OVERVIEW OF THE MAIN RISKS AND FEATURES OF FINANCIAL INSTRUMENTS

This document does not attempt to describe all the risks associated with investments in financial instruments. Its aim is rather to provide some basic information to teach our clients about the existence of risks inherent in any investment in the main financial instruments. All clients are advised against carrying out an investment before being certain they fully understand all the associated risks. They are also advised to adapt their investments to their individual financial situation, needs and investment objectives.

For investment funds, the risk factors to which clients are liable to be exposed are defined and described in the fund prospectus.

1 General risks

The risks addressed in this chapter are potential risks most often incurred by investors holding a financial instrument or a portfolio of financial instruments (held directly or through a portfolio management mandate or investment fund). Other risks may also exist and in such case they are described in the fund prospectus or portfolio management mandate.

1.1 Market risk

Market risk is the risk of a loss arising due to fluctuations in the prices of financial instruments. It is often summarised in a volatility indicator, representing the magnitude of price fluctuations observed over a given period.

It can also materialise as a result of changes in stock prices, interest rates, exchange rates and commodities prices, and can be impacted by various factors such as:

1.1.1 Macroeconomic risk

Changes in activity in a market economy have repercussions on trends in securities prices. Prices fluctuate in sync with the phases of economic expansion and recession. The duration and scope of these economic cycles vary, as do their repercussions on the different sectors of the economy. Furthermore, economic cycles may vary depending on the country. Portfolios maintaining continuous exposure to market risk are affected by fluctuations in this risk. For other portfolios, an incorrect view on the economic climate when making an investment decision may lead to losses.

1.1.2 Psychological risk

Irrational factors may influence the general fluctuation of prices, including for example trends, opinions or rumours liable to cause substantial price declines even though financial conditions and the outlook for businesses have not deteriorated. Some external factors, such as terrorist attacks, wars, riots, etc., may also impact the behaviour of financial market participants.

1.2 Foreign exchange risk

Currency rates fluctuate relative to one another. As a result, foreign exchange risk exists when securities or over-the-counter transactions are denominated (or include an exposure) in a foreign currency. The main factors that influence the rate of a country's currency are the country's inflation rate, differences in interest rates compared to other countries, the assessment of the economic climate, political conditions and investment security. Furthermore, psychological events, such as a crisis of confidence in political leaders, are liable to weaken a country's currency.

Foreign exchange risk can be generated by direct investments in securities denominated in currencies other than the investor's operating currency and/or investments in forward financial instruments (futures) also resulting in exposure to a currency different from the investor's operating currency. Changes in this currency's exchange rate against the operating currency can adversely impact the value of the constituent assets.

1.3 Inflation risk

Inflation risk is predominantly caused by sudden changes in supply and demand for goods and products in the economy, by rises in commodities prices and by excessive wage hikes. It is the risk of receiving payment in a depreciated currency and obtaining a rate of return lower than the inflation rate. This risk is prevalent, for example, with long-dated and fixed-rate bonds. Investors are therefore advised to base their investments on real interest, i.e. the difference between the interest rate and the inflation rate.

1.4 Credit risk

This risk particularly applies to instruments with a bond or money market component.

The issuer of such instruments runs the risk of being temporarily or permanently insolvent ("default" or "insolvency" risk), as a result of which it is unable to pay interest on the debt or repay the debt itself (contracted via bonds and/or money market instruments). An issuer's solvency can change subsequent to general economic developments or changes affecting the issuer's business and/or sector of operation over the term of the debt. Such developments can include changes in the economic climate, changes relative to the business, sector and/or country concerned, and political events generating major economic consequences.

A decline in the issuer's solvency also has adverse impacts on the prices of the securities concerned. The term "spread risk" refers to the fact that, without the issuer even defaulting, the price of a security can increase or decrease according to changing investor expectations concerning the likelihood of the issuer's (in)solvency.

For a mutual investment fund, the portfolio manager may be permitted to set up positive or negative exposure to the credit market and/or specific issuers. As a result, an increase or decrease in credit spreads, or even a default, can adversely impact the value of the portfolio.

