Risk Disclosure Statement

The statements contained in this document are applicable to Broker Services provided to you by the TP ICAP Group of Companies and, in particular, products listed by the MTFs and OTFs of Tullett Prebon, ICAP and PVM.

1. GENERAL

1.1 General

(a) All financial instruments carry risks. In large part this is inherent in their function – their value can increase and decrease according to market conditions, and markets are always subject to uncertainty. However, there are general risks outside the terms of financial instruments which anyone entering into a financial instrument should consider as well as specific risks associated with each financial instrument and each category of financial instrument. This document sets out risks common to financial instruments generally followed by specific risks for each category and, within each category, each instrument.

(b) The information set out in this document is for your information only, and does not constitute legal, tax or other advice. It does not exhaustively describe the financial instruments discussed and you must always assess financial instruments according to their individual terms and in light of your circumstances, your investment objectives and your financial situation. Any descriptions of financial instruments are general and not in reference to any particular instrument.

2. RISKS COMMON TO FINANCIAL INSTRUMENTS

2.1 Currency risk

(a) In respect of any foreign exchange transactions and transactions in derivatives and securities that are denominated in a foreign currency, a movement in exchange rates may have a favourable or an unfavourable effect on the gain or loss achieved on such transactions.
2.2 Interest rate risk

(a) Interest rates can rise as well as fall. A risk with interest rates is that the relative value of a security, especially a bond, may worsen due to an interest rate increase. This could impact negatively on other products. There are additional interest rate related risks in relation to floating rate instruments in that interest income on floating rate instruments cannot be anticipated. Due to varying interest income, investors may not be able to determine the definite yield of floating rate instruments at the time they purchase them, so that their return on investment cannot be compared with that of investments having longer fixed interest periods. If the terms and conditions of the relevant instruments provide for frequent interest payment dates, investors are exposed to reinvestment risk if market interest rates decline. Reinvestment risk is the risk arising from the fact that investors may reinvest the interest income paid to them only at the relevant lower interest rates then prevailing.

2.3 Commodity risk

(a) The prices of commodities may be volatile, and, for example, may fluctuate substantially if natural disasters or catastrophes, such as hurricanes, fires or earthquakes, affect the supply or production of such commodities. The prices of commodities may also fluctuate substantially if conflict or war affects the supply or production of such commodities. If any interest and/or the redemption amount payable in respect of a product is linked to the price of a commodity, any change in the price of such a commodity may result in the reduction of the amount of interest and/or the redemption amount payable. The reduction in the amount payable on the redemption of an investment may result, in some cases, in you receiving a smaller sum on redemption of a product than the amount originally invested in such a product.

2.4 Regulatory, legal and structural risk

(a) All investments could be exposed to regulatory, legal or structural risk.

(b) Returns on all, and particularly new, investments may be at risk from regulatory or legal actions and changes which can, amongst other issues, alter the profit potential of an investment. Legal changes could even have the effect that a previously
acceptable investment becomes illegal. Changes to tax policy may also occur and could have a large impact on profitability. These risks are unpredictable and can depend on numerous political, economic and other factors. The risk may be greater in emerging markets which are developing their regulatory frameworks but does apply everywhere. In emerging markets, there is generally less government supervision and regulation of business and industry practices, stock exchanges and over-the-counter markets, and so potentially the risk of adverse regulatory or legal change may be reduced rather than increased.

(c) The type of laws and regulations which investors are familiar with in the EEA may not exist in some jurisdictions, and where they do, they may be subject to inconsistent or arbitrary application or interpretation and may be changed with retroactive effect. Both the independence of judicial systems and their immunity from economic or political influences remain largely untested in many countries. Judges and courts in many countries may be inexperienced in the areas of business and corporate law. Companies are exposed to the risk that legislatures will revise established law solely in response to economic or political pressure or popular discontent. There is no guarantee that an overseas investor would obtain a satisfactory remedy in local courts in case of a breach of local laws or regulations or a dispute over ownership of assets. An investor may also encounter difficulties in pursuing legal remedies or in obtaining and enforcing judgments in overseas courts.

(d) In the case of many products, there will be no legal or beneficial interest in the obligations or securities of the underlying reference entity. An investor will only have a contractual relationship with the counterparty. Its rights will therefore be limited to contractual remedies against the counterparty in accordance with the terms of the relevant product.

(e) In all cases the legal terms and conditions of a product may contain provisions which could operate against your interests. For example, they may permit early redemption or termination at a time which is unfavourable to you, or they may give wide discretion to the issuer of securities to revise the terms applicable to securities. In other cases there may be limits on the amounts in relation to which rights attaching to securities may be exercised and in the event that you hold too many (or too few) securities, your interests may be prejudiced and should scrutinise these carefully. In some cases, the exercise of rights by others may impact on your investment. For example, a product such as a bond or note may contain provisions for calling meetings of holders of those bonds or notes to consider matters affecting their interests generally (including yours) and may permit defined majorities to bind all holders, including holders who did not attend and vote at the relevant meeting and holders who voted in a manner contrary to the majority. Further, in some cases amendments may be made to the terms and conditions of bonds or notes without the consent of any of the holders.
2.5 Operational risk

(a) Operational risk, such as breakdowns or malfunctioning of essential systems and controls, including IT systems, can impact on all financial products. Business risk, especially the risk that the business is run incompetently or poorly, could also impact on investors in such a business. Personnel and organisational changes can severely affect such risks and, in general, operational risk may not be apparent from outside the organisation.

