



FINANCIAL PRODUCTS AND RISKS
BRIEF PRESENTATION



Contents

1. INTRODUCTION	4
2. DESCRIPTION AND CHARACTERISTICS OF RISKS IN FINANCIAL INSTRUMENTS	5
2.1 Shares	5
2.2 Debt securities and Complex debt securities	5
Bonds	5
Complex bonds	6
Exchangeable bonds	6
Bonds repayable in shares	6
Hybrid securities	7
2.3 Money market products	7
2.4 Units or shares in collective investment undertakings	7
2.5 Derivatives	10
General Overview	10
Options	11
Contracts for futures or forwards:	11
Swaps	12
Contracts for difference	12
Equity warrants	13
Index-linked certificates (certificates with upper and lower limits)	13
Credit derivatives	13
Structured products	14
Repos & Reverse Repos	14
Capital guaranteed investment products	15
3. GENERAL RISKS	16
3.1 Market risk	16
- Interest rate risk	16
- Foreign exchange risk	16
3.2 Spread risk	16
3.3 Leverage risk	16
3.4 Correlation risk	17
3.5 Option risk	17
3.6 Basis risk	17



3.7 Risk of early repayment	17
3.8 Benchmark risk	17
3.9 Specific risk	17
3.10 Liquidity risk	18
3.11 Risk of instability/volatility	18
3.12 Counterparty Risk	18
3.13 Valuation risk	18
3.14 Execution Venue Risk	18
3.15 Operational risks	19
3.16 Settlement Risk	19
3.17 Custodianship risk	19
3.18 Political or legal risk	19
3.19 Risk of evaluating the performance of a financial instrument	19
3.20 Risk of amending the terms of a financial instrument	20
3.21 Evaluation - Ratings Risk	20
3.22 Sovereign Risk	20
3.23 Macroeconomic risk	20

1. INTRODUCTION

The purpose of this document is for the Bank to provide clients with summary information and a general reference to the risks associated with the various financial instruments so that they understand the general nature and risks associated with them. All financial instruments entail risks of different degrees of importance, and even low risk investment strategies may entail elements of uncertainty.

The following risks may arise at the same time and have unforeseeable consequences for the value of an investment even if the capital initially paid is completely lost.

2. DESCRIPTION AND CHARACTERISTICS OF RISKS IN FINANCIAL INSTRUMENTS

2.1 Shares

A share is a security representing part of the issuer's capital. Each person holding a share is called a shareholder. Shareholders are entitled to receive a share of the company's profits in the form of an annual dividend, the amount of which is calculated pro rata with the number of shares in the company held by the shareholder. Shareholders only receive a dividend where the company's revenues permit this. Dividends are not guaranteed and a company may decide not to pay a dividend or to distribute smaller amounts.

By purchasing shares, the investor also looks forward to a profit from any resale of his shares. However, the return on the investment is not guaranteed because the share price depends on the company's performance, on the assessment of the market's performance, on the general financial situation, on the relevant risk per sector and/or on the specific risk per company.

In light of that, an investment in shares entails a risk relating to the payment of dividends and the possible loss of funds. Admission of shares to trading on regulated markets does not provide guarantees about the ability to liquidate shares (see Liquidation Risk).

2.2 Debt securities and Complex debt securities

Bonds

Bonds are debt securities which represent the issuer's debt to the investor. When an investor buys a bond, they lend a sum of money to the issuer of the bond which, in turn, constitutes a debt which must be settled on the specified date according to the relevant issue documentation.

Where specified in the bond description, the borrower is obliged to pay interest (coupon) to the bond holder. The interest rate, frequency and amount of interest are specified in the relevant bond description.

The bond issuer undertakes to pay the capital and interest. However, for certain bonds known as 'zero coupon bonds' no interest is payable over the life of the debt instrument. Yield is determined by the difference between the capital actually paid on the bond issue date and the amount owed at maturity.

The characteristics of special bonds may vary. For example, subordinated bonds have a very long if not indefinite duration, contain a restriction on the investor's rights not to request early repayment and a limited ability for the issuer to request early repayment. Repayment of those securities is subject to payment by other creditors. The ranking of subordinated bonds also varies: The subordinated collateral may be small to very large. In the latter case, there are no debts whose valuation is lower than their value.

