SCHEDULE OF PRODUCT AND SERVICE RISK DISCLOSURES

PART I: INTRODUCTION

This Schedule of Product and Service Risk Disclosures is for use by professional clients of the London branch of Royal Bank of Canada and RBC Europe Limited (together, "**RBCCM**") and must not be relied on by anyone else.

This Schedule of Product and Service Risk Disclosures cannot disclose all the risks and other significant aspects of the products you may purchase, sell or subscribe for from or through us ("**products**"), but is intended to give you information on, and a warning of, the risks associated with them so that you are reasonably able to understand the nature and risks of the services and of the specific types of investment being offered and, consequently, to take investment decisions on an informed basis. You should also read any product-/transaction-specific disclosures that may be included in any product-/transaction-specific documentation provided to you.

All defined terms used herein shall have the meaning given in the RBCCM Terms of Business for Professional Clients (the "**Terms**"), unless specified otherwise.

You must not rely on the guidance contained in this Schedule of Product and Service Risk Disclosures as investment advice based on your personal circumstances, nor as a recommendation to enter into any of the services or invest in any of the products listed below. Where you are unclear as to the meaning of any of the disclosures or warnings described below, we would strongly recommend that you seek independent legal or financial advice.

You should not deal in these or any other 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 product and/or service is suitable for you in light of your circumstances and financial position and, where necessary, you should seek appropriate independent advice in advance of any investment decisions.

Nothing in this Schedule of Product and Service Risk Disclosures obliges RBCCM to deal with you in respect of the products described.

Where we provide you with information relating to a particular tax treatment, please note that this information may not be tailored to your individual circumstances and may be subject to change in the future.

If we provide you with financial analysis/information in relation to the past, simulated or future performance of financial instruments, a financial index or an investment, please be aware that this is not a reliable indicator of future results or performance.

Risk factors may occur simultaneously and/or may compound each other resulting in an unpredictable effect on the value of any investment. In any of the situations described below, the use of leverage (which has the effect of magnifying potential positive or negative outcomes) may significantly increase the impact on you of any of the risks described. As a result of leverage, minor changes in the price of an underlying security or benchmark may result in a disproportionately significant change in the price of the leveraged product or instrument and lead to sudden and large falls in the value of such products and investments. Additionally, the insolvency (or other similar process) of an issuer of an underlying security may also have a disproportionately greater impact on a holder of a leveraged product or investment than it would have on the holder of the underlying security without leverage.

All financial products carry a certain degree of risk and even low risk investment strategies contain an element of uncertainty. The types of risk that might be of concern will depend on various factors, including how the instrument is created, structured or drafted. The specific risks of a particular product or transaction will depend upon the terms of the product or transaction and the particular circumstances of, and relationships between, the relevant parties involved in such product or transaction. Different instruments involve different levels of exposure to risk and in deciding whether to trade in such instruments or become involved in any financial products you should be aware of the guidance set out below.

PART II: PRODUCTS AND INVESTMENTS

Set out below is an outline of the major categories of risk that may be associated with certain generic types of financial instruments, which should be read in conjunction with Parts III and IV.

1. SHARES AND OTHER TYPES OF EQUITY INSTRUMENTS

1.1 General

A risk with an equity investment is that the company must both grow in value and, if it elects to pay dividends to its shareholders, make adequate dividend payments, or the share price may fall. If the share price falls, the company, if listed or traded on-exchange, may then find it difficult to raise further capital to finance the business, and the company's performance may deteriorate vis à vis its competitors, leading to further reductions in the share price. Ultimately the company may become vulnerable to a takeover or may fail.

Shares have exposure to all the major risk types referred to in Part III below. 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.

1.2 **Ordinary shares**

Ordinary shares are issued by limited liability companies as the primary means of raising risk capital. The issuer has no obligation to repay the original cost of the share, or the capital, to the shareholder until the issuer is wound up (in other words, the issuer company ceases to exist). In return for the capital investment in the share, the issuer may make discretionary dividend payments to shareholders which could take the form of cash or additional shares. Ordinary shares usually carry a right to vote at general meetings of the issuer.

There is no guaranteed return on an investment in ordinary shares for the reasons set out in 1.1 above, and in a liquidation of the issuer, ordinary shareholders are amongst the last with a right to repayment of capital and any surplus funds of the issuer, which could lead to a loss of a substantial proportion, or all, of the original investment.