2.6 Emerging markets risk

(a) The securities markets of emerging countries are in the early stages of their development and many of them lack the levels of transparency, liquidity, efficiency and regulation characteristic of more developed markets. In some of these markets, standard practices, market customs and usages have yet to evolve and be readily identifiable as such by market participants. The credit rating of local financial institutions may not be high and there may be limited trust in such institutions. Government supervision of securities markets, investment intermediaries and of quoted companies may be considerably less well developed than in many countries with well-established markets and, in some cases, effectively non-existent. Regulations may be unclear in their scope and effect, and there may be a greater risk than in more developed countries of activities subsequently being regarded as not in compliance with fiscal, currency control, securities, corporate or other applicable regulations. In addition, where a system of regulation is present, it may lack any, or any adequate, mechanism to enforce compliance by participants.

(b) The valuation of both enterprises and securities in some countries has sometimes proved problematic in the absence of efficient secondary markets. In particular, the illiquidity of the markets in general or of particular securities in some countries may make it difficult to determine an accurate valuation for a particular security or whether such security could actually be sold at such a price.

(c) Many emerging countries also have considerable external debt, which could affect the proper functioning of their economies with a corresponding adverse impact on the performance of their markets. Tax regimes may be subject to the risk of a sudden imposition of arbitrary or onerous taxes, which could adversely affect foreign investors.

(d) Businesses in these countries may have a limited history operating in the market conditions existing in more developed markets. Accordingly, when compared to companies in more developed markets, such businesses may be characterised by a lack of management who are experienced in market conditions and a limited capital base with which to develop their operations.
(e) The relative infancy of political systems in some jurisdictions may mean that they are more vulnerable in the face of popular dissatisfaction with reform, political or diplomatic developments, or social, ethnic or religious instability. Such developments, if they were to occur, could in turn lead to a reversal of some or all democratic reforms, a backlash against foreign investment and a move to a centralised planned economy and state ownership of assets. This could involve the compulsory nationalisation or expropriation of foreign-owned assets without adequate compensation, or the restructuring of particular industry sectors in a way which could adversely affect private investors in such sectors.

(f) Foreign investment in emerging countries is in some cases restricted. Some of these countries have non-convertible currencies and the value of investments may be affected by fluctuations in available currency rates and exchange control regulations (which could change at any time). The repatriation of investors’ funds and profits may therefore be restricted or difficult and could involve significant cost. Moreover, considerable delays may occur in the transfer of funds within, and with repatriation of monies out of, these countries.

(g) In some countries the tax position is complex and subject to more frequent change than in western countries. It may not be possible to reclaim tax even where this is theoretically possible due to practical and timing issues.

(h) Many emerging countries do not yet have a legal system comparable to those of more developed countries. Legal reforms may not always correspond to market developments, resulting in ambiguities and inconsistencies which increase the risk of investing in these countries. Legislation to safeguard the rights of private ownership and control as well as establishing intellectual property concepts may not yet be in place, and there is risk of conflicting rules and regulations. Laws and regulations governing investment in securities markets may not exist or may be subject to inconsistent or arbitrary interpretation or application. The independence of the judicial systems, and their susceptibility to economic, or political influences, may be largely untested. It may be impossible to predict whether a foreign investor would obtain effective redress in the local courts in respect of a breach of local laws or regulations, or in an ownership dispute.

(i) The concepts of ownership of and procedures for the transfer of securities in emerging countries may differ radically from those in more developed markets. Registration of shares may not be subject to standardised procedures or to a centralised system, and may be effected on an ad hoc basis. The concept of nominee ownership may be undeveloped and, in some cases, not recognised at all. As a result, registration may be administratively cumbersome and time consuming, leading to delays in settling trades, ownership disputes and constraints on trading. The realisation of rights of ownership, for example the exercise of shareholders’ rights, cannot be assumed. Moreover, in some markets the risk of conflicts of
interest on the part of those responsible for the conduct of the registration procedures, and the risk of fraud (for example, in connection with physical certificates) or of a registrar refusing to effect registration without justification (or of a registrar deleting a registration once it has occurred, with a consequential total loss of investment) is higher in many cases than in more developed markets.

(j) Rules in emerging countries regarding ownership and corporate governance of domestic companies (for example, limiting the ability of management to effect transactions with affiliates or to sell or otherwise dispose of their company’s assets) may not exist or may confer little practical protection on minority shareholders. Disclosure and reporting requirements are in many cases less than in more developed countries and may be non-existent or rudimentary. Anti-dilution protection may also be very limited. Redress for violations of shareholder rights may be difficult in the absence of a system of derivative or class action litigation.

(k) Accounting, auditing and financial reporting standards in many emerging countries are not yet equivalent to those applicable in more developed countries and in some of these countries are of virtually no assistance to an investor. The availability, quality and reliability of corporate information (including official data) is likely to be lower than that in respect of investments in more developed markets.

2.7 Clearing house protections and settlement risk

(a) On many exchanges, the performance of a transaction may be “guaranteed” by the exchange or clearing house. However, this guarantee is unlikely in most circumstances to cover you in your dealings with an exchange member or other intermediary and may not protect you if the broker or another party that you have instructed in respect of the transaction defaults on its obligations to you.