High yield bonds are speculative in nature, with a reduced credit rating for the issuer based on the rating given by international firms, such as the Moody's Baa rating or the average or low yield BBB rating. These have a coupon high enough to reflect the higher level of risk for the investor.



The main risks faced by bond holders were the risk of opening credit and interest rate risks given that the price of a bond is inversely proportional to the change in interest rates and/or the difference in credit. Bond holders also face the risk of issuer insolvency and liquidity risk.

Examples of simple (non-complex bonds):

- Zero-Coupon Bonds
- Fixed Coupon Bonds
- Floating Rate Bonds

Complex bonds

Complex bonds allow investors to access other financial products, especially shares, through an initial investment in bonds. The four most common types of bonds which give access to share capital are as follows:

a) Bonds with Early Call Option

Those bonds give the issuer the right to withdraw them on specific future dates, in other words to repay them before they mature. For example, if interest rates drop significantly compared to the coupon on bonds, then the issuer can exercise the right to 'call back' on a specific date and price specified in advance when the bond is issued.

b) Convertible bonds

These bonds are converted at the holder's request. The maturity and conversion dates are specified in the programme which includes the bond loan terms. The documentation defining the characteristics of the securities specifies the conversion ratio and enable the issuer to request early repayment. The relevant issue description also sets out in detail the bond holder protection clauses. When the bonds are converted into shares in the share capital, the bondholder is converted into a shareholder thereby losing his status as bondholder. Where bondholders do not convert their bonds to shares, they shall remain the issuer's creditor.

Exchangeable bonds

These bonds allow the holder to exchange them with existing shares of a third party or the issuer itself. The issuers of those bonds are companies which have shares in other companies or hold own shares.

Bonds repayable in shares

These bonds are only paid in shares at the issuer's option. The holder is exposed to the same risks as those for shares.



Hybrid securities

Securities which combine features of two or more financial instruments, primarily debt securities and shares. Usually, they do not have a maturity date or have a particularly distant maturity date and contain a call option for their issuer (as do perpetual bonds). In many cases they pay interest/dividends at regular intervals, but their issuers can postpone or even omit some of those payments (as in the case of preference shares).

The risks which exist in all the aforementioned products are associated with the fact that they are complex. During such time as they are in the investor's possession, the investor is exposed to the risks inherent in the bonds and to possible unfavourable fluctuations in the value of the main shares and/or the instability of the relevant capital markets. After conversion, exchange or redemption, investors are exposed to the same risks associated with the shares referred to in point 1.1.

Examples of complex bonds which contain a derivative in their structure:

- Bonds under which the issuer is entitled to call the bond (i.e. seek repayment before their specified maturity date) (callable bonds).
- Bonds under which the investor is entitled to require the issuer to repay early (before the contractual maturity date) (puttable bonds).
- Convertible bonds under which the investor is entitled to convert into shares of the issuer.
- Warrants.
- Structured bonds/securities whose return depends on the performance of other financial instruments or indexed bonds (described in more detail below) and turbo certificates.
- Credit linked notes

2.3 Money market products

Money market products or traded debt securities are debt securities whose maturity is usually less than one year. They may take the form of deposit certificates, negotiable commercial papers, interest-bearing notes or commercial notes. Unlike bonds, these securities are traded on domestic money markets (under the supervision of local central banks) or on international markets.

As in the case of debt securities, holders of those securities are exposed to most of the general risks outlined in the part 3 hereof, and in particular to interest rate risks, liquidity risks and credit spread risks.

2.4 Units or shares in collective investment undertakings

Collective investment undertakings are investment bodies which receive funds from investors managed by a professional manager in the name of and on behalf of investors. There are various types of such organisations. They can be distinguished depending on their structure and classification. Certain organisations are classified based on the management strategies they develop. Their full name is Undertakings for Collective Investment in Transferable Securities ("UCITS"). UCITS have adopted rules



to limit investor risks. These investment bodies are obliged to invest in liquid assets in accordance with the rules on diversification. These investments are easily available in the EU and EEA Member States. At European level the legislator has chosen a series of special features so that UCITS are a widely marketed investment product and have the exact same characteristics in all EU Member States. In Greece UCITS can take the form of a Variable Capital Investment Company which issues shares or a conventional form of a mutual fund which issues units managed by a mutual fund management company. The establishment and operation of the Manager and the mutual fund are governed by Law 4099/2012 as amended by Law 4416/2016 (Government Gazette 160/A) and the regulatory decisions of the Hellenic Capital Market Commission. The Fund is the normal form taken by the UCITS authorised by the Hellenic Capital Market Commission.

