# Information on financial instruments and related risks

## **Table of contents**

Introduction: Building up an investment portfolio MiFID Target market

## 1. Deposits and short-term instruments

1.1 Money market funds

## 2. Bonds and similar securities

- 2.1 State treasury bonds (T-bonds)
- 2.2 Corporate bonds
- 2.3 Mortgage-backed securities (MBS)
- 2.4 Eurobonds
- 2.5 Convertible bonds, bonds cum warrant and equity-linked bonds
- 2.6 Reverse convertibles
- 2.7 Bond funds
  - 2.7.1 Bond funds without capital protection
  - 2.7.2 Bond funds offering capital protection and structured bond funds

## 3. Shares and similar securities

- 3.1 Shares
- 3.2 Equity funds
  - 3.2.1 Equity funds without capital protection
  - 3.2.2 Capital-protected and structured equity funds
- 3.3 Closed-end equity funds
- 3.4 Exchange-traded funds (ETFs)

## 4. Real estate

- 4.1 Real estate certificates
- 4.2 Closed-end real estate investment companies
- 4.3 Open-end real estate investment companies

## 5. Undertakings for collective investment (UCITS)

- 5.1 Introduction
- 5.2 Investment funds
- 5.3 Open-end investment companies



#### 5.4 Closed-end investment companies

## 6. Derivatives

- 6.1 Introduction
- 6.2 Options
- 6.3 Warrants
- 6.4 Certificates
- 6.5 Leverage certificates
- 6.6 Swaps
- 6.7 Forwards
- 6.8 Futures
- 6.9 Hedge funds

## 7. Taxation

## Introduction: Building up an investment portfolio

An investment is never entirely risk-free by definition. And there is no such thing as the ideal investment.

For this reason, every investor, depending on the yield strived for, must determine how much risk he or she is prepared to take and once this risk profile has been determined, include different investment products in a balanced investment portfolio. However, risk is not the only decisive factor for the type of investment. Other factors, which make every investment different, have to be taken into consideration: the investment horizon, the availability of funds, interest rates, payable taxes, etc.

The economy experiences periods of large-scale or small-scale growth and downturns. Investments in the form of shares, bonds and liquid assets are influenced by these periods in different ways, so certain financial assets will perform better than others. The ratio between shares, bonds and liquid assets in a portfolio therefore has to be adapted on an ongoing basis to the conditions in the financial market.

The ratio of assets in a portfolio is known as the spread. To achieve a good spread, investors have to say how much they can invest in shares, bonds, short-term deposits or other instruments.

They must also take account of the tax aspect and of future investments in order for investors to be able to integrate them in the existing portfolio. Account also has to be taken of which stock exchange, share or sector offers the best prospects and which currencies show potential to rise or fall in relation to their national currency. Investors will also have to ensure that their money is distributed over a sufficient number of markets and securities.

This brochure provides a brief introduction to various investment instruments offered by Patria Finance ("Patria") to its customers. To make it easier for you to find your way around, we have grouped these instruments according to the type of underlying asset: short-term fixed-income, long-term fixed-income, shares and so on. Then, for each category of investment instrument, we have set out the major features, strengths and weaknesses. You can use this as a basis for weighing up the risks attached to the various instruments and for making your choice.





The risk attached to an investment may come from various factors. Among the most important risks are market risk, borrower risk and liquidity risk. A summary of the possible risks and their definitions are provided in the following points:

- Market risk is reflected by major interim price fluctuations. This could be due to currency movements (currency risk), but also to interest-rate fluctuations (interest-rate risk) or stockmarket fluctuations (market risk).
- Borrower risk or credit risk is the possibility that a company or issuer will fail to fulfil its obligations duly and on time. In most cases, this will be because of the borrower's poor financial health or imminent bankruptcy.
- Liquidity risk is the risk that a security may prove difficult to sell prior to its maturity.
- Currency or exchange risk is the risk that the value of an investment will be affected by changes in exchange rates.
- Interest-rate risk means that the value of an investment will be affected by movements in market interest rates.
- Inflation risk is the risk that the value of an investment will be affected by a sustained increase in the general level of prices.
- The risk dependent on environmental factors is the risk that the value of an investment will be affected by environmental factors, such as the tax regime.
- Operational risk is the risk of loss due to the insufficiency or failure of internal processes, persons and systems or to external events. Examples include incorrect booking or settlement, remitting funds to a different account or errors in the support systems.

