

**“OVERVIEW OF THE MAIN CHARACTERISTICS AND RISKS  
RELATED TO TRADING IN FINANCIAL INSTRUMENTS”**

Pursuant to the European Markets in Financial Instruments Directives and further related measures which are applicable in Luxembourg since November 1st, 2007 (for MiFID I) and since January 3rd, 2018 (for MiFID II) via respective national provisions (hereinafter called "MiFID"), ANDBANK LUXEMBOURG (hereinafter called "ANDBANK") has to ensure, that its clients (hereinafter called the "Client" respectively the "Clients"), prior to dealing with financial instruments, are provided with sufficient information in relation to the nature and risks of such instruments. The Client has to be enabled to understand the risks involved including leverage, volatility and contingent liabilities where these apply, and to take investment decisions on an informed basis.

Where a financial instrument involves two or more different financial instruments or services, ANDBANK needs to provide an adequate description of the components of that instrument and the way in which their interaction increases the risks.

Against this background, this brochure is intended to provide the Client with a brief outline of the main characteristics and risks associated to financial instruments in which you may invest or ANDBANK may invest on your behalf concerning the types of trading and investments which can involve special risks.

Should the Client have any specific queries or is interested in particular financial instruments, ANDBANK recommends contacting his client adviser, in case the Client needs further information.

This document does not deal with the tax or legal consequences pertaining to transactions in financial instruments. Therefore, ANDBANK recommends requesting tailor-made advice on these issues from specialists before any investment.

Unless the context otherwise requires, in the present document reference to masculine gender includes a reference to the feminine gender and reference to the singular includes a reference to the plural and vice versa.

## **1. Introduction**

The purpose of the information contained in the present document is to give a brief outline of the main characteristics and risks associated to financial instruments in which you may invest.

Should you have any specific queries or if you are interested in particular financial instruments, we recommend that you contact us if you need further information.

This document does not deal with the tax or legal consequences pertaining to transactions in financial instruments. Therefore, we recommend that you request tailor-made advice on these issues from specialists before any investment.

## **2. Basic risks**

These risks apply to any type of investment. However, depending on the relevant financial instrument, one or several of the risks described here below may apply cumulatively, therefore entailing an overall increase in the level of risk incurred by the investor.

### **2.1. Economic risk**

Changes in the activity of a market economy always influence prices of financial instruments and exchange rates. Prices are fluctuating more or less according to the downward or growth trends of the economic activity. The duration and scope of the economic downward or growth trends are variable, as are the repercussions of those variations on the different sectors of the economy. In addition, the economic cycles may vary depending on the different countries.

Failure to take these factors into account as well as a mistaken analysis of the development of the economy when taking an investment decision may lead to losses. In particular, one must take into account the impact of the economic trends on the evolution of investment prices.

Depending, inter alia, of economic trends, good past performance of a financial instrument is no guarantee of good future performance of the same investment. Price losses, entailing losses to the investor, are always possible.

Therefore, an investor must at all times ensure that his investments are appropriate in view of the economic situation and, if necessary, make necessary changes in his portfolio.

## **2.2. Risk of inflation**

Losses in value of a currency may cause financial damage to an investor in relation to investments made by the latter. In this context, such a loss in value may have an influence on the actual value of the existing patrimony of the investor as well as the actual yield that ought to be realized through this patrimony. One should thus take into account actual yields, i.e. the difference between the nominal interest rate and the inflation rate for fixed-rate products.

Therefore, when the inflation rate exceeds the yield generated by the financial instruments (gains in capital and interests), this will lead to a loss in the value of the capital actually invested.

## **2.3. Country risk and transfer risk**

It may happen that a foreign debtor, although solvent, be unable to pay interest or repay his debts upon maturity or even completely defaults on his debts due to the unavailability of the foreign currency or to currency exchange controls triggered, for instance, by economic, political or social instability in the relevant country.

The ensuing unavailability of the foreign currency or currency exchange controls may indeed lead to defaults on payments for the investors. Concerning financial instruments issued in a foreign currency, the investor risks to receive payments in a currency which turns out not to be convertible anymore because of exchange controls.

Moreover, even in the absence of any crisis, state intervention in some economic sectors (e.g. nationalization) may have an influence on the value of investors' assets. In certain extreme cases, investors' assets can even be confiscated or frozen by local authorities or investors' rights can be restricted.

As a matter of principle, there is no means to hedge against such risks. However, country ratings published in the financial press can be a useful guide for investors from that point of view.

Finally, more generally, instability in the political and/or economic and/or social situation of certain countries may lead to quick price fluctuations.

## **2.4. Exchange rate risk**

Since currency exchange rates fluctuate, there is an exchange rate risk whenever financial instruments are held in a foreign currency. Depending on exchange rates, the same investment may generate profits or entail losses.

Moreover, since the activities of companies are, to a greater or lesser extent, related to exchange rates, fluctuations in these latter rates are likely to have an impact on the price of the financial instruments they issue.

Material elements affecting the exchange rate of currencies are in particular the inflation rate of a country, the gap between domestic interest rates and foreign rates as well as between domestic and foreign productivities, the assessment of economic activity forecasts, the political situation in the world and the safety of investments in general. Additionally, psychological events, such as lack of confidence in political leaders, may weaken the exchange rate of a domestic currency.

## **2.5. Liquidity risk**

The possibility for an investor to sell financial instruments at any time at market prices is described as liquidity.

Therefore, insufficient liquidity of the market may prevent an investor from selling off financial instruments at market prices. Fundamentally, a distinction has to be made between a lack of liquidity caused by market offer and demand and a lack of liquidity due to the characteristics of the financial instrument or market practices.

A lack of liquidity due to market offer and demand arises when the offer 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 not be carried out immediately, and/or only partly (partial execution) and/or at unfavorable conditions. In addition, higher transaction costs may apply.

A lack of liquidity due to the inherent characteristics of the financial instrument or to market practice may occur, for example, because of a lengthy transcription procedure for a transaction on registered shares, long performance delays because of market practices or other limitations of trade, short-term liquidity needs that cannot be covered quickly enough by the sale of the financial instruments or long lock-in periods before being entitled to execute a transaction, in particular for alternative investment funds.

## **2.6. Psychological risk**

Irrational factors may affect the overall evolution of prices, such as for example tendencies, opinions, rumors which may cause important drops in prices, although the financial situation and future perspectives of the relevant companies have not evolved unfavorably.

## **2.7. Credit risk**

Credit-financed purchases of financial instruments contain several additional risks. On the one hand, additional collateral may be required – sometimes at very short notice - in case the credit limit guaranteed is exceeded due to the evolution of the price of the collateral. If the investor turns out to be unable to provide such collateral, the bank may be forced to sell deposited financial instruments at an unfavorable moment. On the other hand, the loss suffered due to an adverse evolution of the price of a financial instrument may exceed the initial investment amount. Fluctuations of prices of the financial instruments constituting the collateral may influence the capacity to repay loans in a negative way.

One needs to be aware that, as a consequence of the leverage effect entailed by the purchase of credit-financed financial instruments, the sensitivity to price fluctuations of those investments will be proportionally more important with the consequence that chances of gains increase, as do the risks of losses. The risks entailed by such purchases rise according to the importance of the leverage.

## **2.8. Interest rate risk**

Generally speaking, fluctuations in interest rates, whether short-term or long-term rates, may have substantial adverse consequences on the prices of financial instruments.

## **2.9. Risk of insolvency of the issuer or of the clearing and settlement system**

In case of insolvency of the issuer of financial instruments or of the clearing and settlement system on which those instruments are negotiated, an investor may lose part or all the monies he has invested.

## **2.10. Additional risks on emerging markets**

Emerging markets are the markets of the countries in which the percentage share of income per inhabitant is considered as average or low by the World Bank. More practically, this concept encompasses markets established in countries which are characterized by a certain degree of political instability, relatively unpredictable financial markets and economic growth patterns, a financial market which is still at the development stage and a weak economy. This concept of emerging markets encompasses a large number of markets established in South America, Eastern Europe and certain Asian countries.