As defined in the legislation, a UCITS in the form of a mutual fund is a pool of assets comprised of transferable securities, money market instruments and cash which belong indivisibly to its unitholders. The Fund is not a legal entity and its unitholders are represented by the Manager, namely the mutual fund management company.

That company, as Manager, is responsible for investing monies in specific securities (usually shares or bonds). By investing in a fund, in effect the investor purchases units in the fund and becomes a unitholder. By placing their money in a mutual fund, each investor assigns the right to the fund management team to invest on their behalf as they see fit, provided the conditions for achieving the maximum possible return on the risk the investment entails are met. Otherwise, investors have the option of withdrawing their money from the mutual fund that failed their objective and placing it in another mutual fund that has a better chance of success.

The main types of investments selected by the mutual funds are short- or long-term investments, with or without risk, fixed income or capital appreciation, and interest rate or equity investments, whether Greek or international. The type of investments selected by the mutual funds is known in advance and is maintained without substantial change and usually without conversion to another category, so as to continue to meet the investors' initial objectives.

Mutual funds provide investors with an alternative option to purchase off-the-shelf portfolios instead of developing their own individual portfolios. The use of mutual funds expanded rapidly during the post-war period at international level and were a key focus of developments in developed stock exchange countries around the world. More specifically, mutual funds offer a series of advantages to individual investors due to their organisation, technical-financial structure and experience, so as to achieve relatively acceptable returns for investors.

The components of Mutual Funds are:

- A specific investment objective.
- A variety of shares, bonds and other securities and cash.
- A group of individuals professionally managing the said portfolio.
- A specific method for calculating the value of investments on a daily basis.
- A specific way for investors to enter and leave the fund.
- A specific legal framework covering the aforementioned points.



Based on the financial instruments in which their assets invest, mutual funds fall into the following general categories:

- Money Market Funds to the extent that they primarily invest in deposits and money market products. These funds do not invest in shares and are particularly low risk.
- Bond funds, to the extent that they primarily invest in bonds and up to a small percentage of the capital (10%) in shares. These are also a low-risk type of fund.
- Balanced funds to the extent that they invest at least 10% of their assets in shares and at least 10% in bonds. Investments in shares or bonds may not exceed 65% of the fund's assets. Balanced funds entail average investment risk.
- Equity funds which primarily invest their assets in shares. These are relatively high risk mutual funds.
- Funds of Funds: These are funds that invest in units of other mutual funds. The risk in these mutual funds depends on the categories of other funds in which they invest.
- Hedge Funds: These are special types of funds which can invest to a large extent in derivatives (please refer to the section describing derivatives). The specific funds operate under a less strict regulatory framework. Due to exposure to derivatives, they are considered to entail high investment risk.
- Absolute Mutual Funds: These are special types of mutual funds which actively manage portfolios to achieve positive returns irrespective of the general course of the market. The target return is usually determined based on money market interest rates or on inflation.
- Exchange traded funds (ETFs): ETFs are listed investment instruments traded on regulated markets. The structure of their portfolios follows a stock exchange index (e.g. S&P 500) or a market sector (such as telecommunications, energy, etc.) or the price of a commodity (e.g. gold, oil, corn, etc.).
- Commodity funds: These funds invest in commodity markets, such as the Chicago Mercantile Exchange, using derivatives whose underlying securities are commodities or commodity indexes.
- Alternative Funds - Alternative Investments: Alternative investments relate to non-traditional forms of placements such as commodities, private equity funds, venture capital funds, distressed securities, real estate funds, managed futures and others. In addition, Alternative Funds, which are an alternative form of investment, seek to achieve an absolute positive return, irrespective of the direction in which the markets travel, via particularly complex and dangerous investment strategies which seek to exploit the relationship between return and risk. These investments relate to the use of arbitrage and/or derivatives for speculative purposes (and not just to hedge risk), short selling and leveraging the funds being managed via borrowing.