1.3 **Preference shares**

Unlike ordinary shares, preference shares give shareholders the right to a fixed dividend, the calculation of which is not based on the success of the issuer company. They therefore tend to be a less risky form of investment than ordinary shares.

Preference shares do not usually give shareholders the right to vote at general meetings of the issuer, but shareholders will have a prior claim to any surplus funds of the issuer compared to ordinary shareholders, should the issuer go into liquidation. There is still a risk that you may lose all or part of your capital.

1.4 **Depositary Receipts**

Depositary Receipts (ADRs, GDRs, etc.) are negotiable certificates, typically issued by a bank, which represent a specific number of shares in a company, traded on a stock exchange which is local or overseas to the issuer of the receipt. They may facilitate investment in the companies due to the widespread availability of price information, lower transaction costs and timely dividend distributions. The risks involved relate both to the underlying shares (see 1.1 – 1.3 above) and to the bank issuing the receipt. In addition, there are important differences between the rights of holders of ADRs and GDRs, (together, "**Depositary Receipts**") and the rights of holders of the shares of the underlying share issuer represented by such Depositary Receipts. The relevant deposit agreement for the Depositary Receipt sets out the rights and responsibilities of the depositary (being the issuer of the Depositary Receipt), the underlying share issuer and holders of the Depositary Receipt which may be different from the rights of holders of the underlying shares. For example, the underlying share issuer may make distributions in respect of its underlying shares that are not passed on to the holders of its Depositary Receipts. Any such differences between the rights of holders of the Depositary Receipts and holders of the underlying shares of the underlying share issuer may be significant and may materially and adversely affect the value of the relevant instruments. Depositary Receipts representing underlying shares in a foreign jurisdiction (in particular an emerging market jurisdiction) also involve risks associated with the securities markets in such jurisdictions, which, along with other factors such as the performance of the underlying shares, could affect the value and liquidity of the Depositary Receipts. As the legal owner of the shares underlying the Depositary Receipts is a bank, in the event that the bank becomes insolvent it is possible that a purchaser of any such Depositary Receipts may lose its rights in respect of the underlying shares.

2. WARRANTS

A warrant is a time-limited right to subscribe for shares, debentures, loan stock or government securities and is exercisable against the original issuer of the underlying securities. A relatively small movement in the price of the underlying security could result in a disproportionately large movement, unfavourable or favourable, in the price of the warrant. The prices of warrants can therefore be volatile.

The right to subscribe for any of the investment products listed in 1 above or 3 or 4 below which a warrant confers, is invariably limited in time, with the consequence that if the investor fails to exercise this right within the pre-determined timescale, the investment becomes worthless.

If subscription rights are exercised, the warrant holder may be required to pay to the issuer additional sums (which may be at or near the value of the underlying assets). Exercise of the warrant will give the warrant holder all the rights and risks of ownership of the underlying investment product.

A warrant is potentially subject to all of the major risk types referred to in Part III below, including the risk of the issuer's insolvency.

You should not buy a warrant unless you are prepared to sustain a total loss of the money you have invested plus any commission or other transaction charges.

Some other instruments are also called warrants but are actually options (for example, a right to acquire securities which is exercisable against someone other than the original issuer of the securities, often called a covered warrant). For these instruments, see 6.3 below.

3. MONEY-MARKET INSTRUMENTS

A money-market instrument is a borrowing of cash for a period, generally no longer than six months, but occasionally up to one year, in which the lender takes a deposit from the money markets in order to lend (or advance) it to the borrower. Unlike in an overdraft, the borrower must specify the exact amount and the period for which he wishes to borrow. In the same way as other debt instruments (see 4 below), money-market instruments may be exposed to the major risk types in Part III below, in particular credit and interest rate risk.

4. DEBT INSTRUMENTS/BONDS/DEBENTURES

All debt instruments are potentially exposed to the major risk types in Part III below, 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 coupons tend to be more sensitive to interest rate movements than those with shorter maturities/higher coupons.

Debt securities issued by banks, certain other financial services firms and, in some cases, their parents and other affiliates may be vulnerable to "bail-in" or equivalent measures, where the issuer (or an affiliated bank or firm) undergoes a resolution (or bank rescue) procedure. In a bail-in, a governmental or other regulatory body (known in the EU as a "resolution authority") may require investors' rights under such securities to be written-off in whole or in part, or converted into equity. The purpose of such a bail-in is to prevent the bank (or other firm) from entering into insolvency proceedings and will therefore precede formal insolvency. This means that the holders of bank and related debt securities may lose some or all of their investment, where the issuer is in financial difficulty, even outside of an insolvency scenario and absent the technical default of the issuer.

