Characteristics and risks of financial instruments

The following is an overview of the main characteristics and risks of financial instruments. This document does not describe all risks inherent in transactions with financial instruments. Its objective is rather to give basic information concerning the risks inherent in all transactions with financial instruments. Investors should not enter into any investment transactions before understanding all the risks and considering their financial strength and knowledge and experience of such investments.

BASIC RISKS

a) **Economic risk**: Changes in the activity of a market economy always influence prices of financial instruments. Prices can fluctuate according to the rhythm of economic activity. The duration and scope of economic up- and downturns are variable, as are the repercussions of those variations on the different sectors of the economy. In addition, economic cycles vary between different countries. Failure to take these factors into account as well as a mistaken analysis of the development of the economy when making an investment decision may lead to losses.

b) **Risk of inflation:** The devaluation of a currency may cause financial damage to an investor. Therefore, it is important to consider the real value of the existing assets of the investor as well as the real yield that ought to be realized through these assets. To calculate the yield, the real interest rate should be considered, i.e. the difference between the nominal interest rate and the inflation rate.

c) **Government risk**: Government action can both lead to economic and political instability. Changes in laws and regulations and court rulings can have a negative effect on financial instruments, e.g. changes in tax laws or authorizations for capital transfers between countries. It may happen that an issuer, although solvent, happens to be unable to repay its loan and interest at expiration or even completely default on the loan due to the unavailability of foreign currency as a result of e.g. currency exchange controls.

d) **Exchange rate risk**: Since exchange rates fluctuate, there is an exchange rate risk whenever financial instruments are held in a foreign currency. Changes in exchange rates can result in financial loss, even if the value of the underlying financial instrument in the currency in which it is denominated does not change. Material elements affecting the exchange rate of a currency are the inflation rate of a country, the gap between domestic interest rates and foreign rates, the assessment of the evolution of the economic activity, the international political situation and the safety of the investment. Additionally, internal political crises may weaken the exchange rate of the domestic currency.

e) **Liquidity risk**: Insufficient liquidity of the market may mean that the price that investors receive for their financial instruments does not always match their expectations. Fundamentally, a distinction has to be made between a lack of liquidity caused by market demand and supply and the lack of liquidity due to the characteristics of the financial instrument or the market practice.

A lack of liquidity due to market supply and demand arises when the supply or the demand for one financial instrument at a certain price is non-existent or extremely low. Under those circumstances, purchase or sell orders may either be carried out immediately, or only partly or at unfavourable conditions. In addition, higher transaction costs may apply.

A lack of liquidity due to the characteristics of the financial instrument or market practice may occur, for example, because of a lengthy transcription procedure for transactions of registered shares, long performance delays because of market practices or other limitations of commerce. Such insufficient liquidity may also arise due to short-term liquidity needs that cannot be covered quickly enough by the sale of financial instruments.

f) **Psychological risk**: Irrational factors such as tendencies, opinions, or rumours may affect the overall performance of financial instruments on stock exchanges. They may cause significant drops in prices although the future prospects of the companies that are hit have not actually changed unfavourably.

g) **Sustainability risk:** An environmental, social or governance event or condition that, if it occurs, could cause an actual or a potential material negative impact on the value of an investment. Sustainability risk can materialize due to direct impacts of climate change on an investment (*physical risk*), e.g. due to ocean acidification or extreme weather events. Further, sustainability risk can be caused by *transition risk,* which occurs due to actions taken in response to climate change or other environmental threats. Sustainability risk can have an adverse material impact on the value, funding options and reputation of issuers if mitigation measures are not implemented.

h) **Credit risk**: Credit-financed purchases of financial instruments contain additional risks. On the one hand, supplementary collateral may be required in case the evolution of prices exceeds the credit limit guaranteed by a pledge. If the investor turns out to be unable to present such collateral, the bank may be forced to sell deposited financial instruments at an unfavourable moment. On the other hand, the loss incurred due to an unfavourable change in the price of a financial instrument may exceed the initial investment amount. Fluctuations in prices of pledged financial instruments may influence the capacity to repay loans in a negative way.

The investor needs to be aware that, because of the leverage factor accompanying the purchase of credit-financed financial instruments, the sensitivity to price fluctuation of those investments will be proportionally more important. Consequently, the chances of gains increase, as do the risks of losses. Consequently, the risks of such purchases rise according to the importance of the leverage.

SPECIFIC INVESTMENT RISK

1. BONDS

A bond is a certificate or evidence of a debt on which the issuing company or governmental body promises to pay the bondholders a specific amount of interest for a specified length of time, and to repay the loan on the expiration date. The purchaser of a bond (the creditor) has a claim against the issuer (the debtor). A bond may be in bearer or registered form.

