RISK DISCLOSURE: derivatives

1. A *derivative* is a financial instrument:

(a) whose value changes in response to the change in a specified interest rate, security price, commodity price, foreign exchange rate, index of prices, a credit rating, or similar variable (the underlying);

(b) that requires no initial net investment or little initial net investment relative to other types of contracts that have similar responses to changes in market conditions; and

(c) that is settled at a future date.

Common types of exchange-traded derivatives are futures and options.

2. A *futures contract* is a legally binding agreement between two parties to purchase or sell in the future a specific quantity of underlying asset at a certain price. The price at which the contract trades (the contract price) is determined by relative buying and selling interest on the market.

Futures contracts may be settled either by physical delivery of the underlying security or settled through cash settlement. Futures contracts can be used for speculation, hedging, and risk management. Futures contracts do not provide capital growth or income.

3. Futures trading is speculative and highly volatile. Price movements for futures are influenced by, among other things, government trade, fiscal, monetary and exchange control programs and policies; weather and climate conditions; changing supply and demand relationships; national and international political and economic events; changes in interest rates; and the psychological emotions of the market place. None of these factors can be controlled by us and no assurances can be given that trade results will be profitable for you or that you will not incur substantial losses.

4. Futures trading can be highly leveraged. The low margin deposits normally required in futures trading permit an extremely high degree of leverage. Accordingly, a relatively small price movement in a futures contract may result in immediate and substantial loss or gain to you. You may sustain a total loss of initial margin funds and any additional funds deposited to maintain your position.

5. The placing of certain orders (e.g. stop-loss 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 combination of positions, such as "spread" and "straddle" positions may be as risky as taking simple long or short positions.

Futures trading may be illiquid.

6. An *option contract* is a contract that gives the buyer a right, but not the obligation, to buy or sell an asset at a particular price, on or before a specified date. Options are divided into call options and put options. A *call option* is an option to buy an asset for a specified price (called *strike price*), on or before a specified date. A *put option* is an option to sell an asset for a specified price on or before a specified date. The buyer of an options contract is said to be long, or the holder or owner of the contract. The seller of an options contract is said to be short, or writer of the contract. The cost of the option to the buyer is called the *premium*.

7. 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. If the option is on a future, the purchaser will acquire a futures position with associated liabilities for margin. If the purchased options expire worthless, you will suffer a total loss of your investment. 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.

8. 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 also be exposed to the risk of the purchaser exercising the option and the seller being 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. 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 (including for combination writing) can be unlimited.

9. There are several option styles including (but not limited to) American-, European- and Bermudastyle. An *American-style option* may be exercised at any time prior to its expiration. A *European-style option* may only be exercised on a specific date, its expiration date. A *Bermuda-style option* may be exercised on certain specified dates during the term of the transaction.

10. If you buy an American-style call option and the relevant market price of the underlying asset never rises above the strike price on the option (or if you fail to exercise the option while such condition exits), the option will expire unexercised and you will have lost the premium you paid for the option. Similarly, if you buy an American-style put option and the relevant market price for the underlying asset does not fall such condition exists), the option exists), the option will not be exercised and you will have lost the premium you paid for the put option.

11. Purchasing European-style or Bermuda-style options may carry additional market risk since the option could be "in-the-money" for part or substantially all of the holding period but not on the exercise date(s). A call option is "in-the-money" if the strike price is lower than the relevant market price for the underlying asset. A put option is "in-the-money" if the strike price is higher than the relevant market price for the underlying asset.

12. 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.

Common types of off-exchange derivatives are forwards and CFDs.

13. A *forward contract* is a non-standardised contract between two parties to buy or sell an asset at a specified future time at a price agreed today. Forward contracts are very similar to futures contracts, except they are not exchange-traded, or defined on standardized assets. Persons who need to close position on forwards prior their maturity are likely to receive less than the amount of their initial investment. Therefore, forwards with longer maturities may be subject to greater liquidity risk than forwards with a shorter maturity period.