However, depending on the applicable regulatory regime, certain safeguards or exclusions may operate so as to protect, or mitigate the loss to, such investors. For example, under the applicable EU regime (the Bank Recovery and Resolution Directive), secured creditors (including secured bond holders) are protected from bail-in (but only to the extent of the value of the collateral/security) and, in principle, no such creditor should be put in a worse position than they would have been in the event of the formal insolvency of the issuer.

5. UNITS IN COLLECTIVE INVESTMENT SCHEMES

Collective investment schemes and their underlying assets are potentially exposed to all of the major risk types referred to in Part III below, including insolvency risk relating to the issuer of the underlying assets.

There are many different types of collective investment schemes. Generally, a collective investment scheme will involve an arrangement that enables a number of investors to 'pool' their assets and have these professionally managed by an independent manager. Investments may typically include gilts, bonds and quoted equities, but depending on the type of scheme, may comprise derivatives, real estate or any other asset. There may be risks on the underlying assets held by the scheme and investors are therefore advised to check whether the scheme holds a number of different assets, thus spreading its risk. Subject to this, investment in such schemes may reduce risk by spreading the investor's investment more widely than may have been possible if he or she were to invest in the assets directly.

The reduction in risk may be achieved because the wide range of investments held in a collective investment scheme can reduce the effect that a change in the value of any one investment may have on the overall performance of the portfolio. Although they are therefore seen as a way to spread risks, the portfolio price can fall as well as rise and, depending on the investment decisions made, a collective investment scheme may be exposed to many different major risk types.

The valuation of a collective investment scheme is generally controlled by the relevant fund manager or the investment adviser (as the case may be). Valuations are performed in accordance with the terms and conditions governing the collective investment scheme. Such valuations may be based upon the unaudited financial records of the collective investment scheme and any accounts pertaining thereto. Such valuations may be preliminary calculations of the net asset values of the collective investment schemes and accounts. The collective investment scheme may hold a significant number of investments which are illiquid or otherwise not actively traded and in respect of which reliable prices may be difficult to obtain. In consequence, the relevant fund manager or the investment adviser may vary certain quotations for such investments held by the collective investment scheme in order to reflect its judgement as to the fair value thereof. Valuations may therefore be subject to subsequent adjustments upward or downward. Uncertainties as to the valuation of the collective investment scheme assets and/or accounts may have an adverse effect on the net asset value of the relevant collective investment scheme where such judgements regarding valuations prove to be incorrect.

A collective investment scheme and any collective investment scheme components in which it may invest may utilise (inter alia) strategies such as short-selling, leverage, securities lending and borrowing, investment in sub-investment grade or non-readily realisable investments, uncovered options transactions, options and futures transactions, foreign exchange transactions and the use of concentrated portfolios, each of which could, in certain circumstances, magnify adverse market developments and losses. A collective investment scheme, and any collective investment scheme components in which it may invest, may make investments in markets that are volatile and/or illiquid and it may be difficult or costly for positions therein to be opened or liquidated. The performance of each collective investment scheme and any collective investment scheme component in which it may invest is dependent on the performance of the collective investment scheme managers in selecting collective investment scheme components and the management of the relevant collective investment scheme components.

In addition, the opportunities to realise an investment in a collective investment scheme are often limited in accordance with the terms and conditions applicable to the scheme and subject to long periods of advance notice (during which the price at which interests may be redeemed may fluctuate or move against you). There may be no secondary market in the collective investment scheme and therefore an investment in such a scheme may be (highly) illiquid.

6. DERIVATIVES, INCLUDING OPTIONS, FUTURES, SWAPS, FORWARD RATE AGREEMENTS, DERIVATIVE INSTRUMENTS FOR THE TRANSFER OF CREDIT RISK, FINANCIAL CONTRACTS FOR DIFFERENCES

The risks set out in 6.1- 6.5 below may arise in connection with all types of derivative contract, whether it is in the form of a listed instrument, an OTC instrument, or a securitised product such as a note or a certificate.

6.1 Derivatives Generally

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.

There are many types of derivative, but options, futures and swaps are among the most common. An investor in derivatives often assumes a high level of risk, 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.