Credit risk is higher for certain types of bond market investments, such as

- high-yield (or "junk") bonds, whose lower ratings (less than BBB-/Baa3) reflect the issuer's greater difficulty in meeting its financial obligations,
- emerging market bonds (some of which are also high-yield),
- and subordinated bonds, the repayment of which is given less priority compared to senior bonds in the event of default.

1.5 Counterparty risk

When investors carry out over-the-counter transactions (i.e. not involving instruments listed on the markets), they are also exposed to the risk of default by the counterparty to the transaction, i.e. the risk that said counterparty will not be able to make the financial payments associated with these transactions.

To mitigate this risk, some counterparties decide to set up collateral exchange agreements: at regular intervals, the counterparty currently indebted to the other due to changes in the value of the transaction in progress, delivers cash or securities to the other counterparty in order to provide financial collateral that could then be used if the counterparty defaulted.

1.6 Liquidity risk

Liquidity risk is defined as the risk that a position in a financial instrument cannot be sold, liquidated or closed for a limited cost and in a short enough period of time.

For an investment fund, this can compromise the fund's ability to meet its obligations to redeem units at its investors' request at all times. On some markets (particularly emerging and high-yield markets, small cap equities markets, etc.), price differences can increase under less favourable market conditions, which can generate an impact on net asset value when assets are bought or sold. Also, in the event of a crisis on these markets, the securities can also become harder to trade.

1.7 Concentration risk

This is the risk of significant concentration of investments in a given category of assets, in certain markets or in a given issuer or group of issuers. Changes in these assets or markets can thus have a major impact on the value of the portfolio in question. The more diversified an investor's portfolio, the lower the concentration risk.

For example, this risk is greater on more specific markets (certain regions, sectors or investment themes) than on broadly diversified markets (global distribution of assets).

1.8 Emerging country risk

Market trends can be stronger and faster on emerging markets than on developed markets, which can lead to a substantial decline in the value of the portfolio's assets in the event of the opposite trends relative to the positions taken in the portfolio. Volatility can be generated by overall market risk or triggered by fluctuations in a single security. Sector concentration risks can also prevail on some emerging markets. These risks can also cause an increase in volatility. Emerging countries can be subject to serious political, social, legal and tax-related uncertainties and also other events that can adversely impact the portfolios investing in them.

For example, though solvent, it is possible for a foreign debtor to be unable to make interest and debt payments when they fall due or to remain completely in default due to non-existent transfer capacity or availability in its country of origin. This risk includes the twofold threat of economic and political instability. As a result, payments to which investors are entitled may default due to lack of currencies or transfer limitations in the debtor's country of origin. For securities issued in a foreign currency, investors may receive payments in a currency that cannot be converted due to foreign exchange limitations. In principle, there is no way to guard against this type of risk.

1.9 Performance risk

This risk arises from the level of exposure to other risks, the portfolio/fund management style adopted (more or less active), and the presence or absence of a protection or guarantee mechanism. Volatility can be used as a performance risk indicator.

1.10 Unwinding risk

This is the risk of the unwinding of a position by a payment system not occurring as expected, because the settlement or delivery by a counterparty does not take place or is not carried out in accordance with the initial conditions. This risk exists to the extent that some financial instruments are issued in regions where the financial markets are not highly developed. In regions where the financial markets are well developed, this risk is limited.

1.11 Custody risk

This is the risk of losing assets held by a custodian as a result of insolvency, negligence or fraud by the custodian or by a sub-custodian.

1.12 Modelling risk

This is the risk of losses arising from the inappropriate use of models and/or the use of models containing a bias. It can involve the following types of models in particular:

- **valuation model**: the valuation of some financial products can be determined using a complex mathematical model. In the event of insufficient liquidity on the market, the selling price of financial instruments may no longer match the valuation price determined using the mathematical model. In such case, investors may have to sell their financial instruments at a lower price than the one used to calculate the valuation of their portfolio.
- **decision-making model**: some fund managers use mathematical models to decide which transactions to execute for the portfolio. If there is a bias in using this model, inappropriate transactions may be carried out, generating risks for the shareholder.
- **risk tracking model**: some fund managers use a mathematical model to oversee the management of their portfolio's market risk and/or to minimise the performance gap compared to a benchmark index. In the event of a bias or poor use of the model, this risk may be underestimated and/or inappropriate transactions may be generated.