Spreading your bond portfolio over several issuers will reduce credit risk considerably, while diversification over several currencies will reduce the currency risk you are exposed to. Interest-rate risk can be reduced in turn by including money market investments in the respective portfolio.

How much risk you decide to accept depends on a number of factors, especially subjective ones. One of these is the degree or risk aversion. Other factors include personal investment horizon or the period for which money can be tied up. However, it generally holds that investors are only prepared to accept more risk if they can expect a higher return as a result. For this reason, the expected return on the various investment instruments is also dealt with in this brochure. This brochure has been written to help you better assess the opportunities and risks associated with the various investment instruments and should help you with your future investment decisions.

We warn that prices, yields, appreciation, performance or other parameters of individual Investment instruments reached in the past are in a no way indication or guarantee of future prices, yields, appreciation, performance or other parameters of these or similar individual Investment instruments and these prices, yields, appreciation, performance or other parameters of individual Investment instruments, which are, or which might be, subject of orders of the client might change (rise or decline) and therefore their performance can be only anticipated and not guaranteed and payback of the amount of money invested might not be guaranteed as well.

## MiFID

The Markets in Financial Instruments Directive (or MiFID) is a European Directive relating to a number of investment services in respect of financial instruments.

MiFID aims to promote greater competition on the financial markets by removing obstacles to the cross-border movement of securities and by abolishing the monopoly of regulated stock exchanges. It also aims to further expand the protection rules for those customers trading in financial instruments.



One of the protection rules concerns the obligation to provide information. Customers must be sufficiently informed about the nature of, risks and relevant target market associated with the financial instruments on offer. Information if the financial instrument is intended for retail or professional customer is being also included. Patria provided this information in the past and will continue to do so in the future.

This brochure has been updated to include MiFID and its products, but still also provides information about investment instruments in general.

The following is a complete overview of Patria's main investment instruments and products. For more detailed information, please do not hesitate to contact us.

NB: This brochure has not be conceived to show which strategy or spread is best. There are too many personal factors in play when investing, and these have to be taken into account when determining the risk profile. If you are interested in this area, however, we will be pleased to provide further assistance.

## Target market

All types of following financial instruments are intended for retail customers, professional customers and eligible counterparties (according to document <u>Classification of Clients</u>) from target market point of view. In case the manufacturer of particular financial instrument (or Patria as a distributor) defines that this instrument is intended only for professional customers or eligible counterparties, this information will be provided within the information documents related to financial instrument (e.g. prospectus, KID, term sheet).

## **1.** Deposits and short-term instruments

#### 1.1 Money market funds

#### A. <u>Description</u>

Money market funds invest in safe, short-term instruments with an average maturity of less than one year, such as time deposits, treasury certificates and short-term bonds. The investment strategy is always set out in the security prospectus. Some money market funds invest in Czech korunas or euros, others in foreign currencies. This product is intended for both individuals and corporate entities to appreciate available funds on the domestic and foreign financial markets. The recommended investment period is 1 to 2 years.

Money market funds may be incorporated under Czech or foreign law (e.g. Luxembourg law).

#### B. <u>Strengths</u>

Because money-market funds pool large amounts from investors, individuals investing in these money market funds may obtain advantageous investment conditions and thus a higher return.

Through money market funds, individual investors can invest indirectly in instruments to which access would otherwise be difficult.

Money market funds are suitable for conservative investors and for anyone wishing to deposit their money for a shorter period time. They achieve stable returns at very low risk. Their returns are usually higher than interest on savings accounts and time deposits.



#### C. <u>Weaknesses</u>

Investing through money market funds usually attracts higher charges.

- D. <u>Risks</u>
- Credit risk Low, moderate to high, depending on the investment strategy of the fund and its manager.
  Liquidity risk Low. Due to the specific short-term nature of the investments, money market funds are generally a very liquid investment.
  Currency risk None for financial instruments denominated in Czech korunas. Low, moderate to high, depending on exchange rate movements against
- 4. Interest-rate risk Low, moderate to high. The net asset value ("NAV") can drop briefly, but only if there is a steep interest-rate rise.

