While dealers maintain secondary markets in all outstanding Treasury bills, activity tends to center in the

most recently auctioned issues. These are commonly referred to as the "current" 13-week, 26-week, and "year" bills, respectively.

YIELD-BASED OPTIONS

All yield-based options being traded at the date of this booklet are cash-settled European-style options. The underlying yield of these options is the annualized yield to maturity of the most recently issued Treasury security of a designated maturity—*e.g.*, 30-year, 10-year, 5-year—based upon quotations or prices determined in accordance with a method specified by the options market on which the option is traded. If such security is a Treasury bill, the underlying yield is the annualized discount of the Treasury bill. (A discount represents a percentage of principal amount, rather than a return on investment, and is therefore not a true yield.) Underlying yield is stated in terms of a yield indicator, which is the percentage yield multiplied by ten. For example, if the yield is based on a Treasury bill having an annualized discount of 8.715%, the yield indicator would be 87.15.

The designated maturity of the Treasury security from which the underlying yield is determined is a standardized term of every yield-based option that is traded at the date of this booklet. The specific Treasury security having that maturity is not fixed; rather, the underlying yield is derived from the outstanding security of the designated maturity that has the longest remaining life. Newly-auctioned securities having the longest remaining life will replace old issues on the first trading day following their auction. Thus, the specific Treasury security from which the underlying yield is derived may change during the life of the option. Because yield-based options are European-style options, investors ordinarily will know prior to the time an option is exercisable the specific Treasury security from which its exercise settlement value will be determined. However, an option may often be traded for weeks or months before that specific security is auctioned by the Treasury. During that time, trading in the option will be based upon the yield for the Treasury security of the designated maturity that then has the longest remaining life.

EXAMPLE: Yield-based options whose yield is based on 5-year Treasury notes expiring in December

are opened for trading on the business day following the September auction of 5-year notes. Trading in the options will be based upon current yields for the September issue until the October auction of 5-year notes. Beginning on the trading day following the October auction, trading will be based upon current yields for the new 5-year notes. The same process will occur in November. If the options expire on or after the auction date for 5-year notes in December, their exercise settlement value will be based upon the then current yield for the December issue.

Current bid and asked quotations for recently issued Treasury securities of particular maturities are available from normal market sources. Current yield indicator values based upon a sampling of bid and asked quotations from primary dealers are disseminated at frequent intervals during the trading day by an options reporting source. Exercise settlement values for yield-based options whose underlying yields are derived from Treasury securities are based upon the spot yield for the security at a designated time on the last trading day of the option, as announced by the Federal Reserve Bank of New York.

The aggregate cash settlement amount that the assigned writer of a yield-based option is obligated to pay the exercising option holder is the difference between the exercise price of the option and the exercise settlement value of the underlying yield on the last trading day before expiration, as reported by a designated reporting authority, multiplied by the multiplier for the option. Different yield-based options may have different multipliers.

The exercise prices of yield-based options are expressed in terms of the yield indicator. For example, an exercise price of 82.50 would represent a yield of 8.25%.

Each point of premium will correspond to .1% in yield. The dollar value of the premium for a single yield-based option will equal the quoted premium multiplied by the dollar value of the option multiplier. Thus, a premium of 2½ would equal a premium of $250 for an option having a multiplier of 100, or $5000 for an option having a multiplier of 2000.

The premiums of yield-based options are affected by the factors discussed under "Premium" in Chapter II.

Because yield-based options are European-style options and the underlying yield is determined from the most recently auctioned Treasury security with the longest remaining life, a major factor affecting the pricing of such options is likely to be the estimates of market participants of the anticipated yield at expiration, and current yield may be a less significant pricing factor.

Settlement of exercises of yield-based options takes place on the business day immediately following the day of exercise. Investors may determine from their brokerage firms when and how settlement amounts will be credited or debited to their brokerage accounts.

If the U.S. Department of the Treasury ceases to issue, or changes the terms or the schedule of issuance of, Treasury securities of a designated maturity, an adjustment panel has discretion to adjust the terms of the series by substituting other Treasury securities or to make such other adjustment as the adjustment panel may determine. If the options market on which a particular yield-based option is traded should decrease the multiplier for the option, the adjustment panel has discretion to adjust outstanding options affected by the change by proportionately subdividing them or by taking other action.

Rules of the options market on which yield-based options are traded may permit or require suspension of trading in the options if current quotations for the last-auctioned Treasury securities of the designated maturity become unavailable or unreliable. For a discussion of the risks involved in trading halts, see the discussion in Chapter X under "Other Risks."

CHAPTER VI

FOREIGN CURRENCY OPTIONS

Foreign currency options—sometimes referred to simply as currency options—are options to purchase or sell one currency at a price denominated in another currency. The price of one currency in terms of another currency is known as an exchange rate. The exercise price of a currency option thus represents an exchange rate. The currency in which the premium and exercise price are denominated is referred to as the trading currency. The currency to be purchased or sold at the exercise price is the underlying currency.

Certain of the foreign currency options discussed in this chapter, which are referred to as dollar-denominated foreign currency options, are options to purchase or sell underlying foreign currencies for U.S. dollars, and their exercise prices represent the exchange rates of the underlying foreign currencies with respect to the U.S. dollar. Other options (which are referred to as cross-rate foreign currency options or cross-rate options) that are discussed below under "Cross-Rate Foreign Currency Options" are options to purchase or sell an underlying foreign currency at an exercise price that is denominated in another foreign currency. The exercise price of a cross-rate option therefore represents an exchange rate between two foreign currencies.

While most of the foreign currency options that are traded at the date of this booklet are physical delivery options, trading has been introduced in cash-settled foreign currency options. These options are discussed below under "Cash-Settled Foreign Currency Options."

The term "foreign currency" includes not only the currencies of individual nations, but also the European Currency Unit ("ECU"). The ECU, which is composed of specified amounts of various European currencies, is the official medium of exchange of the European Economic Community's European Monetary System and is primarily intended for use in international commerce. As used in this booklet, the term "sovereign government" includes the European Economic Community.

The principal risks of holders and writers of foreign currency options are discussed in Chapter X. Readers interested in buying or writing foreign currency options should not only read this chapter but should also carefully read Chapter X, particularly the discussions under the headings "Risks of Option Holders," "Risks of Option Buyers," "Other Risks," and "Special Risks of Foreign Currency Options."

MARKET FOR FOREIGN CURRENCIES

Understanding the risks inherent in foreign currency options requires familiarity with the characteristics of the markets for the underlying currencies. Readers will find extensive literature on the subject, and this chapter can do no more than briefly summarize the most fundamental characteristics of those markets as they pertain to foreign currency options.

Foreign exchange rates can be free floating or may be subject to a variety of formal or informal governmental exchange rate control mechanisms. Exchange rates of most Western nations are permitted to fluctuate in value relative to the U.S. dollar and to each other. It must be kept in mind, however, that sovereign governments rarely voluntarily allow their currencies to float freely in response to economic forces. To the contrary, sovereign governments use a variety of techniques, such as intervention by a country's central bank or imposition of regulatory controls, to affect the exchange rates of their currencies. Thus, a special risk in trading options on foreign currencies is that governmental actions might be instituted which could interfere with freely determined currency valuation or even with movement of currencies across borders. These risks are specifically addressed under "Special Risks of Foreign Currency Options" in Chapter X.

The market in foreign currencies exists in every large financial center in the world, and primarily consists of trading by the world's international banks. In contrast to the stock market, the market for foreign currencies is decentralized, essentially free from government regulation designed to protect investors (although, as noted above, governments may take various actions that affect their own currencies and the markets on which they are traded), and extremely large. Trading is generally conducted in units equivalent to $1 million to $5 million, and the market is not structured for trading or delivery of small amounts of currency. While a "retail market" for foreign currencies is available for tourists and others engaged in smaller transactions, the

prices available in that market are only generally related to prices in the "wholesale" interbank market, and it is unlikely that the prices in the retail market will be as favorable as the prices for transactions in large amounts of foreign currency.

SPECIAL CHARACTERISTICS OF FOREIGN CURRENCY OPTIONS

Foreign currency options, like other options, provide opportunities for investment and pose risks to investors as a result of fluctuations in the value of the underlying interest. Just as certain options on equity securities are priced in relation to the price of the underlying security, dollar-denominated foreign currency option prices will generally depend in significant part on the U.S. dollar value of the underlying foreign currency. Similarly, the prices of cross-rate options will tend to depend on the relative values of the underlying currency and the trading currency.

The relationship between the value of an underlying foreign currency relative to the trading currency and the prices of options on that underlying foreign currency can be summarized as follows:

1. If the value of an underlying foreign currency rises in relation to the trading currency, call premiums will normally increase and put premiums decrease.

2. If the value of an underlying foreign currency decreases in relation to the trading currency, call premiums will normally decrease and put premiums increase.

EXAMPLE: Assume a dollar-denominated call option gives its holder the right to purchase British pounds at $1.35 each. At expiration, that option will have intrinsic value if the price of the British pound is above $1.35. At the same time, it will have no intrinsic value if the price of the pound is equal to or below $1.35. The change in the price of British pounds may result from a change in the value of the U.S. dollar relative to all other currencies ("strong" dollar, "weak" dollar), from a change peculiar to the British pound ("strong" pound, "weak" pound), or from a combination of the two. In any case, the final measure of the intrinsic value of the option will be the value of the British pound relative to the U.S. dollar.

EXAMPLE: Assume a cross-rate call option gives its holder the right to purchase British pounds at 2.50 German marks ("DM") each. At expiration, that option will have intrinsic value if the price of the British pound in German marks is above DM2.50. It will have no

intrinsic value if the price is equal to or below DM2.50 at that time. Changes in the exchange rate between German marks and British pounds may result from changes in the value of German marks relative to other currencies generally, from changes in the value of the British pound, or from a combination of the two. In any case, the intrinsic value of the option will be determined by the value of the British pound relative to the German mark, and not to the U.S. dollar or any other currency. However, as is noted in the following section, fluctuations in the value of the trading currency relative to other currencies may significantly affect investors who intend to convert their gains or losses into one of those other currencies.

Readers should note that the various expiration dates for foreign currency options are different from the expiration dates for options on other underlying interests. Readers should determine the expiration date of each foreign currency option they wish to buy or write.

SPECIAL FEATURES OF DOLLAR-DENOMINATED FOREIGN CURRENCY OPTIONS

The amount of the foreign currency underlying each foreign currency option (*i.e.*, the unit of trading) is specified by the options market on which the option is traded.

Exercise prices for currently available dollar-denominated options on foreign currencies other than the Japanese yen are stated in U.S. cents per unit of foreign currency. Exercise prices for dollar-denominated Japanese yen options are expressed in hundredths of U.S. cents per unit. In order to determine the total exercise price per contract, it is necessary to multiply the stated exercise price by the unit of trading of the particular option.

EXAMPLE: A dollar-denominated put covering 31,250 British pounds with an exercise price of 130 would entitle the holder to sell the underlying pounds for an aggregate exercise price of $40,625 ($1.30 multiplied by 31,250).

EXAMPLE: A dollar-denominated call covering 6,250,000 Japanese yen with an exercise price of 94 would entitle the holder to buy the underlying yen for an aggregate exercise price of $58,750 ($.0094 multiplied by 6,250,000).

Because the issuer of a particular foreign currency may unilaterally issue a new currency to replace its existing currency or alter the exchange rate or exchange characteristics of its existing currency with respect to other currencies, an adjustment panel has the discretion to adjust the terms of the options on such foreign currency. (At the date of this booklet, the representative of OCC on an adjustment panel has the power to vote on adjustments to all foreign currency options whether or not the votes of the other panel members result in a tie.) Ordinarily, the terms of foreign currency options will not be adjusted to reflect a devaluation or revaluation of a currency. The monetary authorities of the European Economic Community may change the weighting and identity of the currencies comprising the ECU from time to time. Except in extraordinary circumstances, the terms of ECU options will not be adjusted to reflect such changes.

Premiums for currently available dollar-denominated options on foreign currencies other than the French franc and the Japanese yen are expressed in U.S. cents per unit of foreign currency.

EXAMPLE: If a dollar-denominated option covering 62,500 Swiss francs is purchased at a premium of .81, the cost of the option will be $506.25 (.81 cents, or $.0081, times the unit of trading of 62,500).

Premiums for currently available dollar-denominated French franc options are expressed in tenths of U.S. cents.

EXAMPLE: If a dollar-denominated option covering 250,000 French francs is purchased at a premium of .65, the cost of the option will be $162.50 (.065 cents, or $.00065, times the unit of trading of 250,000).

Premiums for currently available dollar-denominated Japanese yen options are expressed in hundredths of U.S. cents.

EXAMPLE: If a dollar-denominated option covering 6,250,000 Japanese yen is purchased at a premium of .42, the cost of the option will be $262.50 (.0042 cents, or $.000042, times the unit of trading of 6,250,000).

Settlement of exercises of physical delivery dollar-denominated and cross-rate options is significantly different from settlement of exercises of other types of options. The following is a description of the settlement procedures pertaining to such options.

Exercises are settled through the facilities of OCC. For this purpose, OCC has established banking arrangements permitting it to receive and deliver each underlying foreign currency in the country of origin in satisfaction of option exercises. (Exercises and assignments of ECU options settle within a country or countries designated by OCC.) Clearing Members ordinarily deliver or receive foreign currency on the fourth business day after exercise that is also a banking day for OCC's correspondent bank in the country of origin. In the case of dollar-denominated options, cash settlement between OCC and Clearing Members (*i.e.*, payment or receipt of the net exercise price for each day's exercises) takes place in the United States or other locations approved by OCC. In some cases, a wholly-owned subsidiary of OCC—The Intermarket Clearing Corporation—which has the same settlement procedures as OCC, may act as OCC's agent in making foreign currency settlements with Clearing Members.

For purposes of settlement between an investor and his brokerage firm, applicable rules require a holder exercising a physical delivery put option and an assigned writer of a physical delivery call option to arrange for the deposit of the requisite units of the underlying foreign currency into a designated bank account in the country issuing that currency no later than the time by which OCC requires delivery to it of foreign currency by its Clearing Members. Through this procedure, investors ordinarily rely upon their brokerage firms to make settlement with them. However, OCC has established procedures whereby Clearing Members may permit customers to make settlement directly with an OCC correspondent bank. (At the date of this booklet, such procedures are not yet available in the case of cross-rate options.) Investors should consult their brokerage firms with respect to these procedures.

At the date of this booklet, OCC expects, subject to regulatory approval, to adopt exercise settlement procedures whereby OCC's obligation to deliver or pay for underlying foreign currencies in satisfaction of option exercises may be discharged by transferring the foreign currency to be delivered, or the net exercise price for foreign currency to be received, to an OCC correspondent bank that is obligated to complete the settlement. Brokerage firms and their customers would then be relying on the correspondent bank to deliver or pay for the underlying foreign currency.

If OCC should determine that foreign governmental restrictions or taxes would prevent the orderly settlement of delivery foreign currency option exercises or would result in undue burdens on OCC or its Clearing Members, OCC has the authority to impose special exercise settlement procedures. These could range from technical changes in delivery procedures to the fixing of U.S. dollar settlement prices. OCC's authority to fix cash settlement prices for foreign currency options applies to both calls and puts. Thus, OCC could authorize exercising foreign currency put holders, as well as assigned call writers, to pay a U.S. dollar settlement price in lieu of delivering the underlying foreign currency. However, OCC also has the authority to prohibit exercises of foreign currency puts by holders who would be unable to deliver the underlying foreign currency. The potential effects of such a prohibition are discussed in paragraph 5 under "Risks of Option Holders" in Chapter X. If special exercise settlement procedures are imposed, investors may determine the nature of such procedures from their brokers.

CROSS-RATE FOREIGN CURRENCY OPTIONS

As noted at the beginning of this chapter, a cross-rate foreign currency option is an option to purchase or sell a foreign currency at an exercise price that is denominated in another foreign currency. An example of a cross-rate option is an option to purchase British pounds at an exercise price denominated in Japanese yen—that is, the trading currency would be the Japanese yen and the underlying currency would be the British pound. The exercise price would be expressed as a certain number of yen per pound. Premiums for cross-rate options are denominated in the trading currency. Thus, in the above example, premiums would be in yen.

The cross-rate options that have been approved for trading as of the date of this booklet are physical delivery European-style options. It is possible that other kinds of cross-rate options will be traded in the future.

Investors in cross-rate options should bear in mind that the magnitude and direction of any change in the value of the underlying currency in relation to the trading currency may be quite different from the magnitude and direction of any contemporaneous change in the value of either of those currencies in relation to a third currency, such as the U.S. dollar. Thus, for example, the British pound may appreciate in relation to the

Japanese yen at the same time that the pound depreciates in relation to the U.S. dollar. As discussed in Chapter X under "Special Risks of Cross-Rate Options," this is of particular significance to investors who intend to convert their profits or losses on cross-rate options into U.S. dollars.

All of the previous discussion in this chapter relating to foreign currency options in general applies equally to cross-rate options except to the extent that it is specifically limited to dollar-denominated options. Certain special features of cross-rate options are discussed below.

SPECIAL FEATURES OF CROSS-RATE OPTIONS

The amount of the foreign currency underlying each cross-rate option (*i.e.*, the unit of trading) is specified by the options market on which the option is traded.

The exercise price of a physical delivery cross-rate option is the price (denominated in the trading currency) at which the underlying currency may be purchased or sold upon exercise of the option. Exercise prices for cross-rate options are generally expressed in terms of units (or fractions of units) of the trading currency per unit of the underlying currency. Therefore, in order to determine the total exercise price per contract, it is necessary to multiply the stated exercise price by the unit of trading of the particular option.

EXAMPLE: The exercise prices of yen-denominated options covering underlying German marks are expressed in yen per mark. Therefore, a put covering 1,000,000 German marks with an exercise price of 93 Japanese yen ("JY") would entitle the holder to sell the underlying marks for an aggregate exercise price of JY93,000,000 (JY93 multiplied by 1,000,000).

The discussion in this chapter of adjustments under the caption "Special Features of Foreign Currency Options" is applicable also to cross-rate options, except that adjustments in the terms of cross-rate options might be made to reflect events affecting the trading currency as well as events affecting the underlying currency.

Premiums for currently available cross-rate options are expressed in units and decimals of the trading currency per unit of the underlying currency.

EXAMPLE: If a yen-denominated option covering 500,000 British pounds is purchased at a premium of 2.63, the cost of the option will be JY1,315,000 (JY2.63 times the unit of trading of 500,000).

Premium settlements of cross-rate options are effected in a trading currency other than U.S. dollars. Similarly, in the event of exercise, the exercise price is paid in the trading currency. OCC has established banking arrangements permitting it to receive and pay foreign currencies in the country of origin for purposes of both premium and exercise settlement of cross-rate options between OCC and its Clearing Members. Customers ordinarily settle with their brokerage firms, although OCC may establish procedures whereby Clearing Members may permit customers to make exercise settlement directly with an OCC correspondent bank. Each customer should consult his brokerage firm to determine the procedures and time requirements for payment of foreign currencies on settlement of transactions in, and exercises of, cross-rate options.

If OCC should determine that foreign governmental restrictions or taxes or other events beyond the control of OCC would prevent the orderly settlement of exercises of, or premium payments with respect to transactions in, cross-rate options or would result in undue burdens on OCC or its Clearing Members, OCC has the authority to impose special settlement procedures. These could range from technical changes in payment procedures for the trading currency or underlying foreign currency to the fixing of U.S. dollar settlement prices payable in lieu of either currency. OCC also has the authority to prohibit exercises of cross-rate options by holders who would be unable to meet the settlement obligations resulting from the exercise. The potential effects of such a prohibition are discussed in paragraph 5 under "Risks of Option Holders" in Chapter X. If special exercise settlement procedures are imposed, investors may determine the nature of such procedures from their brokerage firms.

CASH-SETTLED FOREIGN CURRENCY OPTIONS

At the date of this booklet, cash-settled foreign currency options are also traded. These options are dollar-denominated, European-style options. Each cash-settled foreign currency option has an expiration date not more than approximately two weeks following the initiation of trading in the option. Cash-settled foreign currency options having longer expirations may be traded in the future.

The discussion above in this chapter relating to dollar-denominated foreign currency options generally applies to cash-settled foreign currency options except to the extent that such discussion specifically applies to physical delivery options.

The contract size of a cash-settled foreign currency option, like the size of other foreign currency options, is expressed in terms of the amount of the underlying currency covered by the option.

EXAMPLE: If the exercise price of a cash-settled call option on German marks is 60 (expressed as U.S. cents per mark), the exercise settlement value of the underlying currency is reported as 65, and the unit of trading is 62,500 marks, then the cash settlement amount of the option will be ($.65 minus $.60) multiplied by 62,500 = $3,125.

A cash-settled foreign currency option that, based on its exercise settlement value, is in the money on the expiration date will be automatically exercised on the expiration date. In the future, cash-settled foreign currency options may provide that they will be automatically exercised only if they are in the money by a specified amount on the expiration date.

At the date of this booklet, the exercise settlement value for cash-settled foreign currency options is based upon bid and offer quotations from a sampling of participants in the interbank spot market for the underlying foreign currency at a specified time on the expiration date. The time as of which the exercise settlement value is calculated and the method of calculation is determined by the options market on which the options are traded and may be changed by it at any time. Any such change may be made applicable to options outstanding at the time of the change.

Another special feature of cash-settled foreign currency options having an expiration date of not more than two weeks following the initiation of trading is that option writers must deposit required margin with their brokerage firms within two business days of the trade date. It should be noted that this is a shorter period than the normal period required for other options transactions.

CHAPTER VII

FLEXIBLY STRUCTURED OPTIONS

Flexibly structured options, like the other options discussed in this booklet, are traded on the U.S. options markets and are issued by OCC. However, unlike other options, the terms of flexibly structured options are not all standardized. When a flexibly structured option is purchased and sold in an opening transaction, the parties to the transaction have the flexibility, within limitations set forth in the rules of the options market on which the transaction occurs, to fix certain of the option's terms. The terms of a flexibly structured option which may be fixed by the parties are called variable terms. The flexibility to fix these variable terms is what makes flexibly structured options different from other options.

The principal risks of holders and writers of flexibly structured options are discussed in Chapter X. Readers who are interested in buying or writing flexibly structured options should read not only this chapter but also all of Chapter X.

Because many of the terms of flexibly structured options are not standardized, it is less likely that there will be an active secondary market in which holders and writers of such options will be able to close out their positions by offsetting sales and purchases. See paragraph 1 under "Special Risks of Flexibly Structured Options" in Chapter X.

The trading procedures established by the options markets for transactions in flexibly structured options differ from the procedures for transactions in other options. Readers desiring information about the trading procedures of an options market for flexibly structured options may obtain that information from that market.

The options markets may fix minimum size or minimum monetary values for transactions in flexibly structured options. Flexibly structured options may be useful to sophisticated investors seeking to manage particular portfolio and trading risks. However, as a result of these minimums, as well as the special trading procedures and reduced likelihood of there being a

secondary market, flexibly structured options transactions are not suitable for investors who are not financially able to bear the risks of maintaining such minimum positions in flexibly structured options.

SPECIAL FEATURES OF FLEXIBLY STRUCTURED OPTIONS

DESIGNATION OF TERMS—The parties to an opening transaction in flexibly structured options may designate the option's variable terms in accordance with the rules of the options market where the transaction occurs. Included among the terms that an options market may identify as variable terms are the specification and amount of the underlying interest, whether the transaction involves a put, call or spread, the style of the option, the exercise price, the cap interval of a capped option, the expiration date, the method for determining the exercise settlement value of a cash-settled option that is exercised on the expiration date, the settlement currency of a cash-settled option, the premium currency, and the trading currency of a foreign currency option.

Only those terms identified as variable terms by the options market where the opening transaction occurs may be designated by the parties. All other terms are standardized in accordance with the rules of OCC and the options market. The rules of an options market may impose limitations on the variable terms which the parties may designate. For example, an options market may require that the expiration date of a flexibly structured option not fall within a specified period of time or that the life of the option not exceed a maximum permissible term. As another example, if the exercise settlement value of an index option is based on a specified average, an options market may require that the average conform with the averaging parameters established by the market. In addition, the underlying interest, the settlement currency, the premium currency and the trading currency, may be designated only from those available for flexibly structured options on the options market, and an options market may require that the premium currency be the same as the settlement currency.

MINIMUM SIZE REQUIREMENTS—Every transaction in flexibly structured options must satisfy the minimum size or monetary value requirements of the options market where the transaction occurs. The minimum requirements may be larger for an opening transaction in a series in which there is no open interest than for other transactions (whether opening or closing) in that series. An options market may also impose minimum size or monetary value requirements on exercises of flexibly structured options. Information as to such minimums may be obtained from the options market where the options are traded.

POSITION and EXERCISE LIMITS—The options markets may establish special position and exercise limits for flexibly structured options. Such limits may differ from the limits applicable to other options, although an options market may require that positions in certain flexibly structured options be aggregated with positions in certain other options. Information concerning position and exercise limits of particular flexibly structured options may be obtained from the options market where the options are traded or from brokerage firms.

TRADING PROCEDURES—The trading hours and trading procedures for flexibly structured options may differ from the trading hours and procedures for other options. These special procedures may mean that the market-making systems that are applicable to other options may not be applicable to flexibly structured options, that there may not be continuous quotations for flexibly structured options, and that quotations may be provided only in response to a specific request as the basis for trading with the party making the request.

EXERCISES and SETTLEMENTS—In general, the exercise, assignment and settlement of flexibly structured options occurs in the same manner as, and are subject to the same time frames and procedures that are applicable to, other options of the same style and having the same underlying interest. See Chapter VIII. However, unlike most other options, flexibly structured options (other than foreign currency options) that are in the money on the expiration date may be exercised automatically. In the future it may be provided that flexibly structured options will be exercised automatically only if they are in the money by a specified amount.

EXERCISE SETTLEMENT VALUE—The method of determining the exercise settlement value on the expiration date of a flexibly structured index option is a variable term that is fixed by the parties in their opening transaction. For example, the parties may specify that such exercise settlement value will be determined with reference to opening prices of the constituent securities of the index, their closing prices, an average of

their high and low prices, an average of opening and closing prices, an average over a stated period of time, or another average that conforms with the parameters established by the options market. However, under the OCC rules in effect at the date of this booklet, the method of determining the exercise settlement value for an exercise that occurs on a day other than the expiration date is not a variable term. The exercise settlement value for such exercises of flexibly structured index options will be the value derived from the closing prices of the constituent securities on the day of exercise (as reported by the reporting authority), and the exercise settlement value of other flexibly structured options will be determined in the same manner as it is determined for other options on the same underlying interest that are traded on the options market where the opening transaction in the flexibly structured option occurred.

SETTLEMENT CURRENCY—The settlement currency may be a variable term to be fixed by the parties out of those currencies specified by the options market on which the transaction occurs as being available for flexibly structured options. The settlement currency may be the currency in which the premium is payable. In addition, brokerage firms may require their customers to make margin payments in the settlement currency.

If the settlement currency and premium currency are not U.S. dollars, settlement of premiums and exercises is generally made through the procedures and arrangements established by OCC for cross-rate foreign currency options. See "Special Features of Cross-Rate Options" in Chapter VI. If ECUs are the settlement currency, settlements can occur in the country or countries designated by OCC.

CHAPTER VIII

EXERCISE AND SETTLEMENT

Although most option holders and writers close out their options positions by an offsetting closing transaction, investors should nonetheless be familiar with the rules and procedures applicable to exercise. Such an understanding can help an option holder determine whether exercise might be more advantageous than an offsetting sale of the option. An option writer needs to understand exercise procedures because of the possibility of being assigned an exercise. Once an exercise of an option has been assigned to an option writer—even though he may not yet have been notified of the assignment—the writer can no longer effect a closing transaction in that option but must instead purchase or sell the underlying interest for the exercise price (or, in the case of a cash-settled option, pay the cash settlement amount).

HOW TO EXERCISE

The period during which an option is exercisable depends on the style of the option. This is discussed under "Style of Option" in Chapter II.

In order to exercise most options traded at the date of this booklet, action must be taken by the option holder prior to the expiration of the option. However, some options may be subject to automatic exercise. For example, capped options are subject to automatic exercise if the automatic exercise value of the underlying interest hits the cap price for the option, and certain other options are subject to automatic exercise at expiration if they are then in the money (or, in the case of some options, in the money by a specified amount).

To exercise an option that is not subject to automatic exercise, the holder must direct his brokerage firm to give exercise instructions to OCC. In order to ensure that an option is exercised on a particular day, the holder must direct his brokerage firm to exercise before the firm's cut-off time for accepting exercise

instructions for that day. Different firms may have different cut-off times for accepting exercise instructions from customers, and those cut-off times may be different for different options.

A brokerage firm's cut-off time for accepting exercise instructions becomes critical on the last trading day before an option expires. An option that expires unexercised becomes worthless. An option holder who intends to exercise an option before expiration must give exercise instructions to his brokerage firm before the firm's cut-off time for accepting exercise instructions on the last trading day before expiration. Many brokerage firms accept standing instructions to exercise, or have procedures for the exercise of, every option which is in the money by a specified amount at expiration. These procedures often incorporate by reference OCC's administrative procedures that provide for the exercise of every option that is in the money by a specified amount at expiration unless the Clearing Firm carrying the option in its accounts instructs OCC not to exercise the option. Investors should determine from their brokerage firm the applicable cut-off times, the firm's procedures for submitting exercise instructions, and whether any of their options are subject to automatic exercise. Investors should also determine whether the exercise of their options is subject to standing instructions of their brokerage firm, and, if so, they should discuss with the firm the potential consequences of such instructions.

In highly unusual circumstances (*e.g.*, where a brokerage firm is unable to receive instructions from its customers), a firm may be authorized under applicable rules to make an exception to its regular cut-off time. However, in order for an option to be exercised, the brokerage firm must in any event pass on its customer's exercise instructions to OCC before expiration. OCC may allow exercises for a limited time after expiration in the unlikely event that OCC is unable to follow its normal procedures for receiving exercise instructions from Clearing Members on the expiration date. Subject to that very limited exception, OCC has no authority to extend the expiration of any option.

Once an exercise instruction is given by a Clearing Member to OCC, it cannot ordinarily be revoked except to correct a bona fide error that is specified in a request filed by the Clearing Member prior to a deadline specified in OCC's rules.

ASSIGNMENT

OCC assigns exercises in standardized lots to Clearing Member accounts that reflect the writing of options identical to the exercised options. A description of OCC's assignment procedures is available from OCC on request at the address set forth in paragraph 1 of Chapter XI of this booklet. Assignments are ordinarily made prior to the commencement of trading on the business day following receipt by OCC of the exercise instruction. In the case of options traded in evening sessions, exercise instructions received by OCC on a business day are ordinarily assigned prior to the opening of trading in that day's evening session.

If exercises are assigned by OCC to a Clearing Member's customers' account, the Clearing Member must then assign them to customers maintaining positions as writers of the exercised options series. The rules of the options markets require their member firms to allocate assignments to customers either on a random selection basis or on a "first-in, first-out" basis and to inform their customers which method is used and how it works. Regardless of the method used, option writers are subject to the risk each day their options are exercisable that some or all of them may be assigned. (See the discussion in Chapter X under "Risks of Option Writers.")

It is possible that an option writer will not receive notification from its brokerage firm that an exercise has been assigned to him until one or more days following the date of the initial assignment to the Clearing Member by OCC. This creates a special risk for uncovered writers of physical delivery call stock options. This is discussed in paragraph 8 under "Risks of Options Writers" in Chapter X and under "Settlement" in this chapter.

SETTLEMENT

Settlements between brokerage firms or their agents on virtually all exercised physical delivery stock options are routinely handled through stock clearing corporations in much the same way as ordinary purchases and sales of the underlying equity security. Promptly after the exercise and assignment of a physical delivery stock option, OCC reports it to the designated stock clearing corporations of the Clearing Members representing the exercising holder and the assigned writer. If neither stock clearing corporation rejects the transaction by a time specified in their

agreements with OCC, settlement is effected pursuant to the rules of those clearing corporations, and OCC has no further responsibility to either the exercising holder or the assigned writer.

In a few cases—which usually occur because an underlying equity security is no longer eligible for clearance through a stock clearing corporation—settlements calling for the delivery of that security are made directly between Clearing Members. OCC's rules provide protect procedures for exercise settlements made directly between Clearing Members that involve the delivery of securities which either have been called for redemption, are due to expire or with respect to which a call or expiration date is impending, or are subject to an offer which will expire, if the expiration time (as defined in OCC's rules) is on or after the exercise settlement date for the option. Under these protect procedures, the Clearing Member entitled to receive the securities may give a liability notice to the delivering Clearing Member by a specified cut-off time prior to the expiration time. If a liability notice is so given and the securities are not delivered sufficiently in advance of the expiration time to permit the receiving Clearing Member to obtain their benefit, the delivering Clearing Member will be liable for any resulting damages. If the failure to deliver was the fault of the Clearing Member's customer, the Clearing Member may (depending on its own procedures) pass that liability on to the customer. Investors should be aware that correspondent clearing corporations may have protect procedures in respect of the settlements made through them.

At the date of this booklet, the regular exercise settlement date for physical delivery stock options is the fifth business day after exercise, but the SEC has adopted a rule that requires the regular settlement date to be the third business day after an exercise that takes place on or after June 1, 1995. The regular exercise settlement dates for all other types of physical delivery options traded at the date of this booklet are described in the separate chapters of the booklet discussing those options.

At the date of this booklet, settlements of exercises of cash-settled options and foreign currency options are effected by Clearing Members through OCC. Settlement of exercises of cash-settled options—through the payment in cash of the cash settlement amount—ordinarily takes place on the business day immediately following the day of exercise. However, cash-settled

capped options that have been automatically exercised on any trading day other than the one immediately prior to expiration are settled on the second business day after the automatic exercise is triggered. The settlement of exercises of cash-settled options that have a settlement currency that is not U.S. dollars is discussed under "Settlement Currency" in Chapter VII.

OCC has authority to postpone settlement of any option on any type of underlying interest when OCC considers such action to be necessary in the public interest or to meet unusual conditions.

Each brokerage firm involved in an exercise or assignment settles with its own customer. Neither OCC nor any options market has any responsibility to customers with respect to funds or securities that have been received by brokerage firms for their customers. Investors may determine from their brokerage firms when and how settlement amounts will be credited or debited to their brokerage accounts.

In certain unusual circumstances, it might not be possible for uncovered call writers of physical delivery stock and stock index options to obtain the underlying equity securities in order to meet their settlement obligations following exercise. This could happen, for example, in the event of a successful tender offer for all or substantially all of the outstanding shares of an underlying security or if trading in an underlying security were enjoined or suspended. In situations of that type, OCC may impose special exercise settlement procedures. These special procedures, applicable only to calls and only when an assigned writer is unable to obtain the underlying security, may involve the suspension of the settlement obligations of the holder and writer and/or the fixing of cash settlement prices in lieu of delivery of the underlying security. In such circumstances, OCC might also prohibit the exercise of puts by holders who would be unable to deliver the underlying security on the exercise settlement date. When special exercise settlement procedures are imposed, OCC will announce to its Clearing Members how settlements are to be handled. Investors may obtain that information from their brokerage firms.

CHAPTER IX

TAX CONSIDERATIONS, TRANSACTION COSTS AND MARGIN REQUIREMENTS

Options investing, like other forms of investing, involves tax considerations, transaction costs and margin requirements that can significantly affect the profit or loss results of buying and writing options. These are only briefly mentioned in this chapter, but should be understood and taken into account by everyone considering transactions in options.

Notwithstanding the importance of tax considerations, transaction costs and margin requirements, for the sake of simplicity, the examples in this booklet do not take these matters into account. Nevertheless, it should be remembered that their impact may significantly reduce the opportunity for profit and the rate of return obtainable from particular options trading strategies; indeed, their effect may in some instances turn an apparent profit into a loss.

TAX CONSIDERATIONS

The tax consequences of an options transaction depend, in part, on the tax status of the investor and also may differ depending upon the type of underlying interest involved—since the tax rules are not the same for each type of underlying interest—and upon such factors as whether an option is exercised or is the subject of a closing transaction or is allowed to expire or whether an option that is written is covered or uncovered. Some options markets have publications that deal specifically with the tax treatment of various options transactions. These may be obtained from brokerage firms as well as the markets themselves. Readers should also be aware that options transactions effected in foreign markets could subject the parties to tax liability under the laws of the country in which the foreign market is located. Because of the importance of tax considerations to all options transactions, it cannot be emphasized too strongly that the reader considering options should consult with his tax adviser as to how taxes may affect the outcome of contemplated options transactions.

TRANSACTION COSTS

The transaction costs of options investing consist primarily of commissions (which are imposed in opening, closing, exercise and assignment transactions), but may also include margin and interest costs in particular transactions. The impact of transaction costs on profitability is often greater for options transactions than for transactions in the underlying interests because these costs are often greater in relation to options premiums than in relation to the prices of underlying interests. Transaction costs are especially significant in option strategies calling for multiple purchases and sales of options, such as spreads and straddles. Transaction costs may be different for transactions effected in foreign options markets than for transactions effected in U.S. markets. Readers should always discuss transaction costs with their brokerage firms before engaging in options transactions.

MARGIN REQUIREMENTS

Writers of options, other than certain covered call option writers and certain writers of cash secured puts (discussed below), must comply with applicable margin requirements.

In the stock market, margin refers to buying stock or selling stock short on credit. Margin customers are required to keep securities on deposit with their brokerage firms as collateral for their borrowings. But options, unlike stock, cannot be bought on credit under current regulations. In the options market, margin means the cash or securities required to be deposited by an option writer with his brokerage firm as collateral for the writer's obligation to buy or sell the underlying interest, or in the case of cash-settled options to pay the cash settlement amount, if assigned an exercise. Minimum margin requirements are currently imposed by the Board of Governors of the Federal Reserve System, the options markets and other self-regulatory organizations, and higher margin requirements may be imposed—either generally or in individual cases—by the various brokerage firms.

Uncovered writers may have to meet calls for substantial additional margin in the event of adverse market movements. Even if a writer has enough equity in his account to avoid a margin call, increased margin requirements on his option positions will make that equity unavailable for other purposes.

If a holder of a physical delivery call option exercises and wishes to purchase the underlying interest on credit, the holder may be required to deposit margin with the holder's brokerage firm. Holders of physical delivery options on a foreign currency should be aware that, at the date of this booklet, foreign currency has no value for margin purposes except to the extent that credit has been extended on the same foreign currency.

Margin requirements are complex and are not the same for writers of options on different types of underlying interests. Margin requirements are subject to change, and may vary from brokerage firm to brokerage firm. Consequently, the examples in this booklet do not take margin requirements into account. However, margin requirements can have an important effect on an option writer's risks and opportunities.

Persons considering writing options (whether alone or as part of options combinations, such as spreads or straddles) should determine the applicable margin requirements from their brokerage firms and be sure that they have sufficient liquid assets to meet those requirements in the event of adverse market movements.

CHAPTER X

PRINCIPAL RISKS OF OPTIONS POSITIONS

This chapter discusses the principal risks of holders and writers of options. The risks discussed are those that are unique to being an option holder or writer. Risks that relate to such matters as the trading of securities generally; the state of the economy; the supply and demand factors in the options markets and in other related markets; the factors affecting the values of the various underlying interests; the factors affecting the volatility, liquidity and efficiency of the options markets or of other markets or other factors that may affect the pricing of particular options; the quality or operations of the various options markets at any particular time; and the procedures of the various options markets and of brokers in transmitting orders and effecting executions are not within the scope of this booklet and are not discussed. (See the discussion in Chapter XI as to the scope and limitations of this booklet.)

It should also be noted that new types of options and new options strategies are constantly being developed and that some of the risks of new options products and new options strategies do not become apparent until there has been significant experience in trading and using the new options and strategies. Accordingly, readers should be aware that there is a risk in newness, particularly if the new option or strategy is complicated or complex, that cannot always be identified or described.

Readers should also be aware that not all options strategies will necessarily be suitable for them and that certain strategies may expose them to very significant potential losses. For example, the risks associated with the writing of puts or uncovered calls expose investors to such potential losses, and this type of strategy is therefore not suitable for all investors.

Many of the risks are the same for options on all types of underlying interests, although some special risks may apply only to options on particular types of underlying interests. The first three sections of this chapter describe risks that apply generally to options on all types of underlying interests. They are followed

by sections discussing the special risks associated with options on the particular types of underlying interests.

RISKS OF OPTION HOLDERS

1. An option holder runs the risk of losing the entire amount paid for the option in a relatively short period of time. This risk reflects the nature of an option as a wasting asset which becomes worthless when it expires. An option holder who neither sells his option in the secondary market nor exercises it prior to its expiration will necessarily lose his entire investment in the option. (As noted in Chapter VIII, many brokerage firms have procedures for the exercise of options at expiration that are then in the money by a specified amount.)

The fact that options become valueless upon expiration means that an option holder must not only be right about the direction of an anticipated price change in the underlying interest, but he must also be right about when the price change will occur. If the price of the underlying interest does not change in the anticipated direction before the option expires to an extent sufficient to cover the cost of the option, the investor may lose all or a significant part of his investment in the option. This contrasts with an investor who purchases the underlying interest directly and may continue to hold his investment, notwithstanding its failure to change in price as anticipated, in the hope of waiting out an adverse price move and eventually realizing a profit.

The significance of this risk to an option holder depends in large part upon the extent to which he utilizes the leverage of options to control a larger quantity of the underlying interest than he could have purchased directly with the same investment amount. This is illustrated in the following example, which compares the consequences of three different approaches to investing the same amount of money in stock or options, with each approach involving a different degree of leverage.

EXAMPLE: Assume that Investors A, B and C each have $5,000 to invest and that each anticipates an increase in the market price of XYZ stock, which is currently $50 a share. Investor A invests his $5,000 in 100 shares of XYZ. Investor B invests $500 in the purchase of an XYZ 50 call (covering 100 shares of

XYZ at a premium of $5 a share) and invests the remaining $4,500 in a relatively risk-free investment such as Treasury bills. (For purposes of this example, it is assumed that all of the calls are purchased when they have six months remaining until expiration, and that the risk-free investment bears interest at an annual rate of, say, 3.25%—which means that a $4,500 investment will earn approximately $73 in interest over six months.) Investor C invests his entire $5,000 in 10 XYZ 50 calls.

If each option is held for six months and, if it is profitable, is either sold or exercised immediately before it expires, the following table illustrates the dollar and percentage profit or loss that each investor would realize on his $5,000 investment, depending upon the price of XYZ stock when the option expires.

Price of XYZ stock at expiration of option	Investor A		Investor B		Investor C	
	Profit or Loss	% Return	Profit or Loss	% Return	Profit or Loss	% Return
62	+ 1,200	+ 24%	+ 773	+ 15.5%	+ 7,000	+ 140%
58	+ 800	+ 16%	+ 373	+ 7.5%	+ 3,000	+ 60%
54	+ 400	+ 8%	− 27	− 0.5%	− 1,000	− 20%
50	0	0	− 427	− 8.5%	− 5,000	− 100%
46	− 400	− 8%	− 427	− 8.5%	− 5,000	− 100%
42	− 800	− 16%	− 427	− 8.5%	− 5,000	− 100%
38	− 1,200	− 24%	− 427	− 8.5%	− 5,000	− 100%

The table demonstrates how increased leverage results in greater profit potential on the upside and greater risk of loss on the downside. Investor C, as the most leveraged investor, would realize the highest percentage return if the price of XYZ increased to 62, but would incur a 20% loss even if the price of XYZ increased to 54 (assuming he did not sell his options while they had significant remaining time value), and would lose all of his investment if the price of XYZ stayed at or below 50.

2. The more an option is out of the money and the shorter the remaining time to expiration, the greater the risk that an option holder will lose all or part of his investment in the option. The greater the price movement of the underlying interest necessary for the option to become profitable (that is, the more the option is out of the money when purchased and the greater the cost of the option) and the shorter the time within which this price movement must occur, the greater the likelihood that the option holder will realize a loss. This does not necessarily mean that an option must be worthwhile to exercise in order for a holder to realize a profit. Instead, it may be possible for the holder to realize a profit by selling an option prior to its expiration

for more than its original cost even though the option never becomes worthwhile to exercise. (The shorter the time remaining until expiration the less likely it is that this will be possible.)

3. Prior to the period when a European-style option or a capped option is exercisable, the only means through which the holder can realize value from the option (unless the capped option is automatically exercised) is to sell it at its then market price in an available secondary market. If a secondary market for such an option is not available during the time the option is not exercisable, it will not be possible for its holder to realize any value from the option at that time.

4. The exercise provisions of an option may create certain risks for the option holders. If the option does not have an automatic feature, a holder who wishes to exercise must assure that action is taken in a timely manner. See the discussion of "How to Exercise" in Chapter VIII.

On the other hand, if the option has an automatic exercise feature—such as one that will cause the option to be automatically exercised at the expiration if it is in the money by a specified amount—the option may be exercised at a price at which the holder would not voluntarily choose to exercise in view of the transactions costs of exercise or other factors. The transaction costs associated with the exercise could even exceed the cash settlement amount of the option, with the result that the holder would realize a net loss from the exercise. Conversely, an option that has a cash settlement amount that is less than the threshold amount cannot be exercised even though the option holder's transaction costs may be low enough to permit the option to be exercised profitably. In such a case, the option may expire unexercised.

The automatic exercise feature of capped options imposes a maximum value that a holder of these options can receive. Even if the option holder expects the value of the underlying interest to continue to move in a favorable direction prior to its expiration, the automatic exercise feature will prevent the holder from realizing any gain from the option in excess of the cap interval times the multiplier for the option.

5. The courts, the SEC, another regulatory agency, OCC or the options markets may impose exercise restrictions. While an American-style option can normally be exercised at any time prior to its expiration,

OCC and the options markets have authority to restrict the exercise of options at certain times in specified circumstances. The options markets often exercise such authority with respect to an option in which trading has been halted. If a restriction on exercise is imposed at a time when trading in the option has also been halted, holders of that option will be locked into their positions until either the exercise restriction or the trading halt has been lifted.

Exercise restrictions imposed by OCC and the options markets affecting cash-settled options generally cannot be continued in effect beyond the opening of business on the last trading day before their expiration. Such exercise restrictions affecting physical delivery options generally cannot be continued beyond the opening of business on the tenth business day before their expiration, but with one important exception. If OCC determines that the available supply of a security underlying a physical delivery option appears to be insufficient to permit delivery of the security by the writers of all outstanding calls in the event of exercise, or that foreign government restrictions would prevent or unduly burden the orderly settlement of exercises of foreign currency options, OCC may indefinitely prohibit the exercise of puts by holders who would be unable to deliver the underlying security. The holder of such a put could lose his entire investment in the option if the prohibition remained in effect until the put's expiration and the holder was unable either to acquire the underlying interest or to sell his put in the market. The put holder might be unable to do either because the very event that caused OCC to impose the exercise prohibition—*e.g.*, a suspension of trading in an underlying stock—might not only make it difficult or impossible to obtain the underlying interest, but might also impair the market in options on that interest.

It is also possible that a court, the SEC or another regulatory agency having jurisdiction would impose a restriction which would have the effect of restricting the exercise of an option. In such a case the option would not be exercisable until the restriction was terminated. In the remote possibility that the restriction were to remain in effect until the expiration of the option—which has never yet occurred—the option would expire worthless, and the holder would lose the entire amount that he paid for the option.

RISKS OF OPTION WRITERS

1. An option writer may be assigned an exercise at any time during the period the option is exercisable. Starting with the day it is purchased, an American-style option is subject to being exercised by the option holder at any time until the option expires. This means that the option writer is subject to being assigned an exercise at any time after he has written the option until the option expires or until he has closed out his position in a closing transaction. By contrast, the writer of a European-style or capped option is subject to assignment only when the option is exercisable or, in the case of a capped option, when the automatic exercise value of the underlying interest hits the cap price.

An assigned writer may not receive notice of the assignment until one or more days after the assignment has been made by OCC. Once an exercise has been assigned to a writer, the writer may no longer close out the assigned position in a closing purchase transaction, whether or not he has received notice of the assignment. In that circumstance, an attempted closing purchase would be treated as an opening purchase transaction.

If an option that is exercisable is in the money, the option writer can anticipate that the option will be exercised, especially as expiration approaches. Once he is assigned an exercise, the assigned writer must deliver (in the case of a call) or purchase (in the case of a put) the underlying interest (or pay the cash settlement amount in the case of an in the money cash-settled option). The consequences of being assigned an exercise depend upon whether the writer of a call is covered or uncovered, as discussed below.

2. The writer of a covered call forgoes the opportunity to benefit from an increase in the value of the underlying interest above the option price, but continues to bear the risk of a decline in the value of the underlying interest. Unlike a holder of the underlying interest who has not written a call against it, the covered call writer has (in exchange for the premium) given up the opportunity to profit from an increase in the value of the underlying interest above the exercise price. If he is assigned an exercise, the net proceeds that he realizes from the sale of the underlying interest pursuant to the exercise could be substantially below its prevailing market price.