1.13 Leverage risk

Some financial products and investment strategies may subject the investor to leverage. Such products and strategies tend to magnify returns on underlying assets, both on the upside and downside.

Consequently, a minor trend on the market can lead to substantial gains or losses. In some cases, the entire investment can be wiped out.

2 Specific risks associated with certain types of investments

2.1 Bonds

Bonds are negotiable instruments, in registered or bearer form, issued by a given issuer (commercial company, local authority, regional government entity, sovereign or supranational authority, etc.) to investors that lend it capital. The nominal value of bonds at issuance comprises a fraction of the overall amount of the debt. Bonds can be issued at a fixed rate, variable rate or a combination of the two. The maturity (from a few months to a few decades) and the repayment method are pre-established. The buyer of a bond (the creditor) holds a claim on the issuer (the debtor).

Among the general risks listed above, bonds are subject to the following risks in particular:

- **Market risk**, related specifically to interest rate fluctuations: the buyer of a fixed-rate security is exposed to the risk of a price drop if interest rates rise. A bond's sensitivity to interest rate changes depends primarily on the residual maturity and nominal level of interest.
- **Credit risk** (issuer default on payment of coupons and/or interest, but also a decline in the bond's performance in the meantime due to the decreased probability of repayment at maturity).
- **Early redemption risk**: the issuer of a bond can provide for the possibility of early redemption to be used in the event interest rates decline. Such early redemption can lead to unexpected changes in returns.
- **Inflation risk**: despite the apparent assurance of a fixed return, most bonds do not guarantee an actual yield. The reported income may therefore be subject to inflation.
- **Risks specific to certain bonds**: additional risks may be associated with certain types of bonds such as Floating Rate Notes, Reverse Floating Rate Notes, Zero Bonds, foreign currency bonds, bonds on indices or options, subordinated bonds, etc. For subordinated bonds, if the issuer fails, these bonds cannot be repaid until all higher-ranked creditors have been paid. For reverse convertible bonds, investors may not receive the full repayment of the principal, but instead a lower amount equivalent to the value of the underlyings at maturity. Investors are advised to learn about the specific risks linked to the types of bonds they wish to purchase.

In addition, depending on the type of bond chosen, foreign exchange risk, liquidity risk, emerging country risk and custody risk may also be present (see "general risks" chapter). Investors should also take diversification into consideration to avoid concentrating their investments in one or a small number of bonds.

Money market instruments (commercial paper, treasuries, certificates of deposit, etc.) generally have similar features and risks as bonds, over shorter maturities.

2.2 Equities

Equities, or stocks, are securities delivered to shareholders to acknowledge their ownership rights in a company. Stocks can be in registered or bearer form. They represent a fraction of the company's share capital. Its price quoted on the stock markets may rise and fall, based on investors' assessment of the company's ability to generate profits in the future.

Among the general risks listed above, equities are subject to the following risks in particular:

- **Company risk**: buyers of stocks are not creditors; instead they contribute capital and thus become co-owners of the company. Consequently, they participate in the company's development and the related risks and opportunities, which can lead to unexpected developments in the investment. In the most extreme case, in which the issuing company fails, investors may lose the entire amount invested.
- **Market risk**: share prices may be subject to unpredictable fluctuations liable to generate losses. Increases or decreases in share prices over the short, medium or long term tend to alternate, and it is not possible to determine how long these cycles will last. It is important to distinguish between overall market risk and the specific risk associated with the company itself. Each of these two risks, considered separately or together, influences changes in share prices.
- **Dividend risk**: the dividend on a share mainly depends on the profit generated by the issuing company. If the company earns little profit or posts losses, the dividend may be low or the company may not distribute a dividend at all.

In addition, depending on the type of equities chosen, foreign exchange risk, liquidity risk, emerging country risk and custody risk may also be present (see "general risks" chapter). Investors should also take diversification into consideration to avoid concentrating their investments in shares issued by one or a small number of companies. Geographic and sector diversification are recommended in particular.