14. A *contract for difference* (CFD) allows you to speculate on the price difference of an underlying (e.g. shares, commodities, indices) without acquiring it. The market price of a CFD reflects the price of the underlying. The underlying can be options and futures on an index of an exchange, as well as equity, currency and interest rate swaps, amongst others. The gain or loss of a CFD reflects the difference between the market price of the underlying, at the time of the agreement and the time of liquidation of the CFD. Unlike other futures and options (which may, depending on their terms, be settled in cash or by delivery of the underlying asset), CFDs can only be settled in cash. A CFD is therefore, intended to secure a profit or to avoid a loss by reference to fluctuations in the price of the underlying rather than by taking delivery of any underlying. No CFD will confer on you any right, titles or interest in any underlying or entitle you to acquire, receive, vote, hold or participate directly in any corporate actions. Each of the types of the underlying has risks that are specific to that underlying type, including in terms of price fluctuations and market liquidity. Transactions in CFDs may also have a contingent liability.

15. A *swap agreement* is a derivative where two counterparties exchange one stream of cash flows against another stream, calculated by reference to an underlying such as securities' indices, bonds currencies, interest rates or commodities, or more intangible items. Swaps can be traded either on or off exchange.

16. A swap agreement may also be combined with an option. Such an option may be structured in two different ways. On the one hand, "*swaptions*" are transactions that give the purchaser of the swaption the right, against payment of a premium, to exercise or not to exercise, until the agreed maturity date, its right to enter into a pre-agreed swap agreement. On the other hand, "*caps*", "*floors*" and "*collars*" enable a party, against payment or receipt of a premium, to protect itself against, or to take an exposure on, the variation on the value or level of an underlying.

17. The swap market has grown substantially in recent years, with a large number of banks and investment banking firms acting both as principals and as agents utilising standardised swap documentation to cover swaps trading over a broad range of underlying assets. As a result, the swap market for certain underlying assets has become more liquid but there can be no assurance that a liquid secondary market will exist at any specified time for any particular swap.

18. Off-exchange derivatives are not listed on an exchange and are OTC products. A major risk of offexchange derivatives, is counterparty risk, whereby a party is exposed to the inability of its counterparty to perform its obligations under the relevant derivative contract. Some off-exchange derivatives are not cleared on a central clearinghouse and thus, exchange and clearing house rules and protections do not apply. While some exchange markets are highly liquid, transactions in off-exchange derivatives may involve greater risk because there is no exchange market on which to close out an open position. It may be impossible to liquidate the existing position, to assess the value of the position arising from an OTC transaction.

19. Before trading derivatives, you will generally be required to put some collateral (or margin) aside to mitigate the risk of not fulfilling your obligations under the relevant derivative contract. These margin requirements are set and explained in the market rules adopted by relevant exchanges or agreed between the parties to a derivative transaction and are subject to change. In relation to exchange-traded derivatives, after the trades have been confirmed and registered, the clearing house becomes the legal counterparty, generally via the process called novation, to the trade. Therefore, in conjunction with the exchanges, the clearing houses will manage and define margining rules and procedures which are also part of the relevant market rules.

20. Where you trade derivatives through a market intermediary with whom you hold any cash or assets, your securities and cash balances may be subject to security interests created in favour of that market intermediary and sued to satisfy your obligations under derivative contracts.

21. 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 or you become unable to make any other payments or deliveries, your positions may be liquidated with little or no prior notice at a loss and you will be liable for any resulting deficit.

22. You shall also be aware that normal pricing relationships between the underlying asset and a derivative do not always exist. There may be volatility in the price of the specific derivative contact and/or limitations on the available market for such instrument. The absence of an underlying reference price may make it difficult to determine a fair value.

23. Trading halts in the underlying security or other trading conditions (e.g. volatility, liquidity, system failures) may cause a trading market for a derivative to be unavailable, in which case you will not be able to

engage in a closing transaction and you remain obliged until settlement, delivery, expiration or assignment under the derivative contract.

24. You should always familiarise yourself with the terms of the specific derivative contracts, which you are trading and associated obligations. Under certain circumstances, the specifications of outstanding contracts may be modified by the exchange or clearing house to reflect changes in the underlying.

25. Derivatives are complex instruments and carry a high degree of risk. Derivative markets are highly volatile. It is possible to lose substantial sums of money if they are not managed correctly. You understand that by entering into transactions in derivatives you assume additional obligations, including contingent liabilities, additional to the cost of acquiring such derivatives. As with any high-risk financial instrument, you should not risk any funds you cannot afford to lose. You must carefully monitor your derivative positions at all times.