The duration of the loan as well as the terms and conditions of repayment are determined in advance. Bonds are issued as short-term (up to 4 years), medium-term (4-8 years) or long-term (more than 8 years). Unless otherwise provided for, the loans are repaid either on the maturity date, through annual payments, or more frequently. The interest payments on bonds may be either fixed or variable, often linked to financial market rates, e.g. EURIBOR. The loan agreement may state that interest payments and principal repayments are index-linked, e.g. they may be linked to the consumer price index.

Main risks:

a) **Insolvency risk**: There is a risk that the issuer may become temporarily or permanently insolvent, which could result in its incapacity to pay back interests and/or the loan. The solvency of an issuer may change depending on the general development of the economy and/or because of changes related to the company, the economic sector of the issuer and/or political developments which entail economic consequences. The deterioration of the issuer's cash flow directly influences the price of the financial instruments issued by the issuer.

b) **Interest rate risk**: The uncertainty concerning future market rates means that the purchaser of a fixed-rate security takes the risk of a decrease of the price of a security in case of a rise in those interest rates. The longer the duration of the loan and the lower the interest rate, the higher the sensitivity of the bonds to a rise in the market rates.

c) **Anticipated refunding risk**: The issuer of a bond may include a provision allowing him to prematurely reimburse the bondholder in case of a decrease of the market rates. Therefore, actual yields may be less favourable to the investor than the expected yields.

d) **Risk of specific kinds of bonds**: Additional risks may exist in relation to some types of bonds, e.g. floating rate notes, reverse floating rate notes, zero coupon bonds, foreign bonds, convertible bonds, indexed bonds, subordinated bonds, etc.

   For those types of bonds, the investor should make inquiries about the risks by means of the issuance prospectus and not purchase such financial instruments before being certain that they understand all the risks.

   For subordinated bonds, the investor ought to enquire about the ranking of the debenture compared to the other debentures of the issuer. In the event of insolvency of the issuer, those bonds will only be reimbursed after repayment of all higher ranked creditors.

   Convertible bonds include the risk that the investor will not be entirely reimbursed but will receive only an amount equivalent to the underlying financial instruments at maturity.

2. STOCKS

A stock certificate represents the rights of the stockholder in a company. These are financial and ownership rights which are determined by the law and the articles of incorporation of the issuing company. Stock may take bearer or registered form. Since shares are negotiable instruments, the rules applicable to such instruments are applicable to shares, e.g. concerning transfer of ownership. Unless otherwise provided, the transfer of bearer shares does not require any formalities, as opposed to the transfer of registered shares which is often subject to limitations. The return on shares is expressed as an increase in the share price and in the form of dividends. In general, investing in stocks is riskier than investing in bonds.

Main risks:

a) **Entrepreneurial risk**: A share purchase does not lend funds to the company, but makes a capital contribution and, as such, becomes a co-owner of the corporation. It is participating in the development of the company as well as in the chances of profits and losses. Therefore, the precise yield of such investment cannot easily be forecast. An extreme situation would entail the insolvency of the issuing company, and consequently the complete loss of the invested amount.

b) **Price fluctuation risk**: Stock prices may undergo unforeseeable price fluctuations, increasing the risk of losses. Increases and decreases in prices in the short, medium- and long-term alternate without it being possible to determine the duration of those cycles.

   The general market risk must be distinguished from the specific risk attached to the company itself. Both risks, together or separated, influence the evolution of share prices.

c) **Divident risk**: The dividend of a share mainly depends on the profit realized by the issuing company. Therefore, if the company makes low profits or even losses, dividend payments may be reduced, and it is possible that no payments will be made.

3. INVESTMENT FUNDS

Funds for collective investment accept funds from investors for collective investments in financial instruments and other assets on the basis of spreading risk, in accordance with a predetermined investment policy.

Investment funds can be open-end or close-end. The units of open-end funds are not fixed, which means that the funds size and participants is not determined. Mutual funds may issue more units as demanded and may also redeem units. Mutual funds are obliged to redeem units at specified redemption price and according to the contractual provision. The capitalization of close-end funds remains the same unless action is taken to change it. As opposed to open-ended funds, the redemption of the units by the close-end funds is not mandatory. Units may only be traded to third parties or, in some cases, on a stock exchange.

Main risks:

a) **Management risk**: Since the yield of investment fund units depends, among other factors, on the capacities and on the decision making of the fund managers, faulty decisions can lead to losses for the fund and its investors.

b) **Risk of drop in unit prices**: Investment fund units carry risk of a drop in their prices, this drop reflecting the decrease in value of the financial instruments or currencies that compose the asset portfolio of the fund. In general, the higher the diversification of the fund, the lower the risk of losses. Inversely, risks are higher for more specialized and less diversified investments. It is therefore important to pay attention to the general and specific risks attached to financial instruments and currencies contained in the fund. The investor may get information about a fund by consulting, among other documents, its prospectus and KIID (Key Investor Information Document).