2.3 Commodities

Several types of financial instruments, including certificates, ETFs (exchange traded funds), investment funds and derivatives, offer exposure to commodities. The most common types of commodities include precious metals (gold, silver, platinum, palladium, etc.), ore and metals (copper, zinc, nickel, lead, etc.), agricultural commodities (wheat, coffee, cotton, etc.) and energy commodities (oil, coal, gas, etc.).

Commodities are exposed to market risk whose fluctuations can vary significantly from those of the traditional securities markets (equities, bonds).

Supply and demand are influenced by producers, transformers and traders, on the one hand, and increasingly by investor transactions, on the other.

Climate and geopolitical factors can also alter levels of supply and demand for the underlying product considered; in other words they can alter the expected scarcity of the product on the market.

However, some commodities such as energy and certain metals may have more strongly correlated trends between them.

Furthermore, depending on the type of financial instrument chosen and the type of issuer, investors may be exposed to credit risk, counterparty risk, foreign exchange risk, liquidity risk, emerging country risk and/or custody risk (see "general risks" chapter). Investors should also take diversification into consideration to avoid concentrating their investments in one or a small number of commodities.

For securities giving exposure to commodities, investors should especially take care to verify any leverage generated by the investment (certificates, ETFs, derivatives, etc.). Some financial products are constructed in such a way that they magnify the return on the underlying asset, both on the upside and downside.

2.4 Derivatives

A derivative is a financial instrument whose value evolves according to the changes in the underlying asset. This asset can be, among others, a market index, an interest rate, a currency, a commodity price or even another derivative. The main derivatives are options, futures, IRS (interest rate swaps), CDS (credit default swaps) and performance swaps.

2.4.1 Options

Options are derivatives whose value evolves according to the changes in the underlying. The party purchasing the option receives the right to buy (call option) or sell (put option) the underlying asset on a given date or over a given period, for a given exercise price, against payment of a premium to the counterparty (the seller of the option).

Features

- Term: the term of an option is the period from its subscription to the date of its expiry.
- Relationship between the option and the underlying: this relationship underscores the number of units of the underlying instrument that the option holder can buy (call) or sell (put) in exercising the options.
- Base price: the base price is the previously agreed-upon price at which the option holder can buy or sell the underlying instrument when exercising the option.
- Leverage: in principle, any change in the price of the underlying instrument generates a proportionately more significant change in the exercise price.
  - Buying a call or a put: the buyer of a call option hopes that, over the term of the option, the price of the underlying instrument will increase, causing the value of the option to increase. Conversely, the buyer of a put option can make a profit if the price of the underlying instrument falls.
  - Selling a call or a put: the seller of a call option hopes that the value of the underlying instrument will fall, while the seller of a put option can make a profit if the value of the underlying instrument increases.

Risks

Price risk
Options are traded on or off the market, and are subject to the law of supply and demand. An important factor in determining the price of an option is knowing if there is a sufficiently liquid market for the option in cash, and determining the actual or expected change in the price of the underlying instrument. A call option loses value when the price of the underlying instrument falls, while the opposite is true for a put option. The price of an option is not only determined by changes in the price of the underlying instrument, but also by a series of other factors determining the price, such as the remaining term of the option or the frequency and intensity of changes in the price of the underlying instrument. Consequently, the risk of a decrease in the value of the option may exist even if the price of the underlying instrument remains unchanged.

Leverage risk
In principle, the leverage on an option reacts out of proportion to changes in the price of the underlying instrument, and thus offers greater opportunities for gains but also greater risk of losses over the term of the option. The risk associated with buying an option increases with the option's leverage.

Buying an option
Buying an option is a highly volatile investment. The probability of the option expiring without any value is very high. In such case, the investor will have lost the entire amount used to purchase the premium, plus commissions. After buying an option, investors can hold the position to maturity or set up the opposite position, or for US-style options, they can exercise them prior to expiry. Exercising an option may call for the cash settlement of a differential or the purchase or delivery of the underlying.