Derivative instruments have a limited life, and may (unless there is some form of guaranteed return to the amount invested in the product) expire and be worthless if the underlying asset does not perform as expected. 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 where there is no exchange market on which to close out an open position), it may not be possible to initiate a transaction or liquidate a position at an advantageous price.

On-exchange derivatives are subject, in addition, to the risks of exchange trading generally, including potentially the requirement to provide margin. 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 also subject to the particular terms of the contract (whether a one-off transferable security or OTC, or a master agreement), as well as the risks identified in Part III 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. In addition, the value of an off-exchange derivative will vary over time and is affected by many factors, including the remaining time until maturity, the market price, price volatility and prevailing interest rates.

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 considered very carefully.

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.

The points set out below in relation to different types of derivative are not only applicable specifically to these derivatives but are also applicable more widely to derivatives generally. All derivatives are potentially subject to the major risk types in Part III below, especially market risk, credit risk and any specific sector risks connected with the underlying asset.

6.2 **Futures/Forwards/Forward rate agreements**

Transactions in futures or forwards 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 and forwards 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. Futures and forwards transactions have a contingent liability, and you should be aware of the implications of this, in particular margining requirements: these are that, on a daily basis, with all exchange-traded, and most OTC off-exchange, futures and forwards, you will have to pay over in cash losses incurred on a daily basis and if you fail to, the contract may be terminated. See further, 1 and 2 of Part IV below.

6.3 **Options**

There are many different types of options with different characteristics which affect the risk.

Put option: a put option is an option contract that gives the holder (buyer) of the option the right to sell a certain quantity of an underlying security to the writer of the option at a specified price (the strike price) up to a specified date (the expiration date).

Call option: a call option is an option contract that gives the holder (buyer) the right to buy a certain quantity of an underlying security from the writer of the option, at a specified price (the strike price) up to a specified date (the expiration date).

Buying options: 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. However, if you buy a call option on a futures contract and you later exercise the option, you must acquire the future. This will expose you to the risks described under 'futures' and 'contingent liability investment transactions'. Certain options markets operate on a margined 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 margin 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 in the same way as a futures position.

Writing options: If you write an option, the risk involved is considerably greater than buying options. You may be liable for margin to maintain your position (as explained in 6.2 above) 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 (known as 'covered call options') the risk is reduced. If you do not own the underlying asset (known as 'uncovered call 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.

Depending on the type of option entered into, there may be increased exposure to market risk (see Part III: Generic Risk types, paragraph 4 – Market Risk below) when compared to other financial products. 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.

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 below the option strike price (or if you fail to exercise the option while such condition exists), the option will not be exercised and you will have lost the premium you paid for the put 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). 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.

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).

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 obligations 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).

Traditional options: Certain London Stock Exchange member firms under special exchange 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 exchange 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.

6.4 Contracts for differences

Certain derivatives are referred to as contracts for differences. These can be options and futures on the FTSE 100 index or any other index of an exchange, as well as equity, currency and interest rate swaps, amongst others. However, unlike other futures and options (which may, depending on their terms, be settled in cash or by delivery of the underlying asset), these contracts can only be settled in cash. Investing in a contract for differences carries the same risks as investing in a future or an option as referred to in 6.2 and 6.3 above. Transactions in contracts for differences may also have a contingent liability.

6.5 Swaps

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 shares, securities' indices, bonds currencies, interest rates or commodities, or more intangible items).

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, upon 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, upon payment or receipt of a premium, to protect itself against, or to take an exposure on, the variation in the value or level of an underlying.

A major risk of off-exchange derivatives, (including swaps) is known as counterparty risk, whereby a party is exposed to the inability of its counterparty to perform its obligations under the relevant financial instrument. 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 meet the interest payments.

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.

7. STRUCTURED PRODUCTS

Structured products, designed to fulfil a particular trading or market objective, may combine the features of two or more financial instruments such as a bond and a derivative, with derivatives tending to constitute an integral part of structured products. Structured products may involve an element of leverage, so a relatively small movement in the value of the relevant underlying asset or index can have a significant effect on the value of a structured product. Structured products are often high risk investments and investors can face the risk of losing some or all of the money invested in them.