Generally speaking, on these markets, the risks identified above are enhanced.

Indeed, political or economic changes (e.g. inflation, exchange rate) will have more influence on investments' prices in emerging markets than in other countries. Likewise, emerging markets usually react more deeply and durably in case of natural disaster or war.

Moreover, emerging markets often have less elaborated rules for clearance and settlement of transactions with the consequence that processing errors or default in delivery of instruments are more likely to occur.

Finally, regulatory supervision over these markets and rules to protect investors are often weak.

## **2.11. Other basic risks**

### **2.11.1. Information risk**

It is the risk of poor investment decisions arising from a lack of information, incomplete information or inaccurate information. This may be due in turn to the use by the investor of unreliable sources, the misinterpretation of originally accurate information by the latter or can be due to communication errors.

### **2.11.2. Transmission risk**

When placing an order, the investor must provide certain details necessary for its execution by the bank (financial instrument, type of order, volume, execution date, etc.). The more precise the order placed is, the smaller the risk of transmission error is.

### **2.11.3. Risks pertaining to transaction costs**

The bank as well as other domestic or foreign-based parties may be involved in the execution of an order (e.g. brokers), in which case the fees and commissions of these persons will be passed on to the investor.

An investment becomes profitable only once all these costs have been covered.

## **3. Specific investment risks**

### **3.1. Term deposits**

These are cash deposits remunerated at a fixed maturity date and rate, determined in advance.

#### **3.1.1. Characteristics:**

- Yield: payment of interests;
- Duration: short-term (up to 4 years), medium-term (4-8 years) or long-term (more than 8 years);
- Interests: interests depend on the terms and conditions of the deposit; e.g. fixed interest for the entire duration or variable interest often linked to financial market rates (e.g. LIBOR or EURIBOR).

#### **3.1.2. Advantages:**

Depending on market conditions, these products may provide a higher return than other fixed-income products.

#### **3.1.3. Risks:**

These products are mainly subject to the risks of inflation, exchange and interest rate and of insolvency of the counterparty, as described under I. above.

### **3.2. 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 specified amount of interest for a specified length of time, and to repay the loan on the expiration date. A bond may be in bearer or registered form. At issuance, the par value of one bond represents a fraction of the total amount of the loan. The interest payments on bonds may be either fixed or variable. The duration of the loan as well as the terms and conditions of repayment are determined in advance. Certain structured products may take the form of a bond and, therefore, these products will be described under the chapter "structured products".

The purchaser of a bond (the creditor) has a claim against the issuer (the debtor).

#### **3.2.1. Characteristics:**

- Yield: interest payments, possible increases in value (difference between the purchase/issuance price and the sale/redemption price);
- Duration: short-term (up to 4 years), medium-term (4-8 years) or long-term (more than 8 years);
- Currency: national currency of the investor or foreign currency. It can be provided that repayment of capital and interest payments can be made in different currencies. In such a case, an option can be associated to the bond in order to limit the exchange rate risk;
- Form: individual documents with specific nominal values (which can be delivered to the investor) or collectively represented by a global certificate, which is deposited with a custodian bank;
- Issue price: at par (100% of the nominal value), below par (the issue price is lower than the nominal value) or above par (the issue price is higher than the nominal value);

- Place of issuance: it can be the domestic market of the investor or also a foreign market;
- Repayment:
  - scheduled repayment: unless otherwise provided for or unless the issuer becomes insolvent, the loans are repaid either on the maturity date, or through annual instalments (generally after a lock-in period), or at different dates determined by drawing lots (generally after a lock-in period);
  - unscheduled repayment: the issuer may reserve the right to repay at a date he will determine, at his own discretion, at a later stage;
- Interests: interests depend on the terms and conditions of the loan; e.g. fixed interest for the entire duration or variable interest often linked to financial market rates (e.g. LIBOR or EURIBOR). In this latter case, a minimum and/or maximum rate can be provided;
- Particular features (e.g. relations between the issuer and the investor): set out in the terms and conditions of issue of the relevant bond.

### **3.2.2. Advantages:**

Depending on market conditions, these products may provide a higher return than other fixed-income products.

### **3.2.3. Risks:**

#### **3.2.3.1. Insolvency risk**

The issuer risks to become temporarily or permanently insolvent, entailing his incapacity to pay back interests and/or the principal amount of the loan. The solvency of an issuer may change depending on the evolution of certain factors during the life of the bond. This may be due in particular to the general evolution of the economy, changes entailing substantial economic consequences.

This risk is more or less important depending on whether the bonds are issued by a governmental body or a private institution. This risk is also related to the nationality of the issuing governmental body or the type or sector of activity of the private institution which issued the bonds (credit institution, industrial undertaking, etc.) as well as, more generally, the creditworthiness of the latter.

This risk is more limited if the bonds are collateralized. However, in such a case, the additional protection granted to the investor will have to be assessed on the basis of the status and creditworthiness of the guarantor.

From that point of view, it should be noted that, as a matter of principle, bonds issued by entities which are considered as safe generally offer lower returns. However, the risk of total loss of the investment is correlatively lower.

The deterioration of the issuer's creditworthiness does equally influence in a negative manner the price of the relevant financial instruments.

#### **3.2.3.2. Interest rate risk**

The uncertainty concerning the evolution of interest rates entails that the purchaser of a fixed-rate financial instrument bears the risk of a decrease in the price of such financial instrument in case of a rise in interest rates. The sensitivity of the bonds to fluctuations in interest rates depends in particular on the period remaining until maturity of the bond and the level of nominal interest rates.

#### **3.2.3.3. Anticipated refunding risk**

The issuer of a bond may include a provision allowing him to repay earlier the bondholder in case for instance of a decrease in interest rates in the markets. Such an early repayment can have an impact on the yield expected by the investor.

#### **3.2.3.4. Risks specific to bonds redeemable by drawing lots**

The maturity date of bonds that are redeemable by lot is difficult to determine so that unexpected changes may take place in the yield of such bonds.

#### **3.2.3.5. Risks related to the country of issue**

If the bond is issued on a foreign market, it will in principle be governed by the law of the country of issue. The investor must thus inquire about the possible impact of the applicability of this foreign law on his rights.

### **3.2.3.6. Risks of specific kinds of bonds**

Concerning some kinds of bonds, additional risks may exist: e.g. floating rate notes, reverse floating rate notes, zero coupon bonds, bonds in a foreign currency, convertible bonds, index or option-linked bonds, subordinated bonds etc.

For those types of bonds, the investor should make inquiries about the risks described in the issuance prospectus and not purchase such financial instruments before being certain to master all risks.

The developments here below only aim at providing a brief outline on the additional risks incurred by the investor in relation to specific bonds.

### **3.2.4. Floating rate bonds**

Floating rate bonds can take several forms, such as for instance, floor floater bonds, which are variable-interest bonds which pay a minimum level of interest. Therefore, in the event that the sum of the reference rate and the spread falls below this level, the investor will receive payment of interests at least at the minimum rate determined in advance. Conversely, for cap floater bonds, the rate of interest paid to the investor is limited to a maximum amount determined in advance.

For these bonds, it is not possible to anticipate, as of their issue, the actual yield of the investment since the latter vary according to the fluctuations of market rates.

For certain variable-interest bonds, it can be provided that the interest rate moves in the opposite direction to market rates (i.e. reverse floating rate bonds). For these medium or long-term bonds, the interest rate payable to the investor is calculated according to the difference between a fixed rate of interest and a reference rate (e.g. 16% minus LIBOR). This means that the investor's interest income rises when the reference rate falls. The price of these bonds is usually subject to higher market fluctuations than the fixed-rate bonds having the same maturity.

There are also convertible floating rate bonds which give the investor or the issuer (depending on the terms and conditions of the bonds) the right to convert the note into a normal fixed-interest bond. If the issuer reserves this right, the actual yield of the bond may be lower than that contemplated by the investor.