(b) Settlement risk is the risk that a counterparty does not deliver the security (or its value) in accordance with the agreed terms after the other counterparty has already fulfilled its part of the agreement to so deliver. Settlement risk increases where different legs of the transaction settle in different time zones or in different settlement systems where netting is not possible. This risk is particularly acute in foreign exchange transactions and currency swap transactions.

2.8 Counterparty insolvency risk

(a) The insolvency or default of the firm with whom you are dealing, or of any brokers involved with your transaction, may lead to positions being liquidated or closed out without your consent or, indeed, investments not being returned to you. There is also insolvency risk in relation to the investment itself, for example of the company that issued a bond or of the counterparty to off-exchange derivatives (where the risk relates to the derivative itself and to any collateral held by the counterparty).
2.9 Risk associated with short selling

(a) Selling “short” means to sell financial instruments that you do not own at the time of the sale. The seller has an obligation to deliver the product sold at the settlement date which will generally be a few days later than the trade date, so he will either go into the market to buy the relevant financial instruments for delivery or he will “borrow” the relevant financial instruments under a stock lending arrangement.

(b) Short selling is a technique used by investors who want to try to profit from the falling price of a financial instrument. If the price of the financial instrument drops after the investor has sold short (in other words at the time when he is buying or borrowing the relevant financial instruments for delivery), the investor will make a profit. If however the price of the financial instrument rises after the investor has sold short, the investor will have automatically made a loss, and the loss has the potential to get bigger and bigger if the price of the financial instrument continues to rise before the investor has gone into the market to buy or borrow the financial instrument to settle the short sale.

2.10 Risk associated with commissions and transaction costs

(a) When products are purchased or sold, several types of incidental costs (including transaction fees and commissions) are incurred in addition to the current price of the security. These incidental costs may significantly reduce or even exclude the profit potential of the products. To the extent that additional domestic or foreign parties are involved in the execution of an order, including but not limited to domestic dealers or brokers in foreign markets, you must take into account that you may also be charged for the brokerage fees, commissions and other fees and expenses of such parties (third party costs).

(b) In addition to such costs directly related to the purchase of products (direct costs), you must also take into account any follow-up costs (such as custody fees). You should inform yourself about any additional costs incurred in connection with the purchase, custody or sale of an investment before investing. The effect of transaction costs (for example on a new issue of securities) may result in the issue price of such securities falling below the market value when trading starts.

(c) Before you begin to trade, you should obtain details of all commissions and other charges for which you must be liable.

2.11 Risk associated with suspensions of trading and grey market investments

(a) Under certain trading conditions it may be difficult or impossible to liquidate a position. This may occur, for example, at times of rapid price movement if the price rises or falls in one trading session to such an extent that under the rules of the relevant exchange trading is suspended or restricted. Placing a stop-loss order will
not necessarily limit your losses to the intended amounts, because market conditions may make it impossible to execute such an order at the stipulated price.

(b) Transactions may be entered into in:

(i) a security whose listing on an exchange is suspended, or the listing of or dealings in which have been discontinued, or which is subject to an exchange announcement suspending or prohibiting dealings; or

(ii) a grey market security, which is a security for which application has been made for listing or admission to dealings on an exchange where the security’s listing or admission has not yet taken place (otherwise than because the application has been rejected) and the security is not already listed or admitted to dealings on another exchange.

(c) There may be insufficient published information on which to base a decision to buy or sell such securities.

(d) Both exchange listed and traded and off-exchange investments may be non-readily realisable. These are investments in which the market is limited or could become so. Accordingly, it may be difficult to assess their market value and/or to liquidate your position.

2.12 Risk associated with stabilisation

(a) Transactions may be carried out in securities where the price may have been influenced by measures taken to stabilise it.

(b) Stabilisation enables the market price of a security to be maintained artificially during the period when a new issue of securities is sold to the public. Stabilisation may affect not only the price of the new issue but also the price of other securities relating to it. Regulations allow stabilisation in order to help counter the fact that, when a new issue comes on to the market for the first time, the price can sometimes drop for a time before buyers are found.

(c) Stabilisation is carried out by a 'stabilisation manager' (normally the firm chiefly responsible for bringing a new issue to market). As long as the stabilising manager follows a strict set of rules, he is entitled to buy back securities that were previously sold to investors or allotted to institutions which have decided not to keep them. The effect of this may be to keep the price at a higher level than it would otherwise be during the period of stabilisation.

(d) Stabilisation measures:

(i) limit the period when a stabilising manager may stabilise a new issue;
(ii) fix the price at which he may stabilise (in the case of shares and warrants but not bonds); and

(iii) require him to disclose that he may be stabilising but not that he is actually doing so.

(e) The fact that a new issue or a related security is being stabilised should not be taken as any indication of the level of interest from investors, nor of the price at which they are prepared to buy the securities.

2.13 Risk associated with combined instruments

(a) Any combined instrument, such as an asset swap, where the performance or valuation of one financial instrument is dependent on that of another, is exposed to the risk of both those products and so combined products may contain a risk which is greater than those of its components generally, although certain combined instruments may contain risk mitigation features, such as principal protected instruments.