Structured products are generally not traded on regulated markets and investors take the risk on the counterparty creating the structure. In the absence of a recognised market for structured products, there can be limited liquidity in the secondary market and prices are less transparent than products traded in the primary market. It can be difficult for investors to obtain reliable information about the value of their investments and the extent of the risks to which they are exposed. The lack of a recognised market and the customised nature of structured products may also negatively affect the liquidity of the structured product.

Further information about the specific risks associated with particular structured products may be made available to you at the time of your investment.

8. FOREIGN EXCHANGE TRADING

Engaging in foreign exchange ("**fx**") trading (buying one currency in exchange for another) exposes investors to the risk of adverse changes in exchange rates. Exchange rates can be volatile and are driven by a variety of factors relating to the economies of the territories whose currencies are being traded.

The "gearing" or "leverage" often obtainable in fx trading means that a small deposit or down payment can lead to large losses as well as gains. Some fx transactions have a contingent liability, which means that investors may be liable for margin to maintain their position and losses may be sustained well in excess of the premium received. Investors may sustain a total loss of any margin they deposit to establish or maintain a position. If the market moves against an investor, it may be called upon to pay substantial additional margin at short notice to maintain the position. If an investor fails to do so within the time required, its position may be liquidated at a loss and it will be responsible for the resulting deficit.

RBCCM's insolvency or default, or that of any other dealers involved with your fx transaction, may lead to positions being liquidated or closed out without your consent. In certain circumstances, you may not get back the actual assets which you lodged as collateral and you may have to accept any available payments in cash.

9. EXCHANGE TRADED FUNDS

An Exchange Traded Fund ("**ETF**") is an investment fund that tracks an index, market sector, commodity or basket of assets but is traded on an exchange. An ETF can be a physically replicated fund that owns at least some of its assets, or a synthetic ETF that invests in derivatives, which is a more complex type of fund with different risk characteristics. As such, they generally combine the flexibility and tradability of shares with the diversification of a collective investment scheme and may expose you to similar risks as detailed for shares and units in collective investment schemes. They may also trade for less than their net asset value.

The net asset value of an ETF will be subject to the generic risk types referred to in Part III below.

In light of the wide range of ETFs available, the prospectus and any other relevant documentation published by the provider of the ETF should be read prior to investing.

10. SECURITIES FINANCING TRANSACTIONS

Securities financing transactions typically involve either stock lending or repurchase transactions. Stock lending involves one party providing legal title to the relevant financial instrument for a limited period of time in exchange for legal ownership of collateral. A repurchase transaction involves the sale of financial instruments, commodities or guaranteed rights relating to title to financial instruments or commodities, alongside an agreement for the seller to buy back the financial instruments, commodities or rights at a specified price and time.

As a result of lending financial instruments or entering into a repurchase transaction, you will cease to be the owner of the relevant financial instruments, commodities or rights. In each case, the transaction involves the transfer by one party of title to financial instruments, commodities or rights to the other party, although you will have the right to reacquire at a future date equivalent financial instruments, commodities or rights (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 return of financial instruments, commodities or rights is subject to the risk of insolvency or other non-performance by the borrower.

These types of transactions also entail operational risks such as non-settlement or the delay of instructions. As you are not the owner during the period financial instruments are lent out, you will not have voting rights, nor will you directly receive dividends or benefit from other corporate actions, although you will normally be entitled to a payment from the borrower equivalent to the dividend you would otherwise have received and the borrower will be required to account to you for the benefit of corporate actions. Full details will be contained in any stock lending agreement you enter into and the above description is subject to the terms of any such document.

11. COMMODITIES

Commodity-based investments may be affected by a variety of political, economic, environmental and seasonal factors that have an impact either on demand or on the available supply of the commodity in question. Investment in commodities is often undertaken either through a structured product over a commodities index or basket of different commodities, or by using a commodity derivative.

The prices of commodities may be volatile and may fluctuate substantially if natural disasters or catastrophes, for example fires, hurricanes or earthquakes, or conflict or war affect the supply or production of such commodities.

If any interest and/or the redemption amount payable in respect of any product is linked to the price of a commodity, any change in the price of such 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 product.

Commodity derivatives are also subject to position limits set by EEA competent authorities on the size of net positions persons can hold in commodity derivatives traded on EEA trading venues and economically equivalent OTC contracts. There is a risk that RBCCM may find it necessary in certain circumstances to unwind positions in commodity derivatives to avoid a breach of these position limits.