Selling an option
Selling an option usually involves taking a greater risk than buying one. This is because, even if the price obtained for the option is fixed, the seller is exposed to potentially unlimited losses.
If the market price of the underlying evolves unfavourably, the seller of the option will be forced to adjust the margin on the option in order to maintain the position. If the option sold is a US-style option, the seller can be called on to settle the transaction in cash or to buy or deliver the underlying. If the option sold has futures as its underlying, the seller can take a position in futures and will be subject to the obligations concerning the adjustment of the margins.
The seller's risk exposure can be reduced by taking a position in the same type of underlying (securities, index or other) as that of the option sold.

Counterparty risk
For options traded over the counter, rather than on the regulated markets, investors are also exposed to counterparty risk (see "general risks" chapter). For options traded on regulated markets, guarantee deposits must be made to limit the risk of the stakeholders' insolvency (see explanation of futures mechanism below).

2.4.2 Futures

Futures are commitments entered into by two counterparties for the purchase or sale of a given quantity of an underlying asset at a predetermined date and at a price agreed upon in advance. More often than not, this underlying is an interest rate, equity index or commodity.

Futures are generally standard products traded on a regulated market. They can be bought or sold over their entire lifespan.

It is possible to open a position by buying or selling a future. To this end, a guarantee deposit - often representing less than 10% of the commitment taken through the contract - is necessary to reduce the risk of default at expiry. Investors are therefore subject to leverage, which can either play in their favour or against them (potential for a much greater loss than the initial amount invested). This guarantee deposit is subject to daily "margin calls" (= decreases or increases of deposits) stemming from the change in the value of the commitment for each counterparty.

To close the position, the same future can be sold prior to expiry. In practice most open positions are closed before expiry.

The risks incurred by such positions are thus not only those associated with the underlying instruments (see risks linked to bonds, equities and/or commodities), but also the leverage that can magnify the underlying's market risk.

2.4.3 Interest rate swaps

Through these contracts, a counterparty agrees to pay a given interest rate over a given period on an initially agreed-upon amount to another counterparty, which in turn agrees to pay another interest rate on this same amount. In general, one counterparty pays a fixed rate and the other a variable rate. These transactions can be used, for example, to exchange the fixed income on an asset (a bond) for variable income, creating the opportunity to take advantage of any interest rate rises.

The counterparties entering into this type of transaction are therefore exposed to market risk (change in interest rates) and counterparty risk (see "general risks" chapter).

These types of contracts can also have different currencies as their underlying, thus generating foreign exchange risk as well.

2.4.4 Credit default swaps

In a CDS, Counterparty A agrees to pay a given interest rate over a given period on an initially agreed-upon amount ("nominal") to Counterparty B, which in turn agrees to deliver the equivalent of the nominal amount (in cash or shares) in the event a specific issuer defaults. If Counterparty A is afraid that Issuer X of a bond that it holds will default, instead of selling the bond, it can decide to enter into a credit default swap with Counterparty B, which then agrees - against payment - to compensate Counterparty A in the event Issuer X defaults.

The value of the CDS may increase or decrease according to changes in the probability of default of the hedged issuer (X in this example), given that this hedge will end up being more or less relevant.

In addition to this risk, each stakeholder is also exposed to counterparty risk relative to the other party.
There are other more advanced credit derivatives (such as credit derivative indices) based on these same basic principles.

2.4.5 Performance swaps

Through these contracts, Counterparty A agrees to pay a given interest rate over a given period on an initially agreed-upon amount to Counterparty B, which in turn agrees to pay the performance of an underlying asset to Counterparty A. This underlying asset can be a stock, a basket of stocks or equity index, commodities, changes in exchange rates, or potentially any other financial asset.

The counterparties entering into this type of transaction are thus exposed to the risks associated with the underlying products (equities, commodities, etc.) with, in some cases, leverage that magnifies the market risk (investors are advised to pay close attention to the definition of the methods used to calculate the performance of the underlying instrument).

Investors are also exposed to counterparty risk (see above) over the entire course of the transaction.