Irrespective of the specific type of Collective Investment Undertakings, the fund manager invests in various financial instruments. Investment risks in collective investment undertakings therefore depend on the nature of the assets comprising the investment portfolio. The portfolio line-up varies depending on the return/risk strategy chosen by the investor (dynamic, balanced or conservative). The Collective Investment Undertaking may provide fully or partially guaranteed capital and/or protected capital. In this case, the main risk is the hedging risk to the guarantor itself. It is therefore important for the investor to have understood the risk profile of the Collective Investment Undertaking in which it invests and to pay particular attention to the provisions on guarantees, if any, in the Collective Investment Undertaking's prospectus.



2.5 Derivatives

General Overview

Derivatives are financial instruments which base their price on and are derived from other underlying products. In other words, their value comes from the value of underlying instruments such as exchange rates, interest rates, the price of debt securities, shares, commodities and financial indexes.

Derivatives are contracts which give the contracting party the option or right to receive from another counterparty during the investment period, or at the end of the derivative itself, assets at a variable price or interest rate for a price or for liabilities specified at the time the contract is concluded. Unlike the underlying securities, derivative contracts usually have a limited duration and always specific maturity dates.

The parties may participate by trading on the money market or via over the counter (OTC) transactions. Derivatives are governed by the provisions of Law 2533/1997 (Government Gazette 228/A) as amended by Laws 4335/2015 and 4514/2018 and in force.

These products are called derivatives because they represent rights and financial commitments either with a variable value or with a value deriving from the underlying assets or liabilities.

There are various forms of derivatives depending on the nature of the underlying instrument (shares, bonds, money market instruments, interest rates or exchange rates, stock exchange indexes or commodities, etc.).

There are many combinations of products to be invested in and consequently derivatives are characterised by various types and risk ratings. Some have limited risk and unlimited potential for one party while the other party is in the opposite position because it is exposed to potentially unlimited losses and limited profits.

Accordingly, the purchase of a product may have a significant impact on the type of risks associated with it. Derivatives paid in cash are subject to risks for the counterparty and market risks. Derivatives settled upon delivery of the underlying instrument are subject to the same risks as well as the risks associated with the underlying instrument after delivery.

In addition to the product structure, many of the risks associated with derivative contracts come from the fact that they are subject to financial leverage. That means that all one needs to do is pay a price for part of the overall exposure to market risks (by paying a premium or an initial deposit) to acquire and retain a position. Actual exposure to derivatives market risks may be a multiple of the initial deposit or the difference paid.

In the case of derivatives, market risk includes exposure to changes in the value of market parameters such as changes in interest rates, exchange rates, share prices, index movements or commodity prices. However, it also includes exposure to fluctuations in the price of the underlying instrument or other factors such as instability or time value.



Due to the wide range of risks in the derivatives sector, it is necessary to understand the risks or performance of the investment strategy for each individual product.

Options

The buyer of an "option" acquires the right to buy (call) or sell (put) to the seller a specific quantity of an underlying instrument at a predetermined price (strike price) or to receive amounts equivalent to the difference between the strike price and the current price of the underlying instrument at a given date (European Option) or at any time until the expiry date (American Option). The price paid to acquire that right is called the premium. The seller of an "option" undertakes towards the buyer to sell (put) or buy (call) the underlying instrument or to receive an amount equal to the price difference of the underlying instrument mainly at the strike price regardless of the current price of the underlying instrument.

Market risk may be limited for the buyer of an option to the amount of the option price (with a possible re-evaluation, as appropriate) and will be significantly higher for the seller.

The buyer assumes the risk of the counterparty with whom the options were traded.

Contracts for futures or forwards:

The person concluding a contract for futures or forwards undertakes to receive or give on a specified date a specific number of underlying instruments at a price to be determined at the time the contract is entered into. The contracting party may also collect an amount if the value of the underlying instrument increases, while the counterparty may collect an amount if the value of the underlying instrument decreases between two given dates.

Futures are standardised products traded on regulated or organised markets. These are standard contracts in terms of the quantity of underlying instrument and delivery or payment dates. A distinction can be drawn between commodity futures and purely financial contracts when the underlying instrument is a financial instrument.