12. PACKAGES / TRANSACTIONS THAT COMBINE MULTIPLE INSTRUMENTS OR SERVICES

Transactions which combine a number of different instruments or services (for example, a bond and an FX swap) will entail exposure to the risks associated with each individual product or service. As a result, such transactions may entail a risk which is greater than the risks of the individual components. However, some transactions may contain features aimed at mitigating risk (for example, principal protection).

PART III: GENERIC RISK TYPES

1. GENERAL

The price or value of an investment will depend on fluctuations in the financial markets outside of anyone's control. Past performance is no indicator of future performance.

The nature and extent of investment risks varies between countries and from investment to investment. These investment risks will vary with, amongst other things, the type of investment being made, including how the financial products have been created or their terms drafted, the needs and objectives of particular investors, the manner in which a particular investment is made or offered, sold or traded, the location or domicile of the issuer, the diversification or concentration in a portfolio (e.g. the amount invested in any one currency, security, country or issuer), the complexity of the transaction and the use of leverage.

The risk types set out below could have an impact on each type of investment:

2. LIQUIDITY

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 as 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.

3. CREDIT RISK

Credit risk is the risk of loss caused by borrowers, bond obligors, guarantors, or counterparties failing to fulfil their obligations or the risk of such parties' credit quality deteriorating. Exposure to the credit risk of one or more reference entities is particularly relevant to any credit-linked product such as credit-linked notes, and the potential losses which may be sustained, and the frequency and likelihood of such losses occurring, when investing in credit-linked products may be substantially greater than when investing in an obligation of the reference entity itself.

4. MARKET RISK

4.1 General

The price of investments goes up and down depending on market supply and demand, investor perception and the prices of any underlying or allied investments or, indeed, sector, political and economic factors. These can be totally unpredictable.

4.2 Overseas markets

Any overseas investment or investment with an overseas element can be subject to the risks of overseas markets which may involve different risks from those of the home market of the investor. In some cases the risks will be greater. The potential for profit or loss from transactions on foreign markets or in overseas denominated contracts will be affected by fluctuations in foreign exchange rates.

4.3 Emerging Markets

Price volatility in emerging markets, in particular, can be extreme. Price discrepancies, low trading volumes and wide pricing spreads can be common and unpredictable movements in the market not uncommon. Additionally, as news about a country becomes available, the financial markets may react with dramatic upswings and/or downswings in prices during a very short period of time. Emerging markets generally lack the level of transparency, liquidity, efficiency, market infrastructure, legal certainty and regulation found in more developed markets. For example, these markets might not have regulations governing market or price manipulation and insider trading or other provisions designed to "level the playing field" with respect to the availability of information and the use or misuse thereof in such markets. They may also be affected by sector, economic and political risk. It may be difficult to employ certain risk and legal uncertainty management practices for emerging markets investments, such as forward currency exchange contracts or derivatives. The impact of the imposition or removal of foreign exchange controls at any time should be considered, as well as potential difficulties in repatriating assets. The risks associated with nationalisation or expropriation of assets, the imposition of confiscatory or punitive taxation, restrictions on investments by foreigners in an emerging market, sanctions, war and revolution should also be considered.

5. LIMITATIONS OF CLEARING HOUSE PROTECTIONS / SETTLEMENT RISK

On many exchanges, the performance of a transaction may be "guaranteed" by the exchange or clearing house. However, this guarantee is usually in favour of the exchange or clearing house member and cannot be enforced by a client of that exchange or clearing house member who may, therefore, be subject to the credit and insolvency risks of the exchange or clearing house member through which/whom the transaction was executed.

There is, typically, no clearing house for off-exchange OTC instruments which are not traded under the rules of an exchange (although unlisted transferable securities may be cleared through a clearing house).

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.

6. INSOLVENCY

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 or margin held by the counterparty).

7. CURRENCY RISK

In respect of any foreign exchange transactions and transactions in derivatives and securities that are denominated in a currency other than that in which your account is denominated, a movement in exchange rates may have a favourable or an unfavourable effect on the gain or loss achieved on such transactions.

The weakening of a country's currency relative to a benchmark currency or the currency of your portfolio will negatively affect the value of an investment denominated in that currency. Currency valuations are linked to a host of economic, social and political factors and can fluctuate greatly, even during intra-day trading. Some countries have foreign exchange controls which may include the suspension of the ability to exchange or transfer currency, or the devaluation of the currency. Hedging can increase or decrease the exposure to any one currency, but may not eliminate completely exposure to changing currency values.