4. DERIVATIVES

Derivatives are financial instruments the value of which varies according to the value of the underlying asset; the underlying asset may be a security, a market index, an interest rate, a currency, the price of raw material or even another derivative.

The most common types of derivative trading can be divided into three main categories:

1. **Options**, which give the holder the right, but not the obligation, to enter into a transaction. One party (the seller of the option) is irrevocably bound to perform while the other one (the purchaser of the option) is free to exercise the option or not.
2. **Futures and forward contracts,** where parties enter into a transaction which will have to be performed at a specified date in the future. In a forward contract, parties bind themselves irrevocably to perform the transaction on the specified date.
3. **Swaps**, where the parties agree to make regular payments to each other, for example based on fixed or variable interest (interest swaps), or at a certain time swap some form of assets with each other, e.g. different type of currencies (currency swaps).

Options

Options are derivative instruments the value of which alter proportionally to the value of the underlying asset. The purchaser of an option receives, after having paid a premium to its counterpart, the seller of the option, the right to purchase (call) or to sell (put) the underlying asset at maturity or during a certain period for a base price. Every change in the price of the underlying asset entails a proportionally higher change in the price of the option premium due to a leverage effect. The buyer of a call option speculates on a rise of the price of the underlying asset, which causes an increase of the option premium. Conversely, the buyer of a put option benefits from a drop in the price of the underlying asset. The seller of a call option anticipates price drops of the underlying asset whereas the seller of a put profits from a rise of the value of the underlying asset.

Main risks:

a) **Market risk**: Options may be traded on the stock exchange or over the counter. They follow the law of supply and demand. An important point for the determination of the price of an option consist, on the one hand in the liquidity of the market, and on the other hand on the real or expected evolution of the price of the underlying asset.

   A call option loses value when the price of the underlying asset decreases, whereas the opposite is true for put options. The price of an option does not solely depend on the price change of the underlying asset. Other factors may come into play, like the duration of the option or the frequency and intensity of all changes in the value of the underlying asset. Consequently, drops in the option premium may appear although the price of the underlying asset remains unchanged.

b) **Leverage risk**: Due to the leverage effect, price changes in the options premium are generally greater than the changes in the price of an underlying asset. Thus, the holder of an option may benefit from high gains but may also suffer high losses. The risk attached to the purchase of an option increases with the importance of the leverage.

c) **Risk when buying options**: The purchase of an option represents a highly volatile investment. The likelihood that an option arrives at maturity without any value is relatively high. In this case, the investor loses the option premium as well as commissions paid for the purchase of the option. The investor has three choices; it may maintain its position until maturity, it may try to get rid of the option before maturity, or, only for 'American' options, exercise the option before maturity.

   The exercise of the option may either entail the payment of the difference between the strike price and the market price or the purchase or the delivery of the underlying asset. If the option's subject consists in a future contract, its exercise causes the taking of a position in futures, which supposes the acceptance of some obligations concerning security margins.

d) **Risk when selling options**: The sale of an option requires, generally speaking, higher risk-taking than its purchase. Indeed, even if the price obtained for an option is fixed, the losses that the vendor incurs may be potentially unlimited. If market prices of the underlying asset vary in an unfavourable way, the seller of the option will have to adapt security margins in order to maintain its position. If the sold option is 'American' type, performance may be required from the seller at any moment until expiration. If the subject of the option is a futures contract, the seller will take a position in futures and will have to respect its obligations concerning security margins. The seller's risk exposure may be reduced by keeping a position on the underlying asset (financial instruments, index or other) corresponding to the sold option.

Futures and forward contracts

Futures are contracts traded in a stock exchange. They are standardized as regards the quantity of the underlying asset and as regards the expiration date of the transaction. Over the counter (OTC) or forward contracts are contracts that are not traded at a stock exchange and which may be standardized or individually negotiated between purchaser and seller.

Be it a future purchase or sale of an underlying asset, the initial margin is fixed at the moment the contract is made. The margin is generally expressed as a percentage of the value of the contract. In general, the investor may at any time for the duration of the contract liquidate or undo the contract before maturity, either by selling the contract or by entering into an opposite contract. The liquidation ends the positions incurred, and gains and losses accumulated until liquidation are realized. This may involve some costs. Contracts that have not been undone until settlement must be honoured by the parties to it. Contracts having as an underlying asset a tangible property asset may be performed by effective delivery of the asset. In the case of an effective delivery of an asset, the contractual provisions need to be performed in full, whereas for cash settlement contracts, only the difference between the contract price and the market price at the moment of the delivery is payable. Therefore, investors need more available funds for contracts providing for the delivery of an underlying asset than for contracts providing for cash settlement.