EXAMPLE: When XYZ stock was $50, the investor collected a $4 a share premium by writing an XYZ 50 delivery call. As expiration approaches, the stock has risen to $58 and he is assigned an exercise. His total return, in addition to any dividends received, will be the $50 exercise price he is paid for the stock plus the $4 premium collected when the option was written—$4 a share less than the $58 he could have sold the stock for if he had not written the option.

On the other hand, if the value of the underlying interest declines substantially below the exercise price, the call is not likely to be exercised and, depending upon the price paid for the underlying interest, the covered call writer could have an unrealized loss on the underlying interest. However, that loss will be wholly or partially offset by the premium he received when he wrote the option.

3. The writer of an uncovered call is in an extremely risky position and may incur large losses if the value of the underlying interest increases above the exercise price. The potential loss is unlimited for the writer of an uncovered call. When a physical delivery uncovered call is assigned an exercise, the writer will have to purchase the underlying interest in order to satisfy his obligation on the call, and his loss will be the excess of the purchase price over the exercise price of the call reduced by the premium received for writing the call. (In the case of a cash-settled option, the loss will be the cash settlement amount reduced by the premium.) Anything that may cause the price of the underlying interest to rise dramatically, such as a strong market rally or the announcement of a tender offer for an underlying stock at a price that is substantially above the prevailing market price, can cause large losses for an uncovered call writer.

EXAMPLE: An investor receives a premium of $4 a share for writing an uncovered XYZ 50 call option and the stock price jumps to $69 as the option approaches expiration. If the investor liquidates his option position at, say, $19, in an offsetting closing purchase transaction, he will incur a loss of $1,500 (the $1,900 paid in the offsetting purchase transaction less the $400 option premium received when the option was written).

The writer of an uncovered call is in an extremely risky position and may incur large losses. Moreover, as discussed in Chapter IX, a writer of uncovered calls must meet applicable margin requirements (which can rise substantially if the market moves adversely to the

writer's position). Uncovered call option writing is thus suitable only for the knowledgeable investor who understands the risks, has the financial capacity and willingness to incur potentially substantial losses, and has sufficient liquid assets to meet applicable margin requirements.

4. As with writing uncovered calls, the risk of writing put options is substantial. The writer of a put option bears a risk of loss if the value of the underlying interest declines below the exercise price, and such loss could be substantial if the decline is significant. The writer of a put bears the risk of a decline in the price of the underlying interest—potentially to zero. A put writer of a physical delivery option who is assigned an exercise must purchase the underlying interest at the exercise price—which could be substantially greater than the current market price of the underlying interest—and a put writer of a cash-settled option must pay a cash settlement amount which reflects the decline in the value of the underlying interest below the exercise price. Unless the put is a cash-secured put (discussed below), its writer is required to maintain margin with his brokerage firm. Moreover, the writer's purchase of the underlying interest upon being assigned an exercise of a physical delivery option may result in an additional margin call.

A requisite for writing puts is an understanding of the risks, the financial capacity and willingness to incur potentially substantial losses, and the liquidity to meet margin requirements and to buy the underlying interest, or to pay the cash settlement amount, in the event the option is exercised. A writer of an American-style put can be assigned an exercise at any time during the life of the option until such time as he enters into a closing transaction with respect to the option. Since exercise will ordinarily occur only if the market price of the underlying interest is below the exercise price of the option, the put writer of a physical delivery option can expect to pay more for the underlying interest upon exercise than its then market value.

EXAMPLE: At a time when XYZ stock is $50, an investor receives a $300 premium ($3 a share) by writing an XYZ 50 put. Subsequently the stock price declines to $40 and he is assigned an exercise. The investor must purchase the stock at $50. Even though the $3 a share premium reduces his effective cost to $47, that is still substantially higher than the $40 market price of the stock.

The put writer's exposure to margin requirements can be eliminated if the put writer elects to deposit cash equal to the option exercise price with his brokerage firm. Under this strategy, known as cash-secured put writing, the option writer is not subject to any additional margin requirements regardless of what happens to the market value of the underlying interest. In the meantime, the option writer might earn interest by having the cash invested in a short-term debt instrument—for example, in a Treasury bill. However, a cash-secured put writer is still subject to a risk of loss if the value of the underlying interest declines.

EXAMPLE: An investor receives a $500 premium for writing an XYZ 50 put option with six months remaining until expiration and deposits with his broker $5,000 invested in Treasury bills which, over the six month option life, will earn interest of $250. If he has not been assigned an exercise by expiration, the investor will have a total return of $750 (option premium of $500 and interest of $250). On the other hand, if the price of XYZ stock were to fall below $42-1/2 and the investor is then assigned an exercise, he would have a net loss—that is, the market price of the XYZ stock he would be required to purchase would be below the exercise price by more than the combined premium income and interest earned.

5. The risk of being an option writer may be reduced by the purchase of other options on the same underlying interest—and thereby assuming a spread position—or by acquiring other types of hedging positions in the options markets or other markets. However, even where the writer has assumed a spread or other hedging position, the risks may still be significant. See paragraph 1 under "Other Risks" below.

6. The obligation of a writer of an uncovered call or of a put that is not cash-secured to meet applicable margin requirements creates additional risks. If the value of the underlying interest moves against the writer's position, or if there is a significant change in the volatility or liquidity of the underlying interest, related interests, or the option, or if the writer's brokerage firm otherwise requires, the firm may request significant additional margin payments. If those payments are not made, the firm may have the right to liquidate the options positions and other securities positions in the writer's account with little or no prior notice.

7. Since the leverage inherent in an option can cause the impact of price changes in the underlying

interest to be magnified in the price of the option, a writer of an option that is uncovered and unhedged may have a significantly greater risk than a short seller of the underlying interest. This is illustrated by the table set forth in paragraph 2 under "Risks of Option Holders" above. If an investor had sold short 100 shares of XYZ to Investor A in that table in order to receive $5,000 in proceeds, the investor would have lost $1,200 if the market price of XYZ had increased to 62. On the other hand, if, in order to receive $5,000 in proceeds, the investor had written 10 XYZ 50 uncovered calls, he would have lost $7,000 if the market price of XYZ had increased to 62.

8. The fact that an option writer may not receive immediate notification of an assignment creates a special risk for uncovered writers of physical delivery call stock options that are exercisable when the underlying security is the subject of a tender offer, exchange offer, or similar event. A writer who fails to purchase the underlying security on or before the expiration date for the offer may learn after the expiration date that he has been assigned an exercise filed with OCC on or before that date. At that point, neither the purchase of the underlying security for regular settlement nor the exercise of another option (*e.g.*, the long leg of a spread) will enable the assigned writer to deliver the security on the settlement date for the option exercise (see "Settlement" in Chapter VIII). If the assigned writer fails to make timely settlement, he may be liable for, among other things, the value of the offer (because his non-delivery may have prevented the exercising holder from making timely delivery of the security to the offeror). This risk can be avoided only by purchasing the underlying security on or before the expiration date for the offer. Occasionally, an offer will require that tendered securities be delivered in less than the normal settlement time for exchange transactions after the offer's expiration date. In those cases, call writers will need to purchase the underlying equity security at an earlier point—*i.e.*, at least the number of days equal to the normal settlement time before the offeror's delivery deadline—in order to protect themselves.

9. Although the rules of the options markets establish exercise cut-off times by which exercise instructions of expiring options must be received by brokerage firms from their customers, OCC must accept all exercises which it receives before expiration—even if those exercises are filed with OCC in violation of an options market's rules. Accordingly, there is a risk

that an option writer will be assigned an exercise that is made based on news that is published after the established exercise cut-off time and that the writer may not have an effective remedy to compensate for the violation of the options market's rules.

10. If a trading market in an option should become unavailable, or if the writers of the option are otherwise unable to engage in closing transactions, the writers of that option would remain obligated until expiration or assignment. See the discussions in paragraphs 2 and 3 under "Other Risks" below.

11. A sudden development may cause a sharp upward or downward spike in the value of the interest underlying a capped option. Such a spike could cause the capped option to be automatically exercised, and writers of the option to become obligated to pay the cash settlement amount, even if the effect of the development on the value of the underlying interest completely disappears on the day after the automatic exercise is triggered.

OTHER RISKS

1. Transactions that involve buying and writing multiple options in combination, or buying or writing options in combination with buying or selling short the underlying interests, present additional risks to investors. Combination transactions, such as option spreads, are more complex than buying or writing a single option. And it should be further noted that, as in any area of investing, a complexity not well understood is, in itself, a risk factor. While this is not to suggest that combination strategies should not be considered, it is advisable, as is the case with all investments in options, to consult with someone who is experienced and knowledgeable with respect to the risks and potential rewards of combination transactions under various market circumstances.

The investor considering strategies involving combination transactions should recognize several other risk-related considerations in addition to those already mentioned: the fact that it may at times be impossible simultaneously to execute transactions in all of the options involved in the combination, the difficulty that may be involved in attempting to execute simultaneously two or more buy or sell orders at the desired prices, the possibility that a loss could be incurred on

both sides of a combination transaction, and the increased risk exposure that would result from the exercise or closing out of one side of the trade while the other side of the trade remains outstanding. Also, the transaction costs of combination transactions can be especially significant, since separate costs are incurred on each component of the combination. This can have the effect of requiring a substantial favorable price movement in the underlying interest before a profit can be realized.

Where a combination transaction involves the writing of an in the money American-style option, an investor must keep in mind the possibility of being assigned an exercise, which would eliminate that component of the transaction and could materially change the investor's risk position.

In the case of straddle writing, where the investor writes both a put and a call on the same underlying interest at the same exercise price in exchange for a combined premium on the two writing transactions, the potential risk is unlimited (except in the case of capped options). To the extent that the price of the underlying interest is either below the exercise price by more than the combined premium, or above the exercise price by more than the combined premium, the writer of a straddle will incur a loss when one of the options is exercised. Indeed, if the writer is assigned an exercise on one option position in the straddle and fails to close out the other position, subsequent fluctuations in the price of the underlying interest could cause the other option to be exercised as well, causing a loss on both writing positions.

Combinations involving different styles of options present added complexities. For example, the assigned writer of an American-style option would be unable to cover by exercising a European-style or capped-style option that he holds unless the assignment happened to occur during the exercise period of that option.

Combination transactions involving all cash-settled options also pose the same risks that are discussed for index options under "Special Risks of Index Options" below.

2. If a trading market in particular options were to become unavailable, investors in those options could no longer engage in closing transactions. Moreover, even if the market were to remain available, there may

be times when options prices will not maintain their customary or anticipated relationships to the prices of the underlying interests and related interests. The options markets attempt to provide secondary markets in which holders and writers of options can close out their positions at any time prior to expiration—by making offsetting sales or purchases—but there is no guarantee that such a market will at all times exist for every option. Lack of investor interest, changes in volatility, or other factors or conditions might adversely affect the liquidity, efficiency, continuity or even the orderliness of the market for particular options. Or an options market might permanently discontinue trading of a particular option or of options generally (although it has ordinarily been the practice, when an options market decides to discontinue trading of options on a particular underlying interest, to do so only after all outstanding series of those options have expired if the options are not traded on another options market). A market could become temporarily unavailable if unusual events—such as volume in excess of trading or clearing capability, computer malfunction, fire or natural disaster—were to interrupt normal market operations. As discussed in paragraph 3 below, an options market may also become unavailable in the event trading in the underlying interest is formally suspended or halted. It is also possible that an options market will not open, or will delay opening, trading in certain options even though trading is taking place in the underlying security (or in the constituent securities of an underlying index).

In addition, an options market may at times determine to impose restrictions on particular types of options transactions, such as opening transactions or uncovered writing transactions. For example, if an underlying interest ceases to meet qualifications imposed by the options market or OCC, new series of options on that interest may no longer be opened to replace expiring series, and opening transactions in existing series may be prohibited.

The accounts of options market makers and specialists are carried and guaranteed by a relatively few firms. If one of these firms were to fail, be suspended by OCC, be restricted in its operations, determine or be required to discontinue or reduce its operations, or have a significant reduction in its capital, the markets for particular options, or even for all options, could be disrupted or possibly forced to discontinue trading.

Similarly, in the event an options specialist or a significant group of options market makers should fail or have a significant reduction in capital, the markets in the particular options in which the specialist or market makers traded could be adversely affected. The suspension by OCC of any Clearing Member that maintains significant positions in a particular options series in its accounts could also disrupt the market for that options series.

An options market could also become unavailable because of its own financial problems. For example, if an options market were to be declared bankrupt or if creditors were to take possession of its principal trading systems, it might be unable to continue to operate as an options market.

If a secondary market in a particular option were to become unavailable, a holder of that option would be able to realize his profits or limit his losses only by exercising at a time when the option is exercisable, and a writer of that option would remain subject to assignment until expiration. However, as noted above in paragraph 5 under "Risks of Options Holders," an options market may also restrict exercises of that option.

3. Disruptions in the markets for underlying interests could result in losses for options investors. Each of the options markets has discretion to halt trading in an option in certain circumstances—such as when the market determines that the halt would be advisable in maintaining a fair and orderly market in the option. If trading is halted or suspended in one or more of the markets for an underlying interest, the trading of options on that interest may also be halted. Similarly, if dissemination of the current level of an underlying index is interrupted, or if trading is interrupted in stocks accounting for a substantial portion of the value of an index, the trading of options on that index may be halted. In addition, the rules of the options markets may require them to halt trading in particular types of options in certain circumstances. At the date of this booklet, the U.S. options markets are required (1) to halt trading in all stock options and stock index options when trading in all stocks on the New York Stock Exchange ("NYSE") has been halted by the activation of "circuit breakers" by the NYSE, and (2) to halt trading in all stock options and stock index options for a specified period of time if the Dow Jones Industrial Average ("Average") is calculated at a value of 250 or more points below its closing value on the previous trading

day, or for at least two hours if the Average is subsequently calculated on the same day at a value of 400 or more points below such closing value. These requirements may be changed from time to time.

When trading in an option is halted or suspended, holders and writers of that option will be unable to close out their positions until trading resumes, and they may be faced with substantial losses if the value of the underlying interest moves adversely during that time. For example, if a trading halt in an underlying stock is followed by the announcement of a tender offer at a substantial premium, and the stock reopens at a price reflecting the offer, uncovered call writers may sustain large losses.

Even if options trading is halted, holders of American-style options would still be able to exercise unless exercises were restricted. (However, OCC or an options market may restrict the exercise of an option while trading in the option has been halted, and the restriction may remain in effect until shortly before expiration. See paragraph 5 under "Risks of Option Holders" above.) If the option is exercisable while trading has been halted in the underlying interest, option holders may have to decide whether to exercise without knowing the current market value of the underlying interest. This risk can become especially important if an option is close to expiration, and failure to exercise will mean that the option will expire worthless. If exercises do occur when trading of the underlying interest is halted, the party required to deliver the underlying interest may be unable to obtain it, which may necessitate a postponed settlement and/or the fixing of cash settlement prices (see Chapter VIII).

4. All cash-settled options have certain special risks. These risks, as they apply to cash-settled index options, are discussed under "Special Risks of Index Options" below. That discussion is also applicable to other types of cash-settled options.

If a cash-settled option has a settlement currency other than U.S. dollars, holders and writers will be subject to the same kinds of risks with respect to the foreign currency and the settlement of an exercise as are discussed in paragraphs 1 through 9 under "Special Risks of Foreign Currency Options" below.

5. Holders and writers of a capped option bear the risk that an automatic exercise value will be reported

erroneously by the official reporting source. As a consequence of the error, the options market on which the option is traded may not determine on a timely basis that the automatic exercise feature has been triggered. In that event, the option will not be automatically exercised unless the options market determines on a subsequent trading day that the automatic exercise value for the option has hit the cap price. Alternatively, the options market may determine on the basis of an erroneous report that the automatic exercise feature has been triggered. If the options market makes such a determination and does not correct it on a timely basis, the option will be automatically exercised and the short positions of all writers will be assigned based on the erroneous report.

6. The insolvency of a brokerage firm could present risks for that firm's customers, whether they are investors in options or in other securities. If a brokerage firm or the OCC Clearing Member that carries the firm's accounts at OCC were to become insolvent, the firm's customers could have some or all of their options positions closed out without their consent. Customers whose options positions were not closed out under these circumstances might experience delays or other difficulties in attempting to close out or exercise affected options positions. Similarly, the insolvency of an associate clearing house could present risks for the customers of brokerage firms whose accounts are carried through that associate clearing house.

7. Special risks are presented by internationally-traded options. Because of time differences between the United States and various foreign countries, and because different holidays are observed in different countries, foreign options markets may be open for trading during hours or on days when U.S. markets are closed. Investors buying or writing options in foreign markets at such times should understand that options premiums may not reflect current prices of the underlying interests in the United States. For a discussion of risks pertaining to index options traded in foreign markets, see paragraph 13 under "Special Risks of Index Options" below.

8. Although OCC's rules and procedures have been designed for the purpose, among others, of facilitating the prompt settlement of options transactions and exercises, there is a risk that OCC and its backup system will fail. For example, if Clearing Member insolvencies are substantial or widespread, OCC's ability to honor

all exercises could be impaired. As noted in Chapter XI, the prospectus of OCC relating to options is available from OCC or any of the U.S. options markets, and the registration statement of OCC, which includes OCC's financial statements, is available for inspection at OCC's office and may be obtained from the SEC.

SPECIAL RISKS OF INDEX OPTIONS

1. Writers of cash-settled index call options cannot provide in advance for their potential settlement obligations by acquiring and holding the underlying interest. A call writer can offset some of the risk of his writing position by holding a diversified portfolio of securities similar to those on which the underlying index is based. However, except where the underlying index is a specialized one based on relatively few securities, most investors cannot, as a practical matter, acquire and hold a portfolio containing exactly the same securities in the same proportions as the underlying index. Most writers of cash-settled index calls who also hold positions in securities will therefore bear the risk that the market prices of those securities will not increase as much as the index.

2. Even if the writer of a cash-settled index call option could assemble a securities portfolio that exactly reproduced the composition of the underlying index, the writer still would not be fully covered from a risk standpoint because of the "timing risk" inherent in writing cash-settled options. When a cash-settled index option is exercised, the amount of cash that the holder is entitled to receive is determined by the difference between the exercise price and the exercise settlement value, which is based on the prices of the constituent securities at a particular time on or in relation to the date on which the option is exercised. As with most other kinds of options, the writer will not learn that he has been assigned until the next business day, at the earliest. The time lag between exercise and notice of assignment poses no risk for the writer of a covered physical delivery call, because that writer's obligation is to deliver the underlying interest and not to pay its value as of a fixed time in the past. So long as the writer of a physical delivery call already owns the underlying interest, he can satisfy his settlement obligations simply by delivering it, and the risk that its value may decline after the exercise date is borne by the exercising holder. In contrast, even if the writer of a cash-settled index call holds securities that exactly match the composition of the underlying index, he will

not be able to satisfy his assignment obligations by delivering those securities against payment of the exercise price. Instead, he will be required to pay cash in an amount based on the exercise settlement value on the exercise date; and by the time he learns that he has been assigned, the index may have declined, with a corresponding decline in the value of the securities portfolio. This "timing risk" is an inherent limitation on the ability of writers of cash-settled calls to cover their risk exposure by holding positions in the underlying interest. This risk applies only to American-style options. The writer of a European-style capped call that is exercisable only on the expiration date runs the risk of assignment only with respect to exercises filed on that day. If the call is more than marginally in the money on the preceding trading day, the writer can ordinarily assume that it will be exercised and take market action to protect himself against a subsequent decline in the value of his position in the underlying interest.

3. The timing risk discussed in the preceding paragraph makes spread positions and certain other multiple option strategies involving cash-settled American-style index options substantially riskier than similar strategies involving physical delivery options. With physical delivery options, a person in a spread position can ordinarily satisfy his settlement obligations on the short leg of the spread merely by exercising the long leg if it is in the money. That is, the cash or underlying interest that he obtains by exercising the long leg will ordinarily be sufficient to enable him to meet his settlement obligations on the short leg. With cash-settled index options, however, an investor in a spread position runs the risk that by the time he receives notice of an exercise assignment on the option he has written, the index value will have changed such that exercising the long leg of the spread will not yield sufficient cash to satisfy his obligation on the exercise assignment. Thus, an investor who holds a spread position in cash-settled index options and is assigned an exercise is at risk for any adverse movement in the prices of the constituent securities of the index after the time the exercise settlement value of the assigned short is determined unless the investor is able to exercise the long leg of the spread in time to receive that same exercise settlement value. Other multiple options strategies involving cash-settled options can present similar risks.

4. Readers intending to use index options to hedge against the market risk entailed in investing in individual securities should recognize the complexities of utilizing index options in this manner. Market risk is the risk that factors affecting the stock market as a whole may have a similar effect on the price of a particular equity security. Historically, some securities have tended to be highly sensitive to factors influencing the market generally; others less so. As a result, different securities may be viewed as involving different levels of market risk. In addition, a security's sensitivity to broad market influences may change over time, so that the same security may involve different levels of market risk at different times.

Investors using index options in this manner should also understand that they remain subject to company risk—that is, the risk that factors affecting a particular company, such as its market position or the quality of its management, may cause its securities to perform differently than the market as a whole.

In addition, readers intending to utilize index options to hedge a diversified securities portfolio against market risk should understand that unless the securities in the portfolio exactly mirror the securities in an underlying index, the portfolio and the index may respond differently to a given market influence. For this reason, the use of index options for hedging purposes involves special risks that are not present with "true" hedges—*i.e.*, hedges composed of options on the specific securities in the hedged position. These risks are greatest when options on broad-based indexes are used to hedge a nondiversified securities position. Except where the composition of the position to be hedged is very similar to that of an underlying index, index options may best be understood as a means of reducing some but not all of the risks of a securities portfolio position.

Readers should also be aware that it may not be possible to purchase or liquidate a portfolio of securities at prices that exactly converge with the prices used in determining the exercise settlement values of some index options. For example, if the underlying index is comprised in whole or part of securities whose primary market is the NASDAQ stock market, an investor cannot be certain that he will be able to effect transactions in those securities at the opening or closing prices (as the case may be) used in determining the exercise settlement value.

5. Just as holders and writers of stock options bear the risk that transactions in the underlying security may be erroneously reported, holders and writers of index options bear the risk that the reported current index level may be in error. A person who buys or sells an index option at a premium based on an erroneously reported index level is bound by the trade and has no remedy under the rules of the options markets. Similarly, persons who exercise cash-settled index options or are assigned exercises based on erroneously reported index levels will ordinarily be required to make settlement based on the exercise settlement value as initially reported by the official source of the index, even if a corrected value is subsequently announced. References herein to index values "as initially reported" refer to the values initially reported by the source of the index as definitive, and not to any tentative or preliminary values that may be announced at an earlier time subject to adjustment. In extraordinary circumstances (*e.g.*, where an exercise settlement value as initially reported is obviously wrong and inconsistent with values previously reported, and a corrected value is promptly announced), OCC has discretion to direct that exercise settlements be based on a corrected exercise settlement value. Ordinarily, however, the exercise settlement value as initially reported by the official source of the index will be conclusive for exercise settlement purposes.

6. A holder of a cash-settled index option who exercises it before the exercise settlement value of the index for that day is available runs the risk that the level of the underlying index may subsequently change. If such a change causes the exercised option to fall out of the money, the exercising holder will be required to pay the difference between the exercise settlement value and the exercise price of the option (times the applicable multiplier) to the assigned writer.

EXAMPLE: A holder of an index put option that settles based on the closing prices of the constituent securities and that has an exercise price of 30 directs his broker to exercise at 10:00 A.M., when the level of the underlying index is 28. If the underlying index stays at that level until the close of trading that day, the holder will be entitled to receive $200 in settlement (assuming a multiplier of 100). If, however, the index level rises to 32 based on the closing prices of the constituent securities, the holder will be required to pay $200 to the assigned writer, thereby sustaining a $200 loss on the exercise.

A holder who plans to exercise a cash-settled index option that settles based on closing prices can minimize this risk by withholding exercise instructions until just before the daily exercise cut-off time fixed by his brokerage firm. However, he may not be able to eliminate it entirely. Daily exercise cut-off times for index options may be earlier than those fixed for other types of options and may occur before definitive exercise settlement values have been determined. In the case of the exercise of a cash-settled index option that settles based on opening prices of the constituent securities, this risk applies if the holder submits exercise instructions before the definitive exercise settlement index value has been announced, which may be different from index levels that are initially disseminated at the time of the opening and which may not be available in some cases until several hours after the opening.

7. Cash-settled index options whose exercise settlement values are based on the opening prices of the constituent securities are not traded on the last scheduled trading day for those securities prior to the option expiration date. An option holder will be able to realize value from his option on that day only if the option is in the money and he exercises it. A writer of this type of option who has not previously closed out his position will be unable to do so on that last trading day for the constituent securities and will be at risk of being assigned an exercise.

8. Current index levels will ordinarily continue to be reported even when trading is delayed or interrupted in some or all of the constituent securities of the index or when the reporting of transactions in those securities has been delayed. In that event, the reported index levels will be based on the most recent reported prices of the constituent securities—whether or not those securities are being currently traded. As a result, reported index levels may at times be based on non-current price information with respect to some or even all of the constituent securities of an index. If this condition existed at the time of determining the exercise settlement value of an exercised option, that exercise would be settled on the basis of an index level that might not reflect current price information with respect to constituent securities accounting for a significant portion of the value of the index. (Indeed, as noted in Chapter IV, an exercise settlement value that is based on the opening prices of the constituent securities may not coincide with, and may diverge substantially from, the index values that are reported at the time of the

opening.) Moreover, if the index underlay a capped index option, that option would or would not be automatically exercised based on an index level that might not reflect the true state of the market at the time.

9. OCC has no authority, and the options markets on which capped index options are traded do not intend as of the date of this booklet, to restrict the automatic exercise of capped index options. It is therefore possible that automatic exercise of a capped index option could occur on a day when OCC or an options market has imposed restrictions on the exercise of other styles of options on the same underlying index. It is also possible that automatic exercise of a capped index option could occur on a day when the options market has suspended trading in the option. Either of these possibilities could limit the ability of a writer to take action to limit the cost of being assigned an automatic exercise.

10. The purchase and sale of index options in foreign markets at times when U.S. markets are closed may present special risks. Although an underlying index may be based on securities primarily traded in U.S. markets, the index levels reported in foreign options markets at such times may be based on the trading of some or all of the constituent securities in foreign markets, and, in any case, option premiums in the foreign market will not reflect current prices of the constituent securities in U.S. markets. In addition, if a cash-settled index option is exercised through the foreign office of a brokerage firm on a day when U.S. markets are closed, the exercise settlement value of the option will not be known until the time fixed for determining exercise settlement values on the next day on which U.S. markets are open. The corresponding risks would apply to the trading in U.S. markets of options based on indexes of securities primarily traded in foreign markets.

SPECIAL RISKS OF DEBT OPTIONS

1. Many of the special risks associated with debt options result from the character of the markets in which the underlying debt securities are issued and traded and the distinctive characteristics of debt securities. The vast majority of the trading activity in bonds and money market instruments takes place in a dealer market. Dealers typically maintain markets in all outstanding issues of Treasury securities, but most of the

activity tends to center on recently issued securities. Liquidity is generally greater and quotations are generally tighter on recent issues than on older issues.

There are numerous dealers in all of the Treasury securities from which the yield on the options now traded is determined, but at the date of this booklet there is no comprehensive consolidation of bids and offers or public reporting of transaction prices in those securities such as exists in the markets for stocks. While there is some dissemination of representative bids and offers, at the date of this booklet anyone interested in buying or selling a Treasury security usually must have his brokerage firm or bank contact one or more dealers individually to learn their current quotations.

The absence of last sale information and the limited availability of quotations for debt instruments can make it difficult for many investors to obtain timely, accurate data about the state of the market for the underlying debt securities. At the same time, dealers in the underlying securities have access to private quotation networks that give actual current bids and offers of other dealers. This information is not available to most investors. As a result, these dealers may have a significant advantage over other participants in the debt options markets.

2. Another important difference between the stock market and the market for Treasury securities is that stock quotations are generally keyed to a 100-share round lot while the basic unit of trading in the debt securities market typically involves much larger dollar amounts. A round lot for most dealers in Treasury securities is, at a minimum, $1,000,000 of principal amount; and on Treasury bills it can be larger. Most dealers are oriented toward doing business with large institutional customers or other dealers. As a result, investors buying or selling debt securities in amounts smaller than round lots can expect to pay more and receive less than dealer quotations for round lot transactions.

The unit of trading for price-based debt options is likely to involve larger dollar amounts of the underlying debt security than is the case with stock options. In general, this means that: (a) premiums for such an option will tend to be higher than for a stock option, and (b) the increase or decrease in the price of an

option that is associated with any given change in the price of the underlying security will tend to be larger for many such debt options.

If the unit of trading for a physical delivery price-based debt option is smaller than $1,000,000, investors who buy or write options covering principal amounts other than a multiple of $1,000,000 may be disadvantaged by having to deal in an odd-lot market for the underlying debt security at prices that are less favorable than for round lots.

3. In the event of a shortage of the underlying debt security deliverable on exercise of a physical delivery price-based debt option, OCC has the authority to permit other generally comparable securities to be delivered in fulfillment of the delivery obligation. If OCC exercises its authority to allow such other securities to be delivered, it may also adjust the exercise prices of the affected options by setting different prices at which otherwise non-eligible securities may be delivered. As an alternative to permitting such substitute deliveries, OCC may impose special exercise settlement procedures similar to those applicable to stock options, including the fixing of a cash settlement price payable by writers who would otherwise be unable to meet their delivery obligations (see "Settlement" in Chapter VIII), and/or prohibit the exercise of puts by holders who would be unable to meet the resulting settlement obligations (see paragraph 5 under "Risks of Option Holders" above).

4. The hours of trading for debt options may not conform to the hours during which the debt securities are traded. To the extent that the options markets close before the markets for the underlying or other related instruments, significant price and rate movements can take place in the underlying markets that may not be reflected in the options markets. The possibility of such movements should be taken into account in relating closing prices in the options markets to those in the underlying markets. In addition, there is a risk that debt options may be exercised on the basis of price movements in the underlying security after the close of trading in the options markets when writers are no longer able to close out their short positions.

5. Because exercises of yield-based options are settled in cash, option writers cannot fully provide in advance for their potential settlement obligations by acquiring and holding the Treasury security from which the underlying yield is determined. A writer of a yield-

based option can theoretically offset most of the risk of his writing position by acquiring Treasury securities of the designated maturity period on which the underlying yield is based. Offsetting risk in this way may be difficult to do in practice, however. While it is possible at any given time to calculate the principal amount of Treasury securities needed to assure that the risk of the option position is offset, such calculations are based upon complex mathematical relationships. Moreover, the principal amount of Treasury securities needed to assure that the risk of an options position is fully offset will generally not remain constant throughout the life of the option, but instead will fluctuate as a result of changes in yields and remaining time to maturity. For a given percentage change in yield, this fluctuation will be greater for securities of longer maturity periods than for securities of shorter maturity periods. Furthermore, there can be no assurance that an option writer will be able to sell the Treasury securities that he holds at the option's expiration at the same average yield that is used in calculating the exercise settlement value of the option. Prices, and therefore yields, could differ from dealer to dealer. Moreover, when dealer quotations are averaged in obtaining a yield, they may result in a value which varies from the value that would be obtained by averaging yields representing actual transactions for the same securities during the same time period.

6. Investors in yield-based debt options run the risk that reported yields may be in error. The values disseminated by the designated reporting authority of the options markets during trading and for exercise settlement purposes will ordinarily be averages or medians of dealer quotations or prices, and it is possible that errors could be made in the gathering or averaging of these values. A person who buys or sells an option at a premium based on an erroneous reported yield value is bound by the trade and has no remedy under the rules of the options markets. Similarly, persons who exercise options or are assigned exercises based on erroneous reported yields will ordinarily be required to make settlement based on the value as initially reported by the reporting authority, even if a corrected value is subsequently announced. In extraordinary circumstances (*e.g.*, where a value as initially reported is obviously wrong and inconsistent with values previously reported, and a corrected value is promptly announced), OCC may direct that exercise settlements

be based on a corrected value. Ordinarily, however, the value as initially reported by the official source will be conclusive for exercise settlement purposes.

7. A holder of a yield-based option who exercises it before the exercise settlement value of the underlying yield is available runs the risk that the level of the underlying yield may subsequently change. If such a change causes the exercised option to fall out of the money, the exercising holder will be required to pay the difference between the exercise settlement value and the exercise price of the option (times the applicable multiplier) to the assigned writer. A holder who plans to exercise an option may be able to minimize this risk by withholding exercise instructions until just before the exercise cut-off time fixed by his brokerage firm. However, he may not be able to eliminate the risk entirely. Exercise cut-off times for yield-based options may occur before definitive exercise settlement values are announced. Because exercise cut-off times may vary from brokerage firm to brokerage firm, and there may be different exercise cut-off times for different yield-based options, option holders who anticipate exercising should determine the applicable cut-off times from their brokers.

8. If for any reason there are no quotations available for the Treasury security from which underlying yields of a yield-based option are determined, trading in the option may be halted. If trading is not halted, reported yields may be based on non-current price information for the Treasury security.

9. If OCC determines that the exercise settlement value of the underlying yield for any series of yield-based options is unreported or otherwise unavailable for purposes of calculating the cash-settlement amount of such series, OCC has the authority to suspend the settlement obligations of the exercising and assigned Clearing Members of options of such series or to fix the cash settlement amount for exercised options of such series based on the best information available to OCC, or to do both. Accordingly, there is a risk to both holders and writers of such options that the settlement of exercised options may be postponed and may be based on a determination by OCC rather than by the pricing actions of the market for the Treasury security from which the underlying yield is determined.

SPECIAL RISKS OF FOREIGN CURRENCY OPTIONS

1. The value of any currency, including U.S. dollars as well as foreign currencies, may be affected by complex political and economic factors applicable to the country issuing that currency. The price of a foreign currency option is dependent upon the value of the underlying foreign currency relative to the trading currency as well as the value of both currencies relative to other currencies generally. Fluctuations in the value of the trading currency—whether it is the U.S. dollar (in the case of a dollar-denominated option) or a foreign currency (in the case of a cross-rate option)—will affect exchange rates and the prices of foreign currency options, even in the case of an otherwise stable underlying foreign currency. Conversely, fluctuations in the value of an underlying foreign currency will affect exchange rates and the prices of foreign currency options even if the value of the trading currency remains relatively constant. Investors should consider factors affecting the economies and currency values of both the country of origin for the trading currency and the country of origin for the underlying currency. Although these same considerations apply to dollar-denominated options and cross-rate options, cross-rate options involve factors affecting the economies of at least two foreign countries and may involve consideration by U.S. investors of factors affecting the U.S. economy as well. Accordingly, a U.S. investor in cross-rate options may need to consider a broader range of economic developments than a U.S. investor in dollar-denominated foreign currency options.

2. Even though the intrinsic value of an option is determined by the value of the underlying currency relative to the trading currency, investors who intend to convert gains or losses into U.S. dollars or other currencies may be particularly affected by changes in the exchange rates between their "home" currency and either the trading or the underlying currency.

EXAMPLE: Assume that an investor purchases a yen-denominated, at-the-money call option on British pounds by converting U.S. dollars to Japanese yen. The British pound then appreciates relative to the yen, and at expiration the exercise price is more favorable than the then current exchange rate between yen and pounds. The investor could realize a gain in yen by converting dollars to yen in order to purchase pounds at the exercise price and then reselling the pounds for

yen at the current exchange rate. If the amount of that gain exceeds the premium that the investor paid for the option, the investor will realize a gain in yen on his investment in the option. However, if the yen has depreciated relative to the dollar since the investor purchased the option, the gain may be reduced or even converted to a loss when the yen are converted back to dollars. This is so because, although the yen received upon the sale of the pounds may exceed the exercise price plus the premium paid in yen, there is no guarantee that, when the yen are converted back to dollars at the current rate, the dollars received will exceed the exercise price plus the premium paid in dollars. If the investor converts the pounds directly into dollars rather than to yen and then to dollars, the result would be the same since the amount of the dollars received would be expected to be approximately the same, ignoring any difference in transaction costs and any timing differences in the two-step process.

Similar considerations will apply if the investor liquidates his investment in a cross-rate option by selling it rather than by exercising it.

EXAMPLE: Assume in the previous example that the premium value of the call option has increased permitting the investor to liquidate his investment in the option by selling it for more yen than he paid for it. If the exchange rate between the U.S. dollar and the Japanese yen has not changed, the investor should be able to convert the yen received on the sale of the option to a U.S. dollar amount greater than his original investment. If, on the other hand, the yen has declined in value relative to the U.S. dollar, the investor's gain in yen may be reduced or converted to a loss when the premium received on the sale of the option is converted to dollars.

3. The exchange rates of foreign currencies (and therefore the prices of foreign currency options) could be significantly affected, fixed or supported directly or indirectly by government actions. Government actions could increase risks to investors in both dollar-denominated and cross-rate options if exchange rates were not free to fluctuate in response to other market forces. Investors in options involving currencies of countries that participate in the European Monetary System ("EMS") should note that, as of the date of this booklet, exchange rates among EMS currencies are subject to exchange rate agreements and intervention mechanisms of the EMS. The monetary authorities of other countries may also intervene, either independently or

in concert with others, to attempt to affect the exchange rates between their currencies and other currencies.

4. Because foreign currency transactions occurring in the interbank market involve substantially larger amounts than those likely to be involved in the exercise of individual foreign currency option contracts, investors who buy or write foreign currency options may be disadvantaged by having to deal in an odd lot market for the underlying foreign currencies at prices that are less favorable than for round lots. Because this price differential may be considerable, it should be taken into account when assessing the profitability of a foreign currency option transaction that will involve the exchange of one currency for another.

5. There is no systematic reporting of last sale information for foreign currencies. There is reasonably current, representative bid and offer information available on any market where foreign currency options are traded, in certain brokers' offices, in bank foreign currency trading offices, and to others who wish to subscribe for this information. There is, however, no regulatory requirement that those quotations be firm or be revised on a timely basis. The absence of last sale information and the limited availability of quotations to individual investors may make it difficult for many investors to obtain timely, accurate data about the state of the underlying market. In addition, the quotation information that is available is representative of very large round lot transactions in the interbank market and does not reflect exchange rates for smaller odd lot transactions. Since the relatively small amount of currency underlying a single foreign currency option would be treated as an odd lot in the interbank market, available pricing information from that market may not necessarily reflect prices pertinent to a single foreign currency option contract.

The quotation information available to investors may be from sources that are different from those used to calculate the exercise settlement value of cash-settled foreign currency options. An investor who attempts to realize the intrinsic value of such an option through an exercise rather than by selling the option in a closing transaction runs the risk that the exercise settlement value may be less than appears from the information then available to him.

6. Foreign governmental restrictions or taxes could result in adverse changes in the cost of acquiring or

disposing of foreign currencies. If OCC determines that such restrictions or taxes would prevent the orderly settlement of delivery foreign currency option exercises or would impose undue burdens on parties to exercise settlements, it has authority to impose special exercise settlement procedures, which could adversely affect some investors.

7. The interbank market in foreign currencies is a global, around-the-clock market. Therefore, the hours of trading for foreign currency options do not conform to the hours during which the underlying currencies are traded. To the extent that the options markets are closed while the market for the underlying currencies remains open, significant price and rate movements may take place in the underlying markets that cannot be reflected in the options markets. The possibility of such movements should be taken into account in relating closing prices in the options markets to those in the underlying markets. In addition, this creates a risk that foreign currency options may be exercised on the basis of price movements in the underlying currency after the close of trading in the options markets, when writers are no longer able to close out their short positions.

8. Since exercise settlement of physical delivery foreign currency options—whether they are dollar-denominated or cross-rate options—occurs within the country issuing the underlying foreign currency, investors must accept or make delivery of the trading and underlying foreign currencies through their brokerage firms in conformity with any U.S. or foreign restrictions or regulations regarding the maintenance of foreign banking arrangements by U.S. residents, and may be required to pay any fees, taxes or charges associated with such deliveries.

9. Exercise settlement of physical delivery foreign currency options—whether they are dollar-denominated or cross-rate options—is made through OCC's correspondent banks in the country of origin. Investors may be exposed to losses in the event that a correspondent bank should fail during the settlement process.

10. As in the case of other cash-settled options, writers of cash-settled foreign currency call options cannot fully provide in advance for their potential settlement obligations by acquiring and holding the underlying interest. Although a call writer may hold the quantity of

the currency underlying the option, there is no assurance that if he is assigned an exercise he will be able to sell such currency at the exercise settlement value.

11. If a cash-settled foreign currency option is exercised based upon a reported exercise settlement value that is in error, the holder and the writer will ordinarily be obligated to make settlement based on the exercise settlement value as originally reported, even if the value is subsequently revised or determined to have been inaccurate. In extraordinary circumstances (*e.g.*, where the value as initially reported is obviously wrong and inconsistent with other available price information and a corrected value is promptly announced), OCC has discretion to direct that the exercise settlement be based on the corrected value.

12. If cash-settled foreign currency options expire on a trading day—as is the case with the cash-settled options traded at the date of this booklet—there will ordinarily be an abbreviated trading session in those options on the morning of their expiration date. If the opening of the options market should be delayed for any reason on that day, there may be no trading at all that day in those options. Accordingly, holders and writers who wait until the last trading day to close out their positions in closing transactions in those options run a risk that they may be unable to do so.

13. If OCC determines that the exercise settlement value for any cash-settled foreign currency option is unavailable for purposes of calculating the cash settlement amount, OCC has the authority to suspend the settlement obligations of the exercising holder and assigned writer of such option or to fix the cash settlement amount based on the best information available to OCC, or to do both. Accordingly, there is a risk to both holders and writers that the settlement of exercised cash-settled foreign currency options may be postponed and may be based on a determination by OCC rather than by the procedures specified by the options market on which the options are traded.

SPECIAL RISKS OF FLEXIBLY STRUCTURED OPTIONS

In addition to the risks discussed above, the following special risks are applicable to flexibly structured options.

1. Because flexibly structured options have variable terms that are fixed by the parties, there are no pre-

established series of flexibly structured options. Rather, many different series of flexibly structured options may be created and outstanding at any given time as a result of the various designations of variable terms that are made in different transactions. Secondary trading interest in flexibly structured options may therefore be spread over a larger number of series than the trading interest in other options, the trading interest in any particular series of flexibly structured options may be very limited, the secondary markets in flexibly structured options may be less deep, liquid and continuous than the markets in other options on the same underlying interests, and the premiums for flexibly structured options may not correlate with premiums for such other options.

2. OCC may base its calculations of the margin requirements of OCC's Clearing Members for positions in a series of flexibly structured options on an estimate derived from data and factors OCC deems pertinent in respect of quotations and transactions in that options series and in other options series. Alternatively, OCC may fix such margin requirements at a level it deems necessary to protect the respective interests of OCC, the Clearing Members and the public. As a result, the Clearing Member's margin requirements for positions in flexibly structured options may differ from—and may be significantly greater than—the margin requirements applicable to similar positions in other options on the same underlying interest. Such differences may cause Clearing Members to require customers that maintain positions in flexibly structured options to deposit more margin for flexibly structured options positions than for positions in other options. To the extent OCC's estimate of the current value of a flexibly structured option is used in the determinations of the margin requirements of the Board of Governors of the Federal Reserve System, the options markets and other self-regulatory organizations, it may also cause such margin requirements to be greater than they would be for other options.

CHAPTER XI

SCOPE AND LIMITATIONS OF THIS BOOKLET

Readers should be aware of the scope and limitations of this booklet set forth below:

1. This booklet has been prepared by the U.S. options markets for distribution pursuant to the requirements of SEC Rule 9b-1 under the Securities Exchange Act of 1934 and the rules of the U.S. options markets. This booklet is not intended to meet other requirements which may be in effect in any jurisdiction and should not be relied upon for that purpose.

Under the applicable SEC regulatory scheme for options, this booklet is not a prospectus. Nothing in this booklet should be construed as furnishing investment advice or as being a recommendation, solicitation or offer to buy or sell any option or any other security. A prospectus of OCC relating to options is available without charge upon request addressed to OCC, One Financial Place, 440 S. LaSalle Street, 24th Floor, Chicago, Illinois 60605, or any of the U.S. options markets. The OCC registration statement relating to options, which includes the OCC prospectus and the financial statements of OCC, is available for inspection at the offices of OCC, and copies may be obtained from the SEC, Room 1024, 450 5th Street, N.W., Washington, D.C. 20549, upon payment of the fees prescribed by the SEC. Additional information concerning OCC—but not the options markets—is included in the OCC prospectus and registration statement.

2. Only the U.S. options markets on which an option is authorized to be traded are responsible for the statements in this booklet concerning that option.

3. The options markets do not intend this booklet to be incorporated by reference into the OCC prospectus or into any other publication that may be prepared or distributed by OCC, an options market or any other person (other than a document that has been specifically designated to be a supplement to this booklet and that has been filed with the SEC pursuant to Rule 9b-1). The fact that another document states that this

booklet is available, or states from whom this booklet may be obtained, or recommends that this booklet be read and understood, does not mean that this booklet has been incorporated by reference into that other document.

4. No other publication is incorporated by reference into this booklet. The fact that this booklet refers to information that may be available in other publications does not mean that any of those other publications has been incorporated into this booklet.

5. This booklet does not attempt to present a complete description of all of the provisions governing options. These are set forth in applicable laws, in the rules and regulations of the SEC and other regulatory agencies, and in the rules, interpretations, policies and procedures (collectively called "rules") of OCC, the options markets and the foreign clearing houses that act as "associate clearing houses" of OCC that may be in force from time to time.

This booklet also does not attempt to describe either the rules that govern the structure or conduct of options trading or the forms and procedures for trading in the various options markets. These matters differ from one options market to another, and they may change from time to time. As examples, the various options markets may utilize different market-making systems (with some markets using a specialist system, others a competing market-maker system, and others a combination of the two), order routing systems, and automatic order execution systems. Moreover, as advances are made in computer technology, the trading and market-making systems and the other trading procedures of the options markets are likely to evolve and change—or even be radically different from what they now are.

At particular times—such as when unusual conditions or circumstances exist, which for example may occur on and after days on which there have been substantial or volatile price movements in the securities markets generally or in the markets for underlying or related interests—the options markets may have authority under their rules to modify the application of some or all of their trading rules and procedures or to take such actions as they may deem appropriate in the circumstances. Such actions could include, among other things, changing the manner in which trading in particular options is conducted, extending trading hours for particular options, halting trading in particular options, restricting the types of orders that may be employed, and modifying or eliminating the bid/asked differential at which market-makers or specialists may quote. The taking of such actions by an options market often is promptly disclosed to the trading crowd in that options market, to representatives of brokerage firms that are members of the options market, and/or to price vendors, but the actions may be taken without public notice, and there can be no assurance that disclosure will be made in a manner that will permit investors to learn of the actions in a timely way.

OCC and the options markets have broad discretion under their rules to take a variety of actions in particular circumstances, and readers should not assume that any organization will exercise its discretion in a particular way in any particular circumstance. A statement in this booklet to the effect that OCC or an options market has authority or discretion to take a particular action does not mean that it will necessarily take that action. To the contrary, it should be understood from such a statement that the organization also has authority not to take that action. Moreover, it should be understood that OCC and the options markets have broad discretion in the manner in which they interpret their own rules.

OCC and the options markets have no duty to enforce, or to oversee the enforcement of, each other's rules. OCC and each U.S. options market has a general statutory obligation to enforce compliance with its own rules by its own members. However, there can be no assurance that all such rules will always be complied with by members, since frequently the only means of enforcing compliance with rules is to impose disciplinary sanctions after the fact on those who have violated them.

Readers desiring information concerning the rules of OCC or any of the options markets as to the terms of options, the manner in which options are traded or in which a market functions, the trading hours of a particular options market, or other related matters, or information concerning any of the other matters referred to herein, may obtain the information from the relevant organization. Information concerning a foreign options market or associate clearing house is generally available from that organization.

6. The U.S. options markets have rules applicable to the handling of customer accounts and the execution

of buy and sell orders that impose special requirements with respect to approval of customer accounts for options trading and recommendations of particular option transactions. This booklet does not attempt to describe those requirements, the laws and rules governing brokerage firms and other securities professionals, or the agreements, procedures and internal rules of brokerage firms that are applicable to the approval and opening of customer accounts, the handling and execution of orders, the transmission to brokerage firms of instructions to exercise or not to exercise options, the manner or time in which writers of options are notified by their brokerage firms that options have been assigned an exercise, the handling of customers' funds, securities and accounts, the safeguarding of customers' positions in options, or other matters relating to the handling of options transactions by brokerage firms. Readers should consult with their own brokerage firms for information concerning such matters.

7. <u>This booklet does not attempt to describe the risks to investors that may be associated with the way trading is conducted in any particular options market or in any market for an underlying or related interest.</u> The reader should not assume that either the options markets or the markets for underlying or related interests will be efficient, liquid, continuous and orderly in all circumstances or that they will be or remain open at all times. Even on relatively normal days, there will be variances in the market-making performance of specialists and market makers in the various markets which derive primarily from differences in individual skills, capital, willingness to accept risk, ability to hedge risk, trading strategies, and market-making obligations, and these variances are likely to be exacerbated during times of greatly increased volume or volatility. Although specialists and market makers in some markets have certain obligations to assist in the maintenance, so far as is practicable, of a fair and orderly market, traditional indicators of orderliness are difficult to apply to the trading of derivative products such as options and there is a risk that the market-making system of a particular market will not operate effectively, efficiently or in an orderly manner at particular times. The nature and scope of that risk are not among the types of risk discussed further in this booklet.