## 2. Bonds and similar securities

- 2.1 State treasury bonds
- 2.2 Corporate bonds
- 2.3 Mortgage-backed securities (MBS)
- 2.4 Eurobonds
- 2.5 Convertible bonds, bonds cum warrant and equity-linked bonds
- 2.6 Reverse Convertibles
- 2.7 Bond funds
  - 2.7.1 Bond funds without capital protection
  - 2.7.2 Bond funds offering capital protection and structured bond funds

the Czech koruna.

#### 2.1 State treasury bonds (T-bonds)

A. <u>Description</u>

A bond is a fungible security with the right to payment of the due amount and the issuer's obligation to satisfy this right. By purchasing a bond, the buyer is lending the bond issuer a certain amount under the terms and conditions specified in connection with the bond issue. The issuer is legally bound to pay an annual or semi-annual coupon payment and redeem the nominal value upon maturity of the bond. Coupon payments are due at annual or semi-annual intervals from the issue date. Bonds are even issued with a maturity period of a number of decades.

The largest bond issuer in the Czech Republic is the Czech Republic itself. Czech treasury bonds are fixed-income securities in Czech korunas and are intended for individual investors. These bonds are usually issued with a term of 3, 5, 10, 15 and 30 years with a fixed interest rate in book-entry form on bearer.

The coupon and maturity of the state T-bonds are fixed in advance by the Ministry of Finance of the Czech Republic. Treasury bonds are sold on the domestic market through auctions. In line with valid legal regulations, auctions have to be technically safeguarded by the Czech National Bank. State T-bonds are sold on the primary market only to direct participants in the auctions. Each participant pays the price indicated in their order, i.e., all the bonds are not sold for the same price. Such auctions are called "American auctions".



Czech T-bonds cannot be redeemed before maturity.

State T-Bonds are listed on the stock exchange.

#### B. Strengths

Definite yield, known in advance. Generally, slightly higher than for time deposits at banks.

Relatively reliable guarantee. The issue, yield and redemption conditions are determined in advance and guaranteed by the issuer, i.e. the state.

#### C. <u>Weaknesses</u>

It is only possible to subscribe to state T-bonds a certain number of times a year when new securities are issued. They can, however, always be bought and sold on the secondary market.

If market interest rates rise, the price of existing state T-bonds on the secondary market will go down.

Since state T-bonds generally have a comparatively long term to maturity, the purchasing power of the invested capital will diminish due to inflation. The higher the rate of inflation and the longer the term to maturity, the greater the currency erosion. This may be offset by the nominal interest rate if higher than the average inflation rate over the life of the state T-bond.

The market price of a bond fluctuates over time. Therefore, over the course of the investment, an investor can upon the sale of his position also suffer a loss that he would have not incurred had he held on to the bond until maturity.

#### D. <u>Risks</u>

- 1. Credit risk OECD members used to be considered the best debtors with practically no risk. Due to market developments, however, the above is no longer true; therefore, there may be a relatively high borrower risk even in the case of state T-bonds.
- Liquidity risk
  Although state T-bonds are listed on the stock exchange, a certain liquidity risk can exist because the state T-bond market is not as deep as, for example, certain equity shares (see below).
- 3. Currency risk None for state T-bonds denominated in Czech korunas. Low, moderate to high risk, depending on the movement of the Czech koruna exchange rate.
- 4. Interest-rate risk Low for state T-bonds with a term of < 3 years, moderate for state T-bonds with a term of between 3 to 5 years, and high for state T-bonds with a term of > 5 years. Investors will incur a loss if market interest rates are higher than the nominal bond rate when the bond is sold on the secondary market. Investors will, nevertheless, realise a gain if the market interest rates are also affected by the expected inflation rate.



#### 2.2 Corporate bonds

#### A. Description

Large corporations and banks in particular choose to issue bonds as a way of obtaining funds. The quality of an issuer is assessed by specialist firms – rating agencies – which evaluate the default risk on the basis of a range of criteria. These include the company's business, its financial structure, the country's financial and economic situation, and the sector in which the company is active. Rating agencies use a scale from AAA (prime debtors) through AA, A, BBB, BB and so on to C (very low).

Companies with a rating of AAA to A inclusive are considered to be of good quality. If a bond offers an unusually high yield, this will generally be offset by the issuer's/debtor's low credit rating, which is tied directly to expectations that the issuer will fully meet its financial obligations under the issue. In other words, high-yield bonds entail a higher risk. Bonds offer interest that is usually calculated on the nominal value and payable on the predetermined payment dates. The interest rate and payment date of the coupon are set at the time of issue.