### **3.2.5. Zero bonds**

Zero bonds do not have interest coupons attached. Instead of periodic payments of interests, the investor receives the difference between the redemption price and the issue price (in addition to the repayment of the principal amount). Such bonds are usually issued at a discount to their nominal value, and redeemed on maturity at par. The size of the discount granted to the investor depends on the maturity of the bond, the borrower's creditworthiness and prevailing market interest rates.

Hence, such bonds offer investors a fixed lump-sum payment at a future date if the bond is held until maturity (which may have various tax implications depending on the countries). On the contrary, if the bond is sold before maturity, the investor will only receive payment of the sale price of the bonds.

Therefore, if market interest rates increase, the price of these bonds falls more sharply than for other bonds with the same maturity and credit rating. Moreover, in case of foreign currency denominated zero bonds, there is also an increased exchange rate risk because interest payments are not made on a regular basis over the life of the bond but there is only payment of a lump sum at a future date determined in advance.

### **3.2.6. Combined-interest bonds or step-up bonds**

For combined-interest bonds or step-up bonds, the investor does not receive interest payments at a single, fixed rate over the entire life of the bond. However, such bonds are similar to fixed-rate bonds in so far as the interest rate is determined in advance and does not depend on fluctuations in market rates. Instead, the rate of interest only changes during the term of the bond, following a pattern agreed at the time of issue.

Indeed, with combined-interest bonds, it is agreed that there will be no coupon for the first years of the life of the bond but an above-average coupon will be paid to the investor for the remaining years. These bonds are usually issued and redeemed at par.

With step-up bonds, a relatively low coupon is paid initially, and a very high one is paid to the investor for the following years. These bonds are usually issued and redeemed at par.

### **3.2.7. Phased interest rate bonds**

These bonds are actually a hybrid of fixed and variable-interest notes. They usually have a maturity of 10 years, and pay a fixed coupon for the first years. Afterwards, during a period of several years, the investor will receive interests calculated on the basis of a variable interest rate in line with market rates. For the last years of the life of the bond, the bond reverts to paying a fixed rate of interest to the investor.

### **3.2.8. Index-linked bonds**

For these bonds, the redemption amount and/or interest payments are determined on the basis of the level of an index or of a managed account determined in advance - at redemption or on the interest payment date – and thus are not fixed. These bonds are often zero bonds.

Such bonds are usually issued in two "tranches": bull bonds (bonds which appreciate in value if the index rises) and bear bonds (bonds which appreciate in value if the index falls). The investor runs the risk of price losses if the value of the index falls (bull bonds) or if the value of the index rises (bear bonds).

### **3.2.9. Subordinated bonds**

For these bonds, investors ought to inquire about the ranking of the debenture compared to other debentures of the issuer since, in case of a bankruptcy of the issuer, those bonds will only be reimbursed after repayment of all higher ranked creditors (preferential and pari passu bonds).

However, generally, the better the position of the creditor in case of insolvency is, the lower the return of the bond will be.

### **3.2.10. Convertible/warrant bonds**

In this case, the investor is granted the right to exchange the bonds, at a specific time or within a specific period, for shares in the issuer at a ratio determined in advance. There is usually a minimum lock-in period during which an investor cannot exercise his right of conversion. In case the right of conversion is not exercised, the bonds remain fixed-interest notes, repayable at par on maturity.

Because they offer a conversion right, such bonds usually offer a lower interest rate than ordinary bonds. The price of these bonds is essentially determined by the price of the underlying shares. Indeed, if the price of the shares drops, the price of the bonds falls as well. Therefore, the risk of price losses is higher than for bonds without conversion rights (but usually lower than the risk of price losses associated to a direct investment in the relevant shares).

There are also bonds which give the investor the right to subscribe for shares, in addition to the bond and not as an alternative. This subscription right is certificated by a warrant which is detachable from the bond. This warrant can be traded separately. The shares in the issuer can be purchased by the investor on surrender of the warrant, on terms agreed in advance. The investor continues, in addition hereto, to hold the bond until maturity. As for bonds with conversion rights, the periodic interest payments are usually relatively low. Moreover, the price of such bonds, with the warrant attached, will equally track the price of the underlying shares. If the bonds are without the warrant attached, they amount to traditional bonds and, therefore, their price is mainly determined by market rates.

Certain special forms of the bonds described in the preceding paragraph give the holder of the warrant the right to buy or sell another bond determined in advance at a fixed price.

## **3.3. Shares**

A share is a certificate evidencing the rights of the shareholder, to whom it is granted, in a company. Share may take bearer or registered form. One share of stock represents a fraction of the share capital of a corporation.

### **3.3.1. Characteristics:**

- Yield: dividend payments and increases in value of the financial instrument are possible;
- Shareholder's rights: financial and ownership rights; those rights are determined by the law and the articles of incorporation of the issuing company;
- Transferability: unless otherwise provided by law, the transfer of bearer shares does not, as a matter of principle, require any formalities, as opposed to the transfer of registered shares which is often subject to limitations.

### **3.3.2. Advantages:**

In principle, the investor has voting rights and shares the profits of the company. He may equally obtain higher returns than for investments in term deposits or bonds.

### **3.3.3. Risks:**

#### **3.3.3.1. Entrepreneurial risk**

A share purchaser is not a creditor of the company, but makes a capital contribution and, as such, becomes a co-owner of the corporation. Consequently, he is participating in the development of the company as well as in the related opportunities and risks, which may entail unexpected fluctuations in the value of such investment. An extreme situation would consist in the bankruptcy of the issuing company, which would have as a consequence the complete loss of the invested amount.

#### **3.3.3.2. Price fluctuation risk**

Share prices may undergo unforeseeable price fluctuations causing risks 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.

As a matter of principle, the general market risk must be distinguished from the specific risk attached to the company itself. Both risks influence the evolution of share prices.

#### **3.3.3.3. Dividend risk**

The dividend of a share mainly depends on the profit realized by the issuing company. Therefore, in case of low profits or even losses, it may happen that dividend payments are reduced or that no payments are made.

### **3.4. Bonus certificates**

Bonus certificates represent patrimonial rights as defined in the terms and conditions of issue of those bonds.

#### **3.4.1. Characteristics:**

In general, they come in the form of par value debt instruments that entitle their holder to a part of the profit of the company.

As a matter of principle, fixed or variable distribution bonus certificates must be distinguished from bonus certificates with option or conversion right.

#### **3.4.2. Risks:**

##### **3.4.2.1. Absence of distribution or reduction of repayment**

In case of losses by the issuing company, interest payments may be halted if no minimal interest payment has been provided for. In addition, the repayment of the principal amount may be reduced.

##### **3.4.2.2. Issuer risk**

The bankruptcy of the issuer entails the complete loss of the invested funds.

### **3.5. Investment funds**

An investment fund is a company or an organized joint ownership which is collecting funds from a certain number of investors and which is engaged in reinvesting those funds according to the principle of risk spreading and to make its stockholders or members benefit from the results of its asset management.

#### **3.5.1. Characteristics:**

□ Open-ended funds: in an open-ended fund, the number of shares/units and, consequently, of participants cannot, in principle, be determined. The mutual fund may issue new shares/units or redeem existing shares/units. Towards investors, the mutual fund is obliged to redeem shares/units, at its own expenses, at the agreed redemption price and in line with the contractual provisions;

□ Closed-ended funds: in a closed-ended fund, the issue of shares/units is limited to a number determined in advance. As opposed to open-ended funds, the redemption of the shares/units by the fund is not mandatory. Shares/units may only be sold to third parties or, in some cases, on the stock exchange.



The price of the shares/units depends on market offer and demand.

### **3.5.2. Advantages:**

The holder of shares/units receives part of the income of the fund.

As a result of the diversification of the underlying investments made by the fund, the chances of profits increase or, at least, the risks of losses are limited.