Forwards are entered into by mutual agreement (OTC trading). Their terms may be standardised or the product of an agreement between the buyer and seller.

In the case of sale with a forward contract, the underlying instruments must be delivered at the price and at the time agreed when the contract was entered into, even if the price of the underlying instrument has increased in the meantime. Consequently, the risk of loss relates to the difference between the two values.

Theoretically, prices have an unlimited risk of overvaluation. Consequently, exposure to the risk of possible loss is also unlimited.

In the case of a Futures product, the underlying instruments must be delivered at the agreed price and date specified when the contract was entered into, even if the price of the underlying instrument has



dropped in the meantime. Consequently, the risk of loss is associated with the difference between the two values. In the worst-case scenario, the loss corresponds to the agreed initial price.

A Future Rate Agreement (FRA) is a fixed yield product used in particular to exchange interest rate differences in the same currency on a predetermined date. It does not presuppose a transaction with a nominal amount at the start or end of the transaction. For example, a forward rate agreement can "lock in" an interest rate. If used as a speculative product (if the transaction does not provide for stock exchange coverage of financial instruments), the product allows the investor to speculate in light of an increase in the floating benchmark rate (purchase of FRAs). The main risk with Future Rate Agreements is that they are associated with interest rate fluctuations.

Swaps

In general, a swap is a contract under which the contracting parties exchange or "swap" FX or interest flows.

Swaps can be divided into categories depending on their subject matter: The two main types are FX swaps and Interest Rate Swaps.

The first consists of a double FX transaction where one party sells to the other at the cash price an amount of FX and, as a counterparty, purchases an amount in another currency. It undertakes to redeem the amount sold upon expiry of the agreement at a pre-agreed price which corresponds to the cash price augmented or reduced by the interest rate difference between the two investments given that the two swaps have equivalent terms for each currency. The main risk in swaps of this type is associated with interest rates and with both exchange rates. Other risks are associated with FX indirect interest rates, liquidity and counterparty risk.

The second type of swap is a contract under which the parties 'swap' exchange rates. In other words, they enter into an agreement to pay amounts at fixed intervals which correspond to the application of different interest rates to a given nominal amount. The main risks are associated with interest rates and counterparty risk.

There are also swaps that allow the exchange of performance of an underlying instrument.

Contracts for difference

Contracts for difference are transactions associated with shares but in which it is not necessary to hold the shares themselves. These are short-term contracts, the result of an agreement between the parties, and reflect the performance of a specific share or index. As in the case of shares, possible profits or losses are determined by the difference between the purchase price and the sale price of the financial product.



Equity warrants

These are listed securities which give the buyer the right (but not the obligation) to buy or sell an underlying instrument at a price initially agreed by the contracting parties, the so-called strike price, on a given date which is the maturity date. Upon maturity a bonus is paid. The underlying instrument is either a share or a stock exchange index.

Index-linked certificates (certificates with upper and lower limits)

These are financial instruments issued for a fixed term which permit a complex investment in an index, share, basket of shares or any other underlying instrument. Payment terms are set by the issuer on the issue date. At maturity, the tied certificates are paid at the price of the underlying instrument applicable on the maturity date.

At the time of purchase and during such time as maximum limit certificate is in effect, the higher the limit in relation to the price of the underlying instrument, the higher the risk. Likewise, in minimum limit certificates, the lower the limits in relation to the value of the underlying instrument, the higher the risk.

Credit derivatives

Credit derivatives are generally off-balance sheet contracts traded by mutual agreement (over the counter). The objective is to transfer the credit risk of a basic instrument.

In general, these transactions connect two counterparties, the seller of credit risk (or buyer of protection) and the buyer of risk (or seller of protection).