It is also possible that the systems of an options market, or of a market for an underlying or related

interest, may fail or may not work effectively or efficiently at times. During the past few years, for example, the operations of various U.S. markets have been disrupted by earthquake, flood, fire, electricity outages, and computer failure. Moreover, no system can be expected to work perfectly at all times. The options markets may rely on manual methods to record trade information, and errors or omissions can occur in their reports of price, volume and other information, and these can be expected to be exacerbated on days of significant volume or volatility.

It is also beyond the scope of this booklet to discuss the risks that may result to investors from the use by market participants of options pricing theories. There are a number of publications that are commercially available which discuss such theories.

8. <u>This booklet does not attempt to describe risks that may be inherent in an investment in the underlying interest.</u> It is obvious that the investment potential of an option can be dependent on the performance of the underlying interest and that investors in options are therefore subject to the risks that may affect the value of that interest. For example, one of the risks undertaken by a purchaser of a call option (or a writer of a put option) on XYZ stock is that XYZ may decline in price during the life of the option. The risk of this decline is dependent on the risks that may affect the economy or the stock market generally or XYZ specifically. Similarly, the holder of a dollar-denominated option on a foreign currency is subject to the risk factors affecting the relative values of the U.S. dollar and the foreign currency. A discussion of these types of risks is beyond the scope of this booklet.

9. <u>This booklet does not attempt to describe systemic risks that could affect the options markets and the investors in those markets.</u> The options markets, like all securities markets, are interrelated with, and frequently interdependent upon, other aspects of national and international financial and capital systems and upon the national and world economy. Any disturbance or crisis of one part of these interrelated systems could severely disrupt or even threaten the performance of the options markets or of OCC. Bank failures, payments breakdowns, large and sudden economic shocks, the failure of a large securities firm, market or clearing organization, or other such events could cause other failures on a widespread basis and

could affect the liquidity and solvency of the participants in the options markets. The specific causes of systemic failure or disruption are not easy to predict, and a discussion of them is beyond the scope of this booklet.

10. <u>All examples in this booklet are based on hypothetical values that are not necessarily indicative of the prices in an actual transaction.</u> Readers should not assume that options will necessarily be priced in accordance with any example in this booklet or in accordance with any pricing formula or model. As noted in the discussion of "Premium" in Chapter II, option premiums are not fixed by OCC or any of the options markets.

11. <u>The examples in this booklet do not include tax consequences, commissions or other transaction costs, nor do they include the impact of applicable margin requirements.</u> As discussed in Chapter IX, these items can be very significant and should be taken into account by all investors.

SUPPLEMENTS

appear on the following pages

DECEMBER 1997 SUPPLEMENT

To accommodate the introduction of trading in cash-settled options on indexes of mutual funds, the February 1994 edition of the booklet entitled *Characteristics and Risks of Standardized Options* is amended by adding the following disclosure to Chapter IV, Index Options, following the third full paragraph on p. 26:

Index options may be traded on underlying indexes designed to reflect the net asset values of selected mutual funds in specified categories. For example, an underlying index may be designed to reflect the net asset value of a selected group of growth funds, or a selected group of growth and income funds. These indexes are calculated and disseminated based on the reported net asset values of the mutual funds included in the index. Mutual funds typically report their net asset values only once per day following the close of trading in the primary markets for the securities held in the funds' investment portfolios. Mutual fund indexes are based on these closing values and are not updated during the trading day. Mutual fund indexes as reported during the trading day will thus be based on non-current information, not only because the funds' portfolios may have changed since the previous day's close, but also because the values of the funds' portfolio securities during the trading day may vary from their values at the previous day's close. Therefore, reported fund index values should not be relied upon as indicative of the current values of the mutual funds included in the indexes. In this respect, mutual fund indexes are comparable to other indexes that are not updated during the trading day, including certain foreign stock indexes. These other indexes are not updated because their component stocks may not be traded in their primary home country markets during all or part of the options trading day.

MARCH 2000 SUPPLEMENT

The February 1994 edition of the booklet entitled *Characteristics and Risks of Standardized Options* (the "options booklet") is amended as follows:

1. The second full paragraph after the example on page 21 of the options booklet is amended to read:

When an underlying security is converted into a right to receive a fixed amount of cash, options on that security will generally be adjusted to require the delivery upon exercise of a fixed amount of cash, and trading in the options will ordinarily cease when the conversion becomes effective. As a result, after such an adjustment is made all options on that security that are not in the money will become worthless and all that are in the money will have no time value. If the option is European-style (as may be the case for a flexibly structured stock option designated as a European-style option), the expiration date of the option will ordinarily be accelerated to fall on or shortly after the date on which the conversion of the underlying security to a right to receive cash occurs. Holders of an in the money option whose expiration date is accelerated must be prepared to exercise that option prior to the accelerated exercise cut off time in order to prevent the option from expiring unexercised. Writers of European-style options whose expiration date is subject to being accelerated bear the risk that, in the event of such an acceleration, they may be assigned an exercise notice and be required to perform their obligations as writers prior to the original expiration date. When the expiration date of a European-style option is accelerated, no adjustment will be made to reflect the accelerated expiration date. There is no assurance that the exercise settlement date for an accelerated option will coincide with the date that the cash payment to the

holders of the underlying security becomes available from the issuer of the underlying security. Covered writers of an accelerated option may therefore be required to pay the cash amount in respect of the option before they receive the cash payment on the underlying security.

2. The third and fourth sentences of the paragraph under "Exercises and Settlements" on page 47 of the options booklet are amended to read:

However, unlike most other options, flexibly structured index options that are in the money on the expiration date may be exercised automatically. In the future it may be provided that flexibly structured index options will be exercised automatically only if they are in the money by a specified amount.

This supplement supercedes the October 1996 supplement to the options booklet.

JANUARY 2004 SUPPLEMENT

This supplement supersedes and replaces the November 1995 Supplement to, and amends specified portions of, Characteristics and Risks of Standardized Options (the "Booklet").

To permit greater flexibility in the methods used for assigning options exercises, the Booklet is amended by replacing the first two paragraphs following the caption "Assignment" in Chapter VIII of the Booklet with the following:

OCC follows established procedures for assigning exercises to Clearing Member accounts that contain short option positions identical to the exercised options. These procedures may be different for different classes of options. A description of OCC's assignment procedures and the options classes to which they apply is available on request from OCC at One North Wacker Drive, Suite 500, Chicago, Illinois 60606.

Assignments are ordinarily made prior to the commencement of trading on the business day following receipt by OCC of the exercise instruction. In the case of options traded in evening sessions, exercise instructions received by OCC on a business day are ordinarily assigned prior to the opening of trading in that day's evening session.

Exercises may be assigned by OCC to a Clearing Member's customers' account. In that event, the Clearing Member must in turn assign those exercises to its customers maintaining positions as writers of the exercised options series. The rules of the options markets require their member firms to establish fixed procedures for allocating assignments to customers (e.g., random selection or "first-in, first-out") and to inform their customers of the method used and how it works.

Regardless of the method used, an option writer is subject to the risk each day the option is exercisable that some or all of his short position may be assigned. (See the discussion in Chapter X under "Risks of Option Writers.") However, if less than all of the open interest in an options series is exercised, OCC's procedures for assigning exercises to Clearing Members and brokers' procedures for allocating assignments to customers may affect the likelihood that a customer's position will be assigned and the potential size of the assignment.

To address special considerations with respect to the deadlines for the exercise of certain options that expire on a day on which an options market is open for trading, the fourth paragraph under the caption "How to Exercise" in Chapter VIII of the Booklet is amended to read as follows:

A brokerage firm's cut-off time for accepting exercise instructions becomes critical on the last trading day before an option expires. An option that expires unexercised becomes worthless. An option holder who intends to exercise an option before expiration must give exercise instructions to his brokerage firm before the firm's cut-off time for accepting exercise instructions on the last trading day before expiration. If the expiration date of an option falls on a day on which an options market is open for trading in that option, a brokerage firm's last cut-off time for accepting exercise instructions prior to the option's expiration may be on the expiration date. Investors should be aware of their brokerage firm's policies in this regard. Many brokerage firms accept standing instructions to exercise, or have procedures for the exercise of, every option which is in the money by a specified amount at expiration. These procedures often incorporate by reference OCC's administrative procedures that provide for the exercise of every option that is in the money by a specified amount at expiration unless the Clearing Firm carrying the option in its accounts instructs OCC not to exercise the option. Investors should determine from their brokerage firm the applicable cut-off times, the firm's procedures for submitting exercise instructions, and whether any of their options are subject to automatic exercise. Investors should also determine whether the exercise of their options is subject to standing instructions of their brokerage firm, and, if so, they should discuss with the firm the potential consequences of such instructions.

MARCH 2005 SUPPLEMENT

To accommodate options on any index intended to measure the predicted volatility of the daily returns of a stock index, the Booklet is amended as follows:

1. The first two paragraphs on page 23, under the caption "About Indexes," are replaced with the following three paragraphs and new caption:

As referred to in this booklet, an index is a measure of the prices or other attributes of a group of securities* or other interests. Although indexes have been developed to cover a variety of interests, such as stocks and other equity securities, debt securities and foreign currencies, and even to measure the cost of living, the following discussion relates only to indexes on equity securities (which are called stock indexes in this booklet) and indexes that are intended to measure the predicted volatility of specified stock indexes (which are called volatility indexes in this booklet) and options on such indexes.

Stock indexes are compiled and published by various sources, including securities markets. A stock index may be designed to be representative of the stock market of a particular nation as a whole, of securities traded in a particular market, of a broad market sector (*e.g.*, industrials), or of a particular industry (*e.g.*, electronics). A stock index may be based on securities traded primarily in U.S. markets, securities traded primarily in a foreign market, or a combination of securities whose primary markets are in various countries. A stock index may be based on the prices of all, or only a sample, of the securities whose prices it is intended to represent. Like stock indexes, volatility indexes are securities indexes. However, the component securities of a volatility index are put and call options series on a specified stock index. Options on volatility indexes are referred to generically as "volatility options."

Information relating specifically to stock indexes appears below under the caption "Stock Indexes." Information relating specifically to volatility indexes appears below under the caption "Volatility Indexes." Information appearing below under the caption "Stock Indexes and Volatility Indexes" is relevant to both stock indexes and volatility indexes.

* *Some indexes reflect values of companies, rather than securities, by taking into account both the prices of constituent securities and the number of those securities outstanding.*

STOCK INDEXES

2. The first sentence in the second full paragraph on page 25 is replaced with the following sentence:

Investors should keep in mind that a stock index can respond only to reported price movements in its constituent securities.

3. The paragraph that was inserted following the third full paragraph on p. 26 in the December 1997 Supplement to this booklet is relocated so that it follows the second full paragraph on page 25 (since that paragraph relates to stock indexes and not to volatility indexes).

4. The following paragraphs and captions are added on page 25 following the relocated paragraph referred to in point 3 immediately above:

VOLATILITY INDEXES

Volatility indexes, and investment strategies involving the use of volatility options, are inherently complex. You should be certain that you understand the method of calculation and significance of any volatility index and the uses for which volatility options based on that index are suited before buying or selling the options.

A volatility index is designed to measure the predicted volatility of a specified "reference" stock index. A volatility index represents a prediction of the volatility of the reference index over a specified future time period—for example, 30 calendar days. In statistical terms, a volatility index measures the predicted standard deviation of the daily returns of the reference index measured over the specified future time period.

Economic, political, social and other events affecting the *level* of the reference index may also affect the *volatility* of the reference index. Volatility indexes have historically tended to move inversely to their reference indexes, since volatility tends to be associated with turmoil in the stock markets and turmoil tends to be associated with downward moves in the stock market. But this relationship does not always hold true and, indeed, a volatility index may be rising at a time when its reference index is also rising. It bears emphasizing that a volatility index on which options are traded reflects only *predictions* about the future volatility of the reference index as those predictions are *implied* by reported current premium values for options on the reference index. The actual volatility of the reference index may not conform to those predictions.

As with other index options, a call volatility option will be in the money at exercise if the exercise settlement value of the underlying index is above the exercise price of the option, and a put volatility option will be in the money at exercise if the exercise settlement value of the underlying index is below the exercise price of the option. Whether the volatility option is in the money is determined in relation only to the value of the underlying volatility index, and not in relation to the reference index. Volatility index values will be affected by any factor that affects the component options series of the index, including, among other things, applicable laws, regulations and trading rules, the market-making and order processing systems of the markets on which the options are traded, and the liquidity and efficiency of those markets.

There are various methods of estimating predicted volatility, and different methods may provide different estimates. Under the method that is used for volatility options that are proposed to be traded at the date of this Supplement, volatility index values are calculated using premium values of out-of-the-money series of options on the reference index in expiration months that are selected and weighted to yield a measure of the volatility of the reference index over a specified future time period. For example, a volatility index that is calculated using this method and that is designed to provide a prediction of volatility over 30 calendar days is based on premium values of out-of-the-money options series on the reference index expiring in the two nearest months with at least 8 calendar days left to expiration.

Volatility options that are described in this Supplement are European-style (that is, are exercisable only on their respective expiration dates) and "A.M.-settled" (that is, are settled using exercise settlement values that are derived from opening values of the component put and call options). An exercise settlement value for these volatility options is calculated from *actual opening premium prices* of the relevant series of options on the reference index unless there is no trade in a series at the opening, in which case the *mid-point of the bid and offer premium quotations* for that series as determined at the opening of trading is used. All other index values for each of these volatility indexes are calculated using the *mid-points of the bid and offer premium quotations* of the options series that comprise the volatility index. (Since these index values are based on quotations they are sometimes referred to as "indicative values.")

Because different values are used in calculating the indicative values and exercise settlement values for volatility options that are described in this Supplement, there is a risk that there may be a divergence between the exercise settlement value and an indicative value calculated at the opening on the date on which the exercise settlement value is being determined. This risk is described further in Chapter X of this booklet, in paragraph 12 under the heading "Special Risks of Index Options." Additional information regarding the method used to calculate the values of a particular volatility index is available from the market on which options on that index are traded.

Like other indexes on which options are traded, the values of volatility indexes are ordinarily updated throughout the trading day, and current values for a volatility index are generally available from brokers and from the markets on which options on that index are traded. Daily closing values and exercise settlement values for volatility indexes may be published in newspapers.

Investors should keep in mind that indicative values of a volatility index can reflect changes in the predicted volatility of the reference index only to the extent that quotations of the constituent options of the volatility index are current. Indicative values for a volatility index may be disseminated, and volatility options may be traded, during times when one or more constituent securities in the reference index are not trading, or when the quotations for one or more of the options series comprising the volatility index are not current. An exercise settlement value for a volatility index may be calculated even if one or more constituent securities in the reference index are not trading. In any of these cases, an indicative value or exercise settlement value will be based on non-current information. The quality of the information reflected in the values of a volatility index should be evaluated in light of the depth and liquidity of the markets for the securities in the reference index and the options that are the components of the index.

The information set forth on pages 26 through 28 under the caption "Features of Index Options" is generally applicable to volatility options. However, the method of determining the exercise settlement value for volatility options may differ from those for other index options. (As described above, an exercise settlement value for volatility options that are described in this Supplement may use a combination of actual opening premium prices for some of the constituent options series and averaged bid and ask premium quotations for others of the constituent options series on the day of exercise.) Other means for determining

the exercise settlement values of volatility options may be established. Volatility options may also have expiration dates that are different from those of other index options. You should be sure that you understand the method of calculation of the exercise settlement value and know the expiration date for each volatility option you wish to buy or write.

STOCK INDEXES AND VOLATILITY INDEXES

5. The following paragraph is inserted on page 73 immediately following the caption "Special Risks of Index Options:"

The risks described in paragraphs 1. through 10. on pages 73 through 78 of this booklet relate primarily to options on stock indexes. Risks involved in buying or writing options on volatility indexes are described in paragraphs 11. through 14.

6. The following paragraphs are inserted on page 78 immediately following paragraph number 10:

11. Strategies involving the purchase and sale of options on a volatility index are inherently complex and require a thorough understanding of the concept of predicted volatility that is measured by the index. The component securities of a volatility index are put and call options (not stocks, which are the component securities of stock indexes). You must have a thorough understanding of the method used to calculate the volatility index in order to understand how conditions in the market for its component options series may affect the values of the index. You may fail to realize your investment objective even if you have correctly predicted certain events if you do not understand how those events may or may not affect the level of the index. There is no assurance that predicted volatility as measured by a particular volatility index will correspond to the actual volatility of the reference index or to measures of predicted volatility calculated using other methods.

12. Because different values are used in calculating indicative values and exercise settlement values of volatility indexes underlying volatility options that are described in this Supplement, there is a risk that there may be a divergence between the exercise settlement value and an indicative value calculated at the opening on the date on which the exercise settlement value is being determined. (Please refer to the discussion in Chapter IV under the heading "Volatility Indexes" for the definition of the term "indicative value" and a description of the method that is used to

calculate an "exercise settlement value" for volatility options that are proposed to be traded at the date of this Supplement.) It is to be expected that there will be at least some divergence between the exercise settlement value for expiring volatility options and an indicative value calculated at the opening on the same date, because the opening price for each of the options series that is used to calculate the exercise settlement value will typically be at either the bid or the ask quotation, depending on the forces of supply and demand for that series, and not at the mid-point between the bid and ask quotations. This divergence may represent a significant percentage of the indicative value for the volatility index if the forces of supply and demand cause all or most of the series to open on the same side of the market.

13. Persons who exercise volatility options or are assigned exercises based on an erroneous index level will ordinarily be required to make settlement based on the exercise settlement value as initially reported by the designated reporting authority for the index, even if a corrected value is subsequently announced. In extraordinary circumstances (*e.g.*, where an exercise settlement value as initially reported is obviously wrong, and a corrected value is promptly announced), OCC has discretion to direct that exercise settlements be based on a corrected exercise settlement value. Ordinarily, however, the exercise settlement value as initially reported by the designated reporting authority for the underlying volatility index will be conclusive for exercise settlement purposes. As described in paragraph 8. on page 77 with respect to other indexes, reported levels of a volatility index may be based on non-current information. This may occur as a result of delays or interruptions in either the market for the securities in the reference index or in the markets for options on the reference index.

14. As in the case of writers of other index options, writers of volatility options cannot provide in advance for their potential settlement obligations by acquiring the underlying interest. Offsetting the risk of writing a volatility option may be even more difficult than offsetting the risk of writing other index options. Similarly, there are timing risks and other risks analogous to those discussed in paragraphs 3. and 4. on pages 74 and 75 of this booklet whenever an investor attempts to employ strategies involving transactions in volatility options and transactions in stocks or in options, futures contracts or other investments related to stocks.

APRIL 2007 SUPPLEMENT

The February 1994 edition of the booklet entitled *Characteristics and Risks of Standardized Options* (the "booklet") is amended as provided below. The changes pertain to non-rate modified cash-settled foreign currency options and rate-modified cash-settled foreign currency options. This supplement supersedes and replaces the January 2007 supplement.

On page 38, the second paragraph under the heading "Special Features of Dollar-Denominated Foreign Currency Options" is deleted and replaced with the following:

NON-RATE-MODIFIED CASH-SETTLED FOREIGN CURRENCY OPTIONS

Exercise prices for currently available dollar-denominated options on foreign currencies (other than rate-modified currency options, as described below) are stated in units of U.S. currency (e.g., cents or hundredths of a cent) per unit of foreign currency. In order to determine the total exercise price per contract, it is necessary to know the unit of U.S. currency used for options on the particular foreign currency, and to multiply the stated exercise price by the unit of trading for such options. For example, at the date of this booklet, dollar-denominated British pound options are expressed in U.S. cents per unit, and dollar-denominated Japanese yen options are expressed in hundredths of U.S. cents per unit.

On page 38, the following is inserted immediately following the second "EXAMPLE" at the end of the page:

Readers should note, however, that certain exchanges may express exercise prices in other unconventional ways. For example, an exercise price stated as $100.50 may in reality mean $1.0050. Readers need to be sure they fully understand the various conventions used by the exchanges on which they trade in quoting exercise prices.

On page 39, the second paragraph is deleted and replaced with the following:

Premiums for currently available dollar-denominated options on foreign currencies (other than rate-modified currency options, as described below) are expressed in units of U.S. currency per unit of foreign currency. In order to calculate the cost of the option, it is necessary to know the unit of U.S. currency used for options on the particular foreign currency. For example, at the date of this booklet, premiums for currently available dollar-denominated Swiss franc options are expressed in U.S. cents, and premiums for currently available dollar-denominated Japanese yen options are expressed in hundredths of U.S. cents.

On page 39, the following are deleted: (a) the sentence immediately following the first "EXAMPLE," (b) the second "EXAMPLE," and (c) the sentence immediately following the second "EXAMPLE."

On page 39, the following is inserted immediately before the last paragraph:

Readers should note, however, that certain exchanges may express premiums in other unconventional ways. Readers need to be sure they fully understand the various conventions used by the exchanges on which they trade in quoting premiums.

The first paragraph under the heading "Cash-Settled Foreign Currency Options," which is the last paragraph on page 43, is deleted and the following sentence is added at the beginning of the first paragraph on page 44:

At the date of this booklet, dollar-denominated cash-settled foreign currency options have also been approved for trading.

The last four paragraphs on page 44 are deleted and replaced with the following:

EXAMPLE: If the exercise price of a cash-settled, dollar-denominated call option on euros is $1.2500 per euro, the exercise settlement value of the euro is determined to be $1.2607 and the option covers 10,000 euros, then the cash settlement amount for the option will be ($1.2607 − $1.2500) × 10,000 = $107.00.

Cash-settled foreign currency options may be <u>automatically exercised</u> on the expiration date if in the money or if in the money by a certain amount. See the discussion in Chapter VIII under "How to Exercise."

The exercise settlement value for cash-settled foreign currency options will be based on an exchange rate for the underlying foreign currency from a source selected by the market on which the options trade as set forth in exchange rules. In the case of rate-modified foreign currency options, the options market on which the options are traded would calculate and disseminate the underlying rate. In either case this rate may be based on a rate announced by the Federal Reserve Bank of New York, bid and offer quotations from a sampling of participants in the interbank spot market for the underlying foreign currency, the rate reported by a recognized pricing service, or some

other widely-available rate. The time as of which the exercise settlement value is calculated and the method of calculation are determined by the options market on which the options are traded and may be changed by it at any time. Any such change may be made applicable to options outstanding at the time of the change.

If OCC determines that the exercise settlement value of the underlying foreign currency for any series of cash-settled foreign currency options is unreported, inaccurate, unreliable, unavailable, or inappropriate for purposes of calculating the cash settlement amount of such series, OCC has the authority to suspend the settlement obligations of the exercising and assigned Clearing Members of options of such series or to fix the cash settlement amount for exercised options of such series or to do both. In the event of such a suspension, OCC will fix a new settlement date after OCC determines that the exercise settlement value is available or after OCC fixes the cash settlement amount.

If OCC determines to fix the cash settlement amount, it will act through an adjustment panel that will use its judgment as to what is appropriate for the protection of investors and the public interest. For a description of adjustment panels, see "Adjustment and Adjustment Panels" in Chapter II. The panel may fix the cash settlement amount using the reported price or value of the underlying foreign currency at such time, or representing a combination or average of prices or values at such time or times, and reported in such manner, as the panel deems appropriate.

If an adjustment panel delays fixing a cash settlement amount for a series of cash-settled foreign currency options past the last trading day before expiration of that series, normal expiration exercise procedures will not apply to the affected series. Instead, exercise settlement will be postponed until the next business day following the day when the adjustment panel fixes the cash settlement amount, and each long position in the affected series will be treated as having been exercised if the cash settlement amount per contract for that series is $1.00 or more. If the cash settlement amount per contract is less than $1.00, the option will be treated as having expired unexercised. As a result of these procedures, holders of expiring cash-settled foreign currency options may not know whether their options have been exercised, and writers of such options may not know whether they have been assigned an exercise, until after the expiration date. An adjustment panel's determinations shall be conclusive, binding on all investors, and not subject to review.

RATE-MODIFIED CASH-SETTLED FOREIGN CURRENCY OPTIONS

A rate-modified currency option is a type of foreign currency option that may be thought of as an option on an underlying exchange rate between two currencies. The holder of a rate-modified currency option receives in U.S. dollars the difference between the modified rate and the exercise price multiplied by a multiplier (*e.g.*, USD $100). In this respect, rate-modified currency options resemble cash-settled index options where the index is an exchange rate between two currencies. Exchange rates in the spot market are expressed as the number of units of one currency ("currency 1") required to purchase a single unit of a second currency ("currency 2"), and for each pairing of the world's major currencies, there is a convention as to which currency is currency 1 and which is currency 2. You should be aware that the exchange rates underlying rate-modified currency options may or may not be stated in the same way that they are conventionally quoted in the spot market. For example, exchange rates between the U.S. dollar and the euro are generally quoted as the number of dollars required to purchase a single euro; but the rate underlying a rate-modified currency option could be stated as the number of euros required to purchase a single dollar. You should therefore be certain that you understand the meaning of an underlying exchange rate.

In the case of rate-modified currency options, the underlying exchange rate may be multiplied by a "rate-modifier," such as 1, 10 or 100, to create an underlying value that more closely resembles a conventional index value. Exercise prices would, of course, also be expressed in terms of the rate-modified values.

EXAMPLE: A rate-modifier of 100 may be applied to the exchange rate between U.S. dollars ("USD") and Swiss francs ("CHF") in order to obtain the underlying exchange rate for USD/CHF rate-modified currency options. If the current exchange rate in the USD/CHF spot market is 1.24 Swiss francs per dollar, the current rate-modified exchange rate would be stated as (1.24 × 100) = 124. For example, an exercise price of 1.25 Swiss francs per dollar would be expressed as 125.

As in the case of an index option, the premiums and exercise settlement values of rate-modified currency options are determined using a multiplier, e.g., USD $100.

EXAMPLE: A rate-modified USD/CHF call option has an exercise price of 125. The USD/CHF exchange rate in the spot market at the time the exercise settlement value is fixed is 1.27 Swiss francs per dollar, meaning that the

underlying rate-modfied value is (1.27 × 100) = 127. The option is in the money. The exercise settlement value of the option is (127 − 125) × $100 = $200.

Do not confuse the rate-modifier with the multiplier. They serve different purposes and may or may not have the same numeric value.

EXAMPLE: Assume that the exchange rate underlying a rate-modified call option on the exchange rate between the U.S. dollar and the Mexican peso is stated as Mexican pesos per U.S. dollar (USD/MXN). The rate-modifier could be 10 and the multiplier could be $100. If the exercise price of the option is 11 Mexican pesos per U.S. dollar, it is stated as 11 × 10 = 110. If the underlying exchange rate is 11.2 at the time the option is exercised, the exercise settlement value is (112 − 110) × $100 = $200.

Note that, as in the case of index options, the multiplier determines the cash value of an option that is in the money by a specified amount. Like index options, and unlike other cash-settled currency options, a rate-modified currency option has no unit of trading—it does not relate to a specified quantity of an underlying currency.

The multiplier is also used in determining the total premium for a rate-modified currency option. For example, if a premium is quoted as .50 and the multiplier is $100, the total premium for a single option is $50.

The paragraph numbered 12 on page 87 is deleted.

MAY 2007 SUPPLEMENT

The February 1994 edition of the booklet entitled *Characteristics and Risks of Standardized Options* (the "Booklet") is amended as follows to reflect certain changes in OCC's rules as well as the rules of certain options markets.

The changes in Part I reflect modifications made to the definition of "ordinary cash dividend or distribution" (*i.e.*, cash dividends and distributions for which no adjustment is made). The changes in Part II reflect changes made to eliminate the need to round adjusted exercise prices in certain circumstances and to provide more precise compensation for fractional shares eliminated by rounding.

Parts III-V of this Supplement supersede and replace the February 2003 Supplement to the Booklet. Part III pertains to options on interests in investment companies and similar entities. Part IV pertains to special exercise settlement procedures or restrictions that may be imposed upon the occurrence of certain extraordinary events. Part V discloses that a registration statement and prospectus for the options covered by the Booklet are no longer available.

Part VI pertains to an expansion of OCC's authority to adjust the multiplier for yield-based Treasury options and to fix the cash settlement amount for such options in certain circumstances. Part VII reflects the adoption of rules by certain options markets that permit, in very limited circumstances, the cancellation or adjustment of a transaction entered into at a premium based on an erroneously reported value for the underlying interest. Part VIII, which supersedes paragraph 1 of the March 2000 Supplement to the Booklet, pertains to the acceleration of the expiration date of options on equity securities in certain circumstances.

Part I. Definition of Ordinary Cash Dividend or Distribution.

The fourth paragraph on page 19 is amended to read as follows:

As a general rule, no adjustment is made for ordinary cash dividends or cash distributions. A cash dividend or distribution announced *prior to* February 1, 2009, will generally be considered "ordinary" unless it exceeds 10% of the aggregate market value of the underlying security outstanding as of the close of trading on the declaration date. The same rule will continue to apply on and after that

date with respect to options series designated by OCC as "grandfathered" for purposes of this rule (*i.e.*, series opened prior to publication of this Supplement that remain outstanding on February 1, 2009). In the case of all other options series, a cash dividend or distribution announced *on or after* February 1, 2009, will generally be considered "ordinary," regardless of size, if OCC believes that it was declared pursuant to a policy or practice of paying such dividends or distributions on a quarterly or other regular basis (and no adjustment will normally be made for any cash dividend or distribution that amounts to less than $12.50 per contract). As an exception to the general rule, options on fund shares will generally be adjusted for capital gains distributions even if made on a regular basis, and adjustments may be made for certain other distributions in respect of fund shares in special circumstances described in OCC's rules, provided in each case that the amount of the adjustment would be $.125 or more per fund share. Determinations whether to adjust for cash dividends or distributions not covered by the preceding rules, or when other special circumstances apply, are made on a case-by-case basis.

Part II. Adjustment of Exercise Prices.

The first seven paragraphs on page 20 of the Booklet are deleted in their entirety, and the following material is inserted in lieu thereof.

Stock dividends, stock distributions and stock splits may result in an adjustment of the number of options held or written or the number of underlying shares, and in some cases may also result in an adjustment of the exercise price.

Stock Options with Exercise Prices Stated in Fractions

As of the date of this Supplement, exercise prices for stock options are stated in points and fractions of a point (*e.g.*, 20⅜ or 30½). The smallest fraction is ⅛. The following adjustment rules apply to any series of stock options whose exercise price is stated in points and fractions of a point:

As a general rule, a 2 for 1 or a 4 for 1 stock split, stock distribution or stock dividend will result in the number of outstanding options being proportionately increased and the exercise price being proportionately decreased.

EXAMPLE: Before a 2 for 1 stock split, an investor holds an option on 100 shares of XYZ stock with an exercise price of $60. After adjustment for the split, he will hold two XYZ options, each on 100 shares and each with an exercise price of $30.

A stock dividend, stock distribution or stock split other than a 2 for 1 or a 4 for 1 distribution or split will normally result in an adjustment in the number of shares deliverable upon exercise, while the aggregate exercise price for the contract remains unchanged.

EXAMPLE: An investor holds a call option covering 100 shares of XYZ stock with an exercise price of $50 resulting in an aggregate exercise price for the contract of $5,000 ($50 × 100). After a 3 for 2 split, the deliverable could be increased to 150 shares while the nominal exercise price remained $50. In that case, upon exercise of the adjusted option, the investor would still pay $5,000 ($50 × 100, not $50 × 150), but would receive 150 shares of XYZ stock instead of 100.

Note in the preceding example that, although the number of shares deliverable was adjusted to be 150, the number by which the unadjusted exercise price of $50 was multiplied to determine the total exercise price continued to be 100 rather than 150. Similarly, premium quotations would continue to be multiplied by 100 to obtain the total premium to be paid for a single option.

Stock Options with Exercise Prices Stated in Decimals

In the future, the exchanges may introduce stock options with exercise prices stated in points and decimals (*e.g.*, 20.15 or 30.80). The following adjustment rules would apply to any series of stock options whose exercise price is stated in points and decimals:

When a stock distribution, stock split or stock dividend results in the issuance of one or more whole shares of stock for each outstanding share—such as a 2 for 1 or a 3 for 1 stock split—as a general rule the number of underlying shares will not be adjusted. Instead, the number of outstanding options will be proportionately increased and the exercise price will be proportionately decreased. (See the example of a 2 for 1 stock split under "Stock Options with Exercise Prices Stated in Fractions" above.)

Other stock dividends, stock distributions and stock splits may result in an adjustment in the number of underlying shares and the exercise price.

EXAMPLE: An investor bought an XYZ 50 option—either a call or a put—and XYZ Corporation subsequently effected a 3 for 2 stock distribution. Instead of covering 100 shares of stock at an exercise price of $50 a share, each outstanding option could be adjusted to cover 150 shares at an exercise price of $33.33 per share. The aggregate exercise price remains substantially the same before and after the adjustment ($50 × 100 = $5,000 and $33.33 × 150 = $4,999.50).

All Stock Options

As a general rule, adjustments in exercise prices are rounded to the nearest exercise price increment (⅛ or one cent, as the case may be), and adjustments in the number of underlying shares are rounded down to eliminate fractional shares. In the latter case, the property deliverable upon exercise may be adjusted to include the value of the eliminated fractional share, as determined by OCC.

Note that in the preceding example where the exercise price of the adjusted XYZ option was rounded down, the exercising put holder or assigned call writer would lose $.50 as a result of the rounding. Rounding up could result in losses to exercising call holders and assigned put writers.

A reverse stock split, combination of shares, or similar event will generally result in an adjustment in the number of shares deliverable upon exercise, while the aggregate exercise price remains unchanged.

EXAMPLE: An investor holds a call option covering 100 shares of XYZ stock with an exercise price of 50 resulting in an aggregate exercise price for the contract of $5,000 ($50 × 100). After a 1 for 10 reverse split, the deliverable could be reduced to 10 shares while the nominal exercise price remained $50. In that case, upon exercise of the adjusted option, the investor would still pay $5,000 ($50 × 100, not $50 × 10), but would receive 10 shares of XYZ stock instead of 100.

As a general rule, no adjustment is made for ordinary stock dividends or distributions. A stock dividend or distribution will generally be considered "ordinary" if (i) the number of shares distributed does not exceed 10% of the number of shares outstanding on the declaration date and (ii) it is declared pursuant to a policy or practice of paying such dividends or distributions on a quarterly basis.

Distributions of property other than the underlying security may result in the adjustment of outstanding options to include the distributed property.

Part III. Options on Fund Shares.

To reflect a broadening of the definition of "fund shares," the Booklet is amended as follows:

The first full paragraph on page 2 of the Booklet is amended to read:

Each options market selects the underlying interests on which options are traded on that market. Options are currently available covering four types of underlying interests: equity securities (which term includes "fund shares" described in Chapter III), stock indexes, government debt securities, and foreign currencies. Options on other types of underlying interests may become available in the future.

The first paragraph of Chapter III, appearing on page 18 of the Booklet, is amended to read:

The term "stock options" is used broadly in this Booklet to include not only options on common stocks but also options on all other types of equity securities, such as limited partnership interests, "American Depositary Receipts" and "American Depositary Shares" representing interests in foreign entities, preferred stocks, and fund shares. The term "fund shares" includes interests in exchange-traded funds and other entities holding or trading in one or more types of investments, and as used in this Booklet the term "equity securities" includes fund shares.

The first paragraph under the caption "FEATURES OF STOCK OPTIONS" on page 18 of the Booklet is amended to read:

As a general rule, a single stock option covers 100 shares of the underlying security, although in the case of options covering fund shares, options covering 100 or 1000 shares may be available. Other stock options departing from the general rule may be introduced in the future. The number of underlying shares covered by any stock option may be adjusted after the option is issued if certain events occur, as described below.

The fourth paragraph on page 19 of the Booklet is amended as set forth in Part I of this Supplement.

Part IV. Special Exercise Settlement Procedures/Restrictions.

Three new paragraphs are added on page 78 of the Booklet at the end of the section headed "8." The new paragraphs read:

If OCC determines that the primary market(s) for one or more component securities of an underlying index did not open or remain open for trading, or that the component security or securities did not open or remain open for trading on the primary market(s), on a trading day at or before the time when the exercise settlement value for that trading day would ordinarily be determined, or that a current index value or other price or value needed to calculate the exercise settlement value for an index option is otherwise unreported, inaccurate, unreliable, unavailable or inappropriate for purposes of calculating the cash settlement amount, then OCC may suspend settlement obligations for exercised and assigned contracts of the affected series. In the event of such a suspension, OCC will fix a new settlement date after OCC determines that the exercise settlement value is available or after OCC fixes the exercise settlement value.

If OCC determines to fix the exercise settlement value, it will act through an adjustment panel that will use its judgment as to what is appropriate for the protection of investors and the public interest. For a description of adjustment panels, see "Adjustment and Adjustment Panels" in Chapter II. The panel may fix the exercise settlement value using the reported price or value of the relevant security or securities or index (i) at the close of regular trading hours (as determined by OCC) on the last preceding trading day for which a price or value was reported by the reporting authority, or (ii) at the opening of regular trading hours (as determined by OCC) on the next trading day for which a price or value was reported by the reporting authority. Alternatively, the panel may fix the exercise settlement value using a price or value for the relevant security or securities or index, or using a combination or average of such prices or values, at or during such time or times that the panel sees fit.

If an adjustment panel delays fixing an exercise settlement value for a series of index options past the last trading day before expiration of that series, normal expiration exercise procedures will not apply to the affected series. Instead, exercise settlement will be postponed until the next business day following the day when the adjustment panel fixes the exercise settlement value, and each long position in the affected series will be treated as having been exercised if the exercise settlement amount per contract for that series is $1.00 or more. If the exercise settlement amount per contract is less than $1.00, the option will be treated as having expired unexercised. As a result of these procedures, holders of expiring index options may not know whether their options have been exercised, and writers of such options may not know whether they have been assigned an exercise notice, until after the expiration date. An adjustment panel's determinations shall be conclusive, binding on all investors, and not subject to review.

The first paragraph on page 41 of the Booklet is amended to read:

If OCC should determine that foreign governmental restrictions or taxes would prevent the orderly settlement of delivery foreign currency option exercises or would result in undue burdens on OCC or its Clearing Members, OCC has the authority to impose special exercise settlement procedures. These could range from technical changes in delivery procedures to the fixing of U.S. dollar settlement prices. If special exercise settlement procedures are imposed, investors may determine the nature of such procedures from their brokers.

The last paragraph on page 53 of the Booklet is amended to read:

In certain unusual circumstances, an event may threaten to reduce the available supply of an underlying security to a level insufficient to allow settlement if all of the outstanding option contracts for the affected security were exercised. This could happen, for example, in the event of a successful tender offer for all or substantially all of the outstanding shares of an underlying security or if trading in an underlying security were enjoined or suspended. If OCC in its discretion determines that a situation of that type exists, OCC may impose special exercise settlement procedures. These special procedures, applicable only when an assigned call writer or an exercising put holder is unable to obtain the underlying security, may involve the suspension of the settlement obligations of the holder and writer and/or the fixing of cash settlement prices in lieu of delivery of the underlying security. When special exercise settlement procedures are imposed, OCC will announce to its Clearing Members how settlements are to be handled. Investors may obtain that information from their brokerage firms.

On page 61 of the Booklet, the second paragraph of the section headed "5." is amended to read:

Exercise restrictions imposed by OCC and the options markets affecting cash-settled options generally cannot be continued in effect beyond the opening of business on the last trading day before their expiration. Such exercise restrictions affecting physical delivery options generally cannot be continued beyond the opening of business on the tenth business day before their expiration.

Part V. Exemption of Standardized Options from 1933 Act Registration.

Effective January 2, 2003, the SEC exempted standardized options issued by a registered clearing agency and traded on a registered national securities exchange or association from the Securities Act of 1933, except for the antifraud provisions of Section 17 of that Act. Effective January 10, 2003, the SEC approved an amendment to OCC's most recent registration statement under that Act terminating the registration of all unsold put and call options. As a result of these actions, the standardized options covered by this Booklet are no longer required to be registered under that Act; an OCC registration statement will no longer be available for inspection at OCC's office; and copies of an OCC prospectus for standardized options will no longer be available from OCC or the U.S. options markets.

Part VI. Yield-Based Treasury Options.

The second full paragraph on page 34 is replaced with the following paragraph:

If the U.S. Department of the Treasury ceases to issue, or changes the terms or the schedule of issuance of, Treasury securities on which underlying yields are based, an adjustment panel has discretion to adjust the terms of the series by substituting other Treasury securities or to make such other adjustment as the adjustment panel may determine. If the options market on which a particular yield-based option is traded should increase or decrease the multiplier for the option, the adjustment panel has discretion to adjust outstanding options affected by the change by proportionately consolidating or subdividing them or by taking other action.

The paragraph numbered 9. on page 82 is replaced with the following:

9. If OCC determines that the exercise settlement value of the underlying yield for any series of yield-based options is unreported, inaccurate, unreliable, unavailable, or inappropriate for purposes of calculating the cash settlement amount of such series, OCC has the authority to suspend the settlement obligations of the exercising and assigned Clearing Members of options of such series or to fix the cash settlement amount for exercised options of such series or to do both. In the event of such a suspension, OCC

will fix a new settlement date after OCC determines that the exercise settlement value is available or after OCC fixes the cash settlement amount.

If OCC determines to fix the cash settlement amount, it will act through an adjustment panel that will use its judgment as to what is appropriate for the protection of investors and the public interest. For a description of adjustment panels, see "Adjustment and Adjustment Panels" in Chapter II. The panel may fix the cash settlement amount using the reported value of the underlying yield (i) at the close of regular trading hours (as determined by OCC) on the last preceding trading day for which such a value was reported by the reporting authority or (ii) at the opening of regular trading hours (as determined by OCC) on the next trading day for which such a value was reported by the reporting authority. Alternatively, the panel may fix the cash settlement amount using the value for the underlying yield, or using a combination or average of such values, at or during such time or times that the panel sees fit.

If an adjustment panel delays fixing a cash settlement amount for a series of yield-based options past the last trading day before expiration of that series, normal expiration exercise procedures will not apply to the affected series. Instead, exercise settlement will be postponed until the next business day following the day when the adjustment panel fixes the cash settlement amount, and each long position in the affected series will be treated as having been exercised if the cash settlement amount per contract for that series is $1.00 or more. If the cash settlement amount per contract is less than $1.00, the option will be treated as having expired unexercised. As a result of these procedures, holders of expiring yield-based options may not know whether their options have been exercised, and writers of such options may not know whether they have been assigned an exercise notice, until after the expiration date. An adjustment panel's determinations shall be conclusive, binding on all investors, and not subject to review.

Part VII. Erroneously Reported Index Levels.

The paragraph numbered 5. on page 76 is replaced with the following paragraph, which omits a statement that a person who buys or sells an index option at a premium based on an erroneously reported index level is bound by the trade and has no remedy. The omission reflects the adoption of rules by certain options markets that permit, in very limited circumstances, the cancellation or adjustment of a transaction entered into at a premium based on an erroneously reported value for the underlying interest:

5. Holders and writers of index options generally bear the risk that the reported current index level may be in error. Persons who exercise cash-settled index options or are assigned exercises based on erroneously reported index levels will ordinarily be required to make settlement based on the exercise settlement value as initially

reported by the official source of the index, even if a corrected value is subsequently announced. References herein to index values "as initially reported" refer to the values initially reported by the source of the index as definitive, and not to any tentative or preliminary values that may be announced at an earlier time subject to adjustment. In extraordinary circumstances (*e.g.*, where an exercise settlement value as initially reported is obviously wrong and inconsistent with values previously reported, and a corrected value is promptly announced), OCC has discretion to direct that exercise settlements be based on a corrected exercise settlement value. Ordinarily, however, the exercise settlement value as initially reported by the official source of the index will be conclusive for exercise settlement purposes.

Part VIII. Accelerated Expiration of Certain Equity Options.

The second paragraph after the "EXAMPLE" on page 21 of the Booklet, as amended by paragraph 1 of the March 2000 Supplement to the Booklet, is further amended to read:

When an underlying security is converted into a right to receive a fixed amount of cash, options on that security will generally be adjusted to require the delivery upon exercise of a fixed amount of cash, and trading in the options will ordinarily cease when the conversion becomes effective. As a result, after such an adjustment is made all options on that security that are not in the money will become worthless and all that are in the money will have no time value. If the option is European-style, the expiration date of the option will ordinarily be accelerated to fall on or shortly after the date on which the underlying security is converted into a right to receive cash. After January 1, 2008, the same treatment will be extended to American-style options. Holders of an in-the-money option whose expiration date is accelerated must be prepared to exercise that option prior to the accelerated exercise cut-off time in order to prevent the option from expiring unexercised. See the discussion in Chapter VIII under "How to Exercise." Writers of options whose expiration date is subject to being accelerated bear the risk that, in the event of such an acceleration, they may be assigned an exercise notice and be required to perform their obligations as writers prior to the original expiration date. When the expiration date of an option is accelerated, no adjustment will be made to compensate for the accelerated expiration date. There is no assurance that the exercise settlement date for an accelerated option will coincide with the date on which the cash payment to the holders of the underlying security becomes available from the issuer. Covered writers of an accelerated option may therefore be required to pay the cash amount in respect of the option before they receive the cash payment on the underlying security.

JUNE 2007 SUPPLEMENT

The February 1994 edition of the booklet entitled *Characteristics and Risks of Standardized Options*, as amended (the "booklet"), is further amended as provided below. The changes pertain to the trading of credit default options.

Credit default options, including credit default basket options, have characteristics that are different from those of any other options described in the booklet at the date of this Supplement. Accordingly, some of the statements and terms in Chapters I and II of the booklet are inapplicable to credit default options. For example, as further described in this booklet, the sentence at the bottom of page 1 and the top of page 2 which notes that the owner of a cash-settled option has "the right to receive a cash payment based on the difference between a determined value of the underlying interest at the time the option is exercised and the fixed exercise price of the option" is not applicable to credit default options. The description of credit default options in this Supplement supersedes material in the booklet applicable to other standardized options to the extent such material is inconsistent with statements in this Supplement. Credit default options are described by amendment to Chapter V of the booklet as follows:

The title of Chapter V (on page 29 of the booklet) is changed to "DEBT OPTIONS AND CREDIT DEFAULT OPTIONS".

On page 29, the second and third paragraphs are deleted and replaced with the following paragraphs:

A third kind of options, called credit default options, are cash-settled options that are related to the creditworthiness of issuers or guarantors of debt securities, and are exercised upon confirmation of a credit event affecting an underlying debt security or securities.

The principal risks of holders and writers of debt options and credit default options are discussed in Chapter X. Readers interested in buying or writing debt options or credit default options should not only read this chapter but should also carefully read Chapter X, particularly the discussions under the headings "Risks of Option Holders," "Risks of Option Writers," "Other Risks," "Special Risks of Debt Options" and "Special Risks of Credit Default Options."

On page 34, the following is inserted immediately following the last paragraph:

Credit Default Options and Credit Default Basket Options

Credit default options are based on debt securities of one or more issuers or guarantors other than the U.S. Treasury. A significant difference between such debt securities and Treasury securities is the non-negligible risk that an issuer or guarantor of debt securities other than Treasury securities may default on its obligations. For example, the issuer might not pay the full interest and face amount of the securities when due or might file for bankruptcy, thereby making it nearly certain that it will not make timely payment of the full interest and face amount. Financial market participants call this credit risk. Credit risk is an important component of the value of most debt securities.

Credit default options relate to the credit risk presented by one or more specified debt securities, called reference obligation(s), of one or more specified issuers or guarantors, each of which is called a reference entity. The reference obligation(s) and each reference entity for a class of credit default options are selected by the listing options market. When a credit default option is based on reference obligation(s) of more than one issuer or guarantor, it is referred to as a credit default basket option. There are further variations on credit default basket options as described below.

A credit default option is automatically exercised and pays a fixed cash settlement amount if a credit event is confirmed for one or more reference obligations of a reference entity prior to expiration of the option. The reference obligations of a reference entity may include all of the outstanding debt securities constituting general obligations of the reference entity or direct claims on the reference entities (excluding any non-recourse debt). A credit event includes a failure to make a payment on a reference obligation as well as certain other events that the listing options market may specify at the time a class of credit default options is listed. The specified credit events will be defined in accordance with the terms of the reference obligation(s). However, not every event that might constitute an event of default by the reference entity under the terms of the reference obligations will necessarily be specified by the listing options market as a credit event. Investors should be certain that they understand the various possible events that will or will not constitute credit events. The determination of whether a particular event meets the criteria of a credit event, however defined, for a specific credit default option is within the sole discretion of the listing options market.

In order to result in automatic exercise of the option, a credit event must be confirmed to have occurred during the covered period (i.e., the period between the initial listing of the series of options and the time specified by the options market as the last day of trading of the option series prior to the expiration date). An event that would otherwise be deemed a credit event will not result in an exercise of the option if it occurs either before or after this period. A series of credit default options ordinarily does not expire until a specified number of business days following the end of the covered period in order to provide the listing options market an opportunity to confirm whether or not a credit event

occurred within the covered period. If an event otherwise meeting the definition of a credit event occurs after the end of the covered period but before the option expires, the option will not be exercised and will expire worthless.