For the investments made by the fund, the latter usually benefits from better market conditions (in particular for costs) than the conditions which would apply to the investor if he invested directly in the same products.

### **3.5.3. Risks:**

#### **3.5.3.1. Management risk**

Since the yield of investments made by a fund depends, among other factors, on the capacities of the managers and on the quality of their decisions, errors in the management of the fund may lead to losses or loss of profits.

#### **3.5.3.2. Risk of a drop in share/unit prices**

Investment fund shares/units bear the 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, any other things remaining equal. The higher the diversification of the investments made by the fund is, the lower at least theoretically, the risks of losses are. Conversely, risks are more important if the fund makes 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's portfolio.

The investor must inquire about the risks specific to each fund by consulting, among others, the relevant prospectus.

### **3.6. Derivatives**

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

Concerning derivatives, a distinction must be made in particular between:

a) Option transactions, which give to one of the parties 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;

b) Forward transactions, where the parties enter into a transaction which will have to be performed at a specified date in the future. In a forward transaction, parties bind themselves irrevocably to perform the transaction concluded between them at the specified date.

Transactions on such products trigger higher risks of losses and can even lead to the total loss of the invested funds. Since such transactions can lead to margin calls over the life of the product, investors must ensure that they have sufficient liquid assets before entering into such transactions.

#### **3.6.1. Option transactions**

Options are derivative instruments the value of which tracks the evolution of the value of the underlying asset. The purchaser of an option receives, after having paid a premium to his 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 strike price determined in advance.

The characteristics of the option can be standardized or defined on a case-by-case basis between the purchaser and the seller.

##### **3.6.1.1. Characteristics:**

Duration: the duration of the option starts from the day of the subscription until the day of the maturity of the option right;

Link between the option and the underlying asset: this link underlines the number of units of the underlying asset that the holder of the option has the right to purchase (call) or to sell (put) by exercising his option right;

□ Strike price: the strike price is equal to the price agreed upon earlier at which the holder of the option may purchase or sell the underlying asset when he exercises his option right;

□ Strike date: options which can be exercised on any trading day up until the maturity date are called “American style” options. Options which can be exercised only on their maturity date are called “European style” options. The latter can nonetheless be traded on the secondary market before their maturity if the market is liquid;

□ Conditions of exercise: the option can be with physical settlement, in which case the buyer of a call option can demand physical delivery of the underlying asset against payment of the strike price or the buyer of a put option can deliver to the seller of the option the underlying asset, against payment of the strike price by the seller. The option can also be with cash settlement, in which case the difference between the strike price and the market value of the underlying asset is due, provided nonetheless that the option is “in-the-money”;

□ Options “in-the-money”, “out-of-the-money”, “at-the-money”:

A call option is “in-the-money” if the market value of the underlying is higher than the strike price.

Conversely, a call option is “out-of-the-money” if the current market value of the underlying asset is lower than the strike price.

A put option is “in-the-money” if the market value of the underlying asset is lower than the strike price.

Conversely, a put option is “out-of-the-money” if the current market value of the underlying asset is higher than the strike price.

When the market value and the strike price are the same, the option is “in-the-money”;

□ Price of the option: The price of an option depends on its intrinsic value as well as on a variety of factors (time value), in particular the remaining life of the option and the volatility of the underlying asset. The time value reflects the chance that the option will be “in-the-money”. Therefore, this latter value is higher for long duration options with a very volatile underlying asset.

□ Margin: over the lifetime of an option, the seller must provide as collateral, either the corresponding amount of the underlying asset or another form of collateral. The margin is determined by the bank.

Stock-exchanges stipulate a minimum margin for listed options. If the margin cover provided by the investor proves to be insufficient, the bank is entitled to request additional collateral, sometimes at a very short notice;

□ Form:

o Option certificates (warrants, listed options): the rights and obligations associated to the relevant option are securitized. They are sometimes listed on the stock-exchange.

o Traded options: these are standardized options for which the rights and obligations are not securitized and which are traded on certain specific stock-exchanges.

o Over-the-counter (OTC) options: these are options traded outside a stock-exchange or agreed directly off-exchange between the parties. Their level of standardization depends on market practices. They can also be tailor-made to meet investors’ needs. This type of option is not listed and rarely takes the form of a certificate;

□ Leverage: every change in the price of the underlying asset entails a proportionally higher change in the price of the option right;

□ Purchase of a call or a put: the buyer of a call option speculates on a rise of the price of the underlying over the life of the option, which causes an increase in the value of his option right. Conversely, the buyer of a put option benefits from a drop in the price of the underlying;

□ Sale of a call or a put: the seller of a call option anticipates price drops of the underlying asset whereas the seller of a put profits from a rise in the value of the underlying asset.

### **3.6.1.2. Advantages:**

Over the lifetime of the option, the beneficiary of the option is granted the right to purchase or sale certain assets. The chances of profits are important due to the leverage effect linked to the use of an underlying asset. For the counterparty, such a transaction mainly permits to increase the return on an existing position.

### **3.6.1.3. Risks:**

#### **3.6.1.3.1. Price risk**

Options may be traded on stock-exchanges or over-the-counter and follow the law of offer and demand. An important point for the determination of the price of an option consists, on the one hand in determining

whether there is a sufficient liquidity of the market for the relevant option, and on the other hand in determining the actual or expected evolution of the price of the corresponding 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 fluctuations of the underlying asset but a series of other factors may come into play, such as for instance the duration of the option or the frequency and intensity of the fluctuations in the value of the underlying asset (volatility). Consequently, drops in the value of the option may appear although the price of the underlying asset remains unchanged.

#### **3.6.1.3.2. Leverage risk**

Due to the leverage effect, price modifications of the value of the option are generally higher than the changes in the price of the underlying asset. Thus, during the lifetime of the option, chances of gains for the holder of an option as well as risks of losses are higher. The risk attached to the purchase of an option increases with the importance of the leverage effect of the relevant option.

#### **3.6.1.3.3. Purchase of an option**

The purchase of an option represents a highly volatile investment and the likelihood that an option reaches maturity without any value is relatively high. In this case, the investor loses all the funds used for the payment of the initial premium as well as commissions. Pursuant to the purchase of an option, the investor can maintain his position till maturity, he can enter into an opposite transaction or, for "American-style" options, exercise the option before maturity.

The exercise of the option may either entail the payment in cash of a differential amount or the purchase or the delivery of the underlying asset. In case the option's object consists in futures contracts, its exercise causes the taking of a position in futures, which supposes the acceptance of some obligations concerning security margins.

#### **3.6.1.3.4. Sale of an option**

The sale of an option entails, generally speaking, higher risk-taking than its purchase.

Indeed, even if the price obtained for an option is fixed, the losses that the seller may incur are potentially unlimited.

If market prices of the underlying asset vary in an unfavorable way, the seller of the option will have to adapt his security margins in order to maintain his position. If the sold option is an "American-style" option, the seller may be required at any moment to settle the transaction in cash or to purchase or deliver the underlying asset. If the underlying of the option consists in futures contracts, the seller will take a position in futures and will have to respect 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.

#### **3.6.1.3.5. Purchase of the underlying asset in case of short sale**

The seller of an uncovered call option does not have a corresponding quantity of the underlying asset at his disposal upon the conclusion of the contract (short sale).

In the case of options with physical settlement, the potential loss for the investor amounts to the difference between the strike price paid for the delivery of the underlying assets in case the option right is exercised and the price he will have to pay to acquire the relevant underlying asset. For options with cash settlement, the risk of loss for the investor amounts to the difference between the strike price and the market value of the underlying.

Since the market value of the underlying can move well above the strike price when exercising the option, the risk of loss for the investor cannot be determined in advance and is, theoretically at least, unlimited.

This risk is more important for "American-style" options which may be exercised at any time and thus at a highly unfavorable time for the seller of the option.

Another risk for the investor selling the option is also to be unable to obtain the requested underlying when the option is exercised or to have the possibility to obtain it only at very unfavorable conditions (in particular for costs) due to the situation of the markets.