Although certain debt securities secured by a receivables and loan portfolio¹ also allow credit risk transfer, in effect there are three categories of credit derivatives which fall into the derivatives category:

- Credit Default Swaps (CDS): in the case of those products, the buyer of protection wants to be shielded from any events which could affect the credit rating of the debtor - holder of the underlying instrument (this is called a "credit event" which is a very broad term and covers in particular, and following agreement between the parties, the case of "bankruptcy", i.e. non-payment or downgrading the debtor's ability to pay). In this way, the buyer of protection undertakes to pay a fixed premium at fixed intervals and until the debt matures (or until a "credit event" occurs). This arrangement takes into account the seller of protection's commitment to pay, in the event of a "credit event", amounts corresponding to the loss associated with the underlying instrument and corresponding to the difference between book value and market value. In other cases, regard is had to the seller's commitment to repurchase the underlying instrument at book value.
- Credit Spread Derivatives (CSD): these products guarantee the buyer the future difference between the performance of the underlying instrument and the performance of a benchmark instrument. The buyer of protection pays a bonus to the seller. In general, the buyer seeks to

¹ These are Collateral Debt Obligations (CDO), Collateral Loan Obligations (CLO) and



protect itself against the downgrading of an underlying instrument by taking another asset or another index as a benchmark (for example, a government bond). This product exists in two alternative forms: a) the credit spread forward: at maturity, the difference between the guaranteed amount and the credit exposure is calculated and paid either by the buyer or by the seller depending on whether the difference is positive or negative, b) the credit spread option: the buyer of protection receives the said difference if it exercises the option and does not receive amounts at maturity if it decides not to exercise that option.

- Total Return Swaps (TRS): These products allow the buyer to cover the return on an asset purchased from the counterparty by drafting a contract under which it exchanges the return on an asset for a variable reference rate such as the Euribor (European Interbank Offered Rate). The buyer of protection may transfer to the seller of protection its entire credit risk and market risk associated with the underlying instrument. The seller pays the buyer an amount corresponding to the Euribor rate (in the case of our example) with an upward or downward margin set by the contracting parties. There may be provision for regular payment of amounts either at maturity (which must occur before the maturity of the underlying instrument) or by periodic payments depending on the terms of the initial agreement. In this case, the buyer pays the income from the assets adjusted to the changes that occurred from the revaluation of the asset (positive or negative). The seller makes regular payments (corresponding to the Euribor rate) in the context of the agreed margin.

Structured products

A structured product is a financial instrument which takes the form of a security or contract and is tailored to the client's needs. These products are recognised by one or more features: a) performance is determined in accordance with an underlying instrument, based on a combination of underlying instruments (interest rates, share capital, indexes, etc.) or based on a mathematical formula; b) the results of leverage; c) other characteristics agreed by the parties such as provisions on payment or payment of guarantees; d) a product which does not permit a prior request for official stock exchange prices from various financial institutions; or e) the non-existence of a secondary market or the existence of a non-liquid secondary market.

Each structured product has its own risk profile. Due to the large number of possible combinations, it is not possible to describe in detail each risk for each structured product. Before entering into any transaction involving structured products, the client must obtain the necessary pre-contractual information from the Bank's competent officers about the special features of the product and the risks it entails, so that the client can take well-substantiated investment decisions about own risks, accepting the terms and special features of the specific products.

Repos & Reverse Repos

The term "repo" is an abbreviation of the English words Repurchase Agreement. Likewise, there are also "reverse repos".



A repo transaction relates to a sale by the Bank to the client of Greek Treasury Securities owned by it, with a simultaneous agreement / condition that after a specific time period the initial seller, i.e. the Bank will repurchase the security(s) at a pre-agreed price. The repurchase price of the securities in each relevant repo transaction includes the amount of that return (interest) calculated based on the interest rate agreed by the contracting parties for such time as the repo transaction is in effect.

A reverse repo is the reverse transaction of a repo.

Capital guaranteed investment products

Investment products whose capital at maturity is guaranteed are special time deposits which guarantee the return of the initial capital to the client if liquidated at maturity. In the case of early liquidation, the initial capital may be affected since a key feature of those products is that the initial capital is guaranteed **at product maturity**.

These products are aimed at clients who wish to benefit from the possible favourable development of associated underlying securities but are not willing to risk their initial capital if the products are liquidated at maturity. The final return on investment products depends on the fluctuation in their underlying value, in other words the value to which the products are associated (stock exchange indexes, share trading, exchange rates for two or more currencies, interest rate developments, etc.). The final return which shows the overall change in the value of the investment in the period between the start and end date is known in most cases only at the product's maturity. The method for calculating return is specified in advance by the Bank and is described in detail in the special terms form for each product the client receives. Given that each capital guaranteed investment product has special terms and specific features, the Client is informed in detail both about the general characteristics of those products and about the specific characteristics of each product (product description, duration, return, ability to recall by the issuer, etc.) in order to decide at own risk whether it will invest in the specific product which presupposes that it has understood and accepted the terms under which the relevant product is issued.