If the listing options market determines that a credit event has occurred within the covered period for a class of credit default options, it will provide a credit event confirmation to OCC, and the options will be automatically exercised. Holders of the exercised options will receive, and writers will be obligated to pay, the fixed cash settlement amount. If OCC does not receive a credit event confirmation from the listing options market before expiration of a series of credit default options, the options will expire worthless.

Credit default options are binary options in that they have a specified, all-or-nothing cash settlement amount. Credit default options, however, have additional unique characteristics. For example, credit default options have no exercise price and cannot be in the money and have no intrinsic value. The discussion of these terms in Chapter I and/or Chapter II of the booklet is therefore inapplicable to credit default options. In addition, a credit default option is automatically exercised whenever a credit event occurs within the covered period. Credit default options are thus a unique style of options and are neither American-style nor European-style.

A credit default basket option is similar to an aggregation of individual credit default options, each based on one or more reference obligations of a different reference entity. All of the outstanding debt securities constituting general obligations of each reference entity or direct claims on reference entities (excluding non-recourse debt) in the basket may be included in the reference obligations.

There are two different kinds of credit default basket options. A single payout credit default basket option is automatically exercised and pays a specified cash settlement amount upon the confirmation of the first credit event to occur with respect to a reference obligation of any one of the basket's reference entities. It is exercised only once. Once exercised, the expiration of the option will be accelerated to correspond to the exercise date. A multiple payout credit default basket option automatically pays a specified cash settlement amount each time a credit event is confirmed with respect to a reference obligation of any one of the reference entities during the covered period. In the case of either single payout or multiple payout credit default basket options, the listing options market may specify a different cash settlement amount for different reference entities or may specify the same cash settlement amount for each reference entity in the basket. The percentage of the total cash settlement amount that is attributable to any individual reference entity is referred to as its weight in the basket. Investors should note that the options markets on which credit default basket options trade may determine "weight" according to their own specified rules, and investors should contact the listing options market for information about how it determines weight. In the case of a multiple payout credit default basket option, a cash settlement amount will be paid only once with respect to any particular reference entity, after which time the affected reference entity will be removed from the credit default basket.

Premiums for both credit default options and credit default basket options are expressed in points and decimals. In order to obtain the aggregate premium for a single option, the quoted premium is multiplied by a premium multiplier specified by the listing options market.

ADJUSTMENT OF CREDIT DEFAULT OPTIONS

Adjustments may be made to the standardized terms of outstanding credit default options when certain events occur, such as a succession event or a redemption event, both of which will be defined by the listing options market in accordance with the terms of the reference obligations. Adjustments of credit default options will be within the sole discretion of the listing options market. Investors should familiarize themselves with the listing options market's rules and procedures governing credit default option adjustments. The listing option market's rules governing adjustments of outstanding options may be changed with regulatory approval, and the listing options market may have authority to make such exceptions as it deems appropriate to its general adjustment rules.

Redemption Event Adjustments. A redemption event occurs when reference obligations of a reference entity are redeemed (or paid in full) by, or on behalf of, the issuer. In the case of all types of credit default options, if only some of the reference obligations are redeemed, the option is ordinarily adjusted such that the remaining reference obligations are the reference obligations for the option and no other adjustment will ordinarily be made. If all of the reference obligations of a reference entity are redeemed and there are other debt obligations of the reference entity that the listing options market deems appropriate to specify as successor reference obligations, then they will be substituted as the reference obligations. If, however, all of the reference obligations of a reference entity are redeemed and there are no other debt obligations of the reference entity that the listing options market deems appropriate to specify as successor reference obligations for the reference entity (a complete redemption), then the adjustment will depend upon whether or not there are other reference entities for the options.

Adjustment of credit default options for a complete redemption. If there is a complete redemption affecting a credit default option, the option will cease trading on the date that the redemption event is confirmed by the listing options market. Expiration of the option will be accelerated to a specified number of days following the confirmation date of the redemption, and the option will expire unexercised if, prior to such expiration, no credit event is confirmed to have occurred prior to the effective date of the redemption event.

EXAMPLE: Company XYZ is the reference entity for a credit default option contract and its 8% May 15, 2022 bond issue is the only reference obligation. During the life of the option, Company XYZ redeems the 8% May 15, 2022 bond issue and there are no other obligations of Company XYZ

that the listing options market deems to be suitable for specifying as successor reference obligations. The option will cease trading on the confirmation date, and its expiration date will be accelerated. If no credit event is confirmed to have occurred within the covered period, the option will expire worthless.

Adjustment of credit default basket options for a complete redemption. In the case of a single or multiple payout credit default basket option, if a complete redemption event occurs with respect to one of the reference entities in the basket and no credit event is confirmed, pursuant to the rules of the listing options market, to have occurred prior to the effective date of such redemption event, the options will be adjusted by removing the affected reference entity from the basket of reference entities. When a reference entity is deleted from the basket of reference entities because of a redemption event, the cash settlement amount of the option will be reduced by an amount reflecting the weight of the deleted reference entity in the basket. The *relative* weights of the other components in the basket will remain unchanged, although each will represent a proportionally larger percentage of the adjusted cash settlement amount.

EXAMPLE: Company XYZ is one of ten reference entities for a class of multiple payout credit default option contracts and its 8% May 15, 2022 bond issue is specified as its only reference obligation. Company XYZ was assigned a weight of 15% when the credit default option was opened for trading. During the life of the option, Company XYZ redeems the 8% May 15, 2022 bond issue. No reference obligations remain and the listing options market determines that there are no other outstanding debt obligations of the issuer suitable for specification as reference obligations. The basket component will be removed from the credit default basket, and the cash settlement amount will be reduced by 15%.

Succession Event Adjustments. A succession event occurs when one or more new entities assume one or more reference obligations of a reference entity or become the obligor with respect to any obligation that is substituted for the original reference obligations. This may occur, for example, when a reference entity is merged into a new entity or spins off a part of its business into a new entity. If, as the result of a succession event, more than one entity is the obligor of the original reference obligations, or obligations that were substituted for the original reference obligations, all of those obligors, including, as the case may be, the original reference entity, are referred to as successor reference entities.

Adjustment of credit default options after a succession event. Where a succession event results in assumption of all reference obligations by a single entity, the listing options market will ordinarily adjust the option by substituting the entity that assumes the reference obligation(s) as the new reference entity. Where a succession event results in more than one successor reference entity, the credit default option may be adjusted by dividing it into two or more options.

EXAMPLE: Company XYZ is the reference entity for a credit default option contract, and its 8% May 15, 2022 bond issue is the only reference obligation. During the life of the

option, Company XYZ spins off Company LMN. Company XYZ remains the obligor with respect to 70% of the principal amount of the original reference obligation. Company LMN becomes the obligor of a new reference obligation that is issued to holders of the remaining 30% of the original reference obligation. Company XYZ and LMN are identified by the listing options market as the successor entities. Following the succession event, the credit default option based on Company XYZ is adjusted into two separate credit default option contracts that specify Company XYZ and Company LMN as reference entities. The cash settlement amount of the original credit default option and the premium multiplier are allocated between the new credit default options in accordance with the 70/30 division of the reference obligation as specified by the listing options market.

Adjustment of credit default basket options after a succession event. When a succession event occurs with respect to a reference entity that is included in a single payout or multiple payout credit default basket option, the listing options market will ordinarily adjust the option by replacing the affected reference entity with the successor entity or entities, and, if one or more new obligations are issued to replace some or all of the existing reference obligations, the new obligations will be substituted as the reference obligations. The listing options market will specify the weight of each new reference entity, and the sum of the weights will equal the weight of the original reference entity.

EXAMPLE: Company XYZ is one of ten equally weighted reference entities for a multiple payout default basket option and its 8% May 15, 2022 bond issue and its 8.5% September 1, 2030 bond issue are specified as its only reference obligations. During the life of the option, Company XYZ spins off Company LMN. Company XYZ remains the obligor for the 2022 bond issue and LMN becomes the obligor of a debt security issued to holder of the 2030 bond issue. The listing options market adjusts the option by specifying XYZ and LMN as the successor reference entities. The reference obligations are the original 2022 bond issue and the replacement for the 2030 bond issue. The listing options market determines the appropriate basket weight for the successor reference entities is 7.5% and 2.5%. The sum of the newly specified weights equals the 10% weight of the predecessor basket reference entity (Company XYZ) replaced by the successor reference entities (Company XYZ and Company LMN).

On page 88, the following is inserted immediately following the last paragraph:

SPECIAL RISKS OF CREDIT DEFAULT OPTIONS

1. Pricing of credit default options is complex. As stated elsewhere in this document, complexity not well understood is, in itself, a risk factor. In order to price these options, investors must estimate the probability of default from available security or other prices, primarily bond and credit default swap ("CDS") prices. Models typically used by market professionals to infer the probability of default from prices may be more complex than the average investor is used to.

2. The sources of price information used to price credit default options are subject to a lack of transparency and, at times, illiquid markets. This is attributable to, among other things: (1) the absence of last sale information and the limited availability of quotations for the reference obligation(s), (2) lack of ready availability of information on related products traded primarily in the over-the-counter market, and (3) the fact that related over-the-counter market credit derivative transactions are privately negotiated and may not be made public in a timely fashion or at all.

3. Dealers in the underlying debt securities and in the over-the-counter credit derivatives markets have access to private quotation networks that give actual current bids and offers of other dealers. This information is not available to most investors. As a result, these dealers may have an advantage over participants with regard to credit default options.

4. If the listing options market determines that a credit default option is subject to a redemption event (*i.e.*, the issuer or guarantor pays off the reference obligation), the option will expire worthless unless a credit event has been confirmed to have occurred prior to the effective date of the redemption event. As a result, purchasers of such options will lose their premium since there is no chance of occurrence of a credit event for the reference entity. On the other hand, if a redemption event occurs but a credit event is confirmed to have occurred prior to the effective date of the redemption event, a seller would be obligated to pay the cash settlement amount even though a holder of the reference obligation may not incur a loss.

5. Since succession events are determined by the listing options market, credit default options may be modified to specify a different reference entity or several different reference entities. As a result, there may be new reference obligations that have higher or lower credit quality than the original reference obligation. In addition, other factors may exist that could affect the likelihood of the occurrence of a credit event. As a result, the occurrence of a succession event could affect the price of these options. Moreover, since the listing options market determines whether a succession event occurred and the adjustment resulting from such an event, the adjustment made to these options may be at variance with the treatment given to the same succession event with respect to related credit derivative products.

6. The occurrence of a credit event must be confirmed by the listing options market. This means that there will be a lag time between the actual occurrence of a credit event and the listing options market's confirmation of the credit event. Rules of the options market may provide a specified time period (*e.g.*, four business days) between the end of the covered period and the expiration date for a series of credit default options to allow the options market to confirm whether a credit event occurred during the covered period. There is a risk, however, that the sources used to monitor a credit event may not identify and report a credit event in a timely fashion. For example, it is possible that a credit event could occur on the last day of trading, but the sources which report the occurrence of a credit event do not

make this information publicly available until *after* the expiration date. In this case, the cash settlement value of a credit default option would be zero. There is also a risk that the listing options market may determine that a credit event has occurred based on information available to it when in fact no credit event has occurred. This could happen, for example, if the sources used to confirm the credit event are erroneous. The rules of OCC and/or the listing options market may provide that a confirmation of a credit event or other contract adjustment may be revoked up to a specified time prior to exercise settlement. Settlements based on a listing options market's confirmation of a credit event are irrevocable even if no credit event has occurred.

7. Every determination by the listing options market of a redemption event, succession event or credit event will be within the listing options market's sole discretion and will be conclusive and binding on all holders and sellers and not subject to review. OCC shall have no authority to make such determinations and shall have no responsibility therefor.

8. Prior to the period when a credit default option has been automatically exercised, the only means through which the holder can realize value from the option is to sell it at its then market price in an available secondary market. If a secondary market for such an option is not available, it will not be possible for its holder to realize any value from the option at that time.

9. There is no underlying interest for credit default options that is quoted in the marketplace. Because of this, there are no underlying interest prices to provide a reference to investors for pricing credit default options.

10. As discussed above under the caption "Other Risks," options markets have discretion to halt trading in an option in certain circumstances — such as when the market determines that the halt would be advisable in maintaining a fair and orderly market in the option. In the case of credit default options, options markets may take into consideration, among other factors, that current quotes for debt securities or other securities of the reference entity are unavailable or have become unreliable.

11. The risk that a trading market for particular options may become unavailable and the potential consequences are also discussed above under the caption "Other Risks." The SEC has approved certain credit default options for listing and trading on a national securities exchange as securities. OCC filed its rules for clearing credit default options with the CFTC, and the CFTC issued an exemption permitting OCC to clear such options when traded on a national securities exchange whether or not they are within the CFTC's jurisdiction. By its terms, the exemption is revocable, and its revocation would be one of the events that could lead to the unavailability of a trading market for credit default options.

Important Information About Equity, Options and Futures Exchange Rules

1. Manipulative Trading: It is a violation of exchange rules for a customer, acting alone or in concert with others, to engage in manipulative trading, including trading designed to unlawfully influence the price or volume of an instrument, and trading without a bona fide investment or hedging or speculative purpose. Manipulative trading includes, but is not limited to: "wash sales", "matched orders", "painting the tape", "spoofing/small-lot baiting" (sending an order to an exchange in order unlawfully to manipulate the execution price of a separate order on that exchange or on another exchange), "marking the close" (sending an order to influence the price of an instrument near the close of trading) and sending orders whose primary purpose is the collection of rebates or payment for order flow rather than investment or trading of the relevant instrument.

2. Pre-Arranged Trading, Block Trading, Crossing and Facilitation: Exchange rules govern the circumstances and procedures under which customers can seek to trade against each other, including pre-arranged trading, block trading, crossing trades, facilitation trades and solicitation trades. Customer must review relevant exchange rules before seeking intentionally to trade against another person or entity. *See* ISE Rules 716 (Block Trades), 717 (Limitations on Orders), and 723 (Price Improvement); CME Policy 339 (Pre-Arranged Trading); CBOT Rule 9B.13 (Trading Against Customer Orders and Crossing Orders).

3. Improper Market Making: It is a violation of U.S. option exchange rules and American Stock Exchange ETF rules for a customer effectively to act as a market maker by holding itself out as willing to buy and sell securities on a regular or continuous basis. In determining whether a customer effectively is operating as a market maker, the exchanges will consider, among other things, the simultaneous or near-simultaneous entry of limit orders to buy and sell the same security; the multiple acquisition and liquidation of positions in the security during the same day; and the entry of multiple limit orders at different prices in the same security.

4. Order Designation: It is a violation of exchange rules to transmit an order for a broker-dealer account or an account in which a broker-dealer has a beneficial ownership interest unless such order is properly marked as a broker-dealer order. Users of the IB system cannot transmit broker-dealer orders with a "customer" designation.

BY OPENING AN IB ACCOUNT AND USING THE IB SYSTEM, CUSTOMERS REPRESENT THAT THEY WILL CONDUCT THEIR TRADING IN ACCORDANCE WITH EXCHANGE RULES.

DISCLOSURE OF RISKS OF MARGIN TRADING

Interactive Brokers ("IB") is furnishing this document to you to provide some basic facts about purchasing securities and futures contracts on margin, and to alert you to the risks involved with trading in a margin account. "Margin trading" can mean engaging in a transaction in which securities are purchased partially through a margin loan extended to you by IB, for which the securities act as collateral. Margin trading can also mean trading investment products such as futures or options in which an initial "margin" deposit is made to secure your obligations and further margin may be required to secure your obligations as the value of your positions change.

This document also describes special risks associated with trading on margin in an IRA account, as described below.

Before trading stocks, futures or other investment products in a margin account, you should carefully review the margin agreement provided by IB and you should consult IB regarding any questions or concerns you may have with your margin accounts.

When you purchase securities, you may pay for the securities in full or you may borrow part of the purchase price from IB. If you choose to borrow funds from IB, you will open a margin account with the firm. The securities purchased are IB's collateral for the loan to you. If the securities or futures contracts in your account decline in value, so does the value of the collateral supporting your loan and, as a result, IB can take action, such as sell securities or other assets in any of your accounts held with IB or issue a margin call, in order to maintain the required equity in the account.

You should understand that pursuant to the IB Margin Agreement, IB generally will not issue margin calls, that IB will <u>not</u> credit your account to meet intraday margin deficiencies and that IB generally will liquidate positions in your account in order to satisfy margin requirements without prior notice to you and without an opportunity for you to choose the positions to be liquidated or the timing or order of liquidation.

In addition, it is important that you fully understand the risks involved in trading securities or futures contracts on margin. These risks include the following:

- **<u>You can lose more funds than you deposit in the margin account.</u>** A decline in the value of securities or futures contracts that are purchased on margin may require you to provide additional funds to IB or you must put up margin to avoid the forced sale of those securities or futures contracts or other assets in your account(s).

- **<u>IB can force the sale of securities or other assets in your account(s).</u>** If the equity in your account falls below the maintenance margin requirements or if IB has higher "house" requirements, IB can sell the securities or futures contracts or other assets in any of your accounts held at the firm to cover the margin deficiency. You also will be responsible for any shortfall in the account after such a sale.

- **<u>IB can sell your securities or other assets without contacting you.</u>** Some investors mistakenly believe that a firm must contact them for a margin call to be valid and that the firm cannot liquidate securities or other assets in their accounts to meet the call unless the firm has contacted them first. This is not the case. As noted above, <u>IB generally will not issue margin calls</u> and can immediately sell your securities or futures contracts without notice to you in the event that your account has insufficient margin.

- **<u>You are not entitled to choose which securities or futures contracts or other assets in your account(s) are liquidated or sold to meet a margin call.</u>** IB has the right to decide which positions to sell in order to protect its interests.

- **<u>IB can increase its "house" maintenance margin requirements at any time and is not required to provide you with advance written notice.</u>** These changes in firm policy often take effect immediately. Your failure to maintain adequate margin in the event of an increased margin rate generally will cause IB to liquidate or sell securities or futures contracts in your account(s).

- **<u>If IB chooses to issue a margin call rather than immediately liquidating undermargined positions, you are not entitled to an extension of time on the margin call.</u>**

- **<u>Special Risks of Trading on Margin in an IRA Account:</u>**

    - **Margin Trading in an IRA Account May Not Be Suitable Depending on Your Financial Circumstances.** Trading requiring margin (including futures trading and short option trading) involves a high degree of risk and may result in a loss of funds greater than the amount you have deposited in your IRA account. You must determine whether trading on margin in an IRA account is advisable based on your financial circumstances, your tolerance for risk, the number of years until your retirement, and other factors. You should consult a professional financial advisor to determine if margin trading in your IRA account is consistent with your financial goals.

    - **You Must Closely Monitor Your Account and Your Trading to Avoid Adverse Tax Consequences:** Trading requiring margin (including futures trading and short option trading) may require deposit of additional funds to your account to maintain sufficient margin. At the same time, provisions of the Internal Revenue Code place limits on the amount of funds that can be deposited to an IRA account. Deposits to the account in excess of such limits may cause adverse tax consequences including, but not limited to, forfeiture of tax-advantaged status of the IRA account and/or penalties. As described above, IB will liquidate positions in your account in the event that you cannot or do not deposit sufficient funds to satisfy margin requirements.

Portfolio Margin Risk Disclosure Statement

OVERVIEW OF PORTFOLIO MARGINING

1. Portfolio margining is a margin methodology that sets margin requirements for an account using a "risk-based" pricing model that calculates the largest potential loss of all positions in a product class or group across a range of underlying prices and volatilities. This model, known as the Theoretical Intermarket Margining System ("TIMS"), is applied each night to U.S. stocks, OCC stock and index options, and U.S. single stock futures positions by the federally-chartered Options Clearing Corporation ("OCC") and is disseminated by the OCC to participating brokerage firms each night. Interactive Brokers evaluates margin compliance throughout the trading day based on the current positions in the account and current market prices, but the margin calculations are based on TIMS parameters received the prior evening.

2. The goal of portfolio margining is to set levels of margin that more precisely reflect actual net risk. The customer may benefit from portfolio margining in that margin requirements that are calculated based on net risk are generally lower than alternative "position" or "strategy" based methodologies for determining margin requirements. Lower margin requirements allow the customer more leverage in an account.

CUSTOMERS ELIGIBLE FOR PORTFOLIO MARGINING

3. To be eligible for portfolio margining, customers (other than broker-dealers or members of a national futures exchange) must be approved for writing uncovered options. If a customer (other than a broker-dealer or member of a national futures exchange) wishes to trade in unlisted derivatives, the customer must have and maintain at all times account equity of not less than five million dollars, aggregated across all accounts under identical ownership at the carrying broker-dealer and/or its United States regulated affiliated broker-dealers or Futures Commission Merchants. This identical ownership requirement excludes accounts held by the same customer in different capacities (e.g., as a trustee and as an individual) and accounts where ownership is overlapping but not identical (e.g., individual accounts and joint accounts). In addition to the requirements of the self-regulatory organization rule, carrying broker-dealers may have their own minimum equity requirement and possibly other eligibility requirements.

POSITIONS ELIGIBLE FOR A PORTFOLIO MARGIN ACCOUNT

4. All margin equity securities (as defined in Section 220.2 of Regulation T of the Board of Governors of the Federal Reserve System), warrants on margin equity securities or on eligible indices of equity securities, equity-based or equity-index based listed options, and security futures products (as defined in Section 3(a)(56) of the Securities Exchange Act of 1934) are eligible to be margined in a portfolio margin account. In addition, a customer that has an account with equity of at least five million dollars may establish and maintain positions in unlisted derivatives (e.g., OTC swaps, options) on a margin equity security or an eligible index of equity securities that can be priced by a theoretical pricing model approved by the Securities and Exchange Commission ("SEC").

SPECIAL RULES FOR PORTFOLIO MARGIN ACCOUNTS

5. A portfolio margin account may be either a separate account or a sub-account of a customer's standard margin account. In the case of a sub-account, equity in the standard account may be available to satisfy any margin requirement in the portfolio margin sub-account without transfer to the sub-account.

6. A portfolio margin account or sub-account will be subject to a minimum margin requirement of $.375 for each listed option, unlisted derivative and security futures product, multiplied by the contract's or instrument's multiplier, carried long or short in the account. Other eligible products are not subject to a minimum margin requirement.

7. A margin deficiency in the portfolio margin account or sub-account, regardless of whether due to new commitments or the effect of adverse market movements on existing positions, must be met within three business days. Failure to meet a portfolio margin deficiency by the end of the third business day will result in a prohibition on entering any new orders, with the exception of new orders that reduce the margin requirement. Failure to meet a portfolio margin deficiency by the end of the third business day will result in the prompt liquidation of positions on the fourth business day, to the extent necessary to eliminate the margin deficiency.

8. Any shortfall in aggregate equity across accounts, when required, must be met within three business days. Failure to meet a minimum equity deficiency by the end of the third business day will result in a prohibition on entering any new orders, with the exception of new orders that reduce the margin requirement, beginning on the fourth business day and continuing until such time as the minimum equity requirement is satisfied, or if applicable, all unlisted derivatives are liquidated or transferred out of the portfolio margin account.

**Please note that pursuant to the IB Customer Agreement, IB reserves the right to liquidate positions prior to the fourth business day. **

SPECIAL RISKS OF PORTFOLIO MARGIN ACCOUNTS

9. Portfolio margining generally permits greater leverage in an account, and greater leverage creates greater losses in the event of adverse market movements.

10. Because the maximum time limit for meeting a margin deficiency is shorter than in a standard margin account, there is increased risk that a customer's portfolio margin account will be liquidated involuntarily, possibly causing losses to the customer.

11. Because portfolio margin requirements are determined using sophisticated mathematical calculations and theoretical values that must be calculated from market data, it may be more difficult for customers to predict the size of future margin deficiencies in a portfolio margin account. This is particularly true in the case of customers who do not have access to specialized software necessary to make such calculations or who do not receive theoretical values calculated and distributed periodically by an approved vendor of theoretical values.

12. Trading of margin equity securities, warrants on margin equity securities or on eligible indices of equity securities, listed options, unlisted derivatives on margin equity securities or an eligible index of equity securities, and security futures products in a portfolio margin account is generally subject to all the risks of trading those same products in a standard securities margin account. Customers should be thoroughly familiar with the risk disclosure materials applicable to those products, including the booklets entitled "Characteristics and Risks of Standardized Options" and

"Security Futures Risk Disclosure Statement". Because this disclosure statement does not disclose the risks and other significant aspects of trading in security futures and options, customers should review those materials carefully before trading these products in a portfolio margin account.

13. Customers should consult with their tax advisers to be certain that they are familiar with the tax treatment of transactions in margin equity securities, warrants on margin equity securities or on eligible indices of equity securities, listed options, unlisted derivatives on margin equity securities or an eligible index of equity securities, and security futures products, including tax consequences of trading strategies involving both security futures and option contracts.

14. The descriptions in this disclosure statement relating to eligibility requirements for portfolio margin accounts, and minimum equity and margin requirements for those accounts, are minimums imposed under the self-regulatory organization rules. Time frames within which margin and equity deficiencies must be met are maximums imposed under the self-regulatory organization rules. Broker-dealers may impose their own more stringent requirements.

15. Customers should bear in mind that the discrepancies in the cash flow characteristics of security futures and certain options are still present even when those products are carried together in a portfolio margin account. In addition, discrepancies in the cash flow characteristics of certain unlisted derivatives may also be present when those products are carried in a portfolio margin account. Both security futures and options contracts are generally marked to the market at least once each business day. Similarly, certain unlisted derivatives may also be marked to the market on a daily basis. However, there may be incongruity between the marking to the market of each eligible product in that marks may take place with different frequency and at different times within the day. For example, when a security futures contract is marked to the market, the gain or loss is immediately credited to or debited from, respectively, the customer's account in cash. While a change in the value of a long option contract may increase or decrease the equity in the account, the gain or loss is not realized until the option is liquidated, exercised, or assigned. Accordingly, a customer may be required to deposit cash in the account in order to meet a variation payment on a security futures contract even though the customer is in a hedged position and has experienced a corresponding (but yet unrealized) gain on an option. Alternatively, a customer who is in a hedged position and would otherwise be entitled to receive a variation payment on a security futures contract may find that the cash is required to be held in the account as margin collateral on an offsetting option position.

The general provisions governing portfolio margining (including definitions used in this document) are set forth in NYSE Rule 431(g) and NASD Rule 4210(g), which
can be found at www.finra.org.

ACKNOWLEDGEMENT FOR CUSTOMERS UTILIZING A PORTFOLIO MARGIN ACCOUNT

BY SIGNING BELOW, I/WE AFFIRM THAT I/WE HAVE READ AND UNDERSTOOD THE PORTFOLIO MARGINING RISK DISCLOSURE STATEMENT.

CUSTOMER NAME:
BY: DATE

Appendix A to CFTC Rule 1.55(c) – Generic Risk Disclosure Statement

Risk Disclosure Statement for Futures and Options

This brief statement does not disclose all of the risks and other significant aspects of trading in futures and options. In light of the risks, you should undertake such transactions only if you understand the nature of the contracts (and contractual relationships) into which you are entering and the extent of your exposure to risk. Trading in futures and options is not suitable for many members of the public. You should carefully consider whether trading is appropriate for you in light of your experience, objectives, financial resources and other relevant circumstances.

Futures

1. Effect of "Leverage" or "Gearing"
Transactions in futures carry a high degree of risk. The amount of initial margin is small relative to the value of the futures contract so that transactions are ‘leveraged' or ‘geared'. A relatively small market movement will have a proportionately larger impact on the funds you have deposited or will have to deposit: this may work against you as well as for you. You may sustain a total loss of initial margin funds and any additional funds deposited with the firm to maintain your position. If the market moves against your position or margin levels are increased, you may be called upon to pay substantial additional funds on short notice to maintain your position. If you fail to comply with a request for additional funds within the time prescribed, your position may be liquidated at a loss and you will be liable for any resulting deficit.

2. Risk-reducing orders or strategies
The placing of certain orders (e.g. ‘stop-loss' orders, where permitted under local law, or ‘stop-limit' orders) which are intended to limit losses to certain amounts may not be effective because market conditions may make it impossible to execute such orders. Strategies using combinations of positions, such as ‘spread' and ‘straddle' positions may be as risky as taking simple ‘long' or ‘short' positions.

Options

3. Variable degree of risk
Transactions in options carry a high degree of risk. Purchasers and sellers of options should familiarize themselves with the type of option (i.e. put or call) which they contemplate trading and the associated risks. You should calculate the extent to which the value of the options must increase for your position to become profitable, taking into account the premium and all transaction costs.

The purchaser of options may offset or exercise the options or allow the options to expire. The exercise of an option results either in a cash settlement or in the purchaser acquiring or delivering the underlying interest. If the option is on a future, the purchaser will acquire a futures position with associated liabilities for margin (see the section on Futures above). If the purchased options expire worthless, you will suffer a total loss of your investment which will consist of the option premium plus transaction costs. If you are contemplating purchasing deep-out-of-the-money options, you should be aware that the chance of such options becoming profitable ordinarily is remote.

Selling (‘writing' or ‘granting') an option generally entails considerably greater risk than purchasing options. Although the premium received by the seller is fixed, the seller may sustain a loss well in excess of that amount. The seller will be liable for additional margin to maintain the position if the market moves unfavorably. The seller will also be exposed to the risk of the purchaser exercising the option and the seller will be obligated to either settle the option in cash or to acquire or deliver the underlying interest. If the option is on a future, the seller will acquire a position in a future with associated liabilities for margin (see the section on Futures above). If the option is ‘covered' by the seller holding a corresponding position in the underlying interest or a future or another option, the risk may be reduced. If the option is not covered, the risk of loss can be unlimited.

Certain exchanges in some jurisdictions permit deferred payment of the option premium, exposing the purchaser to liability for margin payments not exceeding the amount of the premium. The purchaser is still subject to the risk of losing the premium and transaction costs. When the option is exercised or expires, the purchaser is responsible for any unpaid premium outstanding at that time.

Additional risks common to futures and options

4. Terms and conditions of contracts
You should ask the firm with which you deal about the terms and conditions of the specific futures or options which you are trading and associated obligations (e.g. the circumstances under which you may become obligated to make or take delivery of the underlying interest of a futures contract and, in respect of options, expiration dates and restrictions on the time for exercise). Under certain circumstances the specifications of outstanding contracts (including the exercise price of an option) may be modified by the exchange or clearing house to reflect changes in the underlying interest.

5. Suspension or restriction of trading and pricing relationships
Market conditions (e.g. illiquidity) and/or the operation of the rules of certain markets (e.g. the suspension of trading in any contract or contract month because of price limits or "circuit breakers") may increase the risk of loss by making it difficult or impossible to effect transactions or liquidate/offset positions. If you have sold options, this may increase the risk of loss.

Further, normal pricing relationships between the underlying interest and the future, and the underlying interest and the option may not exist. This can occur when, for example, the futures contract underlying the option is subject to price limits while the option is not. The absence of an underlying reference price may make it difficult to judge "fair" value.

6. Deposited cash and property
You should familiarize yourself with the protections accorded money or other property you deposit for domestic and foreign transactions, particularly in

the event of a firm insolvency or bankruptcy. The extent to which you may recover your money or property may be governed by specific legislation or local rules. In some jurisdictions, property which had been specifically identifiable as your own will be pro-rated in the same manner as cash for purposes or distribution in the event of a shortfall.

7. Commission and other charges
Before you begin to trade, you should obtain a clear explanation of all commission, fees and other charges for which you will be liable. These charges will affect your net profit (if any) or increase your loss.

8. Transactions in other jurisdictions
Transactions on markets in other jurisdictions, including markets formally linked to a domestic market, may expose you to additional risk. Such markets may be subject to regulation which may offer different or diminished investor protection. Before you trade you should enquire about any rules relevant to your particular transactions. Your local regulatory authority will be unable to compel the enforcement of the rules of regulatory authorities or markets in other jurisdictions where your transactions have been effected. You should ask the firm with which you deal for details about the types of redress available in both your home jurisdiction and other relevant jurisdictions before you start to trade.

9. Currency risks
The profit or loss in transactions in foreign currency-denominated contracts (whether they are traded in your own or another jurisdiction) will be affected by fluctuations in currency rates where there is a need to convert from the currency denomination of the contract to another currency.

10. Trading facilities
Most open-outcry and electronic trading facilities are supported by computer-based component systems for the order-routing, execution, matching, registration or clearing of trades. As with all facilities and systems, they are vulnerable to temporary disruption or failure. Your ability to recover certain losses may be subject to limits on liability imposed by the system provider, the market, the clearing house and/or member firms. Such limits may vary: you should ask the firm with which you deal for details in this respect.

11. Electronic trading
Trading on an electronic trading system may differ not only from trading in an open-outcry market but also from trading on other electronic trading systems. If you undertake transactions on an electronic trading system, you will be exposed to risks associated with the system including the failure of hardware and software. The result of any system failure may be that your order is either not executed according to your instructions or is not executed at all.

12. Off-exchange transactions
In some jurisdictions, and only then in restricted circumstances, firms are permitted to effect off-exchange transactions. The firm with which you deal may be acting as your counterparty to the transaction. It may be difficult or impossible to liquidate an existing position, to assess the value, to determine a fair price or to assess the exposure to risk. For these reasons, these transactions may involve increased risks. Off-exchange transactions may be less regulated or subject to a separate regulatory regime. Before you undertake such transactions, you should familiarize yourself with applicable rules and attendant risks.

I hereby acknowledge that I have received and understood this risk disclosure statement.

DISCLOSURE REGARDING INTERACTIVE BROKERS' PROCEDURES FOR ALLOCATING EQUITY OPTION ASSIGNMENT NOTICES FROM OCC

As described in the Options Clearing Corporation ("OCC") Publication "Characteristics and Risks of Standardized Options", the OCC assigns exercise notices to clearing firms such as Interactive Brokers LLC ("IB LLC"), [the US-located affiliate of Interactive Brokers (U.K.) Limited ("IB UK") and Interactive Brokers Canada, Inc. ("IBC") that arranges for the execution and clearing of IB UK and IBC customer trades] using a specified assignment procedure. IB LLC, in turn, is required to maintain a procedure to allocate such exercise notices to those customer accounts carried by IB LLC that hold short positions in the relevant options. Upon assignment, customers whose accounts are carried by IB LLC shall be required: (1) in the case of an equity option, to deliver or accept the required number of shares of the underlying security, or (2) in the case of an equity index option, to pay or receive the settlement price, in cash. Customer understands that it may not receive notice of an assignment until one or more days following the date of the initial assignment by OCC to IB LLC and that the lack of such notice creates a special risk for uncovered writers of physical delivery call stock options.

Described below are IB LLC's procedures for allocation of exercise notices, which are based on a random selection process:

<u>Steps</u>

1. Each night, IB LLC receives from the OCC the "OCC E&A" (exercise and assignment activity) file in machine-readable format setting forth, on a per contract basis, the aggregate exercise and assignment quantities to IB LLC.

2. For each contract assignment record, the IB LLC System compiles a list, in ascending account number order, of all customer accounts held at IB LLC with short positions in the relevant contract.

3. If only one customer holds a short position in the contract assigned, that customer is automatically allocated the assignment and no lottery is needed.

4. If more than one customer holds a short position in the contract assigned, the IB LLC System runs an automated random lottery to determine the allocation of quantities that are to be assigned to each customer. The IB LLC System shall:

    a. Assign two sequence ranges to each customer's holdings (see Exhibit A).

    b. Generate a random number to find a "Starting Point". The Starting Point is the customer contract sequence number from which the allocation of the assignment quantity begins. To generate a Random Number, the IB System will:

        - Initialize the Oracle random number generator with the system time (HH24MISS)

        - Find the Random Number by taking the MOD (random number, total position) + 1 to ensure that the Random Number is between one and the total number of short contracts.

    (Note: the IB System will generate a new Random Number for each lottery to be run.)

5. The IB LLC System will then (a) find the account that has the assigned sequence range into which the Random Number falls; and (b) select contracts to be assigned in increments of one, beginning with the contract that correlates with the Random Number until the total number of contracts assigned has been satisfied.

6. The IB LLC System will then process the assigned positions by (a) removing the options positions from customers' accounts and (b) if the option delivers underlying stock, entering the corresponding stock trades at the strike price or (c) if the option assignment settles in cash, entering the corresponding cash debit.

EXHIBIT "A"

Assume there are 1186 options contracts held at OCC for 10 customers and that 50 contracts are assigned to IB LLC by OCC.

1. Assign sequence numbers to each security:

Customer Accounts	No. of Contracts held at OCC	Assigned Sequence Numbers 1st Range	2nd Range
A	1	0001	1187
B	50	0002-0051	1188-1237
C	100	0052-0151	1238-1337
D	2	0152-0153	1338-1339
E	1	0154	1340
F	1	0155	1341
G	100 0	0156-1155	1342-2341
H	1	1156	2342
I	10	1157-1166	2343-2352
J	20	1167-1186	2353-2372
Total in OCC	1186		

2. FIND A STARTING RANDOM NUMBER BETWEEN 0001 AND 1186 using the Oracle random number generator.

3. ASSUMING THE RANDOM NUMBER GENERATED WAS 0396, ALLOCATE THE 50 CONTRACTS TO CUSTOMERS STARTING AT CONTRACT NUMBER 0396.

SUMMARY OF ALLOCATION

Customer Accounts	No of Contracts Held at OCC	Allocation of Assigned Options Contracts
A	1	0
B	50	0
C	100	0
D	2	0
E	1	0
F	1	0
G	1000	50
H	1	0
I	10	0
J	20	0
Total at OCC	1186	50

DAY TRADING RISK DISCLOSURE STATEMENT

This Day Trading Risk Disclosure Statement is being provided to you in the event your Interactive Brokers (IB) margin account becomes, or already is, classified as a Pattern Day Trader account. As required by current SEC and SRO rules and regulations, IB will classify an account that effects three (3) day trades within a five (5) day period as a Pattern Day Trader account. (A day trade is a buy and sell of the same equity security or equity option on the same day). The regulations prohibit IB from permitting a Pattern Day Trader account from effecting any transactions unless such account maintains a Minimum Equity Requirement of at least $25,000.

You should consider the following points before engaging in a day-trading strategy. For purposes of this notice, a "day-trading strategy" means an overall trading strategy characterized by the regular transmission by a customer of intra-day orders to effect both purchase and sale transactions in the same security or securities.

Day trading can be extremely risky. Day trading generally is not appropriate for someone of limited resources and limited investment or trading experience and low risk tolerance. You should be prepared to lose all of the funds that you use for day trading. In particular, you should not fund day-trading activities with retirement savings, student loans, second mortgages, emergency funds, funds set aside for purposes such as education or home ownership, or funds required to meet your living expenses. Further, certain evidence indicates that an investment of less than $50,000 will significantly impair the ability of a day trader to make a profit. Of course, an investment of $50,000 or more will in no way guarantee success.

Be cautious of claims of large profits from day trading. You should be wary of advertisements or other statements that emphasize the potential for large profits in day trading. Day trading can also lead to large and immediate financial losses.

Day trading requires knowledge of securities markets. Day trading requires in-depth knowledge of the securities markets and trading techniques and strategies. In attempting to profit through day trading, you must compete with professional, licensed traders employed by securities firms. You should have appropriate experience before engaging in day trading.

Day trading requires knowledge of a firm's operations. You should be familiar with a securities firm's business practices, including the operation of the firm's order execution systems and procedures. Under certain market conditions, you may find it difficult or impossible to liquidate a position quickly at a reasonable price. This can occur, for example, when the market for a stock suddenly drops, or if trading is halted due to recent news events or unusual trading activity. The more volatile a stock is, the greater the likelihood that problems may be encountered in executing a transaction. In addition to normal market risks, you may experience losses due to systems failures.

Day trading will generate substantial commissions, even if the per trade cost is low. Day trading involves aggressive trading, and generally you will pay commission on each trade. The total daily commissions that you pay on your trades will add to your losses or significantly reduce your earnings. For instance, assuming that a trade costs $16 and an average of 29 transactions are conducted per day, an investor would need to generate an annual profit of $111,360 just to cover commission expenses.

Day trading on margin or short selling may result in losses beyond your initial investment. When you day trade with funds borrowed from a firm or someone else, you can lose more than the funds you originally placed at risk. A decline in the value of the securities that are purchased may require you to provide additional funds to the firm to avoid the forced sale of those securities or other securities in your account. Short selling as part of your day-trading strategy also may lead to extraordinary losses, because you may have to purchase a stock at a very high price in order to cover a short position.

Potential Registration Requirements. Persons providing investment advice for others or managing securities accounts for others may need to register as either an "Investment Advisor" under the Investment Advisors Act of 1940 or as a "Broker" or "Dealer" under the Securities Exchange Act of 1934. Such activities may also trigger state registration requirements.

Risks of After-Hours Trading

There are special characteristics and unique risks associated with trading in securities at times that are outside the ordinary trading hours for the exchange(s) upon which such securities are traded ("After-Hours Trading" or "Extended Hours Trading"). Customers must familiarize themselves with these risks and determine whether After-Hours Trading is appropriate in light of their objectives and experience. Customers are responsible for familiarizing themselves with the hours of the relevant markets upon which they trade and for determining when to place orders for particular securities, how they wish to direct those orders, and what types of orders to use. Interactive Brokers' offer of After-Hours Trading does not constitute a recommendation or conclusion that After-Hours Trading will be successful or appropriate for all customers or trades.

Some risks associated with After-Hours Trading are as follows:

1. **Risk of Lower Liquidity.** Liquidity refers to the ability of market participants to buy and sell securities. Generally, the more orders that are available in a market, the greater the liquidity. Liquidity is important because with greater liquidity it is easier for investors to buy or sell securities, and as a result, investors are more likely to pay or receive a competitive price for securities purchased or sold. There may be lower liquidity in extended hours trading as compared to regular market hours. As a result, your order may only be partially executed, or not at all.

2. **Risk of Higher Volatility.** Volatility refers to the changes in price that securities undergo when trading. Generally, the higher the volatility of a security, the greater its price swings. There may be greater volatility in extended hours trading than in regular market hours. As a result, your order may only be partially executed, or not at all, or you may receive an inferior price in extended hours trading than you would during regular markets hours.

3. **Risk of Changing Prices.** The prices of securities traded in extended hours trading may not reflect the prices either at the end of regular market hours, or upon the opening of the next morning. As a result, you may receive an inferior price in extended hours trading than you would during regular market hours.

4. **Risk of Unlinked Markets.** Depending on the extended hours trading system or the time of day, the prices displayed on a particular extended hours system may not reflect the prices in other concurrently operating extended hours trading systems dealing in the same securities. Accordingly, you may receive an inferior price in one extended hours trading system than you would in another extended hours trading system.

5. **Risk of News Announcements.** Normally, issuers make news announcements that may affect the price of their securities after regular market hours. Similarly, important financial information is frequently announced outside of regular market hours. In extended hours trading, these announcements may occur during trading, and if combined with lower liquidity and higher volatility, may cause an exaggerated and unsustainable effect on the price of a security.

6. **Risk of Wider Spreads.** The spread refers to the difference in price between what you can buy a security for and what you can sell it for. Lower liquidity and higher volatility in extended hours trading may result in wider than normal spreads for a particular security.

7. **Risk of Lack of Calculation or Dissemination of Underlying Index Value or Intraday Indicative Value ("IIV").** For certain Derivative Securities Products, an updated underlying index value or IIV may not be calculated or publicly disseminated in extended trading hours. Since the underlying index value and IIV are not calculated or widely disseminated during the pre-market and post-market sessions an investor who is unable to calculate implied values for certain Derivative Securities Products in those sessions may be at a disadvantage to market professionals.

During After-Hours Trading, Interactive Brokers ("IB") may provide quotations from and execute Customer trades through various Electronic Communications Networks ("ECNs"), exchanges or other trading systems ("After-Hours Trading Facilities"). Quotations provided during After-Hours Trading may be different than quotations provided during exchange trading hours. Likewise, it is possible that the quotations displayed by IB from After-Hours Trading Facilities on which IB can execute Customer trades may be less favorable than those on other After-Hours Trading Facilities to which IB does not have access. Last sale information provided by IB may not reflect the prices of the most recent trades on all of the various After-Hours Trading Facilities.

For a list of trading hours for exchanges and ECNs, click here.

Interactive Brokers LLC
Business Continuity Plan Disclosure

I. **Introduction**

In accordance with applicable regulations, Interactive Brokers LLC has developed a Business Continuity Plan to assist the firm in appropriately responding to a significant business disruption as promptly as possible under prevailing conditions. Among other things, IB's Business Continuity Plan:

- Identifies Emergency Contact Personnel to the firm's regulators;
- Describes the systems infrastructure protections that the firm has established in an effort to minimize the potential adverse effects of a disruption (for example, redundancy of telecommunications and power generation, fire protection and building security);
- Describes the firm's daily back-up of specified data and records and maintenance of back-up media at secure off-site locations;
- Identifies the firm's Disaster Recovery Site(s) and the methods that the firm would use to recover particular data and operations at the site;
- Identifies important firm operations and where applicable, describes how those operations could be re-established in the event of a disruption;
- Identifies the means by which IB will provide customers prompt access to their funds and securities and/or the ability to transfer their funds and positions to another broker or futures commission merchant in the event of a disruption of such magnitude that IB does not intend to continue business; and
- Describes the means by which IB will communicate with its customers, employees, business constituents and regulators in the event of a disruption.

In the event of a significant business disruption, IB intends to continue its operations to the extent reasonable and practical under the circumstances and will place utmost priority in re-establishing the data and operational systems necessary to provide its customers with prompt access to their funds and securities.

IB intends to respond to disruptions of particular scope as follows:

II. **Branch Office Disruption**

Basic Access to Funds and Securities in the Event of a Branch Office Disruption: Critical systems and personnel necessary to provide customers with access to their funds and securities generally are not dependent on operation of IB's branch offices (Chicago, London, Hong Kong and Zug, Switzerland). Thus, IB does not anticipate that even a significant disruption to the operations of a single IB branch office would have more than a temporary impact – if any – on customers' basic access to their funds and securities.

Connection to IB Trading System for Certain Customers: In the event of a significant disruption to certain branch offices, customers that connect to the IB online trading system (e.g., the IB Trader Workstation) through the branch office likely would temporarily lose the ability to connect to the trading system. This likely would last only briefly, as connections for these customers could be reestablished through other IB offices in as little as a matter of hours. Recovery time probably would be minimal (measured in hours or days). Customers would still have the ability to place trades by telephone during the temporary outage. Customers' access to account functions other than trading (e.g., deposits and withdrawals, account management, etc.) likely would be unaffected, as connections for many internet based functions other than trading are not location-dependent.

We remind our customers that electronic and computer-based facilities and systems such as those provided by IB are inherently vulnerable to disruption, delay or failure. As specified in the IB Customer Agreement, customers must maintain alternative trading arrangements in addition to their IB accounts for the placement and execution of customer orders in the event that the IB system is unavailable.

Connection to Market Centers in Same Region as Branch: A significant disruption in a branch office could temporarily impact all IB customers' ability to execute trades on market centers in the same geographic region of the branch office, because necessary communications lines or personnel could be affected. In this case, IB would strive to reconnect to affected markets from its Greenwich, CT headquarters, another branch office, or through a third party. Recovery time to restore some basic ability to trade on local markets probably would be minimal (measured in hours or days).

Other Branch Office Functions: Most important operations performed in IB branch offices, such as Customer Service, Account Application Processing, Compliance, etc. are also are performed in other IB offices and could be migrated to similarly-trained personnel in other branch offices promptly. Accordingly, IB does not anticipate that localized failures in a branch office would have a substantial negative impact on the firm's ability to respond to customer needs. Recovery time would be minimal.

III. **Headquarters Disruption**

In the Event of a Modest Disruption at IB's Headquarters: IB has generally designed its systems, procedures and personnel structure such that there is significant redundancy and cross-capability. Limited disruptions affecting particular communications lines, particular pieces of computer hardware, or particular systems typically can be addressed quickly through use of redundant systems with similar capability. Likewise, the firm has significant capacity and capability in its branch offices, both in terms of systems and personnel, such that limited disruptions in particular areas at the firm's headquarters may be ameliorated quickly.

In the Event of a Very Significant Disruption at IB's Headquarters: IB's response to a very significant disruption at its headquarters necessarily will depend on the extent of the damage caused thereby. In the event of a total loss of IB's headquarters, or the data processing center at its headquarters, IB intends to recover, at its Disaster Recovery Site(s), the relevant data and operational systems (*e.g.*, trade and account data and modified versions of its market data, credit vetting and customer authentication capability) necessary to provide customers prompt access to their funds and securities. IB's

Disaster Recovery Site(s) are located in remote geographic locations that should not be subject to the same communications, electricity and/or transportation restrictions that may be experienced in the firm's Greenwich headquarters.