In this context, it must be reminded that the potential loss can also be greater than the value of the margin cover provided by the investor.

### **3.6.1.3.6. Specific risks associated to options traded over-the-counter (OTC)**

A position arising from the purchase or the sale of an OTC option can only be closed with the approval of the counterparty.

### **3.6.1.3.7. Specific risks associated to combined options**

A combination consists in the conclusion of two or more option contracts based on the same underlying, which differs in the option type or the characteristics of the option.

The number of possible combinations is important. Therefore, the risks involved by any particular combination cannot be described in the present document. Consequently, the investor must inquire about the specific risks associated to the contemplated combination.

It can nonetheless be noted that for any combination, the cancellation, at a certain point, of one or more options may entail substantial changes in the risk position of the investor.

### **3.6.1.3.8. Specific risks associated to “exotic” options**

These options are subject to additional conditions or agreements. Their payment structures cannot be obtained by using a combination of transactions.

They can take the form of tailor-made OTC options or warrants.

The range of exotic options is unlimited so that it is impossible to describe the risks entailed by each “exotic” option in the present document.

However, the most common “exotic” options entail the following additional risks compared to normal options.

#### Options depending on the overall evolution of the underlying

It is not just on expiration or exercise date of the option that the market value of the underlying is important. The investor needs to take into account potential fluctuations in the market value of the underlying during all the life of the option in order to assess the chances of gains or risks of losses.

- Barrier options:

The rights attached to such options arise (knock-in options) or expire (knock-out options) fully and irrevocably only when, during a period determined in advance, the market value of the underlying reaches a fixed threshold.

- Payout options:

Payout options grant a right to payment of a fixed amount, agreed in advance:

#### o Digital option

Payment occurs only if, upon maturity, the market value of the underlying is above (digital call) or below (digital put) the strike price. In this case, if the option is “in-the-money”, the seller of the option must pay the amount initially agreed on.

#### o Lock-in option

Payment occurs only if, during the life of the option or a specified time period during this lifetime, the market value of the underlying reaches a threshold determined in advance. Indeed, when the fixed threshold is reached, the seller of the option must pay the amount initially agreed on, irrespective of the subsequent evolution of the price of the underlying.

#### o Lock-out options

The fixed payment only occurs if during all the life of the option or a specified time period during this lifetime, the market value of the underlying never reaches a threshold or certain thresholds determined in advance. In such a case, whenever the fixed threshold or thresholds are reached, the option becomes invalid and thus loses its value, irrespective of the subsequent evolution of the price of the underlying.

- Asian options

For these options, an average value is derived from the market value of the underlying over a specified time period. This average is used to fix the underlying's value which must be delivered (average-rate option) or the strike price which must be paid (average-strike option). The calculation of an average value for the underlying can result in:

o average-rate option: the value of the option on its maturity date being lower for the buyer and considerably higher for the seller than the difference between the strike price and the market value of the underlying upon maturity;

o average-strike option: the strike price of a call option being higher than the price originally agreed or the strike price of a put option, being lower than the price originally agreed.

- Lookback options

The market value of the underlying is recorded periodically over a specified time period.

For a strike lookback option, the lowest value (call option) or the highest value (put option) of the underlying becomes the strike price.

For a price lookback option, the strike price remains unchanged but the highest value (call option) or the lowest value (put option) is used in calculating the value of the underlying.

Therefore, the risk is that the calculated strike price or calculated value of the underlying varies considerably from the prevailing market prices on the maturity date. Consequently, in the above mentioned cases, the seller must be aware that upon calculation or exercise of the right, the most unfavorable strike price or market value will be applied.

- Contingent options

Buyers of such options must only pay the premium if the market value of the underlying reaches or exceeds the strike price during the life of the option ("American-style" option) or on the maturity date ("European-style" option).

The risk is thus to be compelled to pay the entire premium even if the option is only just "in-the-money" or "at-the money".

- Cliquet and ladder options

o Cliquet options: the strike price is periodically modified for the following period – in general at regular intervals - to bring it in line with the market value of the underlying. An intrinsic value is then, if applicable, calculated and accumulated over the lifetime of the option.

o Ladder options: in this case, the modifications take place periodically only when the underlying reaches specified market prices. Normally, only the higher market value is taken into account.

On the maturity date, the seller of a cliquet option is required to pay all the accumulated lock-in market values in addition to any intrinsic value of the option and the seller of a ladder option must pay the highest lock-in market value. For the seller, the amount to be paid can thus be considerably higher than the option's intrinsic value on the maturity date.

### Options on several underlyings

- Spread and outperformance options

Both types of options are based on two underlyings.

With a spread option, the absolute difference in movement between the value of the two underlyings forms the basis for calculating the option's value.

With an outperformance option, the relative difference, i.e. the percentage improvement of the value of one underlying over the other, is taken into account.

The risk is that, despite a positive performance of the market value of both underlyings, the performance difference between the underlyings may be equal or even lower, thus having an impact on the value of the option.

- Compound options

The underlyings of such options are options.

Such products can consequently entail large leverage effects, which may trigger important financial obligations.

### **3.6.2. Forward transactions**

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

#### **3.6.2.1. Characteristics:**

-Initial required margin: be it a future purchase or sale of an underlying asset, an initial margin is fixed when the contract is concluded. This margin is generally expressed in percentage of the value of the contract;

-Variation margin: during the entire life of the contract, a variation margin is periodically determined and required from the investor. It represents the accounting benefit or loss, derived from the modification of the contractual price or the price of the underlying asset. The variation margin may exceed the initial required margin by far. The computation method for the variation margin, be it during the life of the contract or at closing, depends on the stock-exchange rules and on the specific contractual provisions of each contract. The investor must immediately provide the bank with variation margin upon request from the latter;

-Liquidation: in general, the investor may, at any time during the life of the contract, sell off or liquidate the contract before maturity, either by selling the contract or by entering into an opposite contract as regards the delivery and reception obligations. In this latter case, the provisions of the opposite contract will be such as the delivery and reception obligations arising from both contracts cancel one another out. The liquidation puts an end to the risk positions incurred: gains and losses accumulated until liquidation are realized;

-Settlement: contracts that have not been sold off until settlement must be performed by the relevant parties. Contracts having as underlying tangible property assets may be performed by effective delivery of the assets as well as by cash settlement (although physical delivery settlement is more common) while contracts having as underlying reference rates (to the exception of currencies) cannot be performed by actual delivery of the underlying. In case of an effective delivery of the underlying, the contractual obligations need to be performed in full, whereas for cash settlement contracts, only the difference between the price agreed upon when concluding the contract and the market price upon performance of the contract is payable. Therefore, investors need more available funds for contracts providing for the actual delivery of the underlying asset than for contracts providing for cash settlement.

#### **3.6.2.2. Advantages:**

Chances of gains are important depending on the market value of the underlying upon maturity, especially because the principal amount originally invested is low. Such products may also permit to secure existing positions.

#### **3.6.2.3. Risks:**

##### **3.6.2.3.1. Modification of the value of the contract or the underlying asset**

The investor incurs a risk if the evolution of the actual value of the contract or of the underlying is not in line with the evolution forecasted by the investor when concluding the contract.

Despite a rise in the price of the contract or the underlying, the forward seller will have to deliver the underlying asset at the initially agreed upon price, which may be far lower than the current price. For the seller, the risk is equal to the difference between the price agreed upon when concluding the contract and the market value on maturity date. As the market value may theoretically rise in an unlimited manner, the loss potential for the seller is unlimited and may considerably exceed the required margins.

In case the value of the contract or the underlying asset decreases, the forward purchaser will still have to accept the underlying asset at the price agreed upon in the contract which can be potentially very much higher than the current market value. Therefore, the buyer's risk consists in the difference between the price agreed upon when concluding the contract and the market value on the maturity date. Thus, the maximum the purchaser may lose is the initially agreed upon price. This loss may however exceed by far the required margins.