Main risks:

a) **Changes in the value of the contract or the underlying asset**: Despite a rise of the price of the contract or the underlying asset, the forward seller will have to deliver the underlying asset at the initially agreed price, which may be a lot lower than the current price. For the seller, the risk equals the difference between the price agreed upon in the contract and the market value at the settlement date. As the market value may theoretically rise in an unlimited manner, the potential loss for the seller is unlimited and may considerably exceed the required margins.

   If the value of the contract or the underlying asset decreases, the forward purchaser will still have to accept the asset at the price agreed upon in the contract which can be potentially very much higher than the current market value on the date of settlement. The maximum the purchaser may lose is the initially agreed upon price, which will be the case if the purchaser has to take possession of a worthless asset. This loss may however exceed by far the required margins. Transactions are regularly evaluated (mark-to-market). The investor will need to have permanently at its disposal a sufficient margin cover. In case the margin becomes insufficient during the forward transaction, a variation margin will be required from the investor at very short notice. If the investor does not respond to its margin call, the transaction may be liquidated before the end of the term.

b) **Difficult or impossible sell off**: In order to limit excessive price fluctuations, a stock exchange may fix limits for certain contracts. The investor has to keep in mind that it may be very difficult, if not momentarily impossible, in such a case to sell off the contract, and should make an inquiry concerning the existence of such limits. It will not always be possible (depending on the market and the terms and conditions of the transaction) to sell off contracts at any moment in order to avoid or to reduce the risks of a current transaction. If stop-loss transactions are possible, they may only be performed during office hours. They do not allow limiting losses to the indicated amount, but they will be performed once the indicated amount is attained.

c) **Short sale**: To sell an asset without owning it at the conclusion of the contract (short sale) entails risk that the seller will have to buy the underlying asset in an extremely unfavourable market in order to be able, at settlement, to perform and to effectively deliver the underlying asset.

d) **Specific risks for over the counter transactions**: The market for standardized OTC transactions is in general liquid and transparent. Therefore, the selling off of contracts can normally be done. However, no market exists for OTC transactions that are not standardized. That is why the liquidation is only possible with the agreement of the other party.

Swaps

Swaps are over the counter (OTC) contracts which may be standardized or individually negotiated between purchaser and seller. Swaps are made short-term (up to 4 years), medium-term (4-8 years) or long-term (more than 8 years). If the swap is in the same currency it is a notional swap. If it is in two currencies, usually the principal is exchanged at the beginning and at the end of the swap. Interest depends on the terms and conditions of the swap; e.g. fixed interest for the entire duration or variable interest often linked to financial market rates, e.g. EURIBOR.

Main risks:

a) **Interest rate risk**: The uncertainty concerning future market rates means that the purchaser of a fixed-rate security takes the risk of a decrease of the price of a security in case of a rise in those interest rates. The longer the duration of the loan and the lower interest rate, the higher the sensitivity of the swap agreements to a rise in the market rates.

b) **Inflation risk**: Applies to inflation-linked swaps.

c) **Currency risk**: The currency risk applies to cross currency swaps. Since currency exchange rates fluctuate, there is an exchange rate risk whenever financial instruments are held in a foreign currency. Material elements affecting the exchange rate of a currency are the inflation rate of a country, the gap between domestic interest rates and foreign rates, the assessment of the evolution of the economic activity, the international political situation and the safety of the investments.

5. ALTERNATIVE INVESTMENTS

An alternative investment consists of an investment in domestic and foreign investment funds which is substantially different from traditional investments in stocks and bonds. Hedge funds are the most usual alternative investments. Their investment style often consists of short sales, leverage effects and derivatives. Investments in private equity funds are also included in this category (venture capital, financing of acquisitions of companies).

Main risks:

a) **Leverage**: In this domain, investment policy may be linked to high risks. For example, by using the leverage effect, a slight change of the market may result in large gains or losses. In some situations, the entire investment may be lost.

b) **Lack of information**: Very often, investors in alternative investments only have very little information at their disposal. The sometimes very complex investment policies of the frequently lack transparency for investors. Policy changes that may lead to a significant increase in the risks often remain unclear or even completely underestimated by investors.

c) **Potential lack of liquidity**: Alternative investments may be less liquid than other investments. Therefore, e.g. share redemption for hedge funds will only be possible either monthly, quarterly or annually. In respect of investment in private equity funds, the lock-up period may last up to 10 years or more.

d) **Minimal regulation**: A considerable number of funds in this sector are in offshore centres (offshore funds). Frequently, those offshore centres only impose minimal regulations on the funds. Therefore, numerous problems or delays may appear during the carrying out of buy or sell orders for which the bank cannot be held liable. The non-violation of the investor’s rights is not systematically guaranteed.