8. INTEREST RATE RISK

Interest rates can rise as well as fall. A risk with interest rates is that the relative value of a security, especially a bond, will worsen due to an interest rate increase. This could have a negative impact on other products. There are additional interest rate risks in relation to floating rate instruments and fixed rate instruments, for example interest income on floating rate instruments cannot be anticipated. Due to varying interest income, investors are not able to determine a definite yield from floating rate instruments at the time they purchase them, so that their return on investment cannot be compared with that of investments which have 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. That is, investors may reinvest the interest income paid to them only at the relevant lower interest rates then prevailing.

Changes in market interest rates have a substantially stronger impact on the prices of zero coupon bonds 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 which have the same maturity and credit rating.

9. REGULATORY / LEGAL RISK

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

Returns on all, and particularly new, investments are 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 related issues such as tax may also occur and could have a large impact on profitability. Such risk is unpredictable and can depend on numerous political, economic and other factors.

For this reason, this risk is greater in emerging markets 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.

The type of laws and regulations with which investors are familiar in the EEA may not exist in some places, and where they do, 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, political or nationalistic influences remain largely untested in many countries. Judges and courts in many countries are generally 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.

10. **OPERATIONAL RISK**

Operational risk, such as breakdowns or malfunctioning of essential systems and controls, including IT systems, can have an impact on all financial products. Business risk, especially the risk that the business is run incompetently or poorly, could also have an impact on shareholders of, or 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.

11. **CONFLICTS**

In the ordinary course of their respective businesses, RBCCM and any of its Affiliated Companies, will be subject to various actual and potential conflicts of interest which may operate against your interests.

PART IV: TRANSACTION AND SERVICE RISKS

1. **CONTINGENT LIABILITY INVESTMENT TRANSACTIONS**

Contingent liability investment transactions, which are margined, require you to make a series of payments against the purchase price, instead of paying the whole purchase price immediately.

If you trade in futures, contracts for differences or sell options, you may sustain a total loss of the margin 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 margin 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 must be responsible for the resulting deficit. Even if a transaction is not margined, it may still carry an obligation to make further payments in certain circumstances over and above any amount paid when you entered the contract.

2. **COLLATERAL**

2.1 If you deposit collateral as security with a firm, the way in which it will be treated will vary according to the type of transaction and where it is traded and the terms of any product contract you have entered into with such firm. There could be significant differences in the treatment of your collateral, depending on whether you are trading on a regulated market (see 4 below), with the rules of that exchange (and the associated clearing house) applying, or trading on another exchange or, indeed, off-exchange. Deposited collateral may lose its identity as your property once dealings on your behalf are undertaken. Even if your dealings should ultimately prove profitable, you may not get back the same assets which you deposited, and may have to accept payment in cash. You should ascertain from such firm how your collateral will be dealt with.

2.2 Effect of absolute title transfer

Where your collateral is subject to total title transfer to us, you should note that:

(a) The assets cease to be your assets and you will no longer have a proprietary claim over them. They will not be held subject to the rules of the FCA's Client Assets Sourcebook or of another applicable regulator in safe custody (where they are financial instruments) or subject to FCA's Client Money Rules or other applicable client money protection (where they are cash). The assets become our assets and we can deal with them in our own right;

(b) You will have an unsecured contractual claim against us for re-transfer of equivalent assets; and

(c) As a result, the assets will not be subject to a trust or otherwise insulated in our insolvency. And, in such event, you may not receive back everything so transferred to us and you will only rank as a general creditor. The FCA's Client Money Distribution Rules which are set out in the CASS 7A of the FCA Handbook ("**Client Money Distribution Rules**") will not apply to these assets where they are cash and you will not be entitled to share in any distribution under the Client Money Distribution Rules.

3. **SHORT SALES**

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 (for further detail on this see 10 below).

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.

4. OFF-EXCHANGE TRANSACTIONS

The FCA has categorised certain exchanges as recognised or designated investment exchanges. A list of these exchanges can be found on the FCA website. Transactions which are traded elsewhere may be exposed to substantially greater risks.

5. LIMITED LIABILITY TRANSACTIONS

Before entering into a limited liability transaction, you should obtain from the firm 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.

The amount you can lose in limited liability transactions will be less than in other margined transactions, which have no predetermined loss limit. However, 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.