Transactions are regularly evaluated (mark-to-market) and the investor will need to have permanently at his disposal a sufficient margin cover. In case the margin becomes insufficient during the forward transaction, the investor will have to provide a variation margin at very short notice, failing which the transaction will be liquidated before due term, generally at loss.

##### **3.6.2.3.2. Difficult or impossible sell off**

In order to limit excessive price fluctuations, a stock-exchange may fix price limits for certain contracts. In such a case, the investor has to keep in mind that, whenever a price limit is reached, it may be very difficult if not momentarily impossible to sell off the contract. Thus, every investor should, before entering into a forward contract, 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 pending transaction.

Stop-loss transactions, if they are possible, may only be performed during office hours of the bank. They do not allow to limit losses to the indicated amount, but they will be performed once the threshold is reached in the market and they become at that time an order to perform such a transaction at the then current market price.

#### **3.6.2.3.3. Purchase of the underlying in case of short sale**

To sell an underlying on a forward basis without owning it when concluding the contract (short sale) entails the risk that the seller will have to buy the underlying asset at an extremely unfavorable market price in order to be able, upon maturity, to perform his obligation to deliver effectively the underlying.

#### **3.6.2.3.4. Specific risks associated to over-the-counter transactions (OTC)**

For standardized OTC transactions, the market is in general transparent and liquid. Therefore, the selling off of contracts can normally be done. However, no market exists for OTC transactions agreed individually between the purchaser and the seller. That is why the closing-out is only possible with the agreement of the other party.

#### **3.6.2.3.5. Specific risks associated to forward exchange products**

A forward exchange transaction allows the selling or the purchase of a currency at a future date and at a price fixed when the contract is concluded.

This type of investment permits to eliminate the exchange risk. Moreover, no premium has to be paid upon conclusion of the contract.

The main risk for the investor is the loss of profit in the event the evolution of market rates is more favorable than the evolution of exchange rates anticipated when concluding the contract.

#### **3.6.2.3.6. Specific risks associated to combined transactions.**

The number of possible combinations is important. Therefore, the risks involved by any particular combination cannot be described in the present document. Consequently, the investor must inquire about the specific risks associated to the contemplated combination.

It can nonetheless be noted that, generally, the risks associated to such combined transactions may vary when elements of this combination are sold off.

### **3.7. Structured products or EMTN**

Structured products are combinations of two or more financial instruments, forming together a new investment product. At least one of them must be a derivative product.

Structured products with capital protection are the most frequently traded.

Such products can be traded either on the stock-exchange or over-the-counter.

Due to the important number of possible combinations, each structured product has its own risks since the risks associated to each of the elements of this combination can be reduced or even eliminated or enhanced due to such a combination. Consequently, the investor must inquire about the specific risks associated to the relevant structured product. Such information is available, for instance, in the commercial brochures or form sheets describing the product.

#### **3.7.1. Structured products with capital protection (e.g. GROI, PIP, PEP, GRIP)**

##### **3.7.1.1. Characteristics:**

-Two elements: such products consist generally of two elements: a fixed-income investment (e.g. bond or money market investment) and an option or combination of options. This enables the investor to participate in the price movements of one or more underlying assets while at the same time limiting potential losses. The capital protection component may, if applicable, only cover a portion of the capital invested. Moreover, the participation and protection elements can be separated into two separate components in order to ensure the independency of the two components or even to permit to sell them separately;

-Capital: fully or partially secured (upon maturity). The capital protection component determines how much of the nominal value of the structured product will be paid out to the investor, irrespective of any price movements in the option component;

-Yield: the option component or direct investment in a risky underlying asset determines how and to what extent the investor can benefit from price movements in the underlying. Therefore, this component determines the potential return over and above the capital protection component;  
-Flexibility: these products can be tailored to suit the needs of each client and are adaptable to all types of underlyings.

### **3.7.1.2. Advantages:**

Such products enable the investor to invest on a market while reducing the risk of losing capital which would exist if he invested directly on the same market. Returns may be higher than those of monetary or bond investments with an equivalent level of protection.

### **3.7.1.3. Risks:**

#### **3.7.1.3.1. Risks at the level of the capital protection component**

The capital protection is linked to the nominal value of the product rather than its issue price or purchase price on a secondary market. Therefore, the investor benefits from a guarantee only up to the nominal value of the product with the consequence that capital protection does not necessarily mean 100% repayment of the capital invested.

Consequently, the protection will be reduced if the issue/purchase price is higher than the nominal value and, conversely, increases if the issue/purchase price is lower than the nominal value, in particular if the product has been purchased at a price which was different from par or after the original issue. The level of protection depends on the creditworthiness of the issuer. The capital is therefore protected only if the issuer of the protection can meet his obligations.

The maximum loss is thus limited to the difference between the purchase price and the amount of the capital protection upon maturity. However, over the life of the product, its price can fall below the level of the capital protection amount, which increases the risk of loss in case of sale prior to expiration. Capital protection is only guaranteed for the investor if the latter holds on the product until maturity but is not ensured if early repayment is requested.

Upon maturity, if the capital is not guaranteed up to 100%, the investor will not be repaid the full amount originally invested.

#### **3.7.1.3.2. Risks at the level of the option/direct investment component**

Depending on the evolution of prices in financial markets, this component can expire without value. The risks associated to this component are the same as the risks associated to the relevant option or option combination or direct investment used.

Due to the existence of a capital protection, the investor may obtain a lower return than the return he would have obtained if he had invested directly in the underlying.

#### **3.7.1.3.3. Liquidity risk**

The liquidity of the investment is usually ensured only above a certain amount, subject most of the times to a bid/offer spread and/or a penalty in case the product is not held on until maturity.

### **3.7.2. Structured products without capital protection: convertible reverse or discount certificate**

#### **3.7.2.1. Characteristics:**

-Term product: the investor receives a guaranteed coupon in a given currency but accepts a risk on his capital on maturity;

-Underlying assets: shares, indexes, baskets, etc.;

-Capital: protected if the market value of the underlying is not lower than the strike price on maturity;

-Repayment: in cash or by delivery of the underlying, at a strike price determined in advance, if this strike price has fallen or been exceeded. On the maturity date, if the price of the underlying asset is higher than the strike price, the investor receives the guaranteed coupon plus 100% of the capital initially invested (in cash). If the price of the underlying asset is lower than the strike price, the investor receives the guaranteed coupon plus the underlying asset at the strike price;

-Flexibility: such products can be adapted to all types of underlyings;

-Discount certificate: in this case, the investor receives the coupon only upon maturity but originally purchases this product at a discount.



### **3.7.2.2. Advantages:**

Incomes are higher than for investments in money market products.  
They are short term investments and thus it is easier to assess potential earnings.

### **3.7.2.3. Risks:**

#### **3.7.2.3.1. Risks at the level of the capital**

The capital protection is not guaranteed if the investor receives the underlying asset instead of the capital invested upon maturity.

The capital risk is closely linked to the evolution of the price of the underlying asset.

#### **3.7.2.3.2. Liquidity risk**

The liquidity of the investment is usually ensured only above a certain amount.

#### **3.7.2.3.3. Exchange rate risk**

For the products denominated in currencies other than that of the underlying asset, the investor is exposed to an additional exchange risk.

### **3.7.3. Specific case of certain credit derivative instruments**

Credit linked notes ("CLN")

#### **3.7.3.1. Characteristics:**

An investment in a CLN can be compared to a direct investment in a floating rate note issued by the same entity.

#### **3.7.3.2. Risks:**

##### **3.7.3.2.1. Dual risk**

An investor in a CLN bears the credit risk of both the issuer of the CLN itself and of the underlying credit reference entity/ies. In case of a credit event, the investor receives either a debt instrument (i.e. a bond or a loan) issued or guaranteed by the relevant credit reference entity or a cash settlement amount linked to the market price of such debt instrument, calculated on the basis of the relevant credit event.