During the immediate aftermath period of, for example, a terrorist attack resulting in the destruction of the firm's Greenwich headquarters, the firm does not anticipate that customers could continue to place new trades. IB anticipates that it could recover customer data and position information at its Disaster Recovery Site(s) and establish basic customer access to funds and positions within approximately two to five days of a total loss of its headquarters operations. Thus, while they could not trade, we anticipate that, within this 2-5 day window after the loss of the headquarters facility, customers would be able to request withdrawal of funds or transfer of their positions to another broker whose operations were unaffected by, for example, the terrorist attack. Although IB's Business Continuity Plan is designed to provide customer access to funds and securities within 2-5 days, the actual recovery time will depend on the nature of the disruption, how many IB facilities and personnel are affected, the state of the national and global financial and banking system, and a host of other factors.

In the event of a very significant disruption or total loss of IB's headquarters facilities, IB anticipates that IB customers may be able to access either of the following websites: www.ibgdr.com or www.interactivebrokers.co.uk to obtain information about the extent of the disruption and the state of IB's operations (assuming that the public internet remained available). Likewise, because most customer service personnel are in offices other than at IB headquarters, IB anticipates that customers would continue to be able to contact IB telephonically. Of course, in the event of a significant outage or major terrorist or other disaster affecting the markets, large numbers of customers likely would try to contact IB at the same time, potentially causing major delays.

Beyond the initial aftermath of a very significant disruption or total loss of the firm's headquarters (i.e., in the time period after the first 5 days), the firm would evaluate the nature of the disruption, the availability of its systems and personnel, its financial condition, the condition of the national and global financial markets, and other factors, and the firm would determine whether to restore full brokerage operations or to discontinue brokerage operations and require its customers to transfer their accounts to another broker.

IV. **City Wide Disruptions and Regional Disruptions**

In the event of a significant city-wide or regional disruption in one of the cities in which an IB branch office is located, IB would follow the procedures described in Section II (Branch Office Disruption) above. Since no two IB branch offices are located in the same city or region, we expect that the disruption's effects would be limited (see Section II above). In the event of a significant city-wide or regional disruption, affecting the firm's Greenwich, CT headquarters IB would follow the procedures described in Section III (Headquarters Disruption). IB's Disaster Recovery Site(s) are not located in the same city or region as the firm's headquarters.

V. **Important Disclaimers**

IB will adhere to the procedures set forth in its Business Continuity Plan and described in this disclosure to the extent commercially reasonable and practicable under prevailing circumstances. However, there are innumerable potential causes of a business disruption. In addition, disruptions (and the events that caused them) may vary significantly in nature, size, scope, severity, duration and geographic location and will result in distinct degrees of harm to human life; firm assets; the banks, exchanges, clearing houses and depositories with which the firm conducts business; and local, regional and national systems infrastructure (e.g., telecommunications, Internet connectivity, power generation and transportation) that could affect the firm's recovery in vastly disparate ways. In recognition of this, IB reserves the right to flexibly respond to particular emergencies and business disruptions in a situation-specific manner which the firm deems prudent, in its sole discretion. **Nothing in this document is intended to provide a guarantee or warranty regarding the actions or performance of IB, its computer systems, or its personnel in the event of a significant disruption.**

IB may modify its Business Continuity Plan and this disclosure at any time. IB will post updates to its Business Continuity Plan Disclosure on its website. Should you wish to receive a copy of an updated disclosure by mail, please contact the IB Document Processing Department at newaccounts@interactivebrokers.com.

Interactive Brokers Group Privacy Statement

The Interactive Brokers Group does not sell or license information about Interactive Brokers customers to third parties, nor do we sell customer lists or customer e-mail addresses to third-party marketers.

At IB, we understand that the confidentiality and security of the personal information that you have shared with us is important to you. That's why we have developed specific policies and practices that are designed to protect the privacy of your personal information. By opening an account with IB or by utilizing the products and services that are available through IB, you have consented to the collection and use of your personal information in accordance with the privacy policy set forth below. We encourage you to read this privacy statement carefully.

In order to provide brokerage services and in compliance with regulatory requirements, IB collects certain personal, non-public information from you. This includes information that you provide during the IB account application process (e.g., your name, e-mail address, telephone number, birth date, social security number, investment objectives, etc.), and acquired as a result of the transactions you conduct through the IB system. We safeguard the confidentiality of your information in a number of ways. For example:

- We do not sell or license lists of our customers or the personal, non-public information that you provide to us.
- We restrict access to the personal, non-public information that you have shared with us to those IB employees, agents, and affiliates who need to know such information in connection with the services that IB provides to you.
- We maintain strict employment policies that prohibit employees who have access to your personal, non-public information from using or disclosing such information except for business purposes.
- We take substantial precautions to safeguard your personal, nonpublic information. For example, the IB system can be accessed only by authorized IB personnel via valid user names and passwords. In addition, our Internet-based systems include security measures such as encryption and firewalls.

IB uses the personal, nonpublic information that we collect from you to service your account (e.g., to qualify you for trading the products and using the services available through the IB system and to execute and confirm your IB transactions). In doing so, we may share such information with our employees, agents, and affiliates.

IB also collects and uses information acquired from "cookies." "Cookies" are bits of textual information that are sent electronically from a web server to your browser and are stored on your computer. They do not identify you individually nor do they contain personal information about you, unless you have identified yourself or provided the information by, for example, opening an account or registering for an on-line service. IB may use cookies to measure and identify website traffic patterns and to track the performance of web features and advertisements. By providing IB with a better understanding of how you and others use IB's websites and other web services, cookies enable IB to improve the navigation and functionality of its websites and to present the most useful information and offers to you. IB may share information obtained from cookies with its employees, agents and affiliates, but does not sell such information to unaffiliated third parties. IB may permit other companies or their third party ad servers to set cookies on your browser when you visit an IB website. Such companies generally use these cookies as we do.

We do not disclose personal, nonpublic information to individuals or entities that are not affiliated with IB, except as provided by law. For example, among other reasons we may disclose or report such information: where necessary to authorize, effect, administer, or enforce transactions that you request or authorize; to maintain and administer your account; to provide you with account confirmations, statements and records; to maintain appropriate archival records; where we believe that disclosure is required by applicable law, rules or regulations; to cooperate with law enforcement or regulatory or self-regulatory organizations; to enforce our customer and other agreements; to meet our obligations, or to protect our rights and property.

Finally, if you choose to subscribe to any of the Trader's Toolbox suite of third-party services that are provided through the IB website, we may disclose such information to the service providers as necessary for them to provide the services that you have requested. IB requires these service providers to enter into confidentiality agreements with IB that limit their use of the information that they receive. Such agreements prohibit the service provider from using IB customer information that they receive other than to carry out the purposes for which the information was disclosed. If you have any questions about these policies, please contact the IB Customer Service Department at help@interactivebrokers.com.

INTERACTIVE BROKERS' CUSTOMER INFORMATION POLICIES AND PROCEDURES

This disclosure provides Customers with information about Interactive Brokers' Customer Information Policies and Procedures, and is intended to make it clear that prior Customer or proprietary orders, as well as prior proprietary orders of Interactive Brokers ("IB") or its affiliates, will be represented for execution before subsequently transmitted Customer orders for the same securities which could be executed at the same price. In other words, all orders are to be executed on a "first come, first served basis."

IB does not engage in underwriting activities, nor do IB account executives engage in verbal communications with Customers for the purpose of making recommendations or giving advice with respect to the purchase or sale of financial products. IB Customer orders are ordinarily transmitted through IB's automated order routing system. As such, IB personnel have a limited role in relation to particular Customer orders. The policies and procedures described herein apply to all Interactive Brokers Group (the "Group") affiliates, and generally relate to the confidentiality and prevention of misuse of, or access to, Customer trading information, including Customer orders.

IB generally engages in proprietary trading only to correct errors, or in connection with authorized adjustments of Customer orders or accounts (e.g., close-outs, fails, or other similar transactions). Other Group affiliates are primarily engaged in proprietary trading, and may place orders with IB for execution.

Protections built into IB's automated order routing system assure that when a Customer order is entered into the IB system and transmitted for execution (e.g., to an exchange's electronic system), the identity of IB's Customer is anonymous. In addition, whether an order is designated as a Customer order or a proprietary order of IB or one of its affiliates, would not affect the priority of execution which the IB system allocates on a "first come, first served" basis. The IB system is designed to prevent any subsequent Group proprietary orders to buy (or sell) any security from being executed prior to the execution of Customer orders to buy (or sell) the same securities previously entered into the IB system which could be executed at the same price. The integrity of these systems is tested by an audit trail which is maintained and which time stamps all proprietary and Customer orders. Further, the IB trading system is designed to prevent the disclosure of Customer orders to any person, including Group personnel, prior to the transmission of these orders to the exchange or market center for execution, and prior to display to IB customers on the Interactive Brokers Book. For the purpose of facilitating execution, the Interactive Brokers Book displays competitive bids and offers with their associated sizes as they appear on the Interactive Brokers Book to IB customers and Group personnel on the same basis. The Group trading systems that generate, and are responsible for, entering the proprietary orders of the Group do not view, and their input is independent from, Customer orders.

Finally, only a limited number of identified and approved personnel of the Group may enter proprietary orders or affect the trading engaged in through the systems that generate the Group's proprietary orders. These personnel are prohibited from causing the execution of subsequent Group proprietary orders to buy (or sell) any security on any exchange or market center if they have knowledge of any particular prior unexecuted customer orders to buy (or sell) such security which could be executed at the same price.

Important Information About Interactive Brokers' Penny Option Pricing System

In order to assist our customers to get better prices for their option trades, Interactive Brokers ("IB") has developed a system to allow customers and liquidity providers to display penny prices in the IB system and to try to trade against other participants' penny prices displayed in the IB system. IB will attempt to match penny-priced bids and offers and send them to an option exchange for execution:

- If you want to post an options price in pennies for other IB users to try to trade against, you can send an order to IB priced in a penny increment (e.g., buy 10 XYZ contracts at $2.07). The order will be treated as a discretionary order, as follows: IB will round the order (down for a bid and up for an offer) to the nearest nickel increment (or dime depending on the premium) and send the nickel-priced order to an options exchange so that it will be working (in this example, IB will send an order to an exchange to buy 10 XYZ at $2.05).

- Then, unless you instruct us to hide your penny price, IB will also display your penny price (with size) on the public IB website and through the IB Trader Workstation (if your price is the best price in our system). Your penny price displayed on the IB website and TWS is an indication of interest to others that you are willing to trade at a more aggressive price (e.g. bidding $2.07) than the nickel-priced order being displayed in the national options market (e.g., bidding $2.05).

- If another participant in the system sends an order that can be matched against your penny price (a contra-side order), IB will attempt to execute a trade at a U.S. options exchange using one of the available penny auction pricing mechanisms (such as the Price Improvement Period auction on the Boston Options Exchange, the Price Improvement Mechanism on the International Securities Exchange, or AIM on the Chicago Board Options Exchange).

- During the penny auction process that takes place at the exchange, your order may be executed in whole or in part against the contra-side order at a price no worse for you than the price you specified (i.e., your order to buy 10 contracts at $2.07 will not be executed at a price higher than $2.07 but may be executed at a lower price depending on the contra-side order and depending on what happens during the auction). Of course, you may not trade at all if during the auction process another participant posts a higher-priced bid (e.g., $2.08).

- Auctions typically last for three seconds and after this time we will report an execution back to you (if your order was executed) or if we were unable fully to execute your order we will re-display your penny indication (if your price is the best price in our system).

- As an IB customer, you will also be able to send orders in to try to trade against penny prices displayed by others in the IB system. In that case you may have the opportunity to trade at a better price than the nickel or dime prices displayed in the national options market if someone else on the system has indicated that they are willing to give you a better price.

- To make the system more attractive, professional liquidity providers such as IB's affiliate Timber Hill (one of the largest U.S. options market makers) and others will be able to post penny indications in the system for you to trade against, and will also have the opportunity to hit penny bids and lift penny offers that you submit.

Before using the IB penny pricing system for options, you should understand the following:

- ***Your interest at the penny price will be displayed through the IB system to members of the general public, unless you instruct us otherwise:*** If you send a non-marketable limit order with a penny price better than the national best bid or offer, and if it is the best price in our system, IB will display the penny price (with size) on the IB website and through the IB Trader Workstation so that others will be aware of your interest in trading at that price, unless you instruct us not to display it. Display of your penny-priced indication is not limited to other IB customers and is broadly public. If you instruct us not to display your penny price, your trading interest at that price will remain confidential but of course it will be less likely that someone will try to trade against you.

- ***Your interest at the penny price will <u>not</u> be displayed at an options exchange or through the Options Price Reporting Authority:*** Most options cannot be displayed at an options exchange at a penny price (the minimum price increment is a nickel or dime). If you send an order to IB to buy 10 XYZ contracts at $2.07, IB will send a buy order to be displayed at an option exchange at a price of $2.05, but your $2.07 bid will only be displayed on the IB penny pricing system and not on an options exchange.

- ***IB is not an options exchange and the IB penny option pricing system cannot execute option orders, only route them for possible execution:*** What the system does is to provide a means for traders to communicate with each other that they may be willing to trade at a penny price between the national best bid and offer (offering both traders a chance to get a better price). If there is a potential match, IB will route both orders to an option exchange penny auction process, where the orders may be executed against each other.

- ***When IB sends potentially matching orders to an options exchange, an auction process will be used and you may not get to trade:*** Other traders will have a chance to come in and participate in the trade or to offer a better price for the execution. Therefore your order may not get filled because another trader may come along and offer a better price (e.g., bidding $2.08 for 10 contracts of XYZ when you were only willing to bid $2.07).

- ***The penny prices displayed in the IB system are <u>not</u> "firm" and will not always result in a trade:*** The penny prices being displayed through IB are non-firm indications of interest. They may be cancelled before you get a chance to trade against them or circumstances may change such that IB is unable to initiate the required auction at an options exchange. Likewise, a customer posting an indication of interest to trade at a penny price (e.g., offering to sell ABC calls for $10.58) may get his corresponding rounded offer ($10.60) filled on an exchange and therefore his interest may be exhausted before you get a chance to trade against his penny price.

- ***Trading in Pennies May Result in a Better Price but a Slower Fill*:** By attempting to trade at a better price in pennies between the national best bid and offer, you will get a slower fill than simply trading at the national best bid or offer. You will have to wait at least three seconds for a fill while IB sends your order and the contra-side order to be executed through an options exchange penny auction.

- ***Cancellation fees will not be charged*** when an order is removed from an exchange and submitted for a price improvement auction by IB. Once a price improvement auction commences, you will not be able to cancel your order. All cancellation fees will apply when an order resides on an exchange's book and a cancel or modify order is initiated by the customer.

REQUIRED DISCLOSURES AND SUPPLEMENTAL AGREEMENT FOR SECURITY FUTURES TRADING AT INTERACTIVE BROKERS

I. Introduction

This information is being provided to you by Interactive Brokers ("IB") to ensure that you understand the risks inherent in trading security futures and also so that you understand how your security futures account is being handled by IB. You must review this document carefully and sign it at the bottom in order to be approved to trade security futures products through IB.

You should be aware that security futures are highly leveraged investments and the risk of loss in trading these products can be substantial. Security futures are not suitable for all investors and you must carefully review this document and consult with a financial advisor, if necessary, to determine whether to trade security futures. IB does not provide any investment advice or recommendations, and you will be solely responsible for decisions regarding the security futures trading conducted in your account.

II. Nature of Your Security Futures Account

Under the federal regulations that apply to security futures, security futures positions may be held in a securities trading account subject to Securities and Exchange Commission (SEC) regulations or in a commodities trading account subject to Commodity Futures Trading Commission (CFTC) regulations.

Because Interactive Brokers is fully registered with both the SEC and the CFTC, IB offers both securities accounts and commodities accounts. **Your U.S.-listed security futures positions held by Interactive Brokers will be held in an IB securities account, subject to SEC customer protection rules. Non-U.S.-listed security futures products (traded on non-U.S. exchanges) will be held in an IB commodities account, subject to CFTC customer protection rules.**

The types of protections offered to investors for securities and commodities accounts are different. The different protections available to securities accounts and commodities accounts are described in Section 6 of the NASD/NFA Standardized Risk Disclosure for Security Futures Contracts, below.

III. Standardized Risk Disclosure for Security Futures Contracts

The National Futures Association (NFA) and the NASD[1] have jointly prepared a Standardized Risk Disclosure for Security Futures Contracts. It contains valuable information regarding trading of security futures contracts and you should review it carefully before investing in security futures.

To review the NASD/NFA Standardized Risk Disclosure for Security Futures Contracts, click here.

NOTE: Viewing the Standardized Risk Disclosure requires Adobe Acrobat. To download Adobe Acrobat, click here. If you wish to receive a hard copy of the disclosure, call IB Customer Service at (877) 442-2757.

IV. Supplemental Agreement for Security Futures Trading

The Supplemental Agreement provisions below relate to security futures trading in Customer's IB account and are in addition to the terms and conditions of the IB Customer Agreement, and the Customer Agreement is incorporated herein by reference.

By signing below, Customer acknowledges and agrees to the following:

A. Customer acknowledges that Customer's U.S.-listed security futures positions will be held in a securities account; that Customer's U.S.-listed security futures positions will receive the regulatory protections of a securities account; and that Customer's U.S.-listed security futures positions will not receive the regulatory protections of a commodities account.

B. Customer acknowledges that Customer's non-U.S.-listed security futures positions will be held in a commodities account; that Customer's non-U.S.-listed security futures positions will receive the regulatory protections of a commodities account; and that Customer's non-U.S.-listed security futures positions will not receive the regulatory protections of a securities account.

C. Customer acknowledges that IB may in the future, at its sole discretion, decide to hold customer security futures positions in IB securities accounts or commodities accounts and may not allow customers to make this choice. If IB determines to do this, it will provide required notice to customers of the change.

D. Customer represents that Customer has received and reviewed the NASD/NFA Standardized Risk Disclosure for Security Futures Contracts.

[1] In July 2007, the NASD was consolidated with the member regulation, enforcement and arbitration functions of the New York Stock Exchange to form the Financial Industry Regulatory Authority (FINRA).

E. Customer acknowledges that security futures are highly leveraged investments that are not suitable for all investors. Customer acknowledges that IB representatives are not authorized to provide investment, trading or tax advice and therefore will not provide advice or guidance on trading or hedging strategies involving security futures. Customers who need advice or guidance regarding security futures trading or investments should consult a financial advisor.

F. Customer acknowledges that Customer must review and be aware of, and that Customer is bound by, the rules applicable to the trading of security futures, as established by the NASD, the NFA and the security futures exchanges. Customer represents that it is aware of and agrees not to violate any applicable position limits regarding security futures.

RISK DISCLOSURE STATEMENT FOR SECURITY FUTURES CONTRACTS

This disclosure statement discusses the characteristics and risks of standardized security futures contracts traded on regulated U.S. exchanges. At present, regulated exchanges are authorized to list futures contracts on individual equity securities registered under the Securities Exchange Act of 1934 (including common stock and certain exchange-traded funds and American Depositary Receipts), as well as narrow-based security indices. Futures on other types of securities and options on security futures contracts may be authorized in the future. The glossary of terms appears at the end of the document.

Customers should be aware that the examples in this document are exclusive of fees and commissions that may decrease their net gains or increase their net losses. The examples also do not include tax consequences, which may differ for each customer.

Section 1 – Risks of Security Futures

1.1. Risks of Security Futures Transactions

Trading security futures contracts may not be suitable for all investors. You may lose a substantial amount of money in a very short period of time. The amount you may lose is potentially unlimited and can exceed the amount you originally deposit with your broker. This is because futures trading is highly leveraged, with a relatively small amount of money used to establish a position in assets having a much greater value. If you are uncomfortable with this level of risk, you should not trade security futures contracts.

1.2. General Risks

Trading security futures contracts involves risk and may result in potentially unlimited losses that are greater than the amount you deposited with your broker. As with any high risk financial product, you should not risk any funds that you cannot afford to lose, such as your retirement savings, medical and other emergency funds, funds set aside for purposes such as education or home ownership, proceeds from student loans or mortgages, or funds required to meet your living expenses.

Be cautious of claims that you can make large profits from trading security futures contracts. Although the high degree of leverage in security futures contracts can result in large and immediate gains, it can also result in large and immediate losses. As with any financial product, there is no such thing as a "sure winner."

Because of the leverage involved and the nature of security futures contract transactions, you may feel the effects of your losses immediately. Gains and losses in security futures contracts are credited or debited to your account, at a minimum, on a daily basis. If movements in the markets for security futures contracts or the underlying security decrease the value of your positions in security futures contracts, you may be required to have or make additional funds available to your carrying firm as margin. If your account is under the minimum margin requirements set by the exchange or the brokerage firm, your position may be liquidated at a loss, and you will be liable for the deficit, if any, in your account. Margin requirements are addressed in Section 4.

Under certain market conditions, it may be difficult or impossible to liquidate a position. Generally, you must enter into an offsetting transaction in order to liquidate a position in a security futures contract. If you cannot liquidate your position in security futures contracts, you may not be able to realize a gain in the value of your position or prevent losses from mounting. This inability to liquidate could occur, for example, if trading is halted due to unusual trading activity in either the security futures contract or the underlying security; if trading is halted due to recent news events involving the issuer of the underlying security; if systems failures occur on an exchange or at the firm carrying your position; or if the position is on an illiquid market. Even if you can liquidate your position, you may be forced to do so at a price that involves a large loss.

Under certain market conditions, it may also be difficult or impossible to manage your risk from open security futures positions by entering into an equivalent but opposite position in another contract month, on another market, or in the underlying security. This inability to take positions to limit your risk could occur, for example, if trading is halted across markets due to unusual trading activity in the security futures contract or the underlying security or due to recent news events involving the issuer of the underlying security.

Under certain market conditions, the prices of security futures contracts may not maintain their customary or anticipated relationships to the prices of the underlying security or index. These pricing disparities could occur, for example, when the market for the security futures contract is illiquid, when the primary market for the underlying security is closed, or when the reporting of transactions in the underlying security has been delayed. For index products, it could also occur when trading is delayed or halted in some or all of the securities that make up the index.

You may be required to settle certain security futures contracts with physical delivery of the underlying security. If you hold your position in a physically settled security futures contract until the end of the last trading day prior to expiration, you will be obligated to make or take delivery of the underlying securities, which could involve additional costs. The actual settlement terms may vary from contract to contract and exchange to exchange. You should carefully review the settlement and delivery conditions before entering into a security futures contract. Settlement and delivery are discussed in Section 5.

You may experience losses due to systems failures. As with any financial transaction, you may experience losses if your orders for security futures contracts cannot be executed normally due to systems failures on a regulated exchange or at the brokerage firm carrying your position. Your losses may be greater if the brokerage firm carrying your position does not have adequate back-up systems or procedures.

All security futures contracts involve risk, and there is no trading strategy that can eliminate it. Strategies using combinations of positions, such as spreads, may be as risky as outright long or short positions. Trading in security futures contracts requires knowledge of both the securities and the futures markets.

Day trading strategies involving security futures contracts and other products pose special risks. As with any financial product, persons who seek to purchase and sell the same security future in the course of a day to profit from intra-day price movements ("day traders") face a number of special risks, including substantial commissions, exposure to leverage, and competition with professional traders. You should thoroughly understand these risks and have appropriate experience before engaging in day trading. The special risks for day traders are discussed more fully in Section 7.

Placing contingent orders, if permitted, such as "stop-loss" or "stop-limit" orders, will not necessarily limit your losses to the intended amount. Some regulated exchanges may permit you to enter into stop-loss or stop-limit orders for security futures contracts, which are intended to limit your exposure to losses due to market fluctuations. However, market conditions may make it impossible to execute the order or to get the stop price.

You should thoroughly read and understand the customer account agreement with your brokerage firm before entering into any transactions in security futures contracts.

You should thoroughly understand the regulatory protections available to your funds and positions in the event of the failure of your brokerage firm. The regulatory protections available to your funds and positions in the event of the failure of your brokerage firm may vary depending on, among other factors, the contract you are trading and whether you are trading through a securities account or a futures account. Firms that allow customers to trade security futures in either securities accounts or futures accounts, or both, are required to disclose to customers the differences in regulatory protections between such accounts, and, where appropriate, how customers may elect to trade in either type of account.

Section 2 – Description of a Security Futures Contract

2.1. What is a Security Futures Contract?

A security futures contract is a legally binding agreement between two parties to purchase or sell in the future a specific quantity of shares of a security or of the component securities of a narrow-based security index, at a certain price. A person who buys a security futures contract enters into a contract to purchase an underlying security and is said to be "long" the contract. A person who sells a security futures contract enters into a contract to sell the underlying security and is said to be "short" the contract. The price at which the contract trades (the "contract price") is determined by relative buying and selling interest on a regulated exchange.

In order to enter into a security futures contract, you must deposit funds with your brokerage firm equal to a specified percentage (usually at least 20 percent) of the current market value of the contract as a performance bond. Moreover, all security futures contracts are marked-to-market at least daily, usually after the close of trading, as described in Section 3 of this document. At that time, the account of each buyer and seller reflects the amount of any gain or loss on the security futures contract based on the contract price established at the end of the day for settlement purposes (the "daily settlement price").

An open position, either a long or short position, is closed or liquidated by entering into an offsetting transaction (i.e., an equal and opposite transaction to the one that opened the position) prior to the contract expiration. Traditionally, most futures contracts are liquidated prior to expiration through an offsetting transaction and, thus, holders do not incur a settlement obligation.

Examples:

> Investor A is long one September XYZ Corp. futures contract. To liquidate the long position in the September XYZ Corp. futures contract, Investor A would sell an identical September XYZ Corp. contract.
>
> Investor B is short one December XYZ Corp. futures contract. To liquidate the short position in the December XYZ Corp. futures contract, Investor B would buy an identical December XYZ Corp. contract.

Security futures contracts that are not liquidated prior to expiration must be settled in accordance with the terms of the contract. Some security futures contracts are settled by physical delivery of the underlying security. At the expiration of a security futures contract that is settled through physical delivery, a person who is long the contract must pay the final settlement price set by the regulated exchange or the clearing organization and take delivery of the underlying shares. Conversely, a person who is short the contract must make delivery of the underlying shares in exchange for the final settlement price.

Other security futures contracts are settled through cash settlement. In this case, the underlying security is not delivered. Instead, any positions in such security futures contracts that are open at the end of the last trading day are settled through a final cash payment based on a final settlement price determined by the exchange or clearing organization. Once this payment is made, neither party has any further obligations on the contract.

Physical delivery and cash settlement are discussed more fully in Section

5. **2.2. Purposes of Security Futures**

Security futures contracts can be used for speculation, hedging, and risk management. Security futures contracts do not provide capital growth or income.

<u>Speculation</u>

Speculators are individuals or firms who seek to profit from anticipated increases or decreases in futures prices. A speculator who expects the price of the underlying instrument to increase will buy the security futures contract. A speculator who expects the price of the underlying instrument to decrease will sell the security futures contract. Speculation involves substantial risk and can lead to large losses as well as profits.

The most common trading strategies involving security futures contracts are buying with the hope of profiting from an anticipated price increase and selling with the hope of profiting from an anticipated price decrease. For example, a person who expects the price of XYZ stock to increase by March can buy a March XYZ security futures contract, and a person who expects the price of XYZ stock to decrease by March can sell a March XYZ security futures contract. The following illustrates potential profits and losses if Customer A purchases the security futures contract at $50 a share and Customer B sells the same contract at $50 a share (assuming 100 shares per contract).

Price of XYZ at Liquidation	Customer A Profit/Loss	Customer B Profit/Loss
$55	$500	- $500
$50	0	$ 0
$45	- $500	$500

Speculators may also enter into spreads with the hope of profiting from an expected change in price relationships. Spreaders may purchase a contract expiring in one contract month and sell another contract on the same underlying security expiring in a different month (e.g., buy June and sell September XYZ single stock futures). This is commonly referred to as a “calendar spread.”

Spreaders may also purchase and sell the same contract month in two different but economically correlated security futures contracts. For example, if ABC and XYZ are both pharmaceutical companies and an individual believes that ABC will have stronger growth than XYZ between now and June, he could buy June ABC futures contracts and sell June XYZ futures contracts. Assuming that each contract is 100 shares, the following illustrates how this works.

Opening Position	Price at Liquidation	Gain or Loss	Price at Liquidation	Gain or Loss
Buy ABC at 50	$53	$300	$53	$300
Sell XYZ at 45	$46	- $100	$50	- $500
Net Gain or Loss		$200		- $200

Speculators can also engage in arbitrage, which is similar to a spread except that the long and short positions occur on two different markets. An arbitrage position can be established by taking an economically opposite position in a security futures contract on another exchange, in an options contract, or in the underlying security.

<u>Hedging</u>

Generally speaking, hedging involves the purchase or sale of a security future to reduce or offset the risk of a position in the underlying security or group of securities (or a close economic equivalent). A hedger gives up the potential to profit from a favorable price change in the position being hedged in order to minimize the risk of loss from an adverse price change.

An investor who wants to lock in a price now for an anticipated sale of the underlying security at a later date can do so by hedging with security futures. For example, assume an investor owns 1,000 shares of ABC that have appreciated since he bought them. The investor would like to sell them at the current price of $50 per share, but there are tax or other reasons for holding them until September. The investor could sell ten 100-share ABC futures contracts and then buy back those contracts in September when he sells the stock. Assuming the stock price and the futures price change by the same amount, the gain or loss in the stock will be offset by the loss or gain in the futures contracts.

Price in September	Value of 1,000 Shares of ABC	Gain or Loss on Futures	Effective Selling Price
$40	$40,000	$10,000	$50,000
$50	$50,000	$ 0	$50,000
$60	$60,000	-$10,000	$50,000

Hedging can also be used to lock in a price now for an anticipated purchase of the stock at a later date. For example, assume that in May a mutual fund expects to buy stocks in a particular industry with the proceeds of bonds that will mature in August. The mutual fund can hedge its risk that the stocks will increase in value between May and August by purchasing security futures contracts on a narrow-based index of stocks from that industry. When the mutual fund buys the stocks in August, it also will liquidate the security futures position in the index. If the relationship between the security futures contract and the stocks in the index is constant, the profit or loss from the futures contract will offset the price change in the stocks, and the mutual fund will have locked in the price that the stocks were selling at in May.

Although hedging mitigates risk, it does not eliminate all risk. For example, the relationship between the price of the security futures contract and the price of the underlying security traditionally tends to remain constant over time, but it can and does vary somewhat. Furthermore, the expiration or liquidation of the security futures contract may not coincide with the exact time the hedger buys or sells the underlying stock. Therefore, hedging may not be a perfect protection against price risk.

<u>Risk Management</u>

Some institutions also use futures contracts to manage portfolio risks without necessarily intending to change the composition of their portfolio by buying or selling the underlying securities. The institution does so by taking a security futures position that is opposite to some or all of its position in the underlying securities. This strategy involves more risk than a traditional hedge because it is not meant to be a substitute for an anticipated purchase or sale.

2.3. Where Security Futures Trade

By law, security futures contracts must trade on a regulated U.S. exchange. Each regulated U.S. exchange that trades security futures contracts is subject to joint regulation by the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC).

A person holding a position in a security futures contract who seeks to liquidate the position must do so either on the regulated exchange where the original trade took place or on another regulated exchange, if any, where a fungible security futures contract trades. (A person may also seek to manage the risk in that position by taking an opposite position in a comparable contract traded on another regulated exchange.)

Security futures contracts traded on one regulated exchange might not be fungible with security futures contracts traded on another regulated exchange for a variety of reasons. Security futures traded on different regulated exchanges may be non-fungible because they have different contract terms (e.g., size, settlement method), or because they are cleared through different clearing organizations. Moreover, a regulated exchange might not permit its security futures contracts to be offset or liquidated by an identical contract traded on another regulated exchange, even though they have the same contract terms and are cleared through the same clearing organization. You should consult your broker about the fungibility of the contract you are considering purchasing or selling, including which exchange(s), if any, on which it may be offset.

Regulated exchanges that trade security futures contracts are required by law to establish certain listing standards. Changes in the underlying security of a security futures contract may, in some cases, cause such contract to no longer meet the regulated exchange's listing standards. Each regulated exchange will have rules governing the continued trading of security futures contracts that no longer meet the exchange's listing standards. These rules may, for example, permit only liquidating trades in security futures contracts that no longer satisfy the listing standards.

2.4.How Security Futures Differ from the Underlying Security

Shares of common stock represent a fractional ownership interest in the issuer of that security. Ownership of securities confers various rights that are not present with positions in security futures contracts. For example, persons owning a share of common stock may be entitled to vote in matters affecting corporate governance. They also may be entitled to receive dividends and corporate disclosure, such as annual and quarterly reports.

The purchaser of a security futures contract, by contrast, has only a contract for future delivery of the underlying security. The purchaser of the security futures contract is not entitled to exercise any voting rights over the underlying security and is not entitled to any dividends that may be paid by the issuer. Moreover, the purchaser of a security futures contract does not receive the corporate disclosures that are received by shareholders of the underlying security, although such corporate disclosures must be made publicly available through the SEC's EDGAR system, which can be accessed at www.sec.gov. You should review such disclosures before entering into a security futures contract. See Section 9 for further discussion of the impact of corporate events on a security futures contract.

All security futures contracts are marked-to-market at least daily, usually after the close of trading, as described in Section 3 of this document. At that time, the account of each buyer and seller is credited with the amount of any gain, or debited by the amount of any loss, on the security futures contract, based on the contract price established at the end of the day for settlement purposes (the "daily settlement price"). By contrast, the purchaser or seller of the underlying instrument does not have the profit and loss from his or her investment credited or debited until the position in that instrument is closed out.

Naturally, as with any financial product, the value of the security futures contract and of the underlying security may fluctuate. However, owning the underlying security does not require an investor to settle his or her profits and losses daily. By contrast, as a result of the mark-to-market requirements discussed above, a person who is long a security futures contract often will be required to deposit additional funds into his or her account as the price of the security futures contract decreases. Similarly, a person who is short a security futures contract often will be required to deposit additional funds into his or her account as the price of the security futures contract increases.

Another significant difference is that security futures contracts expire on a specific date. Unlike an owner of the underlying security, a person cannot hold a long position in a security futures contract for an extended period of time in the hope that the price will go up. If you do not liquidate your security futures contract, you will be required to settle the contract when it expires, either through physical delivery or cash settlement. For cash-settled contracts in particular, upon expiration, an individual will no longer have an economic interest in the securities underlying the security futures contract.

2.5.Comparison to Options

Although security futures contracts share some characteristics with options on securities (options contracts), these products are also different in a number of ways. Below are some of the important distinctions between equity options contracts and security futures contracts.

If you purchase an options contract, you have the right, but not the obligation, to buy or sell a security prior to the expiration date. If you sell an options contract, you have the obligation to buy or sell a security prior to the expiration date. By contrast, if you have a position in a security futures contract (either long or short), you have both the right and the obligation to buy or sell a security at a future date. The only way that you can avoid the obligation incurred by the security futures contract is to liquidate the position with an offsetting contract.

A person purchasing an options contract runs the risk of losing the purchase price (premium) for the option contract. Because it is a wasting asset, the purchaser of an options contract who neither liquidates the options contract in the secondary market nor exercises it at or prior to expiration will necessarily lose his or her entire investment in the options contract. However, a purchaser of an options contract cannot lose more than the amount of the premium. Conversely, the seller of an options contract receives the premium and assumes the risk that he or she will be required to buy or sell the underlying security on or prior to the expiration date, in which event his or her losses may exceed the amount of the premium received. Although the seller of an options contract is required to deposit margin to reflect the risk of its obligation, he or she may lose many times his or her initial margin deposit.

By contrast, the purchaser and seller of a security futures contract each enter into an agreement to buy or sell a specific quantity of shares in the underlying security. Based upon the movement in prices of the underlying security, a person who holds a position in a security futures contract can gain or lose many times his or her initial margin deposit. In this respect, the benefits of a security futures contract are similar to the benefits of *purchasing* an option, while the risks of entering into a security futures contract are similar to the risks of *selling* an option.

Both the purchaser and the seller of a security futures contract have daily margin obligations. At least once each day, security futures contracts are marked-to-market and the increase or decrease in the value of the contract is credited or debited to the buyer and the seller. As a result, any person who has an open position in a security futures contract may be called upon to meet additional margin requirements or may receive a credit of available funds.

Example:

Assume that Customers A and B each anticipate an increase in the market price of XYZ stock, which is currently $50 a share. Customer A purchases an XYZ 50 call (covering 100 shares of XYZ at a premium of $5 per share). The option premium is $500 ($5 per share X 100 shares). Customer B purchases an XYZ security futures contract (covering 100 shares of XYZ). The total value of the contract is $5000 ($50 share value X 100 shares). The required margin is $1000 (or 20% of the contract value).

Price of XYZ at expiration	Customer A Profit/Loss	Customer B Profit/Loss
65	1000	1500
60	500	1000
55	0	500
50	-500	0
45	-500	-500
40	-500	-1000
35	-500	-1500

The most that Customer A can lose is $500, the option premium. Customer A breaks even at $55 per share, and makes money at higher prices. Customer B may lose more than his initial margin deposit. Unlike the options premium, the margin on a futures contract is not a cost but a performance bond. The losses for Customer B are not limited by this performance bond. Rather, the losses or gains are determined by the settlement price of the contract, as provided in the example above. Note that if the price of XYZ falls to $35 per share, Customer A loses only $500, whereas Customer B loses $1500.

2.6. Components of a Security Futures Contract

Each regulated exchange can choose the terms of the security futures contracts it lists, and those terms may differ from exchange to exchange or contract to contract. Some of those contract terms are discussed below. However, you should ask your broker for a copy of the contract specifications before trading a particular contract.

2.6.1. Each security futures contract has a set size. The size of a security futures contract is determined by the regulated exchange on which the contract trades. For example, a security futures contract for a single stock may be based on 100 shares of that stock. If prices are reported per share, the value of the contract would be the price times 100. For narrow-based security indices, the value of the contract is the price of the component securities times the multiplier set by the exchange as part of the contract terms.

2.6.2. Security futures contracts expire at set times determined by the listing exchange. For example, a particular contract may expire on a particular day, e.g., the third Friday of the expiration month. Up until expiration, you may liquidate an open position by offsetting your contract with a fungible opposite contract that expires in the same month. If you do not liquidate an open position before it expires, you will be required to make or take delivery of the underlying security or to settle the contract in cash after expiration.

2.6.3. Although security futures contracts on a particular security or a narrow-based security index may be listed and traded on more than one regulated exchange, the contract specifications may not be the same. Also, prices for contracts on the same security or index may vary on different regulated exchanges because of different contract specifications.

2.6.4. Prices of security futures contracts are usually quoted the same way prices are quoted in the underlying instrument. For example, a contract for an individual security would be quoted in dollars and cents per share. Contracts for indices would be quoted by an index number, usually stated to two decimal places.

2.6.5. Each security futures contract has a minimum price fluctuation (called a tick), which may differ from product to product or exchange to exchange. For example, if a particular security futures contract has a tick size of 1¢, you can buy the contract at $23.21 or $23.22 but not at $23.215.

2.7.Trading Halts

The value of your positions in security futures contracts could be affected if trading is halted in either the security futures contract or the underlying security. In certain circumstances, regulated exchanges are required by law to halt trading in security futures contracts. For example, trading on a particular security futures contract must be halted if trading is halted on the listed market for the underlying security as a result of pending news, regulatory concerns, or market volatility. Similarly, trading of a security futures contract on a narrow-based security index must be halted under such circumstances if trading is halted on securities accounting for at least 50 percent of the market capitalization of the index. In addition, regulated exchanges are required to halt trading in all security futures contracts for a specified period of time when the Dow Jones Industrial Average ("DJIA") experiences one-day declines of 10-, 20- and 30-percent. The regulated exchanges may also have discretion under their rules to halt trading in other circumstances – such as when the exchange determines that the halt would be advisable in maintaining a fair and orderly market.

A trading halt, either by a regulated exchange that trades security futures or an exchange trading the underlying security or instrument, could prevent you from liquidating a position in security futures contracts in a timely manner, which could prevent you from liquidating a position in security futures contracts at that time.

2.8.Trading Hours

Each regulated exchange trading a security futures contract may open and close for trading at different times than other regulated exchanges trading security futures contracts or markets trading the underlying security or securities. Trading in security futures contracts prior to the opening or after the close of the primary market for the underlying security may be less liquid than trading during regular market hours.

Section 3 – Clearing Organizations and Mark-to-Market Requirements

Every regulated U.S. exchange that trades security futures contracts is required to have a relationship with a clearing organization that serves as the guarantor of each security futures contract traded on that exchange. A clearing organization performs the following functions: matching trades; effecting settlement and payments; guaranteeing performance; and facilitating deliveries.

Throughout each trading day, the clearing organization matches trade data submitted by clearing members on behalf of their customers or for the clearing member's proprietary accounts. If an account is with a brokerage firm that is not a member of the clearing organization, then the brokerage firm will carry the security futures position with another brokerage firm that is a member of the clearing organization. Trade records that do not match, either because of a discrepancy in the details or because one side of the transaction is missing, are returned to the submitting clearing members for resolution. The members are required to resolve such "out trades" before or on the open of trading the next morning.

When the required details of a reported transaction have been verified, the clearing organization assumes the legal and financial obligations of the parties to the transaction. One way to think of the role of the clearing organization is that it is the "buyer to every seller and the seller to every buyer." The insertion or substitution of the clearing organization as the counterparty to every transaction enables a customer to liquidate a security futures position without regard to what the other party to the original security futures contract decides to do.

The clearing organization also effects the settlement of gains and losses from security futures contracts between clearing members. At least once each day, clearing member brokerage firms must either pay to, or receive from, the clearing organization the difference between the current price and the trade price earlier in the day, or for a position carried over from the previous day, the difference between the current price and the previous day's settlement price. Whether a clearing organization effects settlement of gains and losses on a daily basis or more frequently will depend on the conventions of the clearing organization and market conditions. Because the clearing organization assumes the legal and financial obligations for each security futures contract, you should expect it to ensure that payments are made promptly to protect its obligations.

Gains and losses in security futures contracts are also reflected in each customer's account on at least a daily basis. Each day's gains and losses are determined based on a daily settlement price disseminated by the regulated exchange trading the security futures contract or its clearing organization. If the daily settlement price of a particular security futures contract rises, the buyer has a gain and the seller a loss. If the daily settlement price declines, the buyer has a loss and the seller a gain. This process is known as "marking-to-market" or daily settlement. As a result, individual customers normally will be called on to settle daily.

The one-day gain or loss on a security futures contract is determined by calculating the difference between the current day's settlement price and the previous day's settlement price.

For example, assume a security futures contract is purchased at a price of $120. If the daily settlement price is either $125 (higher) or $117 (lower), the effects would be as follows:

(1 contract representing 100 shares)

Daily Settlement Value	Buyer's Account	Seller's Account
$125	$500 gain (credit)	$500 loss (debit)
$117	$300 loss (debit)	$300 gain (credit)

The cumulative gain or loss on a customer's open security futures positions is generally referred to as "open trade equity" and is listed as a separate component of account equity on your customer account statement.

A discussion of the role of the clearing organization in effecting delivery is discussed in Section 5.

Section 4 – Margin and Leverage

When a broker-dealer lends a customer part of the funds needed to purchase a security such as common stock, the term "margin" refers to the amount of cash, or down payment, the customer is required to deposit. By contrast, a security futures contract is an obligation and not an asset. A security futures contract has no value as collateral for a loan. Because of the potential for a loss as a result of the daily marked-to-market process, however, a margin deposit is required of each party to a security futures contract. This required margin deposit also is referred to as a "performance bond."

In the first instance, margin requirements for security futures contracts are set by the exchange on which the contract is traded, subject to certain minimums set by law. The basic margin requirement is 20% of the current value of the security futures contract, although some strategies may have lower margin requirements. Requests for additional margin are known as "margin calls." Both buyer and seller must individually deposit the required margin to their respective accounts.

It is important to understand that individual brokerage firms can, and in many cases do, require margin that is higher than the exchange requirements. Additionally, margin requirements may vary from brokerage firm to brokerage firm. Furthermore, a brokerage firm can increase its "house" margin requirements at any time without providing advance notice, and such increases could result in a margin call.

For example, some firms may require margin to be deposited the business day following the day of a deficiency, or some firms may even require deposit on the same day. Some firms may require margin to be on deposit in the account before they will accept an order for a security futures contract. Additionally, brokerage firms may have special requirements as to how margin calls are to be met, such as requiring a wire transfer from a bank, or deposit of a certified or cashier's check. You should thoroughly read and understand the customer agreement with your brokerage firm before entering into any transactions in security futures contracts.

If through the daily cash settlement process, losses in the account of a security futures contract participant reduce the funds on deposit (or equity) below the maintenance margin level (or the firm's higher "house" requirement), the brokerage firm will require that additional funds be deposited.

If additional margin is not deposited in accordance with the firm's policies, the firm can liquidate your position in security futures contracts or sell assets in any of your accounts at the firm to cover the margin deficiency. You remain responsible for any shortfall in the account after such liquidations or sales. Unless provided otherwise in your customer agreement or by applicable law, you are not entitled to choose which futures contracts, other securities or other assets are liquidated or sold to meet a margin call or to obtain an extension of time to meet a margin call.

Brokerage firms generally reserve the right to liquidate a customer's security futures contract positions or sell customer assets to meet a margin call at any time without contacting the customer. Brokerage firms may also enter into equivalent but opposite positions for your account in order to manage the risk created by a margin call. Some customers mistakenly believe that a firm is required to contact them for a margin call to be valid, and that the firm is not allowed to liquidate securities or other assets in their accounts to meet a margin call unless the firm has contacted them first. This is not the case. While most firms notify their customers of margin calls and allow some time for deposit of additional margin, they are not required to do so. Even if a firm has notified a customer of a margin call and set a specific due date for a margin deposit, the firm can still take action as necessary to protect its financial interests, including the immediate liquidation of positions without advance notification to the customer.

Here is an example of the margin requirements for a long security futures position.

A customer buys 3 July EJG security futures at 71.50. Assuming each contract represents 100 shares, the nominal value of the position is $21,450 (71.50 x 3 contracts x 100 shares). If the initial margin rate is 20% of the nominal value, then the customer's initial margin requirement would be $4,290. The customer deposits the initial margin, bringing the equity in the account to $4,290.

First, assume that the next day the settlement price of EJG security futures falls to 69.25. The marked-to-market loss in the customer's equity is $675 (71.50 – 69.25 x 3 contacts x 100 shares). The customer's equity decreases to $3,615 ($4,290 – $675). The new nominal value of the contract is $20,775 (69.25 x 3 contracts x 100 shares). If the maintenance margin rate is 20% of the nominal value, then the customer's maintenance margin requirement would be $4,155. Because the customer's equity had decreased to $3,615 (see above), the customer would be required to have an additional $540 in margin ($4,155 – $3,615).

Alternatively, assume that the next day the settlement price of EJG security futures rises to 75.00. The mark-to-market gain in the customer's equity is $1,050 (75.00 – 71.50 x 3 contacts x 100 shares). The customer's equity increases to $5,340 ($4,290 + $1 ,050). The new nominal value of the contract is $22,500 (75.00 x 3 contracts x 100 shares). If the maintenance margin rate is 20% of the nominal value, then the customer's maintenance margin requirement would be $4,500. Because the customer's equity had increased to $5,340 (see above), the customer's excess equity would be $840.

The process is exactly the same for a short position, except that margin calls are generated as the settlement price rises rather than as it falls. This is because the customer's equity decreases as the settlement price rises and increases as the settlement price falls.

Because the margin deposit required to open a security futures position is a fraction of the nominal value of the contracts being purchased or sold, security futures contracts are said to be highly leveraged. The smaller the margin requirement in relation to the underlying value of the security futures contract, the greater the leverage. Leverage allows exposure to a given quantity of an underlying asset for a fraction of the investment needed to purchase that quantity outright. In sum, buying (or selling) a security futures contract provides the same dollar and cents profit and loss outcomes as owning (or shorting) the underlying security. However, as a percentage of the margin deposit, the potential immediate exposure to profit or loss is much higher with a security futures contract than with the underlying security.

For example, if a security futures contract is established at a price of $50, the contract has a nominal value of $5,000 (assuming the contract is for 100 shares of stock). The margin requirement may be as low as 20%. In the example just used, assume the contract price rises from $50 to $52 (a $200 increase in the nominal value). This represents a $200 profit to the buyer of the security futures contract, and a 20% return on the $1,000 deposited as margin. The reverse would be true if the contract price decreased from $50 to $48. This represents a $200 loss to the buyer, or 20% of the $1,000 deposited as margin. Thus, leverage can either benefit or harm an investor.

Note that a 4% decrease in the value of the contract resulted in a loss of 20% of the margin deposited. A 20% decrease would wipe out 100% of the margin deposited on the security futures contract.

Section 5 – Settlement

If you do not liquidate your position prior to the end of trading on the last day before the expiration of the security futures contract, you are obligated to either 1) make or accept a cash payment ("cash settlement") or 2) deliver or accept delivery of the underlying securities in exchange for final payment of the final settlement price ("physical delivery"). The terms of the contract dictate whether it is settled through cash settlement or by physical delivery.