2.14 Risk associated with instruments referring to baskets

(a) Certain financial instruments may be defined in relation to a basket of assets (such as shares, indices etc.) rather than individual assets. They may therefore be affected by the number and quality of reference assets included in such basket. Generally, the value of a basket that includes reference assets from a number of reference asset issuers or indices will be less affected by changes in the value of any particular reference asset included therein than a basket that includes fewer reference assets, or that gives greater weight to some reference assets included therein. In addition, if the reference assets included in basket are concentrated in a particular industry, the value of such a basket will be more affected by the economic, financial and other factors affecting that industry than if the reference assets included in the basket are in various industries that are affected by different economic, financial or other factors or are affected by such factors in different ways.

2.15 Liquidity risk

(a) The liquidity of an instrument is directly affected by the supply and demand for that instrument and also indirectly by other factors, including market disruptions (for example a disruption on the relevant exchange) or infrastructure issues, such as a lack of sophistication or disruption in the securities settlement process. Under certain trading conditions it may be difficult or impossible to liquidate or acquire a position. This may occur, for example, at times of rapid price movement if the price rises or falls to such an extent that under the rules of the relevant exchange trading is suspended or restricted. Placing a stop-loss order will not necessarily limit your losses to intended amounts, but market conditions may make it impossible to
execute such an order at the stipulated price. In addition, unless the contract terms so provide, a party may not have to accept early termination of a contract or buy back or redeem the relevant product and there may therefore be zero liquidity in the product. In other cases, early termination, realisation or redemption may result in you receiving substantially less than you paid for the product or, in some cases, nothing at all.

2.16 Break costs

(a) If you enter into a contract and decide to close out the transaction before its scheduled termination date, you may have to pay break costs. These will be calculated by reference to prevailing market conditions on the basis of current market levels and market expectations of future performance and future obligations under the transaction and may include associated costs, such as credit charges, cost of funding, and any costs incurred in terminating any related financial instrument or trading position. Please note that such break costs may be substantial.

2.17 Collateral

(a) Where transactions require a transfer or the depositing of collateral as security with a counterparty or a central counterparty, these counterparties may treat such collateral differently according to the type of transaction and where it is traded. There could be significant differences in the treatment of your collateral depending on whether the trading is on a regulated market, with the rules of that market applying, is off-exchange or such transaction is cleared through a central counterparty. Transferred collateral may lose its identity as your property once transferred to the broker or counterparty. Even if your dealings should ultimately prove profitable, you may not get back the same assets which was paid on your behalf and may have to accept payment in cash.

2.18 Other risks

(a) Your firm may not deal directly in the relevant market but may act through one or more brokers or intermediaries. In such cases, your positions may be affected by the performance of those third parties in addition to the performance of your firm. In addition, settlement of such transactions may not be effected via the market itself but may be effected on the books of your firm or of a broker or intermediary if such transactions can be crossed with equal but opposite orders of another participant transacting through the same firm, broker or intermediary. Your rights in such circumstances differ from those you would enjoy if your transaction was effected in the market.

(b) The price and liquidity of any investment depends upon the availability and value of the underlying asset, which can be affected by a number of extrinsic factors including, but not limited to, political, environmental and technical. Such factors can also affect the ability to settle or perform on time or at all.
Broker terms, standard terms of business and/or commercial and industry published agreements, whether or not negotiated, pursuant to which you enter into certain transactions, whether exchange-traded or off-exchange, may contain standard terms which nevertheless contain risks. You should consider the terms of such agreements carefully and seek independent legal advice if necessary.

Any payments made or received in relation to any investment may be subject to tax and you should seek professional advice in this respect.

Where you are unable to transfer a particular instrument which you hold, to exit your commitment under that instrument, you may have to offset your position by either buying back a short position or selling a long position. Such an offsetting transaction may have to be over the counter and the terms of such a contract may not match entirely those of the initial instrument. For example, the price of such a contract may be more or less than you received or paid for the sale or purchase of the initial instrument.

3. DERIVATIVES

3.1 General

A derivative is a financial instrument, the value of which is derived from an underlying asset's value. Rather than trade or exchange the asset itself, an agreement is entered into to exchange money, assets or some other value at some future date based on the underlying asset. A premium may also be payable to acquire the derivative instrument.

You should not deal in derivative products unless you understand the nature of the contract you are entering into and the extent of your exposure to risk. You should also be satisfied that the contract is suitable for you in the light of your circumstances and financial position.

An investor in derivatives often assumes a high level of risk, even where the intention behind entering to a derivative is to reduce risk by way of hedging, and therefore investments in derivatives should be made with caution, especially for less experienced investors or investors with a limited amount of capital to invest.

If a derivative transaction is particularly large or if the relevant market is illiquid (as may be the case with many privately negotiated off-exchange derivatives), it may not be possible to initiate a transaction or liquidate a position at an advantageous price.

Off-exchange derivatives may take the form of unlisted transferable securities or bilateral “over-the-counter” contracts (“OTC”). Although these forms of derivatives may be traded differently, both arrangements may be subject to credit risk of the
Issuer (if transferable securities) or the counterparty (if OTCs) and, like any contract, are subject also to the particular terms of the contract (whether a one-off transferable security or OTC contract, or a master agreement), as well as the risks identified below. In particular, with an OTC contract, the counterparty may not be bound to “close out” or liquidate this position, and so it may not be possible to terminate a loss-making contract. Off-exchange derivatives are individually negotiated. As the terms of the transactions are not standardised and no centralised pricing source exists (as exists for exchange traded instruments), the transactions may be difficult to value. Different pricing formulas and financial assumptions may yield different values, and different financial institutions may quote different prices for the same transaction.