##### **3.7.3.2.2. Risk enhanced by the scope of the notion of "credit event"**

The term credit event is defined in broad terms and encompasses more than simply a bond default of the relevant reference entity. Indeed, this concept encompasses, for example, an extension of the repayment date of a loan or a decrease in the rate of interest payable on such loan. Therefore, the holder of a CLN can suffer a loss due to a credit event even though a traditional bond default did not occur. In other words, the probability that a credit event occurs is higher than the probability that a bond default occurs.

##### **3.7.3.2.3. Scope of the risk of loss**

A credit event might result in a CLN suffering a greater loss than the average loss suffered by bonds from that same reference entity since the issuer of the CLN generally has a wider choice of the debt instruments to be delivered on a default and could choose to deliver the lowest priced debt instrument. This risk is mitigated in some structures through pre-defined recovery rates, which determine in advance for instance the loss in case of a credit event.

Moreover, a higher loss may occur as a result of a delivery of a bond or loan with a duration longer than the duration of the CLN itself or in case of a valuation using such a bond/loan. However, major rating agencies are aware of these two characteristics and incorporate them into their ratings of CLNs.

### **3.7.4. Collateralized debt obligations (CDO)**

#### **3.7.4.1. Characteristics:**

Collateralized debt obligations are also structured products based on an underlying basket or portfolio of debt instruments, which can be bonds, loans and/or credit default swaps.

A CDO is usually divided into several tranches providing different levels of risk exposure for the basket of underlying debt instruments. Commonly, the most junior tranche is an "own funds" tranche and the tranches then go up in increasing seniority and correspondingly higher credit ratings.

### **3.7.4.2. Advantages:**

Through these synthetic structures the investor gains exposure to underlying credits which are not always available through direct bond investments.

### **3.7.4.3. Risks:**

#### **3.7.4.3.1. Risks related to the system of tranches**

Losses on the portfolio are borne firstly by the holders of the “own funds” tranche and subsequently by the holders of the various tranches in order of seniority. The holders of a senior tranche only incur a loss due to a relevant credit event if all the own funds and the capital of the more junior tranches have been lost. Therefore, tranches which are not “own funds” tranches have some degree of protection against losses whereas the “own funds” tranche and the more junior tranches represent a leveraged exposure to the fluctuations of the underlying portfolio.

Credit events on a small portion of the underlying portfolio can lead to significant or total loss of the capital invested in the “own funds” tranche and the more junior tranches.

#### **3.7.4.3.2. Risks related to the long-term nature of the product**

The value of any credit derivative can vary significantly before maturity depending on factors including, for instance, the occurrence of credit events and movements of credit spreads in the portfolio.

Moreover, like any debt instrument, the initial rating of any credit derivative can be upgraded or downgraded. A credit rating of a particular instrument reflects the (long-term) default risk of that instrument until it matures, and not short-term market risk. Investors in a credit derivative should generally have a long-term investment perspective and the ability to hold the product until maturity.

#### **3.7.4.3.3. Risk related to the low liquidity**

Such instruments are generally illiquid even though a secondary market may exist.

## **3.8. Synthetic products**

Synthetic products - essentially covered options and certificates - are characterised by their identical or similar profit and loss structures when compared with specific traditional financial instruments (shares or bonds). They result from the combination of two or several financial instruments in the same product. Basket certificates, based on a specific number of selected shares, are one typical example.

Synthetic products can be traded either on a stock-exchange or over-the-counter.

Due to the important number of possible combinations, each synthetic product has its own risks. However, generally, the risks associated to synthetic products are not always the same as the risks associated to the financial instruments they contain. Consequently, before an investment in such products, the investor must make thorough inquiries about these specific risks, for instance by consulting the product description.

### **3.8.1. Covered options (e.g. BLOC warrants, DOCUs, GOALS)**

#### **3.8.1.1. Characteristics:**

Limited loss: when purchasing a covered option, the investor purchases an underlying asset (share, bond or currency) and, at the same time, writes a call option on that same asset. In return, the investor is paid a premium. The latter limits his loss in case the price of the underlying falls;

Limited potential gain: the potential return from any increase in the underlying asset's market value is limited to gains up to the option's strike price;

Collateral: for traditional covered options, the investor must lodge the underlying asset as collateral, thus becoming a passive investor;

Synthetic covered options: this type of product is based on the idea of duplicating or reproducing traditional covered options. But this duplication is achieved by means of a single transaction. Both the purchase of the underlying asset and the writing of the call option are carried out synthetically using derivatives. The purchase price of such a product is identical to that of the underlying minus the premium received for the sale of the call option. Hence, the synthetic product is sold more cheaply than its underlying;

Settlement: either cash settlement or physical delivery of the underlying are possible upon maturity: If the market value of the underlying is higher than the strike price, the investor is paid a specified cash

amount as settlement. If, however, it is lower than the strike price, the investor receives physical delivery of the underlying asset.

### **3.8.1.2. Advantages:**

By writing a call option (traditional covered option) or by the return from the sale of a call option included into the product price (synthetic covered option), any loss in the price of the underlying triggers a lower loss than that which could be suffered in case of a direct investment in the underlying asset.

### **3.8.1.3. Risks:**

Unlike structured products with capital protection, synthetic covered options do not contain a hedge against losses in the market value of the underlying.

Therefore, if the price of the underlying increases and that, upon maturity, it is higher than the strike price of the option, the investor will receive the price originally agreed upon in the form of a cash payment. If the price of the underlying upon maturity is lower than the price contemplated by the investor when purchasing the product, the yield of such product may be lower than the return of an investment on the monetary market with the same maturity.

If the price of the underlying, upon maturity, is equal or lower than the strike price of the option, the investor will receive the underlying. The potential loss that may be suffered by the investor is thus linked to a possible drop in the market value of the underlying until maturity. The risk of loss is therefore unlimited, as if the investor had invested directly in the underlying asset.

However, the premium of the option mitigates the consequences of a potential loss of profit in relation to the underlying.

## **3.8.2. Certificates/EMTN (e.g. PERLES)**

### **3.8.2.1. Characteristics:**

- Diversification: a certificate entitles an investor to purchase a right which is based on several underlyings or has a value derived from several indicators;

- Main types of certificates:

- o index certificates: these reflect a whole market being based on an official index (e.g. DAX, CAC, etc.);

- o region certificates: these are derived from a series of indexes or companies from a certain region (e.g. Eastern Europe, Pacific area, etc.);

- o basket certificates: these are derived from a selection of national or international companies active in the same sector (e.g. biotechnology, telecoms, etc.), indexes, bonds or other underlyings;

- Guarantee: these certificates are securitized;

- Maturity and trading: the maturity of these certificates usually ranges between one to three years.

However, these certificates can be traded at any time;

- Limited duration: they are incorporated in an instrument and thus these certificates have a limited duration;

- Investor's rights: no voting right and no right to dividend/interests in relation to the underlying assets;

- Repayment: repayment occurs upon maturity and equals:

- o a set amount per index point for an index certificate;

- o the difference between the market value upon maturity and the strike price for a region or basket certificate.

### **3.8.2.2. Advantages:**

For a minimum of capital investment, the investor can achieve diversification over a broad range of instruments or risk factors and thus mitigate the latter.

This type of product offers the same potential of gains or losses than a similar direct investment in the underlying assets but, due to the diversification of the index, it is possible to limit or even eliminate the risks specific to the companies composing this index and thus to limit the risk of loss of the full amount invested.

They are usually low-cost products (in particular because they have no rights to dividends/interests or voting rights vested in them).

### **3.8.2.3. Risks:**

#### **3.8.2.3.1. Transfer of risk**

Investments in index, region or basket certificates basically involve the same level of potential loss as direct investments in the corresponding shares themselves. However, they offer greater risk diversification.

However, this does not mean the risks are eliminated - they may simply be transposed onto the market or sector on which the certificate is based.