Most bonds may be redeemed at maturity. Sometimes bonds may be redeemed prior to maturity. This may occur by the issuer buying them back on the stock market or by lottery (in the case of lottery loans) or through the exercise of a call option. These possibilities must be stipulated at the time of issue, however. Perpetuity bonds are not redeemable but pay a steady stream of interest forever. Ordinary bonds have a fixed maturity and offer a fixed rate of interest throughout their life.

Corporate bonds may be subordinated, which means that if the issuer enters liquidation or an insolvency decision or other similar measure is issued, the receivables tied to them will be satisfied only after all other receivables are satisfied, with the exception of receivables with the same or similar condition of subordination. The fact that a bond is a subordinate bond has to be clearly indicated on the bond certificate or in the register of book-entry bonds and in all materials used to promote such bond.

Bonds may have a call option, meaning the issuer can redeem the loan early at a fixed price and on a set date. This option is usually resorted to if the market interest rate for which the issuer is able to refinance itself at that time is lower than the bond rate.

#### B. <u>Strengths</u>

Definite yield, known in advance. The yield on corporate bonds is usually higher than that on state T-bonds and savings certificates, to make up for the higher credit risk.

Good negotiability on the secondary market, especially in the case of issues with longer maturity, which are, with regard to their greater rate of risk, the most volatile and, therefore, the most interesting for traders.

#### C. <u>Weaknesses</u>

Limited possibility for diversification. The market in domestic corporate bonds issued by private companies is not very well developed.

The market price of a bond fluctuates over time. Therefore, over the course of the investment, an investor can upon the sale of his position also suffer a loss that he would have not incurred had he held on to the bond until maturity.





- D. <u>Risks</u>
- Credit risk Low, moderate to high. Depends on the quality of the issuer: the higher the rating, the lower the risk. Firms active in this market usually have a good reputation, but rating agencies are not infallible and sometimes make mistakes.
  Liquidity risk Moderate to high. The secondary markets tend not to be institutionalised. The higher the number of bonds issued, the lower the risk. Market liquidity risk is the risk of loss in the case of low liquidity of the financial instruments market, which prevents quick
- 3. Currency risk None for securities in Czech korunas. Low, moderate to high, depending on the exchange rate movement against the Czech koruna.

liquidity of positions, thereby reducing access to funds.

4. Interest-rate risk Low for loans with a term of < 3 years, moderate for loans with a term of between 3 and 5 years, and high for loans with a term of > 5 years. This concerns the risk of a drop in the fair value of a bond should interest rates rise. The price of a bond on the secondary market thus varies with interest-rate fluctuations. Investors may incur a loss if the bond is sold prior to maturity. Nominal interest rates are also influenced by the anticipated inflation rate.

#### 2.3 Mortgage-backed securities (MBS)

#### A. <u>Description</u>

Mortgage-backed securities (MBS) are bonds issued by mortgage banks with the aim of obtaining the funds necessary to provide mortgages. The face value and value of respective yields from MBS are fully covered by debts from mortgages, which do not exceed 70% of the price of the pledged real estate. Existing alongside to the concept of proper coverage, is the concept of alternative coverage exists. Only highly liquid and prime resources (such as cash, government bonds or deposits with the CNB) can be considered alternative coverage.

Mortgage-backed securities can only be issued by a bank (the issuer of mortgage-backed securities). An issuer of mortgage-backed securities is obliged ensure sufficient coverage of obligations arising from the mortgage-backed securities in circulation, so that the sum of receivables arising from mortgage loans or parts thereof (serving as proper coverage) and the total alternative coverage does not fall below the total amount of obligations arising from all the mortgage-backed securities on the market issued by the issuer.

#### B. <u>Strengths</u>

A conservative investment instrument suitable for investors seeking alternatives to time deposits. MBS are usually publicly tradable – either through a public market organiser or through a broker (or brokers) stipulated by the issuer. Yields are known in advance and are fixed. Investors are thus able to plan cash-flow or the risk profile of their portfolios.

#### C. <u>Weaknesses</u>

Limited possibility for diversification. Compared to state or corporate bonds, they have a small number of issues on the market. To allow for all benefits of MBS to be enjoyed (some issues have



the advantage of zero taxation of the coupon or interest income), it is usually necessary to hold them until maturity.