The expiration of a security futures contract is established by the exchange on which the contract is listed. On the expiration day, security futures contracts cease to exist. Typically, the last trading day of a security futures contract will be the third Friday of the expiring contract month, and the expiration day will be the following Saturday.
This follows the expiration conventions for stock options and broad-based stock indexes. Please keep in mind that the expiration day is set by the listing exchange and may deviate from these norms.

5.1.Cash settlement

In the case of cash settlement, no actual securities are delivered at the expiration of the security futures contract. Instead, you must settle any open positions in security futures by making or receiving a cash payment based on the difference between the final settlement price and the previous day's settlement price. Under normal circumstances, the final settlement price for a cash-settled contract will reflect the opening price for the underlying security. Once this payment is made, neither the buyer nor the seller of the security futures contract has any further obligations on the contract.

5.2.Settlement by physical delivery

Settlement by physical delivery is carried out by clearing brokers or their agents with National Securities Clearing Corporation ("NSCC"), an SEC-regulated securities clearing agency. Such settlements are made in much the same way as they are for purchases and sales of the underlying security. Promptly after the last day of trading, the regulated exchange's clearing organization will report a purchase and sale of the underlying stock at the previous day's settlement price (also referred to as the "invoice price") to NSCC. If NSCC does not reject the transaction by a time specified in its rules, settlement is effected pursuant to the rules of NSCC within the normal clearance and settlement cycle for securities transactions, which currently is three business days.

If you hold a short position in a physically settled security futures contract to expiration, you will be required to make delivery of the underlying securities. If you already own the securities, you may tender them to your brokerage firm. If you do not own the securities, you will be obligated to purchase them. Some brokerage firms may not be able to purchase the securities for you. If your brokerage firm cannot purchase the underlying securities on your behalf to fulfill a settlement obligation, you will have to purchase the securities through a different firm.

Section 6 – Customer Account Protections

Positions in security futures contracts may be held either in a securities account or in a futures account. Your brokerage firm may or may not permit you to choose the types of account in which your positions in security futures contracts will be held. The protections for funds deposited or earned by customers in connection with trading in security futures contracts differ depending on whether the positions are carried in a securities account or a futures account. If your positions are carried in a securities account, you will not receive the protections available for futures accounts. Similarly, if your positions are carried in a futures account, you will not receive the protections available for securities accounts. You should ask your broker which of these protections will apply to your funds.

You should be aware that the regulatory protections applicable to your account are not intended to insure you against losses you may incur as a result of a decline or increase in the price of a security futures contract. As with all financial products, you are solely responsible for any market losses in your account.

Your brokerage firm must tell you whether your security futures positions will be held in a securities account or a futures account. If your brokerage firm gives you a choice, it must tell you what you have to do to make the choice and which type of account will be used if you fail to do so. You should understand that certain regulatory protections for your account will depend on whether it is a securities account or a futures account.

6.1.Protections for Securities Accounts

If your positions in security futures contracts are carried in a securities account, they are covered by SEC rules governing the safeguarding of customer funds and securities. These rules prohibit a broker/dealer from using customer funds and securities to finance its business. As a result, the broker/dealer is required to set aside funds equal to the net of all its excess payables to customers over receivables from customers. The rules also require a broker/dealer to segregate all customer fully paid and excess margin securities carried by the broker/dealer for customers.

The Securities Investor Protection Corporation (SIPC) also covers positions held in securities accounts. SIPC was created in 1970 as a non-profit, non-government, membership corporation, funded by member broker/dealers. Its primary role is to return funds and securities to customers if the broker/dealer holding these assets becomes insolvent. SIPC coverage applies to customers of current (and in some cases former) SIPC members. Most broker/dealers registered with the SEC are SIPC members; those few that are not must disclose this fact to their customers. SIPC members must display an official sign showing their membership. To check whether a firm is a SIPC member, go to www.sipc.org, call the SIPC Membership Department at (202) 371-8300, or write to SI PC Membership Department, Securities Investor Protection Corporation, 805 Fifteenth Street, NW, Suite 800, Washington, DC 20005-2215.

SIPC coverage is limited to $500,000 per customer, including up to $100,000 for cash. For example, if a customer has 1,000 shares of XYZ stock valued at $200,000 and $10,000 cash in the account, both the security and the cash balance would be protected. However, if the customer has shares of stock valued at $500,000 and $100,000 in cash, only a total of $500,000 of those assets will be protected.

For purposes of SIPC coverage, customers are persons who have securities or cash on deposit with a SIPC member for the purpose of, or as a result of, securities transactions. SIPC does not protect customer funds placed with a broker/dealer just to earn interest. Insiders of the broker/dealer, such as its owners, officers, and partners, are not customers for purposes of SIPC coverage.

6.2.Protections for Futures Accounts

If your security futures positions are carried in a futures account, they must be segregated from the brokerage firm's own funds and cannot be borrowed or otherwise used for the firm's own purposes. If the funds are deposited with another entity (e.g., a bank, clearing broker, or clearing organization), that entity must acknowledge that the funds belong to customers and cannot be used to satisfy the firm's debts. Moreover, although a brokerage firm may carry funds belonging to different customers in the same bank or clearing account, it may not use the funds of one customer to margin or guarantee the transactions of another customer. As a result, the brokerage firm must add its own funds to its customers' segregated funds to cover customer debits and deficits. Brokerage firms must calculate their segregation requirements daily.

You may not be able to recover the full amount of any funds in your account if the brokerage firm becomes insolvent and has insufficient funds to cover its obligations to all of its customers. However, customers with funds in segregation receive priority in bankruptcy proceedings. Furthermore, all customers whose funds are required to be segregated have the same priority in bankruptcy, and there is no ceiling on the amount of funds that must be segregated for or can be recovered by a particular customer.

Your brokerage firm is also required to separately maintain funds invested in security futures contracts traded on a foreign exchange. However, these funds may not receive the same protections once they are transferred to a foreign entity (e.g., a foreign broker, exchange or clearing organization) to satisfy margin requirements for those products. You should ask your broker about the bankruptcy protections available in the country where the foreign exchange (or other entity holding the funds) is located.

Section 7 – Special Risks for Day Traders

Certain traders who pursue a day trading strategy may seek to use security futures contracts as part of their trading activity. Whether day trading in security futures contracts or other securities, investors engaging in a day trading strategy face a number of risks.

Day trading in security futures contracts requires in-depth knowledge of the securities and futures markets and of trading techniques and strategies. In attempting to profit through day trading, you will compete with professional traders who are knowledgeable and sophisticated in these markets. You should have appropriate experience before engaging in day trading.

Day trading in security futures contracts can result in substantial commission charges, even if the per trade cost is low. The more trades you make, the higher your total commissions will be. The total commissions you pay will add to your losses and reduce your profits. For instance, assuming that a round-turn trade costs $16 and you execute an average of 29 round-turn transactions per day each trading day, you would need to generate an annual profit of $111,360 just to cover your commission expenses.

Day trading can be extremely risky. Day trading generally is not appropriate for someone of limited resources and limited investment or trading experience and low risk tolerance. You should be prepared to lose all of the funds that you use for day trading. In particular, you should not fund day trading activities with funds that you cannot afford to lose.

Section 8 – Other

8.1.Corporate Events

As noted in Section 2.4, an equity security represents a fractional ownership interest in the issuer of that security. By contrast, the purchaser of a security futures contract has only a contract for future delivery of the underlying security. Treatment of dividends and other corporate events affecting the underlying security may be reflected in the security futures contract depending on the applicable clearing organization rules. Consequently, individuals should consider how dividends and other developments affecting security futures in which they transact will be handled by the relevant exchange and clearing organization. The specific adjustments to the terms of a security futures contract are governed by the rules of the applicable clearing organization. Below is a discussion of some of the more common types of adjustments that you may need to consider.

Corporate issuers occasionally announce stock splits. As a result of these splits, owners of the issuer's common stock may own more shares of the stock, or fewer shares in the case of a reverse stock split. The treatment of stock splits for persons owning a security futures contract may vary according to the terms of the security futures contract and the rules of the clearing organization. For example, the terms of the contract may provide for an adjustment in the number of contracts held by each party with a long or short position in a security future, or for an adjustment in the number of shares or units of the instrument underlying each contract, or both.

Corporate issuers also occasionally issue special dividends. A special dividend is an announced cash dividend payment outside the normal and customary practice of a corporation. The terms of a security futures contract may be adjusted for special dividends. The adjustments, if any, will be based upon the rules of the exchange and clearing organization. In general, there will be no adjustments for ordinary dividends as they are recognized as a normal and customary practice of an issuer and are already accounted for in the pricing of security futures.

Corporate issuers occasionally may be involved in mergers and acquisitions. Such events may cause the underlying security of a security futures contact to change over the contract duration. The terms of security futures contracts may also be adjusted to reflect other corporate events affecting the underlying security.

8.2.Position Limits and Large Trader Reporting

All security futures contracts trading on regulated exchanges in the United States are subject to position limits or position accountability limits. Position limits restrict the number of security futures contracts that any one person or group of related persons may hold or control in a particular security futures contract. In contrast, position accountability limits permit the accumulation of positions in excess of the limit without a prior exemption. In general, position limits and position accountability limits are beyond the thresholds of most retail investors. Whether a security futures contract is subject to position limits, and the level for such limits, depends upon the trading activity and market capitalization of the underlying security of the security futures contract.

Position limits apply are required for security futures contracts that overlie a security that has an average daily trading volume of 20 million shares or fewer. In the case of a security futures contract overlying a security index, position limits are required if any one of the securities in the index has an average daily trading volume of 20 million shares or fewer. Position limits also apply only to an expiring security futures contract during its last five trading days. A regulated exchange must establish position limits on security futures that are no greater than 13,500 (100 share) contracts, unless the underlying security meets certain volume and shares outstanding thresholds, in which case the limit may be increased to 22,500 (100 share) contracts.

For security futures contracts overlying a security or securities with an average trading volume of more than 20 million shares, regulated exchanges may adopt position accountability rules. Under position accountability rules, a trader holding a position in a security futures contract that exceeds 22,500 contracts (or such lower limit established by an exchange) must agree to provide information regarding the position and consent to halt increasing that position if requested by the exchange.

Brokerage firms must also report large open positions held by one person (or by several persons acting together) to the CFTC as well as to the exchange on which the positions are held. The CFTC's reporting requirements are 1,000 contracts for security futures positions on individual equity securities and 200 contracts for positions on a narrow-based index. However, individual exchanges may require the reporting of large open positions at levels less than the levels required by the CFTC. In addition, brokerage firms must submit identifying information on the account holding the reportable position (on a form referred to as either an "Identification of Special Accounts Form" or a "Form 102") to the CFTC and to the exchange on which the reportable position exists within three business days of when a reportable position is first established.

8.3. Transactions on Foreign Exchanges

U.S. customers may not trade security futures on foreign exchanges until authorized by U.S. regulatory authorities. U.S. regulatory authorities do not regulate the activities of foreign exchanges and may not, on their own, compel enforcement of the rules of a foreign exchange or the laws of a foreign country. While U.S. law governs transactions in security futures contracts that are effected in the U.S., regardless of the exchange on which the contracts are listed, the laws and rules governing transactions on foreign exchanges vary depending on the country in which the exchange is located.

8.4. Tax Consequences

For most taxpayers, security futures contracts are not treated like other futures contracts. Instead, the tax consequences of a security futures transaction depend on the status of the taxpayer and the type of position (e.g., long or short, covered or uncovered). Because of the importance of tax considerations to transactions in security futures, readers should consult their tax advisors as to the tax consequences of these transactions.

Section 9 – Glossary of Terms

This glossary is intended to assist customers in understanding specialized terms used in the futures and securities industries. It is not inclusive and is not intended to state or suggest the legal significance or meaning of any word or term.

Arbitrage – taking an economically opposite position in a security futures contract on another exchange, in an options contract, or in the underlying security.

Broad-based security index – a security index that does not fall within the statutory definition of a narrow-based security index (see Narrow-based security index). A future on a broad-based security index is not a security future. This risk disclosure statement applies solely to security futures and generally does not pertain to futures on a broad-based security index. Futures on a broad-based security index are under exclusive jurisdiction of the CFTC.

Cash settlement – a method of settling certain futures contracts by having the buyer (or long) pay the seller (or short) the cash value of the contract according to a procedure set by the exchange.

Clearing broker – a member of the clearing organization for the contract being traded. All trades, and the daily profits or losses from those trades, must go through a clearing broker.

Clearing organization – a regulated entity that is responsible for settling trades, collecting losses and distributing profits, and handling deliveries.

Contract – 1) the unit of trading for a particular futures contract (e.g., one contract may be 100 shares of the underlying security), 2) the type of future being traded (e.g., futures on ABC stock).

Contract month – the last month in which delivery is made against the futures contract or the contract is cash-settled. Sometimes referred to as the delivery month.

Day trading strategy – an overall trading strategy characterized by the regular transmission by a customer of intra-day orders to effect both purchase and sale transactions in the same security or securities.

EDGAR – the SEC's Electronic Data Gathering, Analysis, and Retrieval system maintains electronic copies of corporate information filed with the agency. EDGAR submissions may be accessed through the SEC's Web site, www.sec.gov.

Futures contract – a futures contract is (1) an agreement to purchase or sell a commodity for delivery in the future; (2) at a price determined at initiation of the contract; (3) that obligates each party to the contract to fulfill it at the specified price; (4) that is used to assume or shift risk; and (5) that may be satisfied by delivery or offset.

Hedging – the purchase or sale of a security future to reduce or offset the risk of a position in the underlying security or group of securities (or a close economic equivalent).

Illiquid market – a market (or contract) with few buyers and/or sellers. Illiquid markets have little trading activity and those trades that do occur may be done at large price increments.

Liquidation – entering into an offsetting transaction. Selling a contract that was previously purchased liquidates a futures position in exactly the same way that selling 100 shares of a particular stock liquidates an earlier purchase of the same stock. Similarly, a futures contract that was initially sold can be liquidated by an offsetting purchase.

Liquid market – a market (or contract) with numerous buyers and sellers trading at small price increments.

Long – 1) the buying side of an open futures contact, 2) a person who has bought futures contracts that are still open.

Margin – the amount of money that must be deposited by both buyers and sellers to ensure performance of the person's obligations under a futures contract. Margin on security futures contracts is a performance bond rather than a down payment for the underlying securities.

Mark-to-market – to debit or credit accounts daily to reflect that day's profits and losses.

Narrow-based security index – in general, and subject to certain exclusions, an index that has any one of the following four characteristics: (1) it has nine or fewer component securities; (2) any one of its component securities comprises more than 30% of its weighting; (3) the five highest weighted component securities together comprise more than 60% of its weighting; or (4) the lowest weighted component securities comprising, in the aggregate, 25% of the index's weighting have an aggregate dollar value of average daily trading volume of less than $50 million (or in the case of an index with 15 or more component securities, $30 million). A security index that is not narrow-based is a "broad based security index." (See Broad-based security index).

Nominal value – the face value of the futures contract, obtained by multiplying the contract price by the number of shares or units per contract. If XYZ stock index futures are trading at $50.25 and the contract is for 100 shares of XYZ stock, the nominal value of the futures contract would be $5025.00.

Offsetting – liquidating open positions by either selling fungible contracts in the same contract month as an open long position or buying fungible contracts in the same contract month as an open short position.

Open interest – the total number of open long (or short) contracts in a particular contract month.

Open position – a futures contract position that has neither been offset nor closed by cash settlement or physical delivery.

Performance bond – another way to describe margin payments for futures contracts, which are good faith deposits to ensure performance of a person's obligations under a futures contract rather than down payments for the underlying securities.

Physical delivery – the tender and receipt of the actual security underlying the security futures contract in exchange for payment of the final settlement price.

Position – a person's net long or short open contracts.

Regulated exchange – a registered national securities exchange, a national securities association registered under Section 15A(a) of the Securities Exchange Act of 1934, a designated contract market, a registered derivatives transaction execution facility, or an alternative trading system registered as a broker or dealer.

Security futures contract – a legally binding agreement between two parties to purchase or sell in the future a specific quantify of shares of a security (such as common stock, an exchange-traded fund, or ADR) or a narrow-based security index, at a specified price.

Settlement price – 1) the daily price that the clearing organization uses to mark open positions to market for determining profit and loss and margin calls, 2) the price at which open cash settlement contracts are settled on the last trading day and open physical delivery contracts are invoiced for delivery.

Short – 1) the selling side of an open futures contract, 2) a person who has sold futures contracts that are still open.

Speculating – buying and selling futures contracts with the hope of profiting from anticipated price movements.

Spread – 1) holding a long position in one futures contract and a short position in a related futures contract or contract month in order to profit from an anticipated change in the price relationship between the two, 2) the price difference between two contracts or contract months.

Stop limit order – an order that becomes a limit order when the market trades at a specified price. The order can only be filled at the stop limit price or better.

Stop loss order – an order that becomes a market order when the market trades at a specified price. The order will be filled at whatever price the market is trading at. Also called a stop order.

Tick – the smallest price change allowed in a particular contract.

Trader – a professional speculator who trades for his or her own account.

Underlying security – the instrument on which the security futures contract is based. This instrument can be an individual equity security (including common stock and certain exchange-traded funds and American Depositary Receipts) or a narrow-based index.

Volume – the number of contracts bought or sold during a specified period of time. This figure includes liquidating transactions.

INTERACTIVE BROKERS DISCLOSURE STATEMENT
FOR BOND TRADING

THIS DISCLOSURE STATEMENT DISCUSSES THE CHARACTERISTICS AND RISKS OF TRADING BONDS THROUGH INTERACTIVE BROKERS. BEFORE TRADING BONDS YOU SHOULD CONSIDER CONSULTING A FINANCIAL ADVISOR, WHO CAN PROVIDE ADVICE ON WHETHER PARTICULAR INVESTMENTS SUIT YOUR FINANCIAL GOALS.

INTERACTIVE BROKERS MERELY PROVIDES EXECUTION AND CLEARING SERVICES AND DOES NOT PROVIDE SPECIFIC TRADING OR INVESTMENT ADVICE. INTERACTIVE BROKERS WILL NOT MONITOR YOUR TRADES AND INVESTMENTS TO DETERMINE IF THEY ARE APPROPRIATE FOR YOUR FINANCIAL NEEDS.

BEFORE TRADING ANY PARTICULAR BOND, YOU SHOULD UNDERSTAND THE EXACT TERMS AND CONDITIONS OF THE BOND, INCLUDING ITS CREDIT RATING, ITS MATURITY, ITS RATE, WHETHER IT IS CALLABLE, AND OTHER RELEVANT INFORMATION.

More information on bond trading can be found on the following website sponsored by the Bond Market Association: www.investinginbonds.com.

Section 1 – Characteristics of Bonds

1.1 – What is a bond?

A bond is a type of interest-bearing or discounted security usually issued by a government or corporation that obligates the issuer to pay the holder an amount (usually at set intervals) and to repay the entire amount of the loan at maturity. It is another way for the issuer to generate money as opposed to issuing stock.

1.2 – What are the types of bonds?

A. U.S. Government Bonds

Bonds issued by the U.S. government are called Treasuries. These are grouped into three categories: (1) Treasury bills; (2) Treasury notes; and (3) Treasury bonds. They each have a different length of time until maturity. Income earned on Treasuries is exempt from state and local taxes, but taxable by the federal government. Treasuries are considered to be the safest bond investments since the U.S. government backs them and it is highly unlikely that a situation of default will occur. However, Treasuries with long maturities have more potential for inflation and credit risk.

B. Municipal Bonds

Municipal bonds are debt obligations of state or local governments. The funds may be used to support general governmental needs or special projects. Municipal bonds are considered riskier investments than Treasuries, but they are exempt from taxing by the federal government and local governments often exempt their own citizens from taxes on its bonds. However, municipal bonds often have a lower coupon rate because of the tax break.

C. Corporate Bonds

Corporate bonds are debt instruments issued by private corporations. They usually have four distinguishing characteristics: (1) they are taxable; (2) they usually have a par value of $1000; (3) they have a term maturity (they become due all at once) and are paid for out of a sinking fund for that purpose; and (4) they are traded on major exchanges with prices published in newspapers. Corporate bonds come in various maturities. They are considered the riskiest of the bonds because there is much more of a credit risk with corporate bonds, but this usually means that the bondholder will be paid a higher interest rate. Corporations with low credit ratings issue bonds too, and these are speculative products called junk bonds.

Par value, or face amount, is usually $1000, but bond prices are quoted on $100. For example, a quote of 80 is a bond selling for $800. Amounts less than $10 are quoted in eighths ($1.25). Therefore, a quote of 80 $^{1}/8$ is equal to $801.25.

Convertible Bonds are bonds that may be converted into another form of corporate security, usually shares of common stock. Conversion only occurs at specific times at specific prices under specific conditions and this will all be detailed at the time the bond is issued.

C. Zero-Coupon Bonds

These are bonds that do not pay interest periodically, but instead pay a lump sum of the principal and interest at maturity. However, these are usually aggressively priced and are good for people who will need one lump sum of money at a particular time (e.g., those saving for college). Investors, however, must pay taxes on the interest as it accrues, not when they receive it.

1.3 – Bond Ratings

Standard & Poor's and Moody's Investors Service assign credit ratings to governments and corporations which help determine the amount of interest paid. The ratings for bonds are in the chart below. The ratings represent greater default risk as you read down the chart (see Section 2 for credit and other risks associated with bonds).

Quality	Moody's	Standard & Poor's
Best Quality	Aaa	AAA
High Quality	Aa	AA
Upper-medium grade	A	A
Medium grade	Baa	BBB
Junk Bonds/Speculative/High Yield	Ba, B, Caa, Ca	BB, B, CCC, CC
Default	-	D

It is a good idea to track a bond's rating as they are subject to change by factors that affect the company's credit.

The ratings that appear for the bonds Interactive Brokers LLC offers are from sources Interactive Brokers LLC believes to be reliable, however, Interactive Brokers LLC cannot guarantee accuracy.

Section 2 – General Risks of Bond Trading

Trading bonds may not be suitable for all investors. Although bonds are often thought to be conservative investments, there are numerous risks involved in bond trading. If you are uncomfortable with any of the risks involved, you should not trade bonds.

<u>There is a credit risk involved with trading bonds.</u> When you purchase a corporate bond, you are lending money to a company. There is always the risk that the issuer will go bankrupt. If this happens, you will not receive your investment back. This is a risk of which you must be aware. Credit risk is figured into the pricing of bonds.

<u>There is a prepayment risk involved.</u> Prepayment risk involves the scenario where an issuer "calls" a bond. If this happens, your investment will be paid back early. Certain bonds are callable and others are not, and this information is detailed in the prospectus. If a bond is callable, the prospectus will detail a "yield-to-call" figure. Corporations may call their bonds when interest rates fall below current bond rates.

A "put" provision allows a bondholder to redeem a bond at par value before it matures. Investors may do this when interest rates are rising and they can get higher rates elsewhere. The issuer will assign specific dates to take advantage of a put provision.

Prepayment risk is figured into the pricing of bonds.

<u>There is a significant inflation risk when trading bonds.</u> Inflation risk is the risk that the rate of the yield to call or maturity of the bond will not provide a positive return over the rate of inflation for the period of the investment. In other words, if the rate of inflation for the period of an investment is six percent and the yield to maturity of a bond is four percent, you will receive more money in interest and principal than you invested, but the value of that money returned is actually less than what was originally invested in the bond. As the inflation rate rises, so do interest rates. Although the yield on the bond increases, the price of the actual bond decreases. This is a risk of which you must be aware.

<u>There is an interest rate risk associated with bonds.</u> Changes in interest rates during the term of any bond may affect the market value of the bond prior to call or the maturity date.

Section 3 – Risks of Trading Bonds Electronically

Interactive Brokers is an online, direct access brokerage firm that executes virtually all trades on electronic market centers. Interactive Brokers will post bids and offers for bonds from various information sources and markets and will allow you to execute trades against those electronically-displayed bond quotes.

Unlike the practice of many other brokers, Interactive Brokers will not make telephone calls to various bond dealers in seeking to execute your bond orders. Rather, Interactive Brokers will provide you with direct access to electronic bond trading platforms.

Electronic trading has a number of inherent advantages (such as speed, low cost, and a clear audit trail) but it also has certain inherent disadvantages. ***You should be aware that electronic bond trading platforms may have less liquidity or less advantageous prices than could be offered telephonically by a bond dealer. In addition, electronic trading platforms are inherently vulnerable to technical errors and outages.***

Section 4 – Margin

When a broker-dealer lends a customer part of the funds needed to purchase a security such as a bond, the term “margin” refers to the amount of cash, or down payment, the customer is required to deposit. Bonds, like equity securities, may be traded on margin. Trading on margin is inherently more risky than trading in fully-paid-for securities. For risks associated with margin trading, please see Interactive Brokers LLC’s “DISCLOSURE OF RISKS OF MARGIN TRADING.”

Section 5 – Commissions and Mark-Ups

You will be charged a commission for bond trades executed through Interactive Brokers LLC. Interactive Brokers may execute your bond trade through or against an affiliate of Interactive Brokers (such as Timber Hill LLC or another affiliate), which may charge a markup on trades such affiliate executes as principal against your bond order.

ELECTRONIC TRADING AND ORDER ROUTING SYSTEMS RISK DISCLOSURE STATEMENT

Electronic trading and order routing systems differ from traditional open outcry pit trading and manual order routing methods. Transactions using an electronic system are subject to the rules and regulations of the exchanges offering the system and/or listing the contract. You are responsible for directing your trading in accordance with the relevant policies, procedures and trading rules of the exchanges or systems to which your orders are routed. Before you engage in transactions using an electronic system, you should carefully review the rules and regulations of the exchanges offering the system and/or listing the instruments you intend to trade.

DIFFERENCES AMONG ELECTRONIC TRADING SYSTEMS: Trading or routing orders through electronic systems varies widely among the different electronic systems. You should consult the rules and regulations of the exchange offering the electronic system and/or listing the contract traded or order routed to understand, among other things, in the case of trading systems, the system's order matching procedure, opening and closing procedures and prices, error trade policies, and trading limitations or requirements, and, in the case of all systems, qualifications for access and grounds for termination and limitations on the types of orders that may be entered into the system. Each of these matters may present different risk factors with respect to trading on or using a particular system. Each system may also present risks related to system access, varying response times, and security. In the case of Internet-based systems, there may be additional types of risks related to system access, varying response times and security, as well as risks related to service providers and the receipt and monitoring of electronic mail.

RISKS ASSOCIATED WITH SYSTEM FAILURE: Trading through an electronic trading or order routing system exposes you to risks associated with system or component failure. In the event of system or component failure, it is possible that, for a certain time period, you may not be able to enter new orders, execute existing orders, or modify or cancel orders that were previously entered. System or component failure may also result in loss of orders or order priority. In this regard, Customer must maintain alternative trading arrangements in addition to Customer's IB account in the event that the IB system is unavailable for any reason.

SIMULTANEOUS OPEN OUTCRY PIT AND ELECTRONIC TRADING: Some contracts offered on an electronic trading system may be traded electronically and through open outcry during the same trading hours. You should review the rules and regulations of the exchange offering the system and/or listing the contract to determine how orders that do not designate a particular process will be executed.

LIMITATION OF LIABILITY: Exchanges offering an electronic trading or order routing system and/or listing the contract may have adopted rules to limit their liability, the liability of FCMs and software and communication system vendors, and the amount of damages you may collect for system failure and delays. These limitations of liability provisions vary among the exchanges. You should consult the rules and regulations of the relevant exchanges in order to understand these liability limitations.

INTERNET SERVICES: To the extent that Customer or IB use Internet services to transport data or communications, IB disclaims any liability for interception of any such data or communications. IB is not responsible, and makes no warranties regarding, the access, speed, availability or security of Internet or network services.

ISE Disclosure for Option Orders Over 500 Contracts

Interactive Brokers is required to provide to you the following disclosure regarding option orders of over 500 contracts that may be executed using the International Securities Exchange (ISE) Block Order Solicitation Mechanism:

When handling an order of 500 contracts or more on your behalf, Interactive Brokers may solicit other parties to execute against your order and may thereafter execute your order using the International Securities Exchange's Solicited Order Mechanism. This functionality provides a single-price execution only, so that your entire order may receive a better price after being exposed to the Exchange's participants, but will not receive partial price improvement. For further details on the operation of this Mechanism, please refer to International Securities Exchange Rule 716, which is available at www.iseoptions.com under "Regulation – Rules."

DISCLOSURE REGARDING FLOOR/PIT BASED EXCHANGES

PLEASE READ THE FOLLOWING CAREFULLY. IT MAY SIGNIFICANTLY IMPACT THE SUCCESS OF YOUR TRADING ACTIVITY ON OPEN OUTCRY (PIT) MARKETS.

Certain exchanges to which you may route orders through Interactive Brokers ("IB") are *non-electronic*, *open outcry* market places. On such exchanges, orders submitted via the TWS will be routed to the floor electronically but are thereafter delivered into the trading pits manually and are subject to time disadvantages inherent with such markets. Trades execute when 2 brokers meet in the trading pit and verbally agree on a trade price and other trade details.

Traders acting on these exchanges must be aware of the following:

- All order actions (new orders, modifications, cancellations) are subject to delays relating to the delivery process. The delays are usually 30-60 seconds but can last several/many minutes in busy conditions such as at the open or close of the trading session.

- Frequent order modifications (price or quantity) will often result in poor executions since a modification requires that the pre-existing order be cancelled and a new order instated. If modifications are submitted faster than they can be processed, there is a strong likelihood of poor or missed executions.

- There is no time or price priority for orders. It is possible that an order will not be executed even though trades are reported at, or better than, the expected price.

- Market orders may be executed at unfavorable prices. Use of market orders is permitted, but not recommended.

- Cancelled orders may be executed. It is not uncommon that the report of an executed order is delayed due to market volume. When the cancel request is sent, the pit broker is then forced to report the status which may be "filled, too late to cancel".

IB recognizes the limitations of open outcry trading as compared to electronic trading and has designed the TWS system to remove as many of the problems as possible. Nevertheless, traders should not expect a similar performance from the IB brokerage system for floor-traded markets as for electronic markets.

I acknowledge the limitations of floor-traded markets and agree that IB will not be liable for delays and errors outside of its control relating to the manual open outcry trading process.

Interactive Brokers Order Routing and Payment for Order Flow Disclosure

IB's Order Routing System: Interactive Brokers offers its customers two primary methods of routing their orders to the market for execution. First, IB customers may directly route their orders to a particular market of their choice. For stocks and options traded at exchanges or ECNs, however, IB recommends that customers use IB's intelligent Best Execution Order Routing System (“Smart Routing”), which is designed to optimize both speed and price of execution. IB's Smart Routing system continually scans competing market centers and automatically seeks to route orders to the best market, taking into account factors such as quote size, quote price and the availability of automatic order execution.

Automatic Execution and Price Improvement: Electronic Communication Networks ("ECNs") and exchange automatic execution systems generally execute orders instantaneously at the posted bid or offer, rather than routing orders to a specialist or a trading crowd for manual handling. Generally, when an IB customer selects Smart Routing, IB routes eligible customer orders to exchanges and market centers currently offering automatic execution of orders. While automatically executed orders may not have an opportunity to be executed at a price better than the market center's posted bid or offer, automatic execution of customer orders is faster and more certain than other methods of execution and eliminates execution of orders at prices inferior to the prices posted at the market when the order was routed to it. Automatic execution of orders also eliminates the ability of a market maker or a specialist to hold a customer order and perhaps decline to execute the order if the market moves in the customer’s favor while the order is pending. Overall, IB believes that use of the Smart Routing system to route orders to the exchange or market center with the best price, combined with automatic execution, provides IB customers with the most favorable order execution.

IB’s Order Routing System and Reg NMS: For U.S. stocks, IB’s Smart Routing system is designed to comply fully with Reg NMS and with our duty as a broker-dealer to provide best execution for customer orders. IB’s Smart Routing system connects to most or all exchanges and public market centers, and IB receives direct market data feeds from most or all of these market centers. Therefore IB can route an order directly to the market with the best price. If an order is not executed immediately, IB’s system then constantly monitors the open order and in most cases will cancel and reroute it if market conditions or prices change and another market center becomes more favorable for the order. If an order is too large to be executed at the best price at a single exchange or market center, IB’s Smart Routing system will split the order and sent it to multiple destinations to get the fastest fill at the most favorable price.

Intermarket Sweep Orders for U.S. National Market System Stocks: Because IB’s system monitors the available markets and is designed to send orders only to the markets posting the best price, orders routed by the IB Smart Routing system generally will be marked as “Intermarket Sweep Orders ” – “ISOs” -- meaning that an exchange that receives such an order will be able to execute the order in reliance that the IB system did not identify any better prices for the order, or that other orders sent at or around the same time by IB have already taken out any better quotes on other exchanges or market centers. IB has certain processes in place to monitor its connections to various exchanges and market centers, the quality of its market data feeds and the quality of its order executions. If an exchange system or the IB system is experiencing technical problems, or if IB is not connected to the market that is posting the best price, IB may route an order to an exchange without marking the order as ISO. This will allow the receiving market to re-route the order to a market offering a better price, if necessary.

Orders Sent Near the Opening of Trading: Please note that markets can be especially volatile near the opening of a trading session, with prices and available volume often changing rapidly and with data feeds from various markets potentially being slow or temporarily unavailable. IB cannot guarantee that orders sent near the opening of trading necessarily will receive the best posted price. You may want to consider the use of limit orders at the open, although market orders should be used if you want a higher certainty of getting a fill.

Order Conversion and Designation: Interactive Brokers may convert certain order types or apply conditions to certain IB customer orders sent to IB via Smart Routing in order to facilitate an execution. For example, order types not offered by certain exchanges may be simulated by the IB system using order designations. In addition, orders may be sent Immediate or Cancel, Fill-Or-Kill, All-Or-None, etc. in order to facilitate an immediate automatic execution, consistent with the objectives of the customer order (also, see discussion of “ISO” designation above).

Payment for Order Flow - Stocks: IB does not generally accept direct payment for order flow for stock orders. However, several types of payments received by IB for various types of order executions may be considered indirect payment for order flow under SEC interpretations.

<u>ECN Rebates:</u> IB receives liquidity rebates from ECNs for certain orders routed to those ECNs, ECN liquidity rebates are credited against the fees charged by the ECNs to execute other orders. ECN rebate amounts change frequently. Rebate rates for most ECNs are posted on the IB website (in the section on unbundled commission costs). They also typically are posted on ECN websites.

<u>Liquidity Provider Relationships:</u> IB has entered arrangements with certain institutions under which such institutions may send orders to IB on a “not held” basis. These orders are held within the IB system and are not displayed in the national market. If another IB customer order could be immediately executed against such an order held in the IB system (at the national best bid or offer), the orders may be crossed and the execution reported to the tape. This arrangement provides extra liquidity for some IB customer orders and leads to faster executions at NBBO (since the orders do not have to be sent to an exchange or ECN to be executed but can be executed within the IB system). IB may receive payment in the form of commissions or otherwise from the liquidity providers for these executions.

Payment for Order Flow - Options: IB receives order flow payments in varying amounts (from 65 cents to 75 cents per eligible contract as of July 2007) from U.S. option exchanges, specialists and/or market makers pursuant to the mandatory marketing fee programs that have been adopted by the exchanges and approved by the SEC. For options that are quoted in penny increments the payments generally are between 20 cents and 25 cents for eligible contracts. If multiple exchanges are quoting at the NBBO for an option order and IB has discretion as to where to send the order or a portion of it, IB generally will “break the tie” by sending the order to an exchange where it will receive the most payment for the order, or to an exchange designated by the firm from whom IB will receive the most payment (typically IB’s affiliate Timber Hill LLC – see below).

Affiliate Relationships: IB's affiliate Timber Hill LLC makes markets in stocks and acts as a specialist or market maker on all U.S. option exchanges. Other IB affiliates worldwide, including Timber Hill Europe, also act as market makers on global exchanges. IB's market-making affiliates, including Timber Hill LLC and Timber Hill Europe, may provide automatic execution for certain eligible IB customer orders routed through IB’s Smart Routing system, for certain Nasdaq stocks, NYSE stocks, global stocks and other securities. When an order is sent using Smart Routing, if an IB affiliate is willing to provide an execution at the best available posted price or better for that stock, IB may send the order to that affiliate for an immediate automatic execution. Orders sent to IB affiliates for automatic execution may be eligible for price improvement (i.e., they may be executed at a price better than the best posted bid or offer).

As specialist on various options exchanges, IB's affiliate Timber Hill LLC may be responsible for allocating payment for order flow that is generated in its assigned options classes, depending on the design of the applicable exchange's SEC-approved payment for order flow plan. As much as consistent with these plans, Timber Hill pays such funds to Interactive Brokers. For Boston Options Exchange orders, Timber Hill pays IB $1.00 for eligible contracts executed against Timber Hill (excluding contracts that are executed through the Price Improvement auction ("PIP") at better than the national best bid or offer).

Additionally, IB itself pays certain other broker-dealers for routing option orders to IB, for IB then to execute, generally using IB's Smart Routing system.

Statistical information regarding the quality of executions for stock orders effected through IB's affiliate Timber Hill LLC (e.g., average execution speed, percentage of orders receiving price improvement, etc.) is available on the Interactive Brokers website at www.interactivebrokers.com or may be downloaded at http://www.interactivebrokers.com/en/accounts/legalDocuments/timberHill.php

Interactive Brokers Penny Option Trading Facility for U.S. Options Not Quoted in Pennies on the Exchanges: Under an SEC pilot program announced in 2006, U.S. option exchanges now quote certain options in pennies. For options not yet quoted in pennies by the exchanges, IB has developed a system to display penny option prices in the IB TWS and on the IB website and try to match penny-priced bids and offers and send them to an exchange for execution. This allows price improvement for customer orders over the ordinary nickel and dime trading increments offered by exchanges on these options. The following governs penny option orders in the IB system for options not quoted in pennies by the exchanges:

- Your penny price (with size) will be publicly displayed through the IB TWS and website (if it is the best price in our system), unless you instruct us otherwise. Display of your penny-priced indication is not limited to other IB customers and is broadly public. You can instruct us not to display your penny price, but that will make it less likely for you to trade.

- Your interest at the penny price will not be displayed at an options exchange or through the Options Price Reporting Authority: If you send a penny-priced order, IB will send your order rounded to a nickel or dime (down for a bid and up for an offer) to an option exchange, but your penny price will only be displayed on the IB system. In this respect your penny-priced order is a discretionary order.

- IB is not an options exchange and the IB penny option pricing system cannot execute option orders, only route them to an exchange for execution.

- When IB sends potentially matching orders to an options exchange, an auction process will be used and you may not get to trade: Other traders will have a chance to come in and join the trade at the same price or offer a better price.

- The penny prices displayed in the IB system are not "firm" and will not always result in a trade: Penny prices displayed through IB are non-firm indications of interest and may be cancelled before you can trade against them or circumstances may change such that IB cannot start the required auction at an options exchange.

- Trading in pennies may result in a better price but a slower fill: You will have to wait at least three seconds while the option exchange penny auction is conducted.

Quarterly Order Routing Reports and Other Order Routing Information Available upon Request: U.S. Securities and Exchange Commission rules require all brokerage firms to make publicly available quarterly reports describing their order routing practices. For IB, these quarterly reports describe how and where customer orders are routed when customers use IB's Smart Routing system rather than directing their order to a particular market center. IB's quarterly order routing reports are available on the IB website at www.interactivebrokers.com, or can be obtained by an e-mail request directed to IB Customer Service at help@interactivebrokers.com.

In addition to the basic quarterly reports, under SEC NMS Rule 606 a broker-dealer is required upon a customer request to provide information regarding the identity of the market center to which any customer order (or all orders) was routed in the six months prior to the request; whether the order was a directed or non-directed order, and the time of the transaction, if any, that resulted from such order. Please contact the IB Customer Service Desk in writing through the IB website at www.interactivebrokers.com if you wish to receive the foregoing routing information for any order(s) within the past six months. Please type "Request for Order Routing Information" in the subject line of your request and please include your name, user id and account number as well as the date of the order, the security, the quantity, and any other information necessary to identify the order (e.g., the time of day if there were several similar orders that day).

NOTICE REGARDING PRE-ARRANGED TRADING ON U.S. FUTURES EXCHANGES

Pre-arranged trades are trades that are the result of discussions between two market participants prior to execution to ensure that a contra party will take the opposite side of a particular order. U.S. futures exchanges, including CME and CBOT, have regulations prohibiting the execution of pre-arranged trades except in certain limited instances.

Interactive Brokers customers are responsible to know and abide by all exchange restrictions regarding pre-arranged trading.

For your reference, the relevant CME and CBOT rules are set forth below:

CME (GLOBEX) Policy 539

Prearranged, Pre-negotiated and Noncompetitive Trades Prohibited

539.A. General Prohibition

No person shall prearrange or pre-negotiate any purchase or sale or noncompetitively execute any transaction, except in accordance with Sections B and C below. Violation of this rule may be a major offense.

539.B. Exceptions

The foregoing restriction shall not apply in the following circumstances:

1. Block trades pursuant to Rule 526;
2. A transfer of spot for futures pursuant to Rule 538; and,
3. A transfer of cash for futures after termination of a contract pursuant to Rule 719.

539.C. Pre-Execution Discussions Regarding Globex Trades

Parties may engage in pre-execution discussions with regard to transactions executed on the Globex platform where one party (the first party) wishes to be assured that a contra party (the second party) will take the opposite side of the order under the following circumstances:

1. A party may not engage in pre-execution discussions with other market participants on behalf of another party unless the party for whose benefit the trade is being made has previously consented to permit such discussions.
2. Parties to pre-execution discussions shall not (i) disclose to a non-party the details of such discussions or (ii) enter an order through the Globex platform to take advantage of information conveyed during such discussions except in accordance with this rule.
3. With the exception of orders entered pursuant to the terms of Section C.5. below, a period of 5 seconds shall elapse between entry of the two orders in the case of futures orders or a period of 15 seconds shall elapse between entry of the two orders in the case of option orders.
4. With the exception of orders entered pursuant to the terms of Section C.5. below, in any transaction involving pre-execution discussions, the first party's order must be entered into the GLOBEX platform first and the second party's order may not be entered into the GLOBEX platform until the time period prescribed in Section 539.C.3. above has elapsed.
5. In electronic options operated pursuant to Rule 585 ("Globex Call Market Trading Algorithm"), solicitation of bid(s) and/or offer(s) between market participants through private discussion for the purpose of establishing a market or improving the market for an eligible contract or an eligible combination of contracts for futures and options shall be preceded by issuing a Request For Quote ("RFQ") through an eligible terminal. Subsequent to such RFQ, a trade intended for execution pursuant to Rule 585 for which there has been a pre-execution discussion must be initiated by the entrance of a Request for Cross ("RFC") Order which will contain both the buy and the sell orders. The RFC Order must be entered within fifteen (15) minutes in the same trading session of the entry of the RFQ. Failure to enter the RFC order within fifteen (15) minutes of the entry of the RFQ shall be considered an abandonment of that pre-execution discussion. Any pre-execution discussion or attempt to enter RFC orders must be preceded by the entry of a new RFQ.

CBOT (E-cbot) Rule 9B.13

9B.13 Trading Against Customer Orders and Crossing Orders –

(a) Trading Against Customer Orders

During an e-cbot trading session, a member or Registered User shall not knowingly cause to be entered or knowingly enter into a transaction in which he takes the opposite side of an order entered on behalf of a customer, for the member's or Registered User's own account or his employer's proprietary account unless the customer order has been entered immediately upon receipt and has first been exposed on the e-cbot platform for a minimum 5 seconds for outright futures contracts and a minimum of 15 seconds for strategies and options contracts. Such transactions that are unknowingly consummated shall not be considered to have violated this regulation.

(b) Crossing Orders

Independently initiated orders on opposite sides of the market for different beneficial account owners that are immediately executable against each other may be entered without delay provided that the orders did not involve pre-execution communications.

Opposite orders for different beneficial accounts that are simultaneously placed by a party with discretion over both accounts may be entered provided that one order is exposed on the e-cbot platform for a minimum of 5 seconds for outright futures contracts and a minimum of 15 seconds for strategies and options contracts.

An order allowing for price and/or time discretion, if not entered immediately upon receipt, may be knowingly entered opposite a second order entered by the same firm only if the second order has been entered immediately upon receipt and has been exposed on the e-cbot platform for a minimum of 5 seconds for outright futures contracts and a minimum of 15 seconds for strategies and options contracts.

(c) Pre-Execution Communications Prohibited

(i) Pre-execution communications are communications between two market participants for the purpose of discerning interest in the execution of a transaction prior to the entry of an order on the e-cbot platform.

(ii) Pre-execution communications and transactions arising from such communications are prohibited in all products during all hours except as otherwise provided by Regulation 331.05 "Block Trade Transactions".

Violations of this regulation shall be considered an act detrimental to the interest and welfare of the Exchange.

FINANCIAL SERVICES GUIDE

Interactive Brokers LLC

This Financial Services Guide ("FSG") is issued by Interactive Brokers LLC (ARBN 091191141; AFSL 245574) ("IB") to inform you of various topics, including:

- The Services We Offer;
- Details Regarding How to Instruct Us;
- Remuneration;
- Any Associations or Relationships we May Have and Details of Any Potential Conflicts of Interest;
- How We Use Your Personal Information (IBG Privacy Statement);
- How We Handle Customer Complaints (Dispute Resolution); and
- Our Contact Information

Purpose & Content of the FSG

The purpose of this FSG is to provide IB customers with important information about the financial services that we offer and is structured to give you information required to make an informed decision about whether to use those financial services. In addition to the general information offered in this FSG, we have also outlined the remuneration that may be paid to IB in relation to the financial services we offer, and we have included a section on how we handle complaints.

In addition to this FSG, you may receive, from time to time, a Product Disclosure Statement ("PDS") that will disclose important information about financial products offered by IB including, but not limited to: features, benefits, risks, costs, taxation implications and the availability of additional information regarding certain products (e.g., futures and options) that you may decide to trade.

IB has prepared this document in accordance with the requirements under the Australian Corporations Act (2001). While IB offers execution and clearing services to customers on worldwide exchanges, this FSG is primarily geared toward IB's activities in Australia.

Financial Services Offered

The affiliates of Interactive Brokers Group ("IBG"), an automated global electronic market maker and broker, specialize in routing orders and executing and processing trades in securities, futures and foreign exchange instruments. IBG affiliates conduct business on more than 60 electronic exchanges and trading venues around the world. IB, using its proprietary software, provides non-advisory brokerage services to professional traders and investors with direct access to stocks, options, futures, forex and bonds from a single IB Universal Account℠.

In Australia, IB's financial services licence authorizes it to deal in securities, derivatives and foreign exchange contracts and to provide custodial and depository services to customers. As such, IB offers customers access to securities and futures traded on the Sydney Futures Exchange Limited ("SFE") and the Australian Stock Exchange Limited ("ASX"). In this regard, IB acts as Agent for customers.
IB is a participant on the SFE. IB is not a participant on the ASX. IB's proprietary trading affiliate, Timber Hill Australia Pty Limited (ABN 25079993534) ("THA") is a participant on the ASX. For customers wishing to execute trades on ASX, IB routes such orders through THA's connection to the ASX Integrated Trading System ('ITS") using an electronic communications process ("ecp") dedicated to the routing of only IB customer orders.

A full list of the products IB offers and the worldwide exchanges on which they are offered is available on the IB website at www.interactivebrokers.com.

IB does not solicit orders from customers, nor does it offer any trading, tax or other advice or recommendations to customers. IB employees are prohibited from providing any such advice to customers.

How You Can Send IB Instructions

IB Customers route orders to IB through their Trader Workstation ("TWS"), Computer to Computer Interface ("CTCI") or an Application Programming Interface ("API"), by logging in through a secure username and password. As set forth in the IB Customer Agreement, IB does not know whether an unauthorized person is entering orders with a customer's user name/password. Customers are fully responsible for the confidentiality and use of their user name/password and remain responsible for all transactions entered using their user name/password. Customers may also contact IB Customer Service using the details below should they experience technical difficulties.

Remuneration

Commission and fee information is available for each exchange or market center from a link on the IB website at www.interactivebrokers.com. Please note that IB does not solicit orders from customers, does not offer any advice or recommendations to customers, and IB representatives do not handle customer accounts. As such, no IB employee earns a commission for the trades that are self-directed by IB customers. All commissions are earned by the firm.

Information regarding commissions and brokerage fees may be found on the IB website at www.interactivebrokers.com.

Associations/Relationships & Potential Conflicts of Interest

Neither IB nor any related bodies corporate have any relationships or associations with any product issuer that could be expected to influence us in the provision of financial services. Similarly, IB does not act under any binder in providing any authorized services.

Use of Your Personal Information – IBG Privacy Statement

IBG does not sell or license information about IB customers to third parties, nor do we sell customer lists or customer e-mail addresses to third-party marketers.

At IB, we understand that the confidentiality and security of the personal information that you have shared with us is important to you. That's why we have developed specific policies and practices that are designed to protect the privacy of your personal information. By opening an account with IB or by utilizing the products and services that are available through IB, you have consented to the collection and use of your personal information in accordance with the privacy policy set forth below. We encourage you to read this privacy statement carefully.