#### **3.8.2.3.2. Absence of rights**

In contrast to direct investments, certificates do not confer any voting rights nor do they entitle the investor to payments of dividends or interests in relation to the underlying assets.

Therefore, a drop in the price of the certificate cannot be counterbalanced by payments of dividends or interests.

#### **3.8.2.3.3. Issuer risk**

In addition to the risk of insolvency of the companies constituting the underlyings of the certificate, the investor is exposed to the issuer risk, that is to say the risk of insolvency of the credit institution issuing the certificate.

#### **3.8.2.3.4. Leverage risk**

Due to the leverage effect, price modifications of the value of the certificate are generally higher than the changes in the price of the underlying assets. Thus, during the lifetime of the certificate, chances of gains as well as the risks of losses are higher. The risk attached to the purchase of a certificate increases with the importance of the leverage effect of the relevant certificate.

Such certificates are usually more volatile instruments than normal certificates and can lose their entire value very quickly.

### **3.9. "Alternative" investments and off shore funds**

#### **3.9.1. Characteristics:**

An "alternative investment" consists in an investment in a domestic or foreign investment fund the style of which is completely different from traditional investments in shares and bonds due to the type of investments made by the relevant fund. Hedge funds are the most usual alternative investments. Their investment style is often based on short sales, leverage effects and derivatives. Hedge funds can choose freely the products and markets (including emerging markets) in which they want to invest and their trading methods. Such funds usually set high minimum investment requirements for investors. The remuneration of the managers of these funds is often linked to the performance of said fund.

Investments in private equity funds are also included in this category (venture capital, financing of acquisitions of companies).

The word "off shore" funds points to investment funds located in offshore centers, like for example the Bahamas, the Bermudas, the Cayman Islands, Panama or the Dutch West Indies.

Each fund has its own risks and therefore it is not possible to describe in details the risks associated to investments in such products in the present document but it is only possible to provide summary information.

Consequently, the investor must inquire, on a case-by-case basis, before investing in such products, for instance by consulting the prospectus of the fund.

#### **3.9.2. Advantages:**

The prospects of gains are usually attractive for the level of risk incurred (volatility risk).

#### **3.9.3 Risks:**

##### **3.9.3.1. Leverage risk**

In this domain, investment strategies can entail high risks. For example, by using the leverage effects, a slight change of the market may lead to important gains but also losses. In some situations, the entire investment may be lost.

### **3.9.3.2. Lack of information**

The net asset value of such investment instruments is usually not known at the time when the investor decides to invest or to redeem his investment. This is due to the fact that, in principle, a notice period is necessary before such a transaction can be performed. Consequently, the net asset value can only be calculated once the investment has been made or redeemed.

Moreover, very often, investors in “alternative investments” only have very little information at their disposal. The sometimes very complex strategies of the investment funds frequently lack transparency for investors. Strategic changes that may lead to a significant increase of the risks often remain unclear or even completely underestimated by investors.

### **3.9.3.3. Potential lack of liquidity**

Alternative investments may be more or less liquid. Sometimes, liquidity is very poor.

Most of these investments are subject either to lock-in periods, or redemption penalties if investments are redeemable within a certain period of time. This is due to the relatively illiquid nature of the investments encompassed in such instruments, which tend to be made with a long-term investment view.

Moreover, many of the investment techniques used in the alternative investment industry involve investments either in illiquid financial instruments, or in instruments which are subject to legal or other restrictions on transfer.

Therefore selling an alternative investment position may only be possible periodically or on certain dates after a notice period of several weeks, for example four times a year, on specific dates. Due to bid/ask spreads, the payment of sales proceed may not amount to the net asset value of the instrument.

Share redemption for hedge funds will only either be possible monthly, quarterly or annually. Concerning private equity funds, the lock-in period may last up to 10 years or more.

Finally, due to the complexity of the underlying investments made by these funds, adjustments in the net asset value may be necessary after receipt of the revised annual accounts, As a consequence, certain alternative investment funds block part of the shares of the investor, if the latter decides to sell off 100% of his shares, until receipt of the revised annual accounts.

### **3.9.3.4. Minimal regulation**

An important number of funds in this sector are located in offshore centers (“off shore” funds). Frequently, those offshore centers only impose minimal regulations on the funds. As a consequence, numerous problems or delays may appear during the carrying out of buy or sell orders for which the bank cannot be held liable. The enforceability of the investor's rights is not systematically guaranteed.

The investor interested in “alternative investments” and notably “off shore” funds needs to be aware of those risks.

Before entering into a transaction, the actual investment products should be carefully examined.

### **3.9.3.5. Additional risks associated to private equity funds**

Private equity investments typically carry the following additional risks:

No assurance of investor return:

The risk for the investor is that he may not recoup the full invested amount, and may even lose it entirely. Past investment performance of these instruments is no guarantee of future investment performance, particularly as the nature of the investment environment is constantly changing (new geographic areas, new specialized areas, etc.). In particular, there is often strong competition to acquire portfolio companies during a cyclical upturn, whilst it may be difficult to withdraw from such investments during a cyclical downturn;

Low liquidity:

These funds usually have a term of seven to fifteen years. There is no recognized secondary market in such private equity investments. As a result, the penalty to withdraw from a private equity fund (which will usually require payments over a number of years) can be extreme, up to and including complete forfeiture to any rights to monies already invested in such an investment.

As regards the funds that an investor commits to pay to the fund, the investor must pay particular attention to the notice periods, usually very short ones (which may be as short as seven days,) and should make sure that he has sufficient liquid assets set aside to meet these calls for payments at a short notice.

### **3.10. Investments in real estate**

Real estate investments comprise investments into “real” assets, such as residential housing, office buildings, retail properties, etc.

#### **3.10.1. Characteristics:**

Such investments are generally made through investment funds or listed investment companies, thus providing a certain degree of diversification. Such diversification generally reduces portfolio volatility and serves as a hedge against inflation.

Some real estate investments may have elements of private equity investments.

#### **3.10.2. Risks:**

##### **3.10.2.1. Potentially limited liquidity**

Liquidity and tradability of investments linked to real estate can vary a great deal. Such investments are usually illiquid and it may not be always possible to realize profits in the short term.

Listed investment companies and open-ended investment funds investing in real estate generally have a daily market. On the other hand, real estate investments such as closed ended funds may provide liquidity only monthly, quarterly, or annually with compulsory holding periods of at least several years.

##### **3.10.2.2. Leverage effect**

In case of leverage effect, movements in the market may generate major gains, but also high losses.

### **3.11. Specific risks associated to securities lending**

When an investor lends financial instruments, the ownership of these instruments (including the related rights as well as potential claims arising from them) are transferred to the borrower. As a lender, the investor is granted a contractual right against the borrower to repayment in instruments of the same nature, quantity and quality.

The investor is consequently exposed to the risk of bankruptcy, insolvency or reorganization proceedings or any other similar proceedings of the borrower or of attachment or freezing measures affecting the borrower’s assets.

The investor can dispose of the financial instruments lent only when these have been returned to him. There is thus a risk, until this restitution occurs, which may take several days, that he cannot sell these financial instruments at a moment when their market value increases. Moreover, the investor can have no guarantee that the restitution will take place on a specific date, with the consequence that he may not be in a position to exercise his rights in due time (e.g. voting right associated to these financial instruments).

It may happen that when he must return the financial instruments, the borrower is unable to purchase these instruments on the market. In such a case, the investor may receive a cash payment for an amount equal to the market value of the financial instruments he has lent instead of the financial instruments.

If the borrower provides collateral in order to guarantee the repayment of the lent financial instruments, it cannot be excluded that the value of the assets, constituting the collateral, be lower than the value of the lent financial instruments when the collateral is enforced.

**This document does not pretend to describe all risks inherent to investments in financial instruments. Its objective is rather to give basic information and to make clients aware of the existence of the risks inherent to all investments in financial instruments. The client should not enter into any investment transaction before being sure to master all the risks and having adapted his investments to his assets, needs and experience.**