6. COMMISSIONS/TRANSACTION COSTS

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

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. For instance, credit institutions as a rule charge their clients for own commissions which are either fixed minimum commissions or pro-rata commissions depending on the order value. 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).

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.

7. SUSPENSIONS OF TRADING AND GREY MARKET INVESTMENTS

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.

Transactions may not be entered into in:

(a) 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

(b) A grey market security, which is a security for which an 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.

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

8. CASH AND PROPERTY

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.

Where we provide safe custody services for you or where we hold money for you as client money, your securities or client money may be held by a third party on our behalf, including banks, OTC counterparties, settlement agents, intermediate brokers, Exchanges, Clearing Systems, sub-custodians, CSDs, depositories, agents and nominees (each a "**Third Party**"). Except as specifically provided in the Terms, RBCCM will not be liable for any acts or omissions of any Third Party.

Where your property or client money is held overseas, there may be different legal and regulatory requirements from those applying in the UK and your rights to the property or money may differ from those you would have in the UK.

In the event of insolvency or default of a Third Party, you may not recover all of your property or money. In some jurisdictions compensation schemes may offer protections in connection with investments to certain types of claimants in the event that they suffer a financial loss as a consequence of a person being unable to meet its liabilities. The protections available may be different from the protections afforded to clients under the UK's Financial Services Compensation Scheme and the compensation schemes may also have different rules governing qualification for compensation, limits to the level of protection provided and procedures and time limits for making claims for compensation. In some cases overseas compensation schemes may prioritise local investors over non-local investors.

We will, where possible, direct that your property that is deposited with a Third Party is identifiable separately from our property and from those belonging to that Third Party (for instance, by differently titled accounts or other equivalent measures that achieve the same level of protection). However, in some jurisdictions it may not be possible under national law for your property to be separately identifiable from our assets or those of the Third Party. In these circumstances, there is a risk that your property could be withdrawn or used to meet the obligations of the Third Party or lost altogether if the Third Party fails. On our failure (i.e. the appointment of a liquidator, receiver or administrator, or trustee in bankruptcy, or any equivalent procedure in any relevant jurisdiction), your property may not be protected from claims made on behalf of our general creditors, the Third Party may challenge your rights to any property and you may need to share in a shortfall.

Although property will ordinarily be registered in the name of a nominee, we may from time to time (if the property is subject to the law or market practice of a jurisdiction outside the UK and it is in your best interests to register it in that way or it is not feasible to do otherwise because of the nature of the applicable law or market practice) register or record securities in the name of a Third Party or in our own name. If property is registered in our name, the property in question may not be segregated from our property and in the event of our failure (i.e. the appointment of a liquidator, receiver or administrator or trustee in bankruptcy, or any equivalent procedure in the jurisdiction in question), your property may not be protected from claims made on behalf of our general creditors.

Your property may be held in an omnibus account by a Third Party. Property that is held in an omnibus account may be pooled or co-mingled with property belonging to our other clients or clients of the Third Party. There is a risk that the property could be withdrawn to meet the obligations of other clients, or that the balance of property does not reconcile with the quantity that we or the Third Party is required to hold. In the event of a shortfall, you may share in that shortfall and as a result may not receive your full entitlement of property.

9. STABILISATION

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

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.

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, they are 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.

The Stabilisation Rules:

(a) Limit the period when a stabilising manager may stabilise a new issue;

(b) Fix the price at which they may stabilise (in the case of shares and warrants but not bonds); and

(c) Require them to disclose that they may be stabilising but not that they are actually doing so.

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.

10. NON-READILY REALISABLE INVESTMENTS

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.

11. STOCK LENDING/REPOS

The effect of lending (or 'repo'ing') securities to a third party is to transfer title to them to the borrower (or repo purchaser) for the period that they are lent (or 'repo'ed'). At the end of the period, subject to default of the borrower (or 'repo' purchaser), the lender (or 'repo' seller) receives back securities of the same issuer and type. The borrower's (or 'repo' purchaser's) obligation to transfer equivalent securities is secured against collateral (which is usually transferred by a title transfer mechanism pursuant to market standard agreements). There is, accordingly, credit risk. Lending (or 'repo'ing') securities may affect your tax position.

12. STRATEGIES

Particular investment strategies will carry their own particular risks. For example, certain strategies, such as a 'spread' position or a 'straddle', may be as risky as a simple 'long' or 'short' position. Investment strategies may also not always perform as expected.