3. GENERAL RISKS

In addition to the special risks presented by each specific product presented in the previous section, there are also general risks which apply to all types of financial instruments. The following risks can have an impact on any form of investment.

3.1 Market risk

These risks relate to exposure to fluctuations in the value of market indexes such as, but not limited to, interest rates, exchange rates, credit exposures, share prices, commodity prices or fluctuations in volatility.

Market risks do not include exposure to (a) credit events associated with contracting parties in stock exchange transactions or (b) settlement or delivery risks and legal or business risks.

Various forms of market risk are as follows:

- **Interest rate risk**

Interest rate risk is associated with unfavourable interest rate fluctuations. Interest rate risk also includes the risk of retention costs. Retention costs are positive or negative if the asset's financing costs are respectively higher or lower than the interest received. In this way, the cost of maintaining a loan with a variable interest rate can increase if interest rates rise. Interest rate fluctuations may expose the holder of financial instruments to risk of loss of capital, but the size of the risk depends on the type of financial instrument.

- **Foreign exchange risk**

There is foreign exchange risk when the value of a key instrument has been calculated or is tied to the currency index other than the investor's currency. A reduction or increase in exchange rates may cause, as appropriate, a drop or rise in the value of the financial instrument when its value is expressed in a foreign currency.

3.2 Spread risk

This risk measures the loss associated with unfavourable fluctuations in the probability of indirect disability (in the market assessment) of the debtor which is measured (as appropriate) by the issuer's risk assessment.

3.3 Leverage risk

Leverage risk is characterised by exposure to a market risk which is based on a hypothetical amount higher than the capital invested (examples: futures).



3.4 Correlation risk

Correlation measures the degree of interconnection between fluctuations in two variables.

3.5 Option risk

When the asset includes an option as a component, its value may be affected by fluctuations in certain specific factors:

- Instability or volatility: This measures the volatility of the price of the option's underlying instrument
- Time value: the value of the option excluding its actual value. This includes the cost of retention and the ability to exercise the option.
- Actual value: the cash valuation amount of the option, i.e. its relative value in conjunction with the forward price generated by the market at the time of adjustment.
- The risk-free rate: The interest rate for a risk-free investment

In the case of "exotic" options, the risk may under specific circumstances arise from the operation of the underlying instrument and from conditions related to how it develops (corridors, lump sum options, barrier options).

3.6 Basis risk

This is the risk arising if the cost of a hedging product does not keep pace with the cost of the asset it is required to cover (for example, a futures contract in relation to the underlying instrument).

3.7 Risk of early repayment

This risk is similar to the reinvestment risk in the case of a bond or swap which may be terminated before the maturity date. The risk lies in the fact that the investor may not be able to find the investment conditions in the market if the existing investment is cancelled.

3.8 Benchmark risk

The asset may not follow the performance of the benchmark.

3.9 Specific risk

This is a risk from fluctuations in the price of an asset due to factors specific to the particular asset as opposed to general market risk, which is reflected in general price movements on the capital market.



3.10 Liquidity risk

Liquidity risk is the risk that an asset cannot be bought or sold quickly. The liquidity of a market depends on how it is organised (stock exchange or OTC transactions) and the underlying instruments. It may be easy to buy or sell an ordinary product, but there may be greater difficulties when it comes to very special products. If a market is illiquid, it may not be possible to find a buyer or seller at a given time. The liquidity of a financial instrument can change over time.

3.11 Risk of instability/volatility

This is a risk associated with the change in the specific pricing of a security. Volatility is high when the security is affected by wide changes over a relevant time period (e.g. on a daily basis for certain products or a longer period for certain others). The risk of volatility/instability is calculated based on the average difference between the lowest and highest prices of a financial instrument over a given period of time.