(f) Derivatives can be used for speculative purposes or as hedges to manage other investment or economic risks. In all cases the suitability of the transaction for the particular investor should be very carefully considered.

(g) You are therefore advised to ask about the terms and conditions of the specific derivatives and associated obligations (e.g. the circumstances under which you may become obligated to make or take delivery of an underlying asset 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 asset. Normal pricing relationships between the underlying asset and the derivative may not exist in all cases. 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 assess ‘fair’ value.

### 3.2 Contingent liability transactions

(a) Contingent liability transactions, which require the provision of collateral, require you to make a series of payments against the purchase price, instead of paying the whole purchase price immediately.

(b) If you trade in futures, contracts for differences or sell options you may sustain a total loss of the collateral you deposit with your firm to establish or maintain a position. If the market moves against you, you may be called upon to pay substantial additional collateral at short notice to maintain the position. If you fail to do so within the time required, your position may be liquidated at a loss and you will be responsible for the resulting deficit.

(c) Even if a transaction does not require collateral, it may still carry an obligation to make further payments in certain circumstances over and above any amount paid when you entered the contract.
3.3  **Limited liability transactions**

(a) Before entering into a limited liability transaction, you should obtain from your firm, or the firm with whom you are dealing, a formal written statement confirming that the extent of your loss liability on each transaction will be limited to an amount agreed by you before you enter into the transaction.

(b) The amount you can lose in limited liability transactions will be less than in other transactions, which have no predetermined loss limit. Nevertheless, even though the extent of loss will be subject to the agreed limit, you may sustain the loss in a relatively short time. Your loss may be limited, but the risk of sustaining a total loss to the amount agreed is substantial.

3.4  **Options**

(a) An option is a derivative which gives the holder, in exchange for the payment of a premium, the option to purchase (which is referred to as a call option) or to sell (which is referred to as a put option) an underlying asset. There are several option styles including (but not limited to) American-, European- and Bermuda-style. 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.

(b) Buying options involves less risk than selling options because, if the price of the underlying asset moves against you, you can simply allow the option to lapse. The maximum loss is limited to the premium, plus any commission or other transaction charges. The risk will be higher if the option is to purchase a financial instrument such as a future. If exercise, the option will leave the holder with the risks associated with futures.

(c) If you write (sell) an option, the risk involved is considerably greater than buying options. You may be liable for collateral to maintain your position and a loss may be sustained well in excess of the premium received. By writing an option, you accept a legal obligation to purchase or sell the underlying asset if the option is exercised against you, however far the market price has moved away from the exercise price. If you already own the underlying asset which you have contracted to sell (when the options will be known as “covered options”) the risk is reduced. If you do not own the underlying asset ("uncovered options") the risk can be unlimited. Only experienced persons should contemplate writing uncovered options, and then only after securing full details of the applicable conditions and potential risk exposure.

(d) Certain London Stock Exchange ("LSE") member firms under special LSE rules write a particular type of option called a 'traditional option'. These may involve greater risk than other options. Two-way prices are not usually quoted and there is no access to
a market via a market on which to close out an open position or to effect an equal and opposite transaction to reverse an open position. It may be difficult to assess its value or for the seller of such an option to manage his exposure to risk.

(e) Certain options markets operate on a collateralised basis, under which buyers do not pay the full premium on their option at the time they purchase it. In this situation you may subsequently be called upon to pay collateral on the option up to the level of your premium. If you fail to do so as required, your position may be closed or liquidated.

(f) Depending on the type of option entered into, there may be increased exposure to market risk when compared to other financial products. If you buy an American-style 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. 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).

(g) It is even possible for the holder of an exercised, “in-the-money” option to lose money on an option transaction. Such a situation exists whenever the value received under the option fails to exceed the purchaser’s costs of entering into the option transaction (the premium and any other costs and expenses).

(h) If you are a potential writer of an option, you should consider how the type of option affects the timing of your potential payment and delivery obligations thereunder. As the writer of a European-style option, the timing of any payment and delivery is predictable. Absent early termination, no settlements will be necessary prior to the expiration date. As the writer of an American-style option, however, you must be certain that you are prepared to satisfy your potential payment and delivery obligations at any time during the exercise period (possibly quite soon following the sale of the option).

3.5 Futures

(a) Transactions in futures involve the obligation to make, or to take, delivery of the underlying asset of the contract at a future date, or in some cases to settle the position with cash. They carry a high degree of risk. The ‘gearing’ or ‘leverage’ often obtainable in futures trading means that a small deposit or down payment can lead to large losses as well as gains. It also means that a relatively small movement can lead to a proportionately much larger movement in the value of your investment, and this can work against you as well as for you.

(b) Futures transactions have a contingent liability, and you should be aware of the implications of this, in particular collateralisation requirements: these are that, on a
daily basis, with all exchange-traded futures, you will have to pay over in cash losses incurred on a daily basis and if you fail to, the contract may be terminated.