In order to provide brokerage services and in compliance with regulatory requirements, IB collects certain personal, non-public information from you. This includes information that you provide during the IB account application process (e.g., your name, e-mail address, telephone number, birth date, social security number, investment objectives, etc.), and acquired as a result of the transactions you conduct through the IB system. We safeguard the confidentiality of your information in a number of ways. For example:

- We do not sell or license lists of our customers or the personal, non-public information that you provide to us.

- We restrict access to the personal, non-public information that you have shared with us to those IB employees, agents, and affiliates who need to know such information in connection with the services that IB provides to you.

- We maintain strict employment policies that prohibit employees who have access to your personal, non-public information from using or disclosing such information except for business purposes.

- We take substantial precautions to safeguard your personal, nonpublic information. For example, the IB system can be accessed only by authorized IB personnel via valid user names and passwords. In addition, our Internet-based systems include security measures such as encryption and firewalls.

IB uses the personal, nonpublic information that we collect from you to service your account (e.g., to qualify you for trading the products and using the services available through the IB system and to execute and confirm your IB transactions). In doing so, we may share such information with our employees, agents, and affiliates.

IB also collects and uses information acquired from "cookies." "Cookies" are bits of textual information that are sent electronically from a web server to your browser and are stored on your computer. They do not identify you individually nor do they contain personal information about you, unless you have identified yourself or provided the information by, for example, opening an account or registering for an on-line service. IB may use cookies to measure and identify website traffic patterns and to track the performance of web features and advertisements. By providing IB with a better understanding of how you and others use IB's websites and other web services, cookies enable IB to improve the navigation and functionality of its websites and to present the most useful information and offers to you. IB may share information obtained from cookies with its employees, agents and affiliates, but does not sell such information to unaffiliated third parties. IB may permit other companies or their third party ad servers to set cookies on your browser when you visit an IB website. Such companies generally use these cookies as we do.

We do not disclose personal, nonpublic information to individuals or entities that are not affiliated with IB, except as provided by law. For example, among other reasons we may disclose or report such information: where necessary to authorize, effect, administer, or enforce transactions that you request or authorize; to maintain and administer your account; to provide you with account confirmations, statements and records; to maintain appropriate archival records; where we believe that disclosure is required by applicable law, rules or regulations; to cooperate with law enforcement or regulatory or self-regulatory organizations; to enforce our customer and other agreements; to meet our obligations, or to protect our rights and property.

Finally, if you choose to subscribe to any of the Trader's Toolbox suite of third-party services that are provided through the IB website, we may disclose such information to the service providers as necessary for them to provide the services that you have requested. IB requires these service providers to enter into confidentiality agreements with IB that limit their use of the information that they receive. Such agreements prohibit the service provider from using IB customer information that they receive other than to carry out the purposes for which the information was disclosed.

If you have any questions about these policies, please contact the IB Customer Service Department at help@interactivebrokers.com.

Dispute Resolution

If you wish to file a complaint with IB, we encourage you to send your complaint via Account Management for the most expedient and efficient handling. This can be done by clicking on "Inquiry Ticket." Under "New Ticket" select the following:

Category: Other Regulatory
Sub-category: Submit a Complaint

Alternatively, customers may send their complaints by e-mail to help@interactivebrokers.com; by telephone to the customer service telephone numbers listed on the IB website at www.interactivebrokers.com; or by hard copy addressed to:

Legal & Compliance Department
Interactive Brokers LLC
One Pickwick Plaza
Greenwich, CT 06830

As indicated by the Financial Industry Complaints Service Limited (“FICS”), if you have not received a satisfactory response to your complaint, or, forty-five (45) days have elapsed, you may refer the matter to the FICS. FICS can be contacted at:

P.O. Box 579
Collins Street West
Melbourne Vic 8007

Telephone: 1300 78 08 08
Fax: (03) 9621 2291
Email: fics@fics.asn.au
Website: www.fics.asn.au

This service is provided to you free of charge.

You may also refer the matter to the Australian Securities and Investments Commission (“ASIC”). ASIC may be contacted on their Infoline on 1300 300 630.

Alternatively, customers who wish to file a complaint with, or initiate an arbitration or reparations proceeding against, IB, may consult the website of, or contact, a Self-Regulatory Organization ("SRO"), e.g., the Securities and Exchange Commission (www.sec.gov), the Financial Industry Regulatory Authority (www.finra.org), the National Futures Association (www.nfa.futures.org), the Commodity Futures Trading Commission (www.cftc.gov).

Contact Information

Interactive Brokers LLC
One Pickwick Plaza
Greenwich, CT 06830

1-877-442-2757 (from inside the U.S.)
312-542-6901 (from outside the U.S.)

e-mail: help@interactivebrokers.com

Additional contact information, including issue-specific details, is available at www.interactivebrokers.com.

INTERACTIVE BROKERS LLC

PRODUCT DISCLOSURE STATEMENT

FOR

FUTURES & FUTURES OPTIONS TRADED ON THE SYDNEY FUTURES EXCHANGE

- Interactive Brokers LLC (ARBN 091191141; AFSL 245574) ("IB") provides this Product Disclosure Statement ("PDS") for exchange traded futures and futures options on the Sydney Futures Exchange ("SFE"). YOU MUST READ THIS DOCUMENT IN FULL BEFORE TRADING SUCH PRODUCTS.

- Some features and benefits of futures and futures options, including taxation implications, are detailed below.

- As detailed more fully below, futures and futures options are highly-risky investments. You should familiarize yourself with all the risks involved before trading such products.

- IB's commissions and fees are available on the IB website at www.interactivebrokers.com.

- General information regarding margin is set forth below, and IB's margin policies are available on the IB website at www.interactivebrokers.com. You acknowledge, however, that **IB GENERALLY WILL NOT ISSUE MARGIN CALLS, THAT IB WILL NOT CREDIT YOUR ACCOUNT TO MEET INTRADAY MARGIN DEFICIENCIES, AND THAT IB GENERALLY WILL LIQUIDATE POSITIONS IN YOUR ACCOUNT IN ORDER TO SATISFY MARGIN REQUIREMENTS WITHOUT PRIOR NOTICE TO YOU.** You have also acknowledged that you have received and reviewed IB's Disclosure of Risks of Margin Trading provided separately by IB and available on the IB website.

- As detailed more fully below, IB is an SFE participant. Customers' executed trades shall be cleared by Fortis Clearing Sydney Pty Ltd ("Fortis"), an SFE Clearing Corporation Pty Ltd ("SFE Clearing") participant.

- The availability of additional information, including market data, is set forth below.

- Information regarding the availability of dispute resolution forums is detailed at the end of this document.

- IB has prepared this document in accordance with the requirements under the Australian Corporations Act (2001). While IB offers exchange traded futures and futures options on worldwide exchanges, the focus of this PDS is primarily on IB's activities in Australia. You should note that transactions on derivatives exchanges outside Australia are generally subject to the exchange rules and laws of that jurisdiction.

The information in this Product Disclosure Statement ("PDS") does not take into account your personal objectives, financial situation and needs. Before trading in the products referred to in this PDS you should read this PDS and be satisfied that any trading you undertake in relation to those products is appropriate in view of your objectives, financial situation and needs. Inasmuch as Interactive Brokers LLC employees are not authorized to provide you with any advice or recommendation, you should consult your independent financial advisor or obtain other independent advice before trading in exchange traded futures and futures options.

Purpose of this PDS

Interactive Brokers LLC (ARBN 091191141; AFSL 245574) ("IB") has prepared this PDS for your review to assist you in determining whether you should engage in trading exchange traded futures and futures options on the Sydney Futures Exchange ("SFE"). This document does not constitute a recommendation or solicitation to engage in such trading. Rather, this document is meant to help you evaluate the risks and rewards of trading futures and futures options on the SFE and whether they are appropriate for your investment objectives and financial situation.

Under the Australian Corporations Act, where IB enters into an exchange traded derivative on a customer's behalf, IB is regarded as having *issued* the derivative to the customer. IB's contact details are as follows:

Interactive Brokers LLC

AFSL 245574
ARBN 091191141

One Pickwick Plaza
Greenwich, CT 06830
203-618-5763

Features of Futures and Futures Options Contracts

An exchange traded futures contract is an agreement, traded on a derivatives exchange, to deliver or take delivery of a specified amount of a security or a commodity of a given grade or quality, or to make a cash adjustment based on a change in the price of the commodity, financial instrument, security or stock indices at an agreed time in the future.

Exchange traded futures contracts are issued for periods of up to several years in the future. The time of delivery or settlement for exchange traded futures contracts is one of a series of standardized maturity times.

Option contracts traded over futures contracts (futures options) represent the right to enter into a futures contract at the exercise price of the futures option granted in return for a premium. The seller is then under the obligation to enter into a futures contract at the exercise price of the futures option if the option is validly exercised.

It is important to distinguish between futures options and exchange traded options. If a futures option is exercised, it results in the establishment of a futures contract, but, if an exchange traded option is exercised, it results in making or taking delivery of the actual commodity or instrument underlying the option, or making a cash adjustment based on a change in the price of the commodity or instrument or on the movement in an index.

Possible Benefits of Exchange Traded Futures and Futures Options Contracts

Some people engage in trading derivatives contracts to provide those who deal in the traded commodities, financial instruments and securities with a way to hedge the associated risks related to changing prices for their investments. Others may speculate (i.e., attempt to benefit from changing prices in traded commodities, financial instruments or indices.

Risks of Trading Exchange Traded Futures and Futures Options Contracts

The risk of loss in trading in futures and futures options contracts can be substantial. You should therefore carefully consider whether that kind of trading is appropriate for you in the light of your financial circumstances. In deciding whether or not you will become involved in that kind of trading, you should be aware of the following matters.

(a) You could sustain a total loss of the initial margin funds that you deposit with your broker to establish or maintain a position in a futures market.

(b) If the derivatives market moves against your position, you may be required, at short notice, to deposit with your futures broker additional margin funds in order to maintain your position. Those additional funds may be substantial. If you fail to provide those additional funds within the required time, your position may be liquidated at a loss and in that event you will be liable for any shortfall in your account resulting from that failure.

(c) Exchange traded derivatives are subject to movements in the underlying market. In the case of options, they may fall in price or become worthless at or before expiry.

(d) Under certain conditions, it could become difficult or impossible for you to liquidate a position (this can, for example, happen when there is a significant change in prices over a short period).

(e) The placing of contingent orders (such as a 'stop-loss' order) may not always limit your losses to the amounts that you may want. Market conditions may make it impossible to execute such orders.

(f) A 'spread' position is not necessarily less risky than a simple 'long' or 'short' position.

(g) The high degree of leverage that is obtainable in futures trading because of small margin requirements can work against you as well as for you. The use of leverage can lead to large losses as well as large gains.

(h) If you propose to trade in futures options, the maximum loss in buying an option is the amount of the premium, but the risks in selling an option are the same as in other futures trading.

(i) Options have a limited life span as their value erodes as the option reaches its expiry date. It is therefore important to ensure that the options selected meet your investment objectives.

(k) The exchanges and their Clearing Houses have discretionary powers to take action in relation to the market and the operation of the clearing facility to ensure fair and orderly markets are maintained as far as practicable. These actions can affect an investor's option positions.

This statement does not disclose all of the risks and other significant aspects involved in trading on a derivatives market. You should therefore study such trading carefully before becoming involved in it.

Costs & Amounts Payable Associated with Trading Exchange Traded Futures and Futures Options Contracts

Costs – Information regarding commissions and brokerage fees for exchange traded futures and futures options may be found on the IB website at www.interactivebrokers.com. Commissions are due at the time of the trade.

Additional information on pricing and contract specifications for SFE futures and futures options contracts can be found on the Australian Securities Exchange website at www.asx.com.au.

Amounts Payable

Margins

Generally, margin transactions for futures and futures options are subject to initial and maintenance margin requirements of exchanges, clearinghouses and regulators and also to any additional margin requirement of IB. Initial margin may vary from time to time according to the volatility of the market. Contracts are effectively marked to market on at least a daily basis.

Details regarding IB's margin policies are set forth on the IB website at www.interactivebrokers.com. You acknowledge that **IB GENERALLY WILL NOT ISSUE MARGIN CALLS, THAT IB WILL NOT CREDIT YOUR ACCOUNT TO MEET INTRADAY MARGIN DEFICIENCIES, AND THAT IB GENERALLY WILL LIQUIDATE POSITIONS IN YOUR ACCOUNT IN ORDER TO SATISFY MARGIN REQUIREMENTS WITHOUT PRIOR NOTICE TO YOU.**

Clearing Arrangements

IB is a participant on the SFE and IB shall execute SFE orders for its customers. Orders executed for IB customers shall be cleared by Fortis Clearing Sydney Pty Ltd ("Fortis"), an SFE Clearing Corporation Pty Ltd ("SFE Clearing") participant.

The business address and phone number for Fortis are below:

Fortis Clearing Sydney Pty Limited
Level 8
50 Bridge Street
Sydney
NSW, 2000, Australia
61 2 8221 3000

Market Data

Market data is available for exchange traded futures and futures options contracts by subscribing to the Sydney Futures Exchange Data Feed through IB.

Additional pricing information and contract specifications for SFE contracts are available at www.asx.com.au.

Taxation Implications

Your tax position when trading exchange traded derivatives will depend on your individual circumstances and you should consult your own tax advisor before making any decisions to trade. It is important to determine whether you are a trader, a speculator or a hedger as the tax treatments for each may differ. IB cannot provide a detailed treatment of the taxation issues that are relevant to trading or investing in exchange traded futures and futures options, nor does IB offer any taxation advice, and you must therefore discuss these issues with your tax advisor.

Some of the issues that may be relevant to you include:

- Australian Tax Office ("ATO") rulings need to be considered.
- Are you classified as a trader, as a speculator or as a hedger?
- Does revenue hedging or capital hedging apply to you?
- Are there timing issues, for example, when an option is opened in one tax year and closed in the next tax year?

This is by no means a comprehensive list of the taxation issues of futures and futures options trading. The information contained in this PDS is provided for educational purposes only and does not constitute investment, taxation or financial product advice. Taxation issues will vary from investor to investor. It is therefore important to discuss your taxation situation with your independent financial advisor or accountant, to ensure that any options trades you enter into will not have adverse taxation implications to you.

Dispute Resolution

If you wish to file a complaint against IB, we encourage you to send your complaint via Account Management for the most expedient and efficient handling. This can be done by clicking on "Inquiry Ticket." Under "New Ticket" select the following:

Category: Other Regulatory
Sub-category: Submit a Complaint.

Alternatively, customers may send their complaints by e-mail to help@interactivebrokers.com; by telephone to the customer service telephone numbers listed on the IB website at www.interactivebrokers.com; or by hard copy addressed to:

Legal & Compliance Department
Interactive Brokers LLC
One Pickwick Plaza
Greenwich, CT 06830

As indicated by the Financial Industry Complaints Service ("FICS"), if you have not received a satisfactory response or 45 days have elapsed, you may refer the matter to the FICS. FICS can be contacted at:

P.O. Box 579
Collins Street West
Melbourne Vic 8007
Telephone: 1300 78 08 08

Fax: (03) 9621 2291
Email: fics@fics.asn.au
Website: www.fics.asn.au

This service is provided to you free of charge.

You may also refer the matter to the Australian Securities and Investments Commission (“ASIC”). ASIC may be contacted on their Infoline on 1300 300 630.

Alternatively, customers who wish to file a complaint with, or initiate an arbitration or reparations proceeding against, IB, may consult the website of, or contact, a Self-Regulatory Organization ("SRO"), e.g., the Securities and Exchange Commission (www.sec.gov), the Financial Industry Regulatory Authority (www.finra.org), the National Futures Association (www.nfa.futures.org), the Commodity Futures Trading Commission (www.cftc.gov).

INTERACTIVE BROKERS LLC

PRODUCT DISCLOSURE STATEMENT

FOR

OPTIONS TRADED ON THE AUSTRALIAN STOCK EXCHANGE LIMITED

- Interactive Brokers LLC (ARBN 091191141; AFSL 245574) ("IB") provides this Product Disclosure Statement ("PDS") for exchange-traded options ("ETOs") on the Australian Stock Exchange Limited ("ASX"). YOU MUST READ THIS DOCUMENT IN FULL BEFORE TRADING SUCH OPTIONS.

- Some features and benefits of ETOs, including taxation implications and returns, are detailed below.

- As detailed more fully below, ETOs are highly-risky investments. You should familiarize yourself with all the risks involved before trading such options.

- IB's commissions and fees are available on the IB website at www.interactivebrokers.com.

- General information regarding margin is set forth below, and IB's margin policies are available on the IB website at www.interactivebrokers.com. You acknowledge, however, that **IB GENERALLY WILL NOT ISSUE MARGIN CALLS, THAT IB WILL NOT CREDIT YOUR ACCOUNT TO MEET INTRADAY MARGIN DEFICIENCIES, AND THAT IB GENERALLY WILL LIQUIDATE POSITIONS IN YOUR ACCOUNT IN ORDER TO SATISFY MARGIN REQUIREMENTS WITHOUT PRIOR NOTICE TO YOU.** If you maintain a margin account with IB, you have also received and reviewed IB's Disclosure of Risks of Margin Trading provided separately by IB and available on the IB website.

- As of the date of this PDS, the cutoff time for the exercise of ASX options is 17:00 Sydney time. All in-the-money options shall be automatically exercised.

- As detailed more fully below, IB is not an ASX participant. IB's proprietary trading affiliate, Timber Hill Australia Pty Limited (ABN 25079993534) ("THA") is a participant on the ASX and shall execute customer orders on the ASX. Such executed trades shall be cleared by Fortis Clearing Sydney Pty Ltd ("Fortis"). Contact details for these entities are included below.

- The availability of additional information, including market data and educational material, is set forth below.

- Information regarding the availability of dispute resolution forums is detailed at the end of this document.

- IB has prepared this document in accordance with the requirements under the Australian Corporations Act (2001). While IB offers exchange traded options on worldwide exchanges, the focus of this PDS is primarily on IB's activities in Australia. You should note that transactions on derivatives exchanges outside Australia are generally subject to the exchange rules and laws of that jurisdiction.

The information in this Product Disclosure Statement ("PDS") does not take into account your personal objectives, financial situation and needs. Before trading in the products referred to in this PDS you should read this PDS and be satisfied that any trading you undertake in relation to those products is appropriate in view of your objectives, financial situation and needs. Inasmuch as Interactive Brokers LLC employees are not authorized to provide you with any advice or recommendation, you should consult your independent financial advisor or obtain other independent advice before trading in exchange traded options ("ETOs").

Purpose of this PDS

Interactive Brokers LLC (ARBN 091191141; AFSL 245574) ("IB") has prepared this PDS for your review to assist you in determining whether you should engage in trading ETOs on the Australian Stock Exchange Limited ("ASX"). This document does not constitute a recommendation or solicitation to engage in such trading. Rather, this document is meant to help you evaluate the risks and rewards of trading ASX ETOs and whether they are appropriate for your investment objectives and financial situation.

Under the Australian Corporations Act, where IB enters into an exchange traded derivative on a customer's behalf, IB is regarded as having *issued* the derivative to the customer. IB's contact details are as follows:

Interactive Brokers LLC

AFSL 245574
ARBN 091191141

One Pickwick Plaza
Greenwich, CT 06830
203-618-5763

Features of ETOs

Underlying securities/approved indices - Options traded on ASX's Options Market are only available for certain securities and approved indices. These securities are referred to as underlying securities or underlying shares. They must be listed on ASX and are selected by the Australian Clearing House Pty Limited ("ACH") according to specific guidelines. The issuers of underlying securities do not participate in the selection of securities against which options may be listed. Index options are cash settled, rather than deliverable, because it is not practical to deliver all the securities which make up the index. You will receive a cash payment on exercising an in-the-money index option.

Contract Size - On ASX's Options Market an option contract size is standardised at 1,000 underlying shares. That means that 1 option contract represents1,000 underlying shares. This may change if there is an adjustment such as a new issue or a reorganisation of capital in the underlying share. In the case of index options, contract value is fixed at a certain number of dollars per index point (for example, $10 per index point). The size of the contract is equal to the index level x the dollar value per index point (for example, for an index at 5,000 points, 1 contract would be 5,000 x $10 = $50,000).

Expiration - Options have a limited life span and expire on standard expiry days set by ACH. The expiry day is the day on which all unexercised options in a particular series expire and is the last day of trading for that particular series. For shares this is usually the Thursday before the last Friday in the month. For index options, expiry is usually the third Thursday of the contract month. However, ACH has the right to change this date should the need arise. In general, all options for a particular class follow one of the three quarterly cycles listed below:

• January/April/July/October;
• February/May/August/November; or
• March/June/September/December.

Options are usually listed for the next three months in the quarterly expiry cycle.

Exercise (strike) Price - The exercise price is the predetermined buying or selling price for the underlying shares if the option is exercised. ACH sets the exercise prices for all options listed on ASX's Options Market with a range of exercise prices available for options on the same expiry. New exercise prices are listed as the underlying share price moves.

Premium - The premium is the price of the option which is arrived at by the negotiation between the taker and the writer of the option. It is the only component of the five option components that is not set by ACH. Option premiums are quoted on a cents per share basis. To calculate the full premium payable for a standard size option contract, multiply the quoted premium by the number of shares per contract, usually 1,000.

The strike price and premium of an index option are usually expressed in points. A multiplier is then applied to give a dollar figure. For example, the multiplier may be $10 per point, meaning that to buy an index option with a premium of 50 points, you would pay $500 (plus brokerage and exchange fees).

Possible Benefits of ETOs

ETOs may provide you with certain benefits, including:

Risk Management – Put options may allow an investor to hedge (protect) against a possible drop in value of the shares the investor holds. By purchasing index put options, you can lock in the value of a share portfolio. You may fear a market downturn, but have good reasons for not wanting to sell stocks. By purchasing index put options, you can make profits if the index falls. Profits on put options should compensate you for the loss of value in the stocks in the portfolio. This outcome effectively insures the portfolio at the level of the put options less the cost of the put.

Time to Decide –A call option determines the purchase price for the underlying shares and gives the call option holder until the expiry day to decide whether or not to exercise the option and buy the shares. Likewise, the taker of a put option until the expiry day has time to decide whether or not to sell the shares at the determined price.

Speculation – Provided there is sufficient liquidity, you may also trade in and out of an option position without exercising the option. If you expect a stock or index to rise, you may decide to buy call options for that stock or index. Conversely, if you expect the market to decline, you may decide to buy put options for that stock or index. Index options allow for exposure to the broader market. Investing in index options approximates trading a share portfolio that tracks a particular index. It provides exposure to the broader market which the index represents, with no specific company risk. Often index options are over benchmark indices traded by professional investors, who are less dependent on having to 'pick individual winners'.

Leverage - Leverage provides the potential to make a higher return from a smaller initial outlay than investing directly. However, leverage usually involves more risks than a direct investment in the underlying shares. Trading in options can allow you to benefit from a change in the price of the share without having to pay the full price of the share. Like options over a single company, index
options can provide leveraged profit opportunities. When the market rises (or falls), percentage gains (or losses) are far greater for the option than rises (or falls) in the underlying index.

Diversification - Options can allow you to build a diversified portfolio for a lower initial outlay than purchasing shares directly.

Income - You can earn extra income over and above dividends by writing call options against your shares, including shares bought on margin. By writing an option you receive the option premium up front. While you get to keep the option premium, there is a possibility that you could be exercised against and have to deliver your shares at the exercise price.

Risks of Trading ETOs

Transactions involving options contracts carry a high degree of risk. You should only trade ETOs if you understand the nature of the products and the extent of your exposure to risks. You should familiarize yourself with the type of option (i.e., put or call) which you contemplate trading and the associated risks. You should calculate the extent to which the value of the options must increase for your position to become profitable, taking into account the premium and all transaction costs. Before you invest in options, you should consider your experience, investment objectives, financial resources and all other relevant considerations and consult your independent financial advisor if necessary.

Market Risks - The market value of options is affected by a range of factors. They may fall in price or become worthless on or before expiry. Changes in the price of the underlying security may result in changes to the price of an option, but the change can sometimes be in a different direction or of a different magnitude to the change in the price of the underlying.

Options are a wasting asset - Options have an expiry date and therefore have a limited life. An option's time value erodes over its life and this accelerates as an option nears expiry. It is important to assess whether the options you have selected have sufficient time to expiry for your view of the market to be realised.

Effect of 'Leverage' or 'Gearing' - The initial outlay of capital may be small relative to the total contract value with the result that options transactions are 'leveraged' or 'geared'. A relatively small market movement may have a proportionately larger impact on the value of the contract. This may work against you as well as for you. The use of leverage can lead to large losses as well as large gains.

Your Loss May Be Unlimited - Writing (selling) options may entail considerably greater risk than taking options. The premium received by the writer (seller) is fixed and limited, however the writer may incur losses greater than that amount. The writer who does not own the underlying shares or does not have offsetting positions potentially faces unlimited losses.

Liquidity and Pricing Relationships - Market conditions (for example, lack of liquidity) may increase the risk of loss by making it difficult to effect transactions or close out existing positions. Normal pricing relationships may not exist in certain circumstances, for example, in periods of high buying or selling pressure, high market volatility or lack of liquidity in the underlying security.

Orderly market powers - ASX and ACH have broad powers under the ASX Market Rules to take action in the interests of maintaining fair and orderly markets or of providing services in a fair and effective way. These powers include the ability to suspend trading, impose position limits or exercise limits and terminate open contracts. In some circumstances, this may affect your positions. Similarly, regulatory authorities such as the Australian Securities Investment Commission ("ASIC") may give directions to ASX or ACH, for example, to suspend dealings in products.

Trading Disputes - You should be aware that all options transactions on ASX are subject to the rules, procedures, and practices of ASX and ACH. Under the ASX Market Rules, certain trading disputes between market participants (for example, errors involving traded prices that do not bear a relationship to fair market or intrinsic value) may lead to ASX cancelling or amending a trade. In these situations the customer's consent is not required for the cancellation of a trade.

Trading Facilities - As with all trading facilities and systems, there is the possibility of temporary disruption to, or failure of the systems used in ASX's Options Market, which may result in your order not being executed according to your instructions or not being executed at all and such disruptions, failures and unavailability may result in your not being able to close out existing positions. In addition, your ability to recover certain losses may be subject to limits on liability imposed by the system provider, ASX, ACH or IB.

Costs & Amounts Payable Associated with Trading ETOs

Costs – Information regarding commissions and brokerage fees for ETOs may be found on the IB website at www.interactivebrokers.com. Commissions are due at the time of the trade.

Additional information on pricing and contract specifications for ASX options contracts can be found on the Australian Securities Exchange website at www.asx.com.au.

Amounts Payable

Margins

With regard to ETOs, the ACH calculates margins using a system known as TIMS (Theoretical Intermarket Margining System). TIMS takes into account the volatility of the underlying security when calculating margin obligations.

The total margin for ETOs is made up of two components:

Premium margin is the market value of the position at the close of business each day. It represents the amount that would be required to close out your option position.

Risk margin covers the potential change in the price of the option contract assuming the maximum probable inter-day movement (daily volatility) in the price of the underlying security. The daily volatility figure, expressed as a percentage, is known as the margin interval.

Margins are recalculated by ACH on a daily basis to ensure an adequate level of margin is maintained. This means that you may have to pay more if the market moves against you. If the market moves in your favour, margins may fall. IB's margin requirements may be higher than those set by ACH, and IB's margin policies are available on the IB website at www.interactivebrokers.com. You acknowledge, however, that **IB GENERALLY WILL NOT ISSUE MARGIN CALLS, THAT IB WILL NOT CREDIT YOUR ACCOUNT TO MEET INTRADAY MARGIN DEFICIENCIES, AND THAT IB GENERALLY WILL LIQUIDATE POSITIONS IN YOUR ACCOUNT IN ORDER TO SATISFY MARGIN REQUIREMENTS WITHOUT PRIOR NOTICE TO YOU.**

Exercise Policy

ASX listed options are exercised though the IB Trader Workstation's Option Exercise window. As of the date of this PDS, the cutoff time for the exercise of ASX options is 17:00 Sydney time. All in-the-money options shall be automatically exercised.

Execution & Clearing Arrangements

IB is not a participant on the ASX. IB's proprietary trading affiliate, Timber Hill Australia Pty Limited (ABN 25079993534) ("THA") is a participant on the ASX. For customers wishing to execute trades on ASX, IB shall route such orders through THA's connection to the ASX Integrated Trading System ('ITS") using an electronic communications process ("ecp") dedicated to the routing of only IB customer orders.

The business address and phone number for THA is below:

Timber Hill Australia Pty Limited
Level 25
56 Pitt Street
Sydney
NSW, 2000, Australia
61 2 9240 5145

Orders executed for IB clients shall be cleared by Fortis Clearing Sydney Pty Ltd ("Fortis"), an ACH Clearing Participant. With respect to clients' orders executed on ASX and cleared by Fortis, Fortis carries the Clearing Obligations and any settlement obligations for all Market Transactions of THA and IB (including those of Customer). As the Clearing Participant, Fortis must settle such transactions as principal with ACH or the relevant counter-party, even though the Market Transaction may have been entered into on Customer's behalf. The Clearing Obligations and any settlement obligations of Customer are therefore owed directly to Fortis, as the Clearing Participant.

If Customer fails to pay the amounts due in respect of a Market Transaction; or if Customer fails to fulfill its settlement obligations in respect of a Market Transaction, Fortis has direct rights against Customer, including the rights of sale under the Market Rules. As such, an agreement is deemed to have been entered into between Fortis and Customer. Such deemed agreement comes into existence immediately upon the receipt by IB of an order by Customer to enter into a Cash Market Transaction.

The business address and phone number for Fortis are below:

Fortis Clearing Sydney Pty Limited
Level 8
50 Bridge Street
Sydney
NSW, 2000, Australia
61 2 8221 3000

Returns

ETOs do not entitle investors to dividends or other entitlements paid by the issuer of the underlying securities, unless the investor exercises the option to become the holder of the underlying securities at or before the relevant date for dividend or entitlement purposes.

Market Data

Market data is available for ETOs by subscribing to the Australian Stock Exchange Data Feed through IB. Additional pricing information and contract specifications are available on the ASX website at www.asx.com.au.

Educational Booklets

ASX has prepared a series of educational booklets relating to ETOs which are available to you via their website at http://www.asx.com.au/resources/publications/booklets.htm. In addition to reviewing this PDS, investors should be aware that much of the information included in this PDS overlaps with these explanatory booklets and you should review them accordingly. If you cannot access them on the ASX website, you may contact the IB Customer Service Department at 1-877-442-2757 (from the U.S.) or 312-542-6901 (from outside the U.S.). IB will provide a hard copy to you. Additional contact details are available on the IB website at www.interactivebrokers.com.

Taxation Implications

Your tax position when trading exchange traded derivatives will depend on your individual circumstances and you should consult your own tax advisor before making any decisions to trade. It is important to determine whether you are a trader, a speculator or a hedger as the tax treatments for each may differ. IB cannot provide a detailed treatment of the taxation issues that are relevant to trading or investing in exchange traded options, nor does IB offer any taxation advice, and you must therefore discuss these issues with your tax advisor.

Some of the issues that may be relevant to you include:

- Australian Tax Office ("ATO") rulings need to be considered.
- Are you classified as a trader, as a speculator or as a hedger?
- Is an option trade on revenue account or on capital account?
- Are there timing issues, for example, when an option is opened in one tax year and closed in the next tax year?
- Where an option strategy is in place around the time a stock goes ex-dividend, are you in danger of not satisfying the 45-day Holding Period Rule and therefore being disqualified from receiving the franking credits attached to the dividend?
- Could the exercise of an option position crystallise a taxation event for the underlying shareholding?

<u>This is by no means a comprehensive list of the taxation issues of futures and options trading. The information contained in this PDS is provided for educational purposes only and does not constitute investment, taxation or financial product advice.</u> Taxation issues will vary from investor to investor. It is therefore important to discuss your taxation situation with your independent financial advisor or accountant, to ensure that any options trades you enter into will not have adverse taxation implications to you.

Dispute Resolution

If you wish to file a complaint against IB, we encourage you to send your complaint via Account Management for the most expedient and efficient handling. This can be done by clicking on "Inquiry Ticket." Under "New Ticket" select the following:

Category: Other Regulatory
Sub-category: Submit a Complaint.

Alternatively, customers may send their complaints by e-mail to help@interactivebrokers.com; by telephone to the customer service telephone numbers listed on the IB website at www.interactivebrokers.com; or by hard copy addressed to:

Legal & Compliance Department
Interactive Brokers LLC
One Pickwick Plaza
Greenwich, CT 06830

As indicated by the Financial Industry Complaints Service ("FICS"), if you have not received a satisfactory response or 45 days have elapsed, you may refer the matter to the FICS. FICS can be contacted at:

P.O. Box 579
Collins Street West
Melbourne Vic 8007
Telephone: 1300 78 08 08
Fax: (03) 9621 2291
Email: fics@fics.asn.au
Website: www.fics.asn.au

This service is provided to you free of charge.

You may also refer the matter to the Australian Securities and Investments Commission ("ASIC"). ASIC may be contacted on their Infoline on 1300 300 630.

Alternatively, customers who wish to file a complaint with, or initiate an arbitration or reparations proceeding against, IB, may consult the website of, or contact, a Self-Regulatory Organization ("SRO"), e.g., the Securities and Exchange Commission (www.sec.gov), the Financial Industry Regulatory Authority (www.finra.org), the National Futures Association (www.nfa.futures.org), the Commodity Futures Trading Commission (www.cftc.gov).

INTERACTIVE BROKERS LLC AGREEMENT FOR CUSTOMERS TRADING SYDNEY FUTURES EXCHANGE PRODUCTS

The following terms and conditions are required by Sydney Futures Exchange ("SFE" or "Exchange") Operating Rule 2.2.25 to be in place between Interactive Brokers LLC ("IB"), an SFE Full Participant, and its clients who wish to trade SFE products.

(a) Governing Law and Rules

The Client and IB are bound by the SFE Operating Rules and the customs, usages and practices of the Exchange's Markets.

(b) Client to Provide Information

In relation to the Client's trading on the Exchange, the Client will upon IB's request, provide all information and documentation relevant to that trading, to IB and IB is authorised by the Client to provide the information and documentation to the Exchange.

(c) Benefit to IB of Contract Registration with SFE Clearing

Any benefit or right obtained by IB upon registration of a contract with SFE Clearing by way of assumption of liability of SFE Clearing under any contract or any other legal result of such registration is personal to IB and the benefit of such benefit or right does not pass to the Client.

(d) Client only has Rights Against IB

In relation to all trades conducted on the Exchange by IB and all Contracts registered by IB with SFE Clearing the Client has no rights whether by way of subrogation or otherwise, against any person or corporation other than IB.

(e) Margins

Client acknowledges that:

(i) IB may call for payment of Margin such money or property (or Call for the lodgement of Approved Securities in lieu thereof) as IB, in its absolute discretion, feels is necessary to protect itself from the personal obligation incurred by Dealing in Contracts on behalf of the Client.

(ii) should the Client fail to meet the Call (or lodge Approved Securities) then IB may (without prejudice to any other rights or powers under the Agreement) in its absolute discretion, and without creating an obligation to do so, Close Out, without notice, all or some of the Client's Contracts.

(iii) the time for payment of Margins is of the essence and if no other time is stipulated by IB prior to calling a Margin then the Client is required to comply within twenty-four (24) hours.

(iv) liability to pay the Initial Margin accrues at the time the trade is executed regardless of when a Call is made.

(v) liability to pay Margin accrues at the time the Margin comes into existence regardless of when a Call is made.

(vi) the Client is responsible to pay in cash any deficit owing to IB after closure and that if the Client defaults in payment of such deficit, IB may realise any securities held by IB and apply the proceeds against that deficiency.

(f) Appointment of Attorney

Client appoints the Managing Director of SFE Clearing as the Client's attorney to do all things necessary to transfer any Open Position held by IB on the Client's behalf to another SFE Participant where the SFE Participant status of IB has been suspended or terminated.

(g) Exchange Data

Client acknowledges that:

(i) data made available to the Client by access to electronic order entry facilities is not the property of IB and remains the valuable property of the Exchange; and

(ii) the Client is prohibited from publicly displaying, redistributing or re-transmitting the data in any way without having executed a Market Data Distribution Agreement or similar agreement with the Exchange.

(h) Tape Recordings

Client acknowledges that the Client's telephone conversations with IB can be recorded by IB or the Exchange. The Client is to be given the right to listen to any recording in the event of a dispute or anticipated dispute.

(i) Right to Refuse to Deal

Client acknowledges that IB reserves the right to refuse to Deal on behalf of the Client in relation to any Dealings in Contracts (other than closing out existing Open Positions held in IB's account on behalf of the Client) or limit the number of Open Positions held on behalf of the Client or both. IB will inform the Client of any refusal at or before the time of the Client placing the order or as soon as possible thereafter.

(j) Termination and Closing Out

Client acknowledges that:

(i) without affecting any existing obligations or liabilities, either the Client or IB may terminate the agreement at any time by giving the other notice in writing to that effect;

(ii) upon termination of the Client Agreement that unless otherwise agreed in writing, IB will Close out all the Client's Futures Contracts and Close Out, abandon or exercise any Options not yet exercised.

INTERACTIVE BROKERS LLC SUPPLEMENTAL AGREEMENT & DISCLOSURES FOR TRADING ON THE AUSTRALIAN STOCK EXCHANGE LIMITED

Effect of the Supplemental Agreement & Disclosures

This Supplemental Agreement & Disclosures for Trading on the Australian Stock Exchange Limited ("ASX") ("the Agreement") is in addition to the Interactive Brokers (ARBN 091191141; AFSL 245574) ("IB") Customer Agreement and forms part of the contract between IB and Customer (hereinafter, "Customer" or "Client") regarding transactions on ASX.

Market Transactions on ASX are entered into subject to the Rules, directions, decisions and requirements of ASX, and the Australian Clearing House Pty Limited ("ACH") Clearing Rules, and, where relevant, the ASX Settlement and Transfer Corporation Pty Limited ("ASTC") Settlement Rules; the customs and usages of the Market; and the correction of errors and omissions. Confirmations regarding Customer's transactions are issued subject to these terms.

ASX Authority Regarding Market Transactions

Customer understands and agrees that ASX has the power under the Rules to cancel or amend Market Transactions or Crossings.

Disclosures Regarding the Execution and Clearing of ASX Transactions

Pursuant to ASX Market Rule 7.1.1, IB provides you with the following information:

IB is not a participant on the ASX. IB's proprietary trading affiliate, Timber Hill Australia Pty Limited (ABN 25079993534) ("THA") is a participant on the ASX. IB shall route customers' ASX orders through THA's connection to the ASX dedicated to the routing of only IB customer orders.

The business address and phone number for THA is:

Level 25
56 Pitt Street
Sydney
NSW, 2000, Australia
61 2 9240 5145

Orders executed for IB clients shall be cleared by Fortis Clearing Sydney Pty Ltd ("Fortis"), an ACH Clearing Participant. With respect to clients' orders executed on ASX and cleared by Fortis, Fortis carries the Clearing Obligations and any settlement obligations for all Market Transactions of THA and IB (including those of Customer). As the Clearing Participant, Fortis must settle such transactions as principal with ACH or the relevant counter-party, even though the Market Transaction may have been entered into on Customer's behalf. The Clearing Obligations and any settlement obligations of Customer are therefore owed directly to Fortis, as the Clearing Participant.

If Customer fails to pay the amounts due in respect of a Market Transaction; or if Customer fails to fulfill its settlement obligations in respect of a Market Transaction, Fortis has direct rights against Customer, including the rights of sale under the Market Rules. As such, an agreement is deemed to have been entered into between Fortis and Customer upon the terms included herein. Such deemed agreement comes into existence immediately upon the receipt by IB of an order by Customer to enter into a Cash Market Transaction.

The business address and phone number for Fortis are below:

Level 8
50 Bridge Street
Sydney
NSW, 2000, Australia
61 2 8221 3000

National Guarantee Fund Coverage of ASX Market Transactions

IB is not a participant on the ASX and Customer's market transactions are not covered by the National Guarantee Fund ("NGF").

Contact

Customer may contact IB's Customer Service Department with any questions regarding this document. The contact details to reach an IB Customer Service Representative are available on the IB website at: www.interactivebrokers.com. IB' s main customer service telephone numbers are as follows:

1-877-442-2757 (from inside the U.S.)
312-542-6901 (from outside the U.S.)

I have read, understand and agree to be bound by these terms.

IF YOUR INTERACTIVE BROKERS ACCOUNT CONFIGURATION WILL INCLUDE PERMISSIONS TO TRADE OPTIONS ON THE AUSTRALIAN STOCK EXCHANGE LIMITED, YOUR ACCOUNT WILL ALSO BE SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS.

INTERACTIVE BROKERS LLC AGREEMENT FOR CUSTOMERS TRADING OPTIONS ON THE AUSTRALIAN STOCK EXCHANGE LIMITED

The following terms and conditions are required by Australian Stock Exchange Limited (“ASX”) Market Rule 7.1.2 to be in place between Market Participants and their customers who trade options on ASX. Though Interactive Brokers (ARBN 091191141) (“IB”) is not a participant on the ASX, IB has implemented the below terms and conditions in accordance with ASX Market Rule 7.1.2.

1 Application of Market Rules

The Client and IB are bound by the Market Rules of Australian Stock Exchange Limited (“ASX”), the Corporations Act and the Procedures, customs, usages and practices of ASX and its related entities, as amended from time to time, in so far as they apply to Options/derivative instruments traded on ASX for the Client. Client authorizes IB to route Client’s orders for equity and index options to the ASX for execution.

2 Explanatory Booklet

The Client has received and read a copy of the current explanatory booklet published by ASX in respect of each ASX Derivative Market Contract.

3 Authority

The Client acknowledges that they are either:

(a) acting as principal; or

(b) acting as an intermediary on another’s behalf and are specifically authorized to transact the ASX Derivative Market Contracts, by the terms of:-

(i) a licence held by the Client;

(ii) a trust deed (if the Client is a trustee); or

(iii) an agency contract.

4 Nature of IB’s Obligations

Notwithstanding that IB may act in accordance with the instructions of, or for the benefit of, the Client, the Client acknowledges that any contract arising from any order submitted to the Market, is entered into by IB as principal.

5 Dealing as principal

The Client acknowledges that IB or its affiliates, including Timber Hill Australia Pty Limited (ABN 25079993534) (“THA”), may, in certain circumstances permitted under the Corporations Act and the Market Rules, take the opposite position in a transaction in the ASX Derivative Market Contracts, either acting for another client or on its own account.

6 Commissions and fees

The Client must pay to IB commissions, fees, taxes and charges in connection with dealings for the Client in ASX Derivative Market Contracts at the rates determined by IB from time to time and notified to the Client in writing.

7 Tape recording of conversations

The Client acknowledges that IB may record telephone conversations between the Client and IB. If there is a dispute between the Client and IB, the Client has the right to listen to any recording of those conversations.

8 Client to provide information

The Client will take all reasonable steps to deliver information or documentation to IB, or cause information or documentation to be delivered to IB concerning Option Transactions which are requested by a person having a right to request such information or documentation. IB is authorized to produce the information or documentation to the person making the request.

9 Right to refuse to deal

IB is not an ASX participant. IB’s proprietary trading affiliate, THA, is an ASX participant. For clients wishing to execute trades on ASX, IB shall route such orders through THA’s connection to the ASX Integrated Trading System (‘ITS”).

The Client acknowledges that IB may at any time refuse to deal in, or may limit dealings in, the ASX Derivative Market Contracts for the Client. Neither IB nor its affiliate, THA, the ASX Trading Participant, are required to act in accordance with the Client’s instructions where to do so would constitute a breach of the Market Rules, the Clearing Rules, or the Corporations Act. IB will notify the Client of any refusal or limitation as soon as practicable.

10 Termination of Agreement

Either the Client or IB may terminate this Agreement by giving notice in writing to the other. Termination will be effective upon receipt of the notice by the other party.

11 Effect of termination

Termination does not affect the existing rights and obligations of the Client or IB at termination.

12 Revised terms prescribed by ASX

If ASX prescribes amended minimum terms for a Client Agreement for the ASX Derivative Market Contracts for the purposes of the Rules (the "New Terms"), to the extent of any inconsistency between these minimum terms and the New Terms, the New Terms will override the terms of this Agreement and apply as if the Client and IB had entered into an agreement containing the New Terms.

13 Market Participant to provide Client with copy of changes

IB will provide a copy of the New Terms to the Client as soon as practicable after ASX prescribes the New Terms.

14 Application of Clearing Rules

The Client acknowledges that each Option registered with an Approved Clearing Facility is subject to operating rules and the practices, directions, decisions and requirements of that Approved Clearing Facility.

15 Authority of ASX Regarding Market Transactions

Customer understands and agrees that ASX has the power under the Rules to cancel or amend Market Transactions or Crossings.

I have read, understand and agree to be bound by these terms.

__________________________________ ______________

Customer Signature Date

Euronext.LIFFE Disclosure

1. **Rules of LIFFE and our capacity:** All contracts in the terms of an Exchange Contract made on LIFFE (hereinafter,"LIFFE" or "Exchange") shall be subject to the Rules of LIFFE as from time to time in force. As a member of LIFFE, an affiliate of Interactive Brokers LLC ("IB"), which shall act as executing broker, contracts only as a principal in respect of contracts in the terms of an Exchange Contract. In the event of a conflict between the Rules of LIFFE and the terms of this Agreement, the Rules of LIFFE as from time to time in force, shall prevail.

2. **LIFFE Risk Disclosure for Financial Futures:** Pursuant to General Notice Number 1376, issued 18 March 1999 with an effective date of 12 April 1999, LIFFE requires that we provide you with certain information in connection with your trading of equity futures and options through LIFFE CONNECT, as follows:

   Client Issues

   1. **Exclusion of Liability:** As set forth in section 8 below, unless otherwise expressly provided for, the Exchange shall not be liable to any member or client for loss or damage caused as a result of such curtailment of trading opportunities.

   2. **Client Orders:** Prior to the commencement of trading, clients must undertake to understand the characteristics of order types recognised in LIFFE CONNECT™ and be aware that the Exchange has a number of powers which, if exercised, may impact upon the ability of a member to submit an order on behalf of a client or which may lead to the cancellation of an order after submission to the LIFFE CONNECT™ trading Host prior to execution. In particular, in addition to the powers already available to the Exchange (including those in relation to investor protection and maintaining an orderly and proper market), clients should be aware that, in respect of LIFFE CONNECT™

      1. the Exchange has the power to suspend a member's access, or access via a particular Individual Trading Mnemonic ("ITM") or ITMs, following a single warning, and to terminate a member's access under certain conditions;

      2. the Exchange will cancel all outstanding orders on the default of a member;

      3. orders outside the price limits will be rejected automatically by the Trading Host;

      4. all orders (with the exception of GTC orders) will be cancelled automatically at Market close or when the ITM under which the order was submitted is logged out without being transferred to an alternative ITM

      5. all orders (including GTC orders) will be cancelled at close of business on the Last Trading Day of the expiry month to which they relate; and

      6. all orders with the exception of GTC orders will be cancelled automatically if the Trading Host fails.

3. **Error Correction Facility**: In our and your interests, the Exchange may from time to time sanction the making of contracts by us outside the pit in order to satisfy your order, where there has been an error in the execution of your order in the pit. Where a better price (an improvement) can be obtained, we will seek to secure and offer that improvement to you. However, you should note that where, in response to your order, we have bought or sold in accordance with the instruction in your order to buy or, as the case may be, to sell but have traded the wrong delivery/expiry month or wrong exercise price of the relevant contract, then we may in accordance with the Exchange's Rules offset any loss arising from that trade against any improvement achieved for you in the course of correctly satisfying your order, thus offering you only the net improvement, if any.

4. **Matching contracts:** In respect of every contract made between us subject to the Rules of LIFFE, we shall have made an equivalent contract on the floor of the market for execution by open outcry or in the market conducted on the Automated Pit Trading system, or shall have accepted the allocation of any such contract.

5. **Allocation:** In respect of every contract made between us for allocation to another member specified by you:

   (a) in the event that such other member accepts the allocation, we shall (without prejudice to any claim we may have for commission or other payment) upon such acceptance cease to be a party to the contract and shall have no obligation to you for its performance;

   (b) in the event that such other member declines to accept the allocation, we shall be entitled at our option either to confirm the contract with you or to liquidate it by such sale, purchase, disposal or other transaction or cancellation as we may in our discretion determine, whether on the market or by private contract or any other feasible method; and any balance resulting from such liquidation shall be promptly settled between us.

6. **Allocation on Delivery or Exercise:** Where the London Clearinghouse ("LCH") does not specify a particular contract when making a delivery or exercise, IB shall use a random lottery when selecting particular contracts. This method is detailed in the Disclosure Regarding IB's Procedures for Allocating Equity Option Exercise Notices available on the IB website. However, Customer acknowledges that: (A) commodity options cannot be exercised and must be closed out by offset; and (B) for futures contracts that settle not in cash but by physical delivery of the commodity (including currencies not on IB's Deliverable Currency List), Customer cannot make or receive delivery. If Customer has not offset a commodity option or physical delivery futures position prior to the deadline on the IB website, IB is authorized to roll or liquidate the position or liquidate any position or commodity resulting from the option or futures contract, and Customer is liable for all losses/costs. As such, IB does not use an allocation method on physical delivery futures.