3.12 Counterparty Risk

Counterparty risk is the risk of the debtor not paying the specific debt in good time. It is associated with three factors: the amount of the debt, the likelihood of insolvency and the proportion of the debt which should be recovered in the event of insolvency. It measures loss in conjunction with the likelihood of the debtor being unable to make payment. For example, an investor should examine the quality of the issuer of a security, i.e. the issuer's ability to pay or settle (as appropriate). In the case of OTC derivative contracts (transactions which do not entail a debt) the counterparty risk corresponds at any time to the replacement value of the said derivative if its value is positive.

3.13 Valuation risk

Valuation risk is associated with unfavourable fluctuations in variables which are taken into account in valuing an investment, namely instability/volatility, interest rates and/or (as appropriate) the calculated dividend yield.

3.14 Execution Venue Risk

This risk is associated with the location of the market for the underlying instrument. When the market is not the same as the investor's market, the investor may be exposed to exchange rate risk.

Transatlantic Markets: Any foreign investment or investment which contains a foreign asset may be subject to transatlantic market risks. These risks may differ from those of the market in which the financial instrument has been issued or in which the investor is located.

Emerging Markets: Investments in emerging markets entail risks which are not encountered in traditional markets. This risk also exists when the issuer or financier of a product has its registered offices in an emerging market or engages in the main volume of its activities there.



3.15 Operational risks

Operational risk is the risk of loss arising from inadequate or incomplete internal procedures, employee or system deficiencies or external incidents. The risk covers human error, fraudulent conduct and deceit, shortcomings in IT systems, staff management problems, commercial disputes and external events such as accidents, fires, floods, etc.

3.16 Settlement Risk

Settlement risk is the risk of transactions not being entered into for a financial instrument on the agreed delivery date. The risk is then equivalent to the difference between the price of the product on the theoretical delivery date and its price on the actual delivery date. This is the difference between the settlement price agreed for the financial instrument and its current market value on the actual settlement date when the difference could result in a loss.

Capital markets have different settlement and delivery procedures and, in some markets, procedures may be affected by the volume of transactions, putting their execution at risk. Inability to settle due to such problems may not allow an investor to benefit from the investment opportunities offered. The inability to sell securities due to settlement problems may be detrimental to the investor due to subsequent fluctuations in the price of securities or, if the investor has already entered into a contract to sell those securities, he may be liable for failure to complete the transaction with the buyer.

3.17 Custodianship risk

In some markets, especially in emerging markets, the rules and regulations on custodianship issues are likely to be less developed in terms of investor protection compared to those in markets where strict custodianship rules apply. In such markets, assets assigned to the safekeeping of sub-custodians, if a sub-custodian is required, may be exposed to risks associated with their inability to properly perform their duties or with their bankruptcy. The risk becomes more pronounced when the market does not provide for an investor compensation scheme or when, where such a scheme exists, the investor is not eligible for the protection offered by the scheme.

3.18 Political or legal risk

The risk of new taxes being imposed by the government (or other competent authority), or other legislative obligations or restrictions being imposed on securities which the investor has already purchased. For example, a government may prohibit securities held in custody from leaving the country.

3.19 Risk of evaluating the performance of a financial instrument

Risk of misinterpretation of the return on a financial instrument since the disclosure relates to return up to the date of disclosure. Past performance does not provide indications about future performance.



3.20 Risk of amending the terms of a financial instrument

Risk of the terms of a security being amended by the General Meeting of Holders of the Securities.

3.21 Evaluation - Ratings Risk

Evaluation of financial instruments by one or more rating agencies does not necessarily reflect all the risks associated with those instruments or the impact of those risks (including the aforementioned risks) on the value of the financial instrument. A rating is not a recommendation to buy, sell or hold a financial instrument and may be suspended, amended or withdrawn at any time.

3.22 Sovereign Risk

This risk arises in cases where the issuer of a security is the government of a state and relates to evaluating the changing political situations in a country. To evaluate it, two different criteria are calculated which are: the likelihood of a country's economy going bankrupt and the estimated percentage of recovery of the security in the event of bankruptcy.

3.23 Macroeconomic risk

This type examines the correlation between the viability of businesses (issuers of securities) and the macroeconomic situation of a country or sector of the economy. Factors affecting macroeconomic risk include unemployment, inflation, imports/exports and company stock exchange valuations.