3.6 Forwards

(a) Transactions in forwards have the same risks as futures, as they too involve the obligation to make or take delivery of an underlying asset, but they involve a higher counterparty default risk as they are typically traded OTC off-exchange. They are also less likely to be closed out prior to maturity, meaning that you are less able to take advantage of fluctuations in asset prices by selling the forward in the market.

3.7 Swaps

(a) A swap agreement is a derivative where two counterparties exchange one stream of cash flows (generally fixed at the strike price) against another stream, calculated by reference to an “underlying” (such as securities’ indices, bonds currencies, interest rates or commodities, or more intangible items).

(b) The key risk associated with swaps is where the price of the underlying moves significantly away from the strike price of the swap. Where, for example, one counterparty pays a fixed rate of 5% and the other counterparty pays a floating rate by reference to Bank of England base rate, and the Bank of England base rate falls to 1% or lower, the counterparty paying the fixed rate is well “out-of-the money” and owes much more than it would if it did not enter into the swap. A counterparty being out of the money may also be seen as a higher credit risk as its outstanding liabilities are higher than they would otherwise be, affecting that counterparty’s other transactions.

(c) Counterparty insolvency risk can affect swaps significantly: for example if a party, A, wants a fixed interest rate loan and so swaps a variable rate loan with another party, B, thereby swapping payments, this will synthetically create a fixed rate for A. However, if B goes insolvent, A will lose its fixed rate and will be paying a variable rate again. If interest rates have gone up a lot, it is possible that A will struggle to repay.

3.8 Caps

(a) A cap is similar to a swap except that the fixed stream is only fixed once the price of the underlying reaches a certain upper limit. Until that point (and after it reduces under the limit) both counterparties pay each other at the price of the underlying.

(b) A cap is less risky than a swap for a counterparty paying the fixed price as it can take advantage of reductions in the price of the underlying, while being protected from certain increases in the price. However, it is more risky for the other counterparty, as the other counterparty will not be able to take advantage of the price going down
(as the other party will pay the same rate) but will have to absorb the higher price where it goes above the cap.

(c) To compensate for this risk, the counterparty paying the fixed price will often pay a premium. Due to the inherent uncertainties of calculating the value of this risk, the premium may be higher than the counterparty paying it would pay in total under a swap.

3.9 Floors

(a) A floor is similar to a cap except that the fixed stream is fixed once the price of the underlying reaches a lower limit. It presents similar risks to a cap for both parties except that the risks apply to the opposite parties compared to a cap.

3.10 Collars

(a) A collar is a combination of a cap and a floor, in that the fixed stream is only fixed where the price of the underlying either reaches an upper limit or a lower limit. As such, it presents the same risks as a cap or a floor to both parties depending on the price of the underlying at any given time.

(b) While a premium is often payable in respect of a collar, one or other of the parties may also agree to mitigate their risks by changing the value of the fixed stream from (as would normally be the case under a floor) the value of the lower limit to a higher value. For example, an interest rate collar may stipulate that where base rate is 5% or lower a party pays 5.5%, where it is between 5% and 7% the party pays base rate, and where it is 7% or higher the party pays 7%. There may even be an intermediate stipulation where if, for example, base rate is between 5.5% and 6.5%, the party pays 6%. These variations are all ways of mitigating risks for each party, but a party entering into such an inherently complex instrument should consider the benefits of the instrument as compared to the position if it does not enter into the instrument at all, as it may have unanticipated adverse consequences.

3.11 Swaptions

(a) 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 preagreed swap agreement. It therefore combines the risks of options and swaps. The risks of entering into a swap are exacerbated by the fact that only the pre-existing swap may be entered into under the option, so if there is a more advantageous swap available it cannot be entered into and the premium paid for the option will be lost.
3.12 Spread Options

(a) Spread options are options that are valued on the basis of the difference between the price of two or more assets. The underlying assets can be any assets including equities, bonds and currencies. The value of the spread option is therefore determined by the volatility and risk exposures of the underlying assets. A spread option will have all of the risks associated with other options, but the risks are compounded by dependence on the two separate variables instead of simply one. Spread options are also likely to be traded OTC rather than on an exchange, which carries greater counterparty default risk.

3.13 Commodity Derivatives

(a) Where the value of a derivative is linked to the price of a commodity, the extra volatility of commodity prices as compared with other prices may compound the risks of the derivatives. In particular, the risks associated with being “out-of-the-money” are greater as a counterparty may be significantly more “out-of-the-money” than it is likely to be with derivatives based on a different underlying.

3.14 Credit Derivatives

(a) Credit derivatives are derivatives which are intended to transfer credit risk. The price is determined by the credit risk of the relevant borrower. A typical credit derivative will involve the transfer of the risk to a third party (as counterparty to the credit derivative) such that the third party will (in exchange for a fee) pay the outstanding liabilities of the borrower in the place of the borrower. As with other forms of derivative, credit derivatives are exposed to market risk, counterparty risk and liquidity risk, but in addition to the normal counterparty risk, parties entering into credit derivatives are exposed to the risk of the borrower. As the price of the credit derivative is dependent on this risk, the accuracy of the valuation of the credit derivative is difficult to determine, and the price paid for the derivative may be higher than the risk of borrower default. Credit derivatives may also create systemic risks in that certain market participants may assess risk less accurately because they can pass risk onto third parties under the credit derivative.