2.5 Investment funds

An investment fund (general term covering in particular collective investment vehicles and open-ended mutual funds) is a company or joint ownership that collects money from a certain number of investors with the aim of investing it in various assets according to the principle of risk distribution and having their shareholders or participants benefit from the resulting management of their assets. The main benefits of an investment fund are diversification (regardless of the amount of the individual investment), professional management and possible exposure to market segments that are sometimes more complex for individual investors to handle.

- In an open-ended fund, the number of units, and therefore participants, cannot be determined at first glance. The fund can issue new units or redeem existing units. The fund is obligated to redeem an investor's units, at the fund's expense, at the agreed-upon redemption price and in accordance with contractual provisions.
- In a closed fund, the issuance is limited to a given number of units. Unlike open funds, a closed fund is not obligated to redeem units. Units can only be sold to third parties or, where applicable, to the market. The price obtained for the units is determined according to supply and demand.

ETFs (exchange traded funds) or trackers are special investment funds, listed on the market like stocks, and reflecting the performance of a given market segment ("passive" management, as opposed to "active" management by a fund manager aiming to outperform a benchmark index).

Risks:

Portfolio management risk
Given that an investment fund's ROI depends, among other things, on the portfolio managers' skills and the quality of their decisions, any errors in assessing the fund's management can lead to declines or capital losses.
Furthermore, instruments available to investment fund managers can be used to take the opposite positions from those that would result from simply holding the securities. For example, an investment fund may incur losses due to increases or decreases in the stock markets or in interest rates, depending on the overall exposure set up by the portfolio manager.
This risk is generally included in the definition of market risk in the fund prospectus.

Risk of a decrease in NAV
The prices of investment fund units may decline, reflecting a drop in the corresponding value of the securities or currencies comprising the fund's assets, all else being equal. The greater the diversification of the fund's investments, the lower the risk of losses. Conversely, the risk of losses is higher if the investments are more specialised and less diversified.
It is therefore important to pay close attention to the general and specific risks associated with the securities and currencies in which the fund is authorised to invest. Furthermore, some portfolio managers use leverage, which can magnify the gains and losses generated on the assets underlying the positions taken.
As a general rule, investment funds offer no capital guarantee or protection mechanism unless explicitly provided for in their prospectus.

UCITS or funds with a European passport are investment funds which, among other things, observe a set of rules common to all European Union countries, particularly in terms of diversification and limitation of counterparty risk and leverage.

Investors should learn about each fund's specific risk by consulting its prospectus. Depending on the type of fund, each of the risks detailed in the "General risks" chapter may apply.

2.6 "Alternative" investments and offshore funds

The term "alternative investment" refers to an investment in a foreign or domestic investment fund, which varies from traditional investments in equities or bonds in its investment style. The aim is usually to obtain a minimal positive performance regardless of the change in a given asset class.

Their investment style often includes the use of short-selling, leverage or derivatives. Investments in private equity funds (venture capital, LBOs) also fall into this category.

Alternative UCITS must at least observe the common set of rules adopted by European Union countries (see above) for other alternative funds which are generally subject to more relaxed regulations. In this category, the term offshore funds designates investment funds domiciled in "offshore" centres such as the Bahamas, Bermuda, the Cayman Islands and Panama. The laws in these countries are often less strict, giving the managers of these funds more investment opportunities but also exposing them to what can be significantly higher risks, particularly in terms of leverage.

The risks addressed below tend to be even higher the more relaxed the country's laws. In any event, these investments are reserved for informed investors. Investors should learn about each fund's specific risk by consulting its prospectus. Depending on the type of fund, each of the risks detailed in the "General risks" chapter may also apply.

Leverage risk

The investment strategies for these types of funds can be associated with major risks. For example, by using leverage, a minor trend on the market can lead to substantial gains or losses. In some cases, the entire investment can be wiped out.

Potentially limited liquidity

Alternative investments have highly varying degrees of liquidity. Their liquidity can be very limited. For hedge funds, redemptions can only be carried out monthly, quarterly or annually. For private equity funds, the lock-up period can exceed 10 years.

Minimal regulation

Many funds in this sector are offshore funds. They are often subject to minimal regulations and transparency as a result. The enforcement of rights is not systematically guaranteed. Investors interested in alternative funds, and particularly offshore funds, need to be aware of these risks.