7. **Margin:** Customer shall monitor Customer's account so that at all times the account shall contain a sufficient Account Balance to meet the margin requirements set by IB, margin requirements which IB may modify for any Customer for open and new positions at any time in IB's sole discretion. The required margin may exceed the margin required by any exchange or clearing house. IB may reject any Customer Order while determining the correct margin status of Customer's account. Customer shall maintain, without notice or demand, a sufficient Account Balance at all times so as to continuously meet the margin requirements established by IB. IB has no obligation to notify Customer of any failure to meet margin requirements in Customer's account prior to exercising its rights and remedies under this Agreement. Customer understands that IB will not issue margin calls, and that IB will not credit Customer's account to meet intraday margin deficiencies.

8. **The Market - Exclusion of Liability (rule 1.4):** The Exchange is obliged under the Financial Services Markets Act 2000 to ensure that business conducted by means of its facilities is conducted in an orderly manner and so as to afford proper protection to investors. To this end, the Exchange will at all times endeavour to maintain a fair and orderly market as is consistent with the Exchange's legal obligations and the object of the market.

   The Exchange wishes to draw to the attention of members and clients that, inter alia, business on the market may from time to time be suspended or restricted or the market may from time to time be closed for a temporary period or for such longer period as may be determined in accordance with the LIFFE's Rules including, without limitation, as a result of a decision taken under Rule 4.15 or 4.16 on the occurrence of one or more events which require such action to be taken in the interests of, inter alia, maintaining a fair and orderly market. Any such action may result the inability of one or more members and through such members one or more clients to enter into contracts in accordance with the Rules on the terms of Exchange Contracts either by means of contracts entered into on the market floor or through an ATS.

   Furthermore, a member and through the member one or more clients may from time to time be prevented from or hindered in entering into contracts in the terms of Exchange Contracts, or errors in orders or in contracts in the terms of Exchange Contracts may arise, as a result of a failure or malfunction of communications, or equipment, or market facilities, or the ATS central processing systems, or one or more ATS workstations supplied to the member by the Exchange or otherwise used by the member or software supplied to the member by the Exchange or any other person.

   The Exchange further wishes to draw the following exclusion of liability to the attention of members and clients. Unless otherwise expressly provided in the Rules or in any other agreement to which the Exchange is party, the Exchange shall not be liable to any member or client for loss (including any indirect or consequential loss including, without limitation, loss of profit), damage, injury or delay, whether direct or indirect, arising from any of the circumstances or occurrences referred to in Rule 1.4.2. or from any act or omission of the Exchange, its officers, employees, agents or representatives under LIFFE's Rules or pursuant to the Exchange's obligations under statute or from any breach of contract by or any negligence howsoever arising of the Exchange, its officers, employees, agents or representatives.

9. **Arbitration.** Any dispute arising from or relating to this agreement, in so far as it relates to contracts made between us subject to the Rules of LIFFE, and any dispute arising from or relating to any such contract as aforesaid and made hereunder shall, unless resolved between us, be referred to arbitration under the arbitration rules of LIFFE, or to such other organisation as LIFFE may direct before either of us resort to the jurisdiction of the courts (other than to obtain an injunction or an order for security for a claim).

10. **Governing Law.** This agreement and all contracts made under this agreement shall be subject to and construed in accordance with English law.

11. **Jurisdiction:** Subject to the arbitration clause above, disputes arising from this agreement or from contracts made under this agreement shall (for our benefit) be subject to the exclusive jurisdiction of the English courts to which both parties hereby irrevocably submit, provided that this shall not prevent us bringing an action in the courts of any other jurisdiction.

12. **Changes to Agreement:** Notwithstanding any previous agreement between us to the contrary, we now agree that a variation of the terms agreed between us from time to time does not require the written agreement of both of us. This notification shall take effect 12 days after despatch by us, provided that you do not object within 10 days of receipt.

REGULATORY INFORMATION AND ADDITIONAL PROVISIONS FOR USERS FROM HONG KONG & USERS TRADING ON HONG KONG EXCHANGES

Your agreement is with Interactive Brokers' United States office ("IB"). IB wants to make sure that you are aware that:

- As of March 6, 2000, The Stock Exchange of Hong Kong Limited (“SEHK”), Hong Kong Futures Exchange Limited (“HKFE”) and Hong Kong Securities Clearing Company Limited (“HKSCC”) merged under a single holding company, Hong Kong Exchanges and Clearing Limited (“HKEx”). The SEHK Options Clearing House Limited (“SEOCH”) and the HKFE Clearing Corporation Limited are also wholly-owned subsidiaries of HKEx.
- IB is not a member of the HKFE.
- IB is not a member of the SEHK.
- Factual information, including market quotations and other data, is provided as a discretionary courtesy; and IB does not warrant in any fashion, and is not responsible for, the accuracy or timeliness of such information. Reliance on such information is at the Customer's own risk. (See paragraph 25 of the IB Customer Agreement).
- Electronic or computer-based facilities and systems such as those used by IB are vulnerable to disruption or failure. Your ability to make claims or recover losses may be subject to limits on liability imposed by the IB Customer Agreement. (See paragraph 28 of the IB Customer Agreement).
- **Because information is being sent to you, and from you, through internet facilities, there will be a time delay with respect to price quotations and data transmission and your orders may not necessarily be executed at the price indicated to you through the internet.**

The following "Additional Provisions" are applicable to Users from Hong Kong and Users trading on Hong Kong Exchanges and are in addition to the Provisions of the IB Customer Agreement. To the extent that there is any conflict between the terms of the IB Customer Agreement and the terms of the Additional Provisions, the Additional Provisions shall prevail.

The following definitions are applicable to the Additional Provisions:

- "Agreement" refers to the IB Customer Agreement and these Additional Provisions;
- “Commission” means the Securities and Futures Commission;
- "HKFE" means Hong Kong Futures Exchange Limited;
- "the HKFE Clearing House" means HKFE Clearing Corporation Limited;
- "SEHK" means The Stock Exchange of Hong Kong Limited;
- "SEOCH" means The SEHK Options Clearing House Limited;
- “CCASS” means the Central Clearing and Settlement System operated by Hong Kong Securities Clearing Company Limited;
- “HKSCC” means Hong Kong Securities Clearing Company Limited;
- "IB" means Interactive Brokers LLC, an overseas company registered with the Securities and Futures Commission as a Dealer and also registered in the United States as a broker-dealer with the U.S. Securities and Exchange Commission and a Futures Commission Merchant with the U.S. Commodity Futures Trading Commission;
- "Procedures" means the practices, procedures and administrative requirements prescribed from time to time by the HKEx, HKFE, SEHK, HKFE Clearing House, CCASS/HKSCC or SEOCH, as applicable;
- "the Ordinance" means the Securities and Futures Ordinance, Chapter 571 of the Laws of Hong Kong as amended from time to time;
- "THSHK" means Timber Hill Securities Hong Kong Limited, an entity registered with the Securities and Futures Commission and a member of the SEHK, HKFE, HKFE Clearing House, SEOCH and HKSCC; THSHK is an affiliate of IB.
- "Rules" means the Rules and Regulations of the HKEx, HKFE, SEHK, HKFE Clearing House, CCASS/HKSCC or SEOCH, as applicable, and any amendments, supplements, variations or modifications thereto.

1. These Additional Provisions are subject to and governed by the provisions of the Ordinance and Hong Kong Law.

2. The rules and regulations of the HKEx, HKFE or SEHK as applicable, and the HKFE Clearing House, CCASS/HKSCC or SEOCH, as applicable, shall be binding on the Customer and IB. Those rules and regulations contain provisions which require IB, in certain circumstances, to disclose the name and beneficial identity or such other information concerning Customer as the exchange or Commission may request. Customer agrees to provide such information to IB in compliance with the Ordinance, exchange Rules, Regulations and Procedures or as the exchange or Commission may require. Customer acknowledges that if such information is not provided, the Chief Executive of the exchange may require the closing out of Customer’s positions or the imposition of a margin surcharge on Customer's positions.

3. IB, its affiliates, including THSHK, and their respective directors and/or employees may trade on their own account and, subject to the provisions of the Ordinance, IB and its affiliates may take the opposite position to the Customer's order in relation to any futures/options contract, whether on IB's or its affiliate's own account or for the account of other customers of IB, provided that such trade is executed competitively on or through the facilities of HKFE in accordance with its rules or the facilities of any other commodity, futures or options exchange in accordance with the rules and regulations of the exchanges and clearinghouses governing the relevant markets.

4. Unless otherwise confirmed in writing by IB and agreed to by the Customer and IB, IB is acting solely as broker to any transactions made with IB by the Customer.

5. In all transactions referred to in the Agreement, IB or its affiliates are authorized to engage in proprietary trading and may contract as principal.

6. The Customer submits to the non-exclusive jurisdiction of the Courts of Hong Kong in respect of all disputes, differences and claims relating to or arising out of the Agreement.

7. The Customer is bound by rule 631 of the HKFE which permits the HKFE or Chief Executive of the HKFE to take steps to limit positions or require the closing out of contracts of the Customer who in the opinion of the HKFE or the Chief Executive are accumulating positions which are or may be detrimental to any particular Market or Markets, or which are or may be capable of adversely affecting the fair and orderly operation of any Market or Markets as the case may be. In addition, IB may be required to report information regarding large open positions held by its Customers in accordance with relevant regulations. More information on these requirements can be found in HKFE rules 628 – 633 and the Securities and Futures (Contracts Limits and Reportable Positions) Rules and related guidance notes issued by the Commission.

8. All monies or other properties received by IB from the Customer or from any other person, including the HKFE Clearing House for the account of the Customer in respect of the futures/options contracts transacted on behalf of the Customer, shall be held by IB as trustee, segregated from IB's own assets and paid into a segregated bank account. All monies or other property so held by IB shall not form part of the assets of IB for insolvency or winding up purposes but shall be promptly returned to Customer upon the appointment of a provisional liquidator, liquidator or similar officer over all or any part of IB's business or assets.

9. The Customer hereby authorizes IB to apply any monies, approved debt securities or approved securities which the Customer may pay to IB in order to: (i) meet obligations to the HKFE Clearing House (provided that no withdrawal from the Customer's accounts with IB may be made which would have the effect that the relevant margin requirements or trading liabilities conducted on behalf of any Customer are thereby financed by any other Customer); (ii) pay commission, brokerage, levies and other proper charges for contracts transacted by IB on behalf of the Customer; and/or (iii) make payments in accordance with the Customer's directions (provided that no money may be paid into another account of the Customer unless that account is also a segregated bank account). The Customer acknowledges that IB may apply such monies, approved debt securities or approved securities in or towards meeting IB's obligations to any party insofar as such obligations arise in connection with or incidental to all futures/options contracts transacted on the Customer's behalf. The Customer agrees that IB may retain interest on the Customer's money.

10. In respect of any account of IB, its affiliates, including THSHK, or any other broker acting on their behalf, maintained with the HKFE Clearing House, whether or not such account is maintained wholly or partly in respect of the futures/options contracts transacted on behalf of the Customer and whether or not monies or approved securities paid or deposited by the Customer has been paid to the HKFE Clearing House, as between such entities and the HKFE Clearing House, such entities deal as principal and accordingly no such account is impressed with any trust or other equitable interest in favor of the Customer and the monies and/or approved securities paid to or deposited with the HKFE Clearing House are thereby freed from the trust referred to in paragraph 8, above.

11. In the event that the Customer directs IB to enter into any contract on an exchange or other market on which such transactions are effected in a foreign currency: (i) any profit or loss arising as a result of a fluctuation in the exchange rate affecting such currency will be entirely for the account and risk of the Customer; (ii) all initial and subsequent deposits for margin purposes shall be made in such currency in such amounts as IB may, at its sole discretion, require; and (iii) when such a contract is liquidated IB shall debit or credit the account of the Customer in the currency in which such account is denominated at a rate of exchange (where the relevant contract is denominated in a currency other than that of the account) determined by IB at its sole discretion on the basis of the then prevailing money market rates of exchange.

12. The Customer acknowledges that the HKFE Clearing House may do all things necessary to transfer any open positions held by IB on the Customer's behalf and money and securities standing to the credit of the Customer's account with IB to another member of the HKFE if necessary.

13. LEVIES & COMMISSIONS

- Every contract executed on the floor of the HKFE shall be subject to the charge of an applicable Investor Compensation Fund levy and a levy pursuant to the Ordinance, the cost of both of which shall be borne by the Customer.
- In respect of contracts executed in markets other than those organized by the HKFE, any charges levied on such contracts by the relevant markets shall be borne by the Customer.
- The Customer will pay commission and other charges at rates to be determined by IB and at charges pursuant to Hong Kong law or the rules of the HKFE or other exchanges governing the relevant markets.

14. RULES & LAWS

- All transactions shall be subject to the constitution, rules, regulations, customs, usages, rulings and interpretations, from time to time extant or in force of the HKEx, HKFE or SEHK or other markets as applicable (and of their respective clearing house, if any), where the transactions are executed by IB or IB agents. All transactions under this agreement shall also be subject to any law, rule, or regulation then applicable thereto, including but not by way of limitation, the provisions of the Ordinance, as amended from time to time, and the rules and regulations thereunder.
- All transactions entered between IB and the Customer relating to any money, foreign currency, currency option, currency future, or currency forward contract or foreign exchange contract shall be governed by and subject to all the rules, regulations, orders and laws of the country of the currency or money concerned and those of Hong Kong and/or the by-laws, rules and regulations of the exchange concerned in which the transaction is done.
- All transactions related to futures/options contracts executed in markets other than those organized by the HKFE will be subject to the rules and regulations of those markets and not those of the HKFE, with the result that the Customer may have a markedly different level and type of protection in relation to those transactions as compared to the level and type of protection afforded by the rules of the HKFE.

- No provisions of this Agreement will operate to remove, exclude, or restrict any of your rights or any obligations of IB under Hong Kong law.

15. EXPLANATION OF MARGIN PROCEDURES AND UNILATERAL CLOSING OUT OF CLIENTS' POSITIONS

Margin Procedures

We set out below an explanation of margin procedures and the circumstances under which Customer positions may be unilaterally closed.

- Paragraph 11 of the IB Customer Agreement sets out detailed provisions regarding Margin Requirements.
- IB follows all margin rules laid down by all exchanges on which products are traded on margin.
- Any changes in margin requirements (whether imposed by the exchange or by IB) will be communicated to customers.
- Customers must remember that, in the event of a default, IB may close out the customers' open positions without prior notice to or consent from the customers as provided for by the terms of the Agreement. IB has reserved in the Agreement the right to close out any open positions(s) without notice: (i) when the margins on deposit with IB are exhausted, inadequate in the opinion of IB to protect it against possible price fluctuations or any adverse conditions; or (ii) any other appropriate circumstances. Please Note: IB is required to notify the HKFE (and may be required to report to the HKFE and the Commission particulars of all open positions) if Customer fails to meet two or more successive margin calls or demands for variation adjustments if the total amount in default exceeds HK $150,000.
- No conduct or omission on behalf of IB, nor any agreement purportedly entered into on IB's behalf (save an agreement in accordance with the terms of the Agreement), shall constitute any form of waiver or variation or relaxation of IB's rights to close out customers' positions unilaterally.
- Any steps taken by IB to close out customers' positions unilaterally will be entirely without prejudice to IB's other rights under the Agreement and otherwise, in particular the right to payments from customers of all amounts outstanding.

16. STATEMENT OF PARTICULARS OF APPROVED CONTRACTS

IB and THSHK are licensed to trade in the products approved by the HKEx, HKFE or SEHK, as applicable, from time to time. Contract specifications for the products in question are available on request.

17. If Customer suffers pecuniary loss by reason of IB’s default, the liability of the Investor Compensation Fund will be restricted to valid claims as provided for in the Ordinance and the relevant subsidiary legislation and will be subject to the monetary limits specified in the Securities and Futures (Investor Compensation – Compensation Limits) Rules and accordingly there can be no assurance that any pecuniary loss sustained by reason of such a default will necessarily be recouped from the Investor Compensation Fund in full, in part or at all.

18. We disclose the following to you: Company Name: Interactive Brokers LLC. Licensed for Dealing in Securities, Dealing in Futures Contracts and Leveraged Foreign Exchange Trading. Central Entity Number (CE Number): AEX264. Staff responsible for your account: The IB Customer Service Desk. Name of IB Responsible Officer / Registered Representative: David E. Friedland CE No.: ACP478.

19. RISK DISCLOSURE STATEMENT FOR EQUITY SECURITIES

- Customer acknowledges that the price of securities can and does fluctuate, and that any individual security may experience downward movements, and under some circumstances even become valueless. Customer appreciates therefore that there is an inherent risk that losses may be incurred rather than profit made, as a result of buying and selling securities. This is a risk that the Customer is prepared to accept.
- Customer also acknowledges that there are risks in leaving securities in the custody of the Broker or in authorizing the Broker to deposit securities as collateral for loans or advances made to the Broker or authorizing the Broker to borrow or loan securities.

HONG KONG RISK DISCLOSURE STATEMENTS

A. RISK OF SECURITIES TRADING

- The prices of securities fluctuate, sometimes dramatically. The price of a security may move up or down, and may become valueless. It is as likely that losses will be incurred rather than profit made as a result of buying and selling securities.

B. RISK OF TRADING FUTURES AND OPTIONS

- The risk of loss in trading futures contracts or options is substantial. In some circumstances, you may sustain losses in excess of your initial margin funds. Placing contingent orders, such as "stop-loss" or "stop-limit" orders, will not necessarily avoid loss. Market conditions may make it impossible to execute such orders. You may be called upon at short notice to deposit additional margin funds. If the required funds are not provided within the prescribed time, your position may be liquidated. You will remain liable for any resulting deficit in your account. You should therefore study and understand futures contracts and options before you trade and carefully consider whether such trading is suitable in the light of your own financial position and investment objectives. If you trade options you should inform yourself of exercise and expiration procedures and your rights and obligations upon exercise or expiry.

C. RISK OF TRADING IN LEVERAGED FOREIGN EXCHANGE CONTRACTS

- The risk of loss in leveraged foreign exchange trading can be substantial. You may sustain losses in excess of your initial margin funds. Placing contingent orders, such as "stop-loss" or "stop-limit" orders, will not necessarily limit losses to the intended amounts. Market conditions may make it impossible to execute such orders. You may be called upon at short notice to deposit additional margin funds. If the required funds are not provided within the prescribed time, your position may be liquidated. You will remain liable for any resulting deficit in your account. You should therefore carefully consider whether such trading is suitable in light of your own financial position and investment objectives.

D. RISK OF TRADING IN GROWTH ENTERPRISE MARKET STOCKS

- Growth Enterprise Market (GEM) stocks involve a high investment risk. In particular, companies may list on GEM with neither a track record of profitability nor any obligation to forecast future profitability. GEM stocks may be very volatile and illiquid.
- You should make the decision to invest only after due and careful consideration. The greater risk profile and other characteristics of GEM mean that it is a market more suited to professional and other sophisticated investors.
- Current information on GEM stocks may only be found on the internet website operated by The Stock Exchange of Hong Kong Limited. GEM Companies are usually not required to issue paid announcements in gazetted newspapers.
- You should seek independent professional advice if you are uncertain of or have not understood any aspect of this risk disclosure statement or the nature and risks involved in trading of GEM stocks.

E. RISK OF CLIENT ASSETS RECEIVED OR HELD OUTSIDE HONG KONG

- Client assets received or held by the licensed or registered person outside Hong Kong are subject to the applicable laws and regulations of the relevant overseas jurisdiction which may be different from the Securities and Futures Ordinance (Cap.571) and the rules made thereunder. Consequently, such client assets may not enjoy the same protection as that conferred on client assets received or held in Hong Kong.

F. RISK OF PROVIDING AN AUTHORITY TO REPLEDGE YOUR SECURITIES COLLATERAL ETC.

- There is risk if you provide the licensed or registered person with an authority that allows it to apply your securities or securities collateral pursuant to a securities borrowing and lending agreement, repledge your securities collateral for financial accommodation or deposit your securities collateral as collateral for the discharge and satisfaction of its settlement obligations and liabilities.
- If your securities or securities collateral are received or held by the licensed or registered person in Hong Kong, the above arrangement is allowed only if you consent in writing. Moreover, unless you are a professional investor, your authority must specify the period for which it is current and be limited to not more than 12 months. If you are a professional investor, these restrictions do not apply.
- Additionally, your authority may be deemed to be renewed (i.e. without your written consent) if the licensed or registered person issues you a reminder at least 14 days prior to the expiry of the authority, and you do not object to such deemed renewal before the expiry date of your then existing authority.
- You are not required by any law to sign these authorities. But an authority may be required by licensed or registered persons, for example, to facilitate margin lending to you or to allow your securities or securities collateral to be lent to or deposited as collateral with third parties. The licensed or registered person should explain to you the purposes for which one of these authorities is to be used.
- If you sign one of these authorities and your securities or securities collateral are lent to or deposited with third parties, those third parties will have a lien or charge on your securities or securities collateral. Although the licensed or registered person is responsible to you for securities or securities collateral lent or deposited under your authority, a default by it could result in the loss of your securities or securities collateral.
- A cash account not involving securities borrowing and lending is available from most licensed or registered persons. If you do not require margin facilities or do not wish your securities or securities collateral to be lent or pledged, do not sign the above authorities and ask to open this type of cash account.

G. RISK OF MARGIN TRADING

- The risk of loss in financing a transaction by deposit of collateral is significant. You may sustain losses in excess of your cash and any other assets deposited as collateral with the licensed or registered person. Market conditions may make it impossible to execute contingent orders, such as "stop-loss" or "stop-limit" orders. You may be called upon at short notice to make additional margin deposits or interest payments. If the required margin deposits or interest payments are not made within the prescribed time, your collateral may be liquidated without your consent. Moreover, you will remain liable for any resulting deficit in your account and interest charged on your account. You should therefore carefully consider whether such a financing arrangement is suitable in light of your own financial position and investment objectives.

H. ADDITIONAL RISK DISCLOSURE FOR FUTURES AND OPTIONS TRADING

- This brief statement does not disclose all of the risks and other significant aspects of trading in futures and options. In light of the risks, you should undertake such transactions only if you understand the nature of the contracts (and contractual relationships) into which you are entering and the extent of your exposure to risk. Trading in futures and options is not suitable for many members of the public. You should carefully consider whether trading is appropriate for you in light of your experience, objectives, financial resources and other relevant circumstances.

<u>Futures</u>

1. Effect of 'Leverage' or 'Gearing'

Transactions in futures carry a high degree of risk. The amount of initial margin is small relative to the value of the futures contract so that transactions are 'leveraged' or 'geared'. A relatively small market movement will have a proportionately larger impact on the funds you have deposited or will have to deposit: this may work against you as well as for you. You may sustain a total loss of initial margin funds and any additional funds deposited with the firm with which you deal to maintain your position. If the market moves against your position or margin levels are increased, you may be called upon to pay substantial additional funds on short notice to maintain your position. If you fail to comply with a request for additional funds within the time prescribed, your position may be liquidated at a loss and you will be liable for any resulting deficit.

2. Risk-reducing orders or strategies

The placing of certain orders (e.g. “stop-loss” orders, or “stop-limit” orders), which are intended to limit losses to certain amounts, may not be effective because market conditions may make it impossible to execute such orders. Strategies using combinations of positions, such as 'spread' and 'straddle' positions may be as risky as taking simple 'long' or 'short' positions.

<u>Options</u>

3. Variable degrees of risk

Transactions in options carry a high degree of risk. Purchasers and sellers of options should familiarize themselves with the type of option (i.e. put or call) which they contemplate trading and the associated risks. You should calculate the extent to which the value of the options must increase for your position to become profitable, taking into account the premium and all transaction costs.

The purchaser of options may offset or exercise the options or allow the options to expire. The exercise of an option results either in a cash settlement or in the purchaser acquiring or delivering the underlying interest. If the option is on a futures contract, the purchaser will acquire a futures position with associated liabilities for margin (see the section on Futures above). If the purchased options expire worthless, you will suffer a total loss of your investment which will consist of the option premium plus transaction costs. If you are contemplating purchasing deep-out-of-the-money options, you should be aware that the chance of such options becoming profitable ordinarily is remote.

Selling ('writing' or 'granting') options generally entails considerably greater risk than purchasing options. Although the premium received by the seller is fixed, the seller may sustain a loss well in excess of that amount. The seller will be liable for additional margin to maintain the position if the market moves unfavorably against him. The seller will also be exposed to the risk of the purchaser exercising the option and the seller will be obligated to either settle the options in cash or to acquire or deliver the underlying interest. If the option is on a futures contract, the seller will acquire a position in a futures contract with associated liabilities for margin (see the section on Futures above). If the option is 'covered' by the seller holding a corresponding position in the underlying interest or a futures contract or another option, the risk may be reduced. If the option is not covered, the risk of loss can be unlimited.

Certain exchanges in some jurisdictions permit deferred payment of the option premium, exposing the purchaser to liability for margin payments not exceeding the amount of the premium. The purchaser is still subject to the risk of losing the premium and transaction costs. When the option is exercised or expires, the purchaser is responsible for any unpaid premium outstanding at that time.

Additional Risks Common to Futures and Options

4. Terms and conditions of contracts

You should ask the firm with which you deal about the terms and conditions of the specific futures or options which you are trading and associated obligations (e.g. the circumstances under which you may become obliged to make or take delivery of the underlying interest of a futures contract and, in respect of options, expiration dates and restrictions on the time for exercise). Under certain circumstances the specifications of outstanding contracts (including the exercise price of an option) may be modified by the exchange or clearing house to reflect changes in the underlying interest.

5. Suspension or restriction of trading and pricing relationships

Market conditions (e.g. illiquidity) and/or the operation of the rules of certain markets (e.g. the suspension of trading in any contract or contract month because of price limits or 'circuit breakers') may increase the risk of loss by making it difficult or impossible to effect transactions or liquidate/offset positions. If you have sold options, this may increase the risk of loss.

Further, normal pricing relationships between the underlying interest and the futures, and the underlying interest and the option may not exist. This can occur when, for example, the futures contract underlying the option is subject to price limits while the option is not. The absence of an underlying reference price may make it difficult to judge 'fair' value.

6. Deposited cash and property

You should familiarize yourself with the protections given to money or other property you deposit for domestic and foreign transactions, particularly in the event of a firm insolvency or bankruptcy. The extent to which you may recover your money or property may be governed by specific legislation or local rules. In some jurisdictions, property which had been specifically identifiable as your own will be pro-rated in the same manner as cash for purposes of distribution in the event of a shortfall.

7. Commission and other charges

Before you begin to trade, you should obtain a clear explanation of all commission, fees and other charges for which you will be liable. These charges will affect your net profit (if any) or increase your loss.

8. Transactions in other jurisdictions

Transactions on markets in other jurisdictions, including markets formally linked to a domestic market, may expose you to additional risk. Such markets may be subject to regulation which may offer different or diminished investor protection. Before you trade, you should enquire about any rules relevant to your particular transactions. Your local regulatory authority will be unable to compel the enforcement of the rules of regulatory authorities or markets in other jurisdictions where your transactions have been effected. You should ask the firm with which you deal for details about the types of redress available in both your home jurisdiction and other relevant jurisdictions before you start to trade.

9. Currency risks

The profit or loss in transactions in foreign currency-denominated contracts (whether they are traded in your own or another jurisdiction) will be affected by fluctuations in currency rates where there is a need to convert from the currency denomination of the contract to another currency.

10. Trading facilities

Electronic trading facilities are supported by computer-based component systems for the order-routing, execution, matching, registration or clearing of trades. As with all facilities and systems, they are vulnerable to temporary disruption or failure. Your ability to recover certain losses may be subject to limits on liability imposed by the system provider, the market, the clearing house and/or participant firms. Such limits may vary: you should ask the firm with which you deal for details in this respect.

11. Electronic trading

Trading on an electronic trading system may differ not only from trading in an open-outcry market but also from trading on other electronic trading systems. If you undertake transactions on an electronic trading system, you will be exposed to risks associated with the system including the failure of hardware and software. The result of any system failure may be that your order is either not executed according to your instructions or is not executed at all.

12. Off-exchange transactions

In some jurisdictions, and only then in restricted circumstances, firms are permitted to effect off-exchange transactions. The firm with which you deal may be acting as your counterparty to the transaction. It may be difficult or impossible to liquidate an existing position, to assess the value, to determine a fair price or to assess the exposure to risk. For these reasons, these transactions may involve increased risks. Off-exchange transactions may be less regulated or subject to a separate regulatory regime. Before you undertake such transactions, you should familiarize yourself with applicable rules and attendant risks.

I. DISCLOSURE REGARDING HONG KONG OPTIONS

- Hong Kong options are treated as normal premium options in that IB will not post changes in variation margin (profits or losses) for such options. The profit or loss will be determined at the time a position is closed and will be the difference between the opening and closing transaction prices. You should note that the end profit or loss calculation result remains identical. It is important to note that positions resulting from strategies with combined futures and options legs may require additional collateral to maintain. This is because commodity accounts must maintain a positive cash balance and adverse market movements may cause the futures portion of the strategy to generate negative cash which will not be offset by options price changes.

Client Standing Authority

To: Interactive Brokers LLC
Suite 1512, Two Pacific Place
88 Queensway
Admiralty, Hong Kong

Authority under Securities and Futures (Client Securities) Rules

This letter of authority is in respect of my/our securities or securities collateral as set out below.

Unless otherwise defined, all the terms used in this authorisation letter shall have the same meanings as in the Securities and Futures Ordinance and the Securities and Futures (Client Securities) Rules as amended from time to time.

This letter authorises you to:

i. apply any of my/our securities or securities collateral pursuant to a securities borrowing and lending agreement;

ii. deposit any of my/our securities collateral with an authorized financial institution as collateral for financial accommodation provided to you;

iii. deposit any of my/our securities collateral with Hong Kong Securities Clearing Company Limited ("HKSCC") as collateral for the discharge and satisfaction of your settlement obligations and liabilities. I/We understand that HKSCC will have a first fixed charge over my/our securities to the extent of your obligations and liabilities;

iv. deposit any of my/our securities collateral with any other recognised clearing house, or another intermediary licensed or registered for dealing in securities, as collateral for the discharge and satisfaction of your settlement obligations and liabilities; and

v. apply or deposit any of my/our securities collateral in accordance with paragraphs (i), (ii), (iii) and/or (iv) above if you provide financial accommodation to me/us in the course of dealing in securities and also provide financial accommodation to me/us in the course of any other regulated activity for which you are licensed or registered.

You may do any of these things without giving me/us notice. I/We acknowledge that this authority shall not affect your right to dispose or initiate a disposal by your associated entity of my/our securities or securities collateral in settlement of any liability owed by or on behalf of me/us to you, the associated entity or a third person.

This authority is given to Interactive Brokers LLC in consideration of its agreeing to continue to maintain securities cash and/or margin account(s) for me/us and in consideration of its agreeing to continue to maintain futures account(s) for me/us.

I/We understand that a third party may have rights to my/our securities, which you must satisfy before my/our securities can be returned to me/us.

This authority is valid for a period of 12 months from the date of this letter.

This authority may be revoked by giving you written notice addressed to the Customer Service Department at your address specified above. Such notice shall take effect upon the expiry of two weeks from the date of your actual receipt of such notice.

I/We understand that this authority shall be deemed to be renewed on a continuing basis without my/our written consent if you issue me/us a written reminder at least 14 days prior to the expiry date of this authority, and I/we do not object to such deemed renewal before such expiry date.

This letter has been explained to me/us and I/we understand the contents of this letter.

Client Money Standing Authority

To: Interactive Brokers LLC
Suite 1512, Two Pacific Place
88 Queensway
Admiralty, Hong Kong

Authority under Securities and Futures (Client Money) Rules

This letter of authority covers money held or received by Interactive Brokers LLC in Hong Kong (including any interest derived from the holding of the money which does not belong to you) in one or more segregated account(s) on my/our behalf ("Monies").

Unless otherwise defined, all the terms used in this authorisation letter shall have the same meanings as in the Securities and Futures Ordinance and the Securities and Futures (Client Money) Rules as amended from time to time.

This letter authorises you to:

1. combine or consolidate any or all segregated accounts, of any nature whatsoever and either individually or jointly with others, maintained by you or IBG LLC ("IB Group") and/or any of its subsidiaries from time to time and you may transfer any sum of Monies to and between such segregated account(s) to satisfy my/our obligations or liabilities to any member of the IB Group, whether such obligations and liabilities are actual, contingent, primary or collateral, secured or unsecured, or joint or several; and

2. transfer any sum of Monies interchangeably between any of the segregated accounts maintained at any time by any member of the IB Group.

You may do any of these things without giving me/us notice.

This authority is given to Interactive Brokers LLC in consideration of its agreeing to continue to maintain securities cash and/or margin account(s) for me/us and in consideration of its agreeing to continue to maintain futures account(s) for me/us.

This authority is given without prejudice to other authorities or rights which IB Group may have in relation to dealing in Monies in the segregated accounts.

This authority is valid for a period of 12 months from the date of this letter.

This authority may be revoked by giving you written notice addressed to the Customer Service Department at your address specified above. Such notice shall take effect upon the expiry of two weeks from the date of your actual receipt of such notice.

I/We understand that this authority shall be deemed to be renewed on a continuing basis without my/our written consent if you issue me/us a written reminder at least 14 days prior to the expiry date of this authority, and I/we do not object to such deemed renewal before such expiry date.

This letter has been explained to me/us and I/we understand the contents of this letter.

Notice Regarding NFA's BASIC System

Interactive Brokers LLC ("IBL") is required to inform its Securities Futures Products ("SFP") customers of the National Futures Association ("NFA") Background Affiliation Status Information Center ("BASIC"). The BASIC system compiles various information on registrants and anyone can access this system on the Internet.

The information in the BASIC system includes Commodity Futures Trading Commission ("CFTC") registration information and membership information from the NFA. Also included are regulatory and non-regulatory actions contributed by the NFA, the CFTC and the U.S. futures exchanges regarding futures-related activity.

The NFA BASIC system may be accessed at www.nfa.futures.org/basicnet/. To locate information on a registrant, simply enter the registrant's NFA ID number when prompted. For questions regarding this system, you may contact the NFA information center at 1-800-621-3570 between the hours of 8:00 a.m. to 5:00 p.m. CST.

FINRA Investor Protection Information Resources

Financial Industry Regulatory Authority ("FINRA") Conduct Rule 2280 requires that Interactive Brokers provide customers with certain information regarding its Public Disclosure Program. This information is included below:

1. The FINRA Public Disclosure (BrokerCheck) Program Hotline Number, Address and Facsimile number are:

   Telephone: (800) 289-9999

   FINRA BrokerCheck
   P.O. Box 9495
   Gaithersburg, MD 20898-9495

   Fax: (240) 386-4750

2. The FINRA Website address is:

   http://www.finra.org

Customers who wish to obtain a brochure that describes FINRA BrokerCheck should contact FINRA at the address or phone number listed above.

RISK DISCLOSURE STATEMENT FOR FOREX TRADING AND IB MULTI-CURRENCY ACCOUNTS

Rules of the U.S. National Futures Association ("NFA") require Interactive Brokers ("IB") to provide you with the following Risk Disclosure Statement:

RISK DISCLOSURE STATEMENT

OFF-EXCHANGE FOREIGN CURRENCY ("FOREX") TRANSACTIONS INVOLVE THE LEVERAGED TRADING OF CONTRACTS DENOMINATED IN FOREIGN CURRENCY CONDUCTED WITH A FUTURES COMMISSION MERCHANT OR A RETAIL FOREIGN EXCHANGE DEALER AS YOUR COUNTERPARTY. BECAUSE OF THE LEVERAGE AND THE OTHER RISKS DISCLOSED HERE, YOU CAN RAPIDLY LOSE ALL OF THE FUNDS YOU DEPOSIT FOR SUCH TRADING AND YOU MAY LOSE MORE THAN YOU DEPOSIT.

YOU SHOULD BE AWARE OF AND CAREFULLY CONSIDER THE FOLLOWING POINTS BEFORE DETERMINING WHETHER SUCH TRADING IS APPROPRIATE FOR YOU.

(1) TRADING IS NOT ON A REGULATED MARKET OR EXCHANGE—YOUR DEALER IS YOUR TRADING PARTNER WHICH IS A DIRECT CONFLICT OF INTEREST. BEFORE YOU ENGAGE IN ANY RETAIL FOREIGN EXCHANGE TRADING, YOU SHOULD CONFIRM THE REGISTRATION STATUS OF YOUR COUNTERPARTY.

The off-exchange foreign currency trading you are entering into is not conducted on an interbank market, nor is it conducted on a futures exchange subject to regulation as a designated contract market by the Commodity Futures Trading Commission ("CFTC"). The foreign currency trades you transact are trades with the futures commission merchant or retail foreign exchange dealer as your counterparty. WHEN YOU SELL, THE DEALER IS THE BUYER. WHEN YOU BUY, THE DEALER IS THE SELLER. As a result, when you lose money trading, your dealer is making money on such trades, in addition to any fees, commissions, or spreads the dealer may charge.

(2) AN ELECTRONIC TRADING PLATFORM FOR RETAIL FOREIGN CURRENCY TRANSACTIONS IS NOT AN EXCHANGE. IT IS AN ELECTRONIC CONNECTION FOR ACCESSING YOUR DEALER. THE TERMS OF AVAILABILITY OF SUCH A PLATFORM ARE GOVERNED ONLY BY YOUR CONTRACT WITH YOUR DEALER.

Any trading platform that you may use to enter off-exchange foreign currency transactions is only connected to your futures commission merchant or retail foreign exchange dealer. You are accessing that trading platform only to transact with your dealer. You are not trading with any other entities or customers of the dealer by accessing such platform. The availability and operation of any such platform, including the consequences of the unavailability of the trading platform for any reason, is governed only by the terms of your account agreement with the dealer.

(3) YOUR DEPOSITS WITH THE DEALER HAVE NO REGULATORY PROTECTIONS.

All of your rights associated with your retail forex trading, including the manner and denomination of any payments made to you, are governed by the contract terms established in your account agreement with the futures commission merchant or retail foreign exchange dealer. Funds deposited by you with a futures commission merchant or retail foreign exchange dealer for trading off-exchange foreign currency transactions are not subject to the customer funds protections provided to customers trading on a contract market that is designated by the CFTC. Your dealer may commingle your funds with its own operating funds or use them for other purposes. In the event your dealer becomes bankrupt, any funds the dealer is holding for you in addition to any amounts owed to you resulting from trading, whether or not any assets are maintained in separate deposit accounts by the dealer, may be treated as an unsecured creditor's claim.

(4) YOU ARE LIMITED TO YOUR DEALER TO OFFSET OR LIQUIDATE ANY TRADING POSITIONS SINCE THE TRANSACTIONS ARE NOT MADE ON AN EXCHANGE OR MARKET, AND YOUR DEALER MAY SET ITS OWN PRICES.

Your ability to close your transactions or offset positions is limited to what your dealer will offer to you, as there is no other market for these transactions. Your dealer may offer any prices it wishes, and it may offer prices derived from outside sources or not in its discretion. Your dealer may establish its prices by offering spreads from third party prices, but it is under no obligation to do so or to continue to do so. Your dealer may offer different prices to different customers at any point in time on its own terms. The terms of your account agreement alone govern the obligations your dealer has to you to offer prices and offer offset or liquidating transactions in your account and make any payments to you. The prices offered by your dealer may or may not reflect prices available elsewhere at any exchange, interbank, or other market for foreign currency.

(5) PAID SOLICITORS MAY HAVE UNDISCLOSED CONFLICTS

The futures commission merchant or retail foreign exchange dealer may compensate introducing brokers for introducing your account in ways which are not disclosed to you. Such paid solicitors are not required to have, and may not have, any special expertise in trading, and may have conflicts of interest based on the method by which they are compensated. Solicitors working on behalf of futures commission merchants and retail foreign exchange dealers are required to register. You should confirm that they are, in fact registered. You should thoroughly investigate the manner in which all such solicitors are compensated and be very cautious in granting any person or entity authority to trade on your behalf. You should always consider obtaining dated written confirmation of any information you are relying on from your dealer or a solicitor in making any trading or account decisions.

FINALLY, YOU SHOULD THOROUGHLY INVESTIGATE ANY STATEMENTS BY ANY DEALERS OR SALES REPRESENTATIVES WHICH MINIMIZE THE IMPORTANCE OF, OR CONTRADICT, ANY OF THE TERMS OF THIS RISK DISCLOSURE. SUCH STATEMENTS MAY INDICATE POTENTIAL SALES FRAUD.

THIS BRIEF STATEMENT CANNOT, OF COURSE, DISCLOSE ALL THE RISKS AND OTHER ASPECTS OF TRADING OFF-EXCHANGE FOREIGN CURRENCY TRANSACTIONS WITH A FUTURES COMMISSION MERCHANT OR RETAIL FOREIGN EXCHANGE DEALER.

PERFORMANCE OF INTERACTIVE BROKERS RETAIL CUSTOMER FOREX ACCOUNTS FOR THE PAST FOUR CALENDAR QUARTERS:

The table below sets forth the percentage of non-discretionary retail forex customer accounts maintained by Interactive Brokers LLC that were profitable and unprofitable for the past four calendar quarters. The accounts were identified and these statistics were calculated according to the definitions and interpretations set forth by the CFTC and NFA[1].

TIME PERIOD	NUMBER OF ACCOUNTS	PERCENTAGE OF PROFITABLE ACCOUNTS	PERCENTAGE OF UNPROFITABLE ACCOUNTS
Q3 2012	11115	44.6%	55.4%
Q2 2012	10399	42.3%	57.7%
Q1 2012	49286	41.4%	58.6%
Q4 2011	45053	51.0%	49.0%

PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS.

FURTHER INFORMATION PROVIDED BY INTERACTIVE BROKERS:

A. Overview: Interactive Brokers Multi-Currency enabled accounts allow IB Customers to trade investment products denominated in different currencies using a single IB account denominated in a "base" currency of the customer's choosing. IB Customers can also use their Multi-Currency enabled accounts to conduct foreign exchange transactions in order to manage credits or debits generated by foreign securities, options or futures trading, to convert such credits or debits back into the Customer's base currency, or to hedge or speculate. IB foreign exchange transactions offered to retail customers are forex spot transactions.

B. Nature of Your Account and Whether SIPC Covers Foreign Currency: Foreign currency trading at Interactive Brokers takes place in a securities account. Your IB securities account is governed by rules of the U.S. Securities and Exchange Commission ("SEC") and the Financial Industry Regulatory Authority. In addition, IB observes the rules of the National Futures Association in connection with foreign currency trading.

Interactive Brokers LLC is a member of the Securities Investor Protection Corporation ("SIPC"). SIPC protects cash and securities held with Interactive Brokers as specified in the Securities Investor Protection Act. SIPC protects cash, including US dollars and foreign currency, to the extent that the cash was deposited with Interactive Brokers for the purpose of purchasing securities. Whether foreign currency in your IB account would be protected by SIPC would depend in part on whether the cash was considered to be deposited with Interactive Brokers for the purpose of purchasing securities. Interactive Brokers expects that at least one factor in deciding this would be whether and the extent to which the customer engages in securities trading in addition to or in conjunction with forex trading, but, as discussed in section 3 above, funds deposited specifically for forex trading have no regulatory protections under NFA rules or CFTC regulations. For further information, you must contact your own legal counsel or SIPC.

Customer money held in the securities account is subject to Securities Exchange Act Rule 15c3-3 governing customer reserve requirements. Although relevant regulations only require computation of the 15c3-3 reserve requirement and associated segregation of customer funds to be performed weekly, IB performs such calculations and segregation on a daily basis.

C. General Risk: Customer understands and acknowledges that buying and selling securities, options, futures and other financial products that are denominated in foreign currencies or traded on foreign markets is inherently risky and requires substantial knowledge and expertise. Customers applying for Interactive Brokers Multi-Currency enabled accounts represent that they are aware of and understand the risks involved in trading foreign securities, options, futures and currencies and that they have sufficient financial resources to bear such risks.

D. Customer Responsibility for Investment Decisions: Customer acknowledges that IB representatives are not authorized to provide investment, trading or tax advice and therefore will not provide advice or guidance on trading or hedging strategies in the Multi-Currency enabled account. Customers must evaluate carefully whether any particular transaction is appropriate for them in light of their investment experience, financial objectives and needs, financial resources, and other relevant circumstances and whether they have the operational resources in place to monitor the associated risks and contractual obligations over the term of the transaction. In making these assessments, IB strongly recommends that Customers obtain independent business, legal, and accounting advice before entering into any transactions.

E. Exchange Rate Risk: Exchange rates between foreign currencies can change rapidly due to a wide range of economic, political and other conditions, exposing the Customer to risk of exchange rate losses in addition to the inherent risk of loss from trading the underlying financial product. If a Customer deposits funds in a currency to trade products denominated in a different currency, Customer's gains or losses on the underlying investment therefore may be affected by changes in the exchange rate between the currencies. If Customer is trading on margin, the impact of currency fluctuation on Customer's gains or losses may be even greater.

F. Currency Fluctuation: When Customer uses the foreign exchange facility provided by IB to purchase or sell foreign currency, fluctuation in currency exchange rates between the foreign currency and the base currency could cause substantial losses to the Customer, including losses when the Customer converts the foreign currency back into the base currency.

G. Nature of Foreign Currency Exchange Transactions Between Customer and IB: When Customer enters into a foreign exchange transaction with IB, IB, as the counterparty to Customer's trade, may effectuate that transaction by entering into an offsetting transaction with one of IB's affiliates, with another customer that enters quotes into IB's system, or with a third party bank (IB's "Forex Providers"). In such transactions, the Forex Provider is not acting in the capacity of a financial adviser or fiduciary to Customer or to IB, but rather, is taking the other side of IB's offsetting trade in an arm's length contractual transaction. Customer should be aware that the Forex Provider may from time to time have substantial positions in, and may make a market in or otherwise buy or sell instruments similar or economically related to, foreign currency transactions entered into by Customer. IB's Forex Providers may also undertake proprietary trading activities, including hedging transactions related to the initiation or termination of foreign exchange transactions with IB, which may adversely affect the market price or other factors underlying the foreign currency transaction entered into by Customer and consequently, the value of such transaction.

H. Prices on the IB Forex Platforms: The prices quoted by IB to Customers for foreign exchange transactions on IB's IdealPro platform will be determined based on Forex Provider quotes and are not determined by a competitive auction as on an exchange market. Prices quoted by IB for foreign currency exchange transactions therefore may not be the most competitive prices available. For purposes of maintaining adequate scale and competitive spreads, a minimum size is imposed on all IdealPro orders (USD $25,000 as of March 2012 but this is subject to change at any time). Orders below the minimum size are considered odd lots and limit prices for these odd lot-sized orders are not displayed through IdealPro. While odd lot marketable orders are not likely to be executed at the interbank spreads afforded to IdealPro orders, they will generally be executed at prices only slightly inferior (1-3 ticks). IB will charge transaction fees as specified by IB for foreign currency exchange transactions. IB's Forex Providers will try to earn a spread profit on transactions with IB (differential between the bid and ask prices quoted for various currencies).

I. Price Slippage: Prices quoted on IB's system generally reflect the prices at which IB's Forex Providers are willing to trade. Prices quoted on IB's system reflect changing market conditions and therefore quotes can and do change rapidly. As such, when a Customer order is received and processed by IB's system, the quote on IB's platform may be different from the quote displayed when the order was sent by Customer. This change in price is commonly referred to as "slippage." IB generally will not execute a Customer order at a certain price unless IB is able to trade at that price against one of IB's Forex Providers.

If Customer sends an order for a forex transaction to IB's system but Customer's requested price is no longer available and therefore the order is non-marketable, IB will not execute the order then but will place it in IB's limit order book in accordance with Customer's time-in-force instructions. Other customers can then trade against this order when it becomes the National Best Bid and Offer ("NBBO") or IB may execute the order if it becomes marketable based on prices received from IB's Forex Providers.

If Customer sends an order for a forex transaction to IB's system and the current price is more favorable for Customer than what Customer requested in the order, the order will generally be executed at the available better price.

Although IB attempts to obtain the best price for Customer orders on forex transactions, because of the inherent possibility of transmission delays between and among Customers, IB and Forex Providers, or other technical issues, execution prices may be worse than the quotes displayed on the IB platform.

J. Other Risks: There are other risks that relate to trading foreign investment products and trading foreign currencies that cannot be described in detail in this document. Generally, however, foreign securities, options, futures and currency transactions involve exposure to a combination of the following risk factors: market risk, credit risk, settlement risk, liquidity risk, operational risk and legal risk. For example, there can be serious market disruptions if economic or political or other unforeseen events locally or overseas affect the market. Also, the settlement date of foreign exchange trades can vary due to time zone differences and bank holidays. When trading across foreign exchange markets, this may necessitate borrowing funds to settle foreign exchange trades. The interest rate on borrowed funds must be considered when computing the cost of trades across multiple markets. In addition to these types of risk there may be other factors such as accounting and tax treatment issues that Customers should consider.

(1)Information regarding the performance of Interactive Brokers retail forex customers for the past 5 years is available upon request.