3.15 Non-Deliverable Forwards

(a) Non-deliverable forwards are forward contracts in foreign currency where, unlike a normal forward, no currency is actually purchased on the forward’s maturity date. Instead, the forward is cash settled on the basis of the difference between the agreed exchange rate in the forward and the actual spot rate at the maturity date. Non-deliverable forwards are typically used in relation to non-convertible foreign currency where a normal forward is not possible because certain governments prohibit forward trading in their currency.
(b) Non-deliverable forwards carry lower counterparty risk as instead of needing to pay the full amount for actual foreign currency, parties to a non-deliverable forward are only required to pay the difference between the agreed forward rate and the actual spot rate. However, in addition to normal derivatives risks, they carry risks associated with valuing the payment on the maturity date. This is because, unlike a normal foreign exchange forward where the exchange happens according to the applicable spot rate at the time (and one party bears the profit or loss on that exchange compared to the forward rate), in a non-deliverable forward the currency is not actually exchanged, and so a spot rate has to be derived from market indicators and quotes. This is inherently less certain and therefore riskier.

3.16 Asset Swaps

(a) Asset swaps are a category of swaps that are based on underlying exchange of fixed income and non-fixed income investments rather than cash flows. The intention is that the fixed income investment (such as a bond) will pay out what would in a normal swap be the fixed cash flow while the other investment will pay out the floating cash flow. In addition to the risks generally presented by swaps, therefore, counterparties to an asset swap will be subject to all of the risks associated with financial instruments such as bonds, including default risk associated with the issuer of the bond.

3.17 Forward Rate Agreements

(a) A forward rate agreement is an agreement which determines the interest rate or currency exchange to be paid or received on an obligation beginning in the future. They therefore carry all of the risks associated with futures or forwards, in that they commit the parties to a particular price which may be significantly different and less advantageous than the market price, as well as the additional disadvantage that the rate is paid on a sum also pre-determined and set in the future. A counterparty may therefore end up being “out of the money” twice – first as regards the sum to be paid and second as regards the rate.

3.18 Repos

(a) Repos (and stock lending) are not strictly derivatives but are often grouped with them as they have some similar structural features.

(b) The term repo refers to a sale and repurchase transaction in securities, normally fixed income securities such as bonds. In a repo, the repo seller transfers title in the securities to the repo purchaser. The repo is in effect for a specific period, and at the end of the period the repo purchaser transfers title to equivalent securities (of the same issuer and type) to the repo seller.
(c) The repo purchaser’s obligation to transfer equivalent securities is secured against collateral (usually under a Title Transfer Collateral Arrangement). There is, accordingly, credit risk. Selling securities under a repo may also affect your tax position (although you should seek independent advice on the issue).

(d) As a result of selling securities under a repo you will cease to be the owner of them, although you will have the right to reacquire at a future date equivalent securities (or in certain circumstances their cash value or the proceeds of redemption). However, except to the extent that you have received collateral, your right to the repurchase of securities is subject to the risk of insolvency or other non-performance by the borrower. Since you are not the owner of the securities during the period of the repo, you will not have voting rights nor will you directly receive dividends or other corporate actions although you will normally be entitled to a payment from the repo purchaser equivalent to the dividend you would otherwise have received and the repo purchaser will be required to account for you for the benefit of corporate actions.

(e) Repos also entail counterparty default risk and operational risks such as the non-settlement or delay in settlement of instructions.

3.19 Stock Lending

(a) Stock lending (or securities lending) agreements are very similar to repos in structure. Although the terminology is different (referring to lender and borrower as opposed to seller and purchaser) securities are not “lent” but are in fact fully legally transferred. The risks are therefore broadly similar in terms of losing rights over securities transferred and, in particular, being subject to counterparty default risk.

(b) A key difference is that repos generally use fixed income products whereas stock lending uses equities. Equities can often be more risky for the party that holds them than fixed income products as what they pay can fluctuate significantly. However, stock lending agreements normally require any payments to be transferred to the lender, so the risks of lower payments transfer to the lender rather than to the borrower. Whereas most repo takes place so that the seller can obtain cash, stock lending is driven by the borrower who wants to hold the securities for a particular time. The borrower will therefore need to consider carefully the reasons it has for holding the securities under a stock lending agreement.

4. FIXED INCOME INSTRUMENTS

4.1 Corporate Bonds

(a) Corporate bonds are debt instruments issued by a corporate entity. They will generally pay a fixed rate of interest to their holders, and they are easily transferable to new holders. They are valid for a certain period and at the maturity date they can
be exchanged for the principal amount. All debt instruments including corporate bonds are potentially exposed to market risk, in particular credit risk and interest rate risk. Debt securities may be subject to the risk of the issuer’s inability to meet principal and/or interest payments on the obligation and may also be subject to price volatility due to such factors as interest rate sensitivity, market perception of the creditworthiness of the issuer, general market liquidity, and other economic factors, amongst other issues. When interest rates rise, the value of corporate debt securities can be expected to decline. Fixed-rate transferable debt securities with longer maturities/lower interest rates tend to be more sensitive to interest rate movements than those with shorter maturities/higher interest rates.

(b) Changes in market interest rates have a substantially stronger impact on the prices of zero coupon bonds (that is, bonds that do not pay interest) than on the prices of ordinary bonds because the discounted issue prices are substantially below par. If market interest rates increase, zero coupon bonds can suffer higher price losses than other bonds having the same maturity and credit rating.