- D. <u>Risks</u>
- 1. Credit risk Low to moderate. Under the law, MBS can be issued only by a mortgage bank. The credit risk of MBS is also equal to the credit risk of the issuing bank. As payment of the yields and redemption of the face value of MBS are covered by the cash flow from the mortgages, the risk that MBS will not be redeemed is relatively low.
- 2. Liquidity risk Low to moderate. In terms of scope, the MBS segment is a small part of the bond market. The risk is chiefly in the low absolute number of tradable issues. The issuing banks usually offer the possibility of redeeming MBS prior to maturity. The cost of this is usually the margin between the redemption price and the sale price.
- 3. Currency risk None in the case of MBS issued by a Czech mortgage bank.
- 4. Interest-rate risk Low for MBS issued with a maturity of < 3 years, average for MBS with a maturity of between 3 and 5 years and high for bonds with a maturity > 5 years. The risk lies in the fact that interest rates are able to influence the value of the investment. The interest-rate risk is thus the loss resulting from a change in the price of the instrument, which is sensitive to interest-rate changes. The price of bonds (including MBS) moves in the opposite direction to interest rates. Should interest rates rise/fall sharply, the price of MBS can fall/rise just as sharply. Should MBS be sold prior to maturity, there is no guarantee that the sale price will be greater than the nominal value of the respective MBS.

#### 2.4 Eurobonds

#### A. <u>Description</u>

A Eurobond is a bond issued in the capital markets denominated in a currency other than that of the country in which the bond was issued. The debtor may be a country, local government or private company. The issue is usually underwritten by an international bank syndicate and sold to investors who generally reside outside the issuer's country and the country in whose currency the issue is denominated.

Eurobonds may be subordinated, which means in the ranking of creditors they will only be redeemed after ordinary debts and bonds, but before payment is made to shareholders. This distinction is important if the issuer if facing payment difficulties.

There are some special categories of Eurobonds:

Eurobonds with flexible choice of currency denomination: exchange parity – usually between two currencies – is fixed for the entire term of the loan. The issuer may choose the currency at the time of issue and generally also on redemption, based on fixed exchange parity.

Floating-rate Eurobonds (FRNs – floating-rate notes): interest is set for the next period regularly (e.g. every six months for the next six-month period) based on a reference rate in the international money market plus a fixed margin.



Zero-coupon Eurobonds: Eurobonds that do not pay annual interest, but capitalise it until maturity. The issue price is the nominal value, discounted on the basis of the issue date and the fixed interest rate. For instance, a zero coupon bond of 100 EUR at 10% for 10 years will have an issue price of 38.56 EUR. Conversely, we could say that an investment of 38.56 EUR today at compound interest of 10% over 10 years would be worth 100 EUR.

Step-up bonds: Eurobonds for which different coupons are determined in advance for various periods in the life of the loan. Coupons go up in later years. For instance, 3% for the first two years, 6% for years three and four and 9% for the last two years.

Perpetuals: bonds with no fixed maturity date or fixed coupons and no early redemption of capital.

Eurobonds with a call or put option: the issuer (call) or investor (put) has the right to demand early redemption.

Eurobonds may be issued or redeemed at par, above par or below par.

Bonds may have a call option, meaning the issuer can redeem the loan early at a fixed price and on a set date. This option is resorted to if the market rate at that time is lower than the bond rate (see corporate bonds above).

#### B. <u>Strengths</u>

Interest and redemption price fixed in advance (except for FRNs and perpetuals).

Diversification. Since Eurobonds are foreign currency investments, they offer the possibility of spreading the currency risk. Eurobonds may be easily bought or sold on the secondary market, depending on the issue.

#### C. <u>Weaknesses</u>

There is not always an efficient secondary market for Eurobonds. It is difficult to trade Eurobonds in certain currencies (for instance, LUF, AUD, NZD), or those from less well-known or smaller issuers.

Investing in foreign currency involves risks and charges.

D. <u>Risks</u>

- 1. Credit risk Low, moderate to high. Depends on the quality of the issuer, which is assessed by the rating agencies. The higher the rating, the lower the risk. However, rating agencies give an assessment of the company which is linked to a specific moment in time; they are also not infallible. Ratings may be revised up or down during the term of a loan. A downgrading from A (= higher credit risk) could make it more difficult to sell a Eurobond. Subordinated loans entail a higher risk.
- 2. Liquidity risk Moderate to high. Secondary markets tend not to be institutionalised.
- 