4.2 Government Bonds

(a) Government bonds are bonds issued by a range of government entities, from national governments (“sovereign debt”) to local or regional bodies (“municipal bonds”). The risk level of government bonds depends on the country or entity issuing the debt; developed country bonds are considered to carry less risk than bonds issued by developing countries. Credit rating agencies rate a country’s risk of debt default. As with corporate bonds, government bonds may be subject to the risk of the issuer’s inability to meet principal and/or interest payments on the obligation and may also be subject to price volatility due to such factors as interest rate sensitivity, market perception of the creditworthiness of the issuer, general market liquidity, and other economic factors, amongst other issues.

(b) Government bonds as an asset class in general are often rated higher than corporate bonds by credit rating agencies, indicating lower risk. However, whereas corporates may be subject to political risk depending on their jurisdiction, political risk (risk arising from decisions of governments or other political authorities) is the key risk associated with government bonds. Political risk may be harder to evaluate than commercial risk and even well-developed jurisdictions may unexpectedly and suddenly present political risks affecting the creditworthiness of government bonds.

4.3 Convertible Bonds

(a) Convertible bonds are debt securities issued in relation to a company that can be converted into an agreed quantity of the company’s shares, usually at the discretion of the bondholder but otherwise at certain points during the term of the bond. In addition to risks generally associated with debt securities, investors in convertible bonds are subject to the risks of equity securities.
(b) Generally, holdings in equity securities expose holders to more risk than debt securities since remuneration is tied more closely to the profitability of the issuer. In the event of insolvency (or an equivalent event) of the issuer, your claims for recovery of your equity investment in the issuer will generally be subordinated to the claims of preferred or secured creditors and ordinary unsecured creditors of the issuer.

(c) Shares have exposure to all the major market risk types. In addition, there is a risk that there could be volatility or problems in the sector that the company is in. If the company is private, i.e. not listed or traded on an exchange, or is listed but only traded infrequently, there may also be liquidity risk, whereby shares could become very difficult to dispose of. If shares have to be sold quickly, you may get back much less than was paid for them.

4.4 Callable Bonds

(a) Callable bonds are debt securities that can be redeemed by the issuer of the security prior to the maturity date. The issuer may wish to call an outstanding bond in order to re-issue the debt securities; for instance, in order to take advantage of a lower interest rate. Callable bonds tend to pay a higher interest rate than an ordinary bond; however, they create significant uncertainty for the bondholder. Bondholders are exposed to normal market risks, including counterparty default risk; however, in a callable bond, they are subject to the risks of general movements in market interest rates as well as the commercial judgment of the counterparty as to when to call the bond. A less risky callable bond only allows the issuer to call the bond following the occurrence of certain events, but it remains out of the control of the investor.

4.5 Structured Securities including Asset Backed Securities

(a) Structured securities, including asset backed securities and covered bonds, typically, but not always, are debt securities whose value at maturity or coupon rate is determined by reference to other securities, securities indices, fund units, currencies, commodities, mortgage pools, credit card pools, loan pools or other assets or financial indicators. The performance of structured securities depends to a great extent on the performance of the security, currency, other instrument(s) or financial indicators by reference to which their value is determined, and may also be influenced by interest rate changes. At the same time, structured securities are subject to the credit risks associated with the issuer of the security, and their values may decline if the issuer's creditworthiness deteriorates. There may be much less secondary liquidity for structured and asset backed products than for other fixed income instruments issued by the highest rated entities.
5. **MONEY-MARKET INSTRUMENTS**

5.1 **Certificates of Deposit**

(a) A certificate of deposit is a promissory note issued by a bank in exchange for a deposit. Holders of the certificate of deposit have restricted access to the funds deposited until the maturity date, at which point the funds are returned with interest.

(b) You should familiarise yourself with the protections accorded to you in respect of 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.

(c) The major risk of purchasing a certificate of deposit in the money markets, other than counterparty risk, is that there is greater uncertainty associated with holding the investment for a long period of time and the holder of the certificate foregoes the opportunity to invest in other instruments.

5.2 **Commercial Paper**

(a) Commercial paper is an unsecured short-term debt instrument issued by a company to meet short-term liabilities. The maturity date on commercial paper is normally close to its issue date. Commercial paper is typically issued at a discount (for lower interest rates). Commercial paper is often unsecured meaning that counterparty default risk is higher than with other debt securities. As with certificates of deposit, there are risks associated with holding a more illiquid asset than a debt or equity security – however, the short maturity period for commercial paper mitigates this risk.

5.3 **Treasury Bill**

(a) Treasury bills are short-term debt instruments backed by governments with a maturity of less than one year. The principal and interest rates of bills are paid to investors cumulatively at the maturity date; as such investors do not receive regular interest payments. Bills are issued at relatively low value and are therefore accessible to a wide range of investors. However, due to their low risk they offer low returns and do not generate steady cash flows.

5.4 **Notice Money**

(a) Notice money is the offer of funds by a bank that must be repaid by the borrower upon demand (i.e. a very short term loan). Notice money therefore lacks the
maturity date and payment schedule of a term loan. The interest rate on notice money can fluctuate significantly during its period of validity and parties to it are subject to the risks associated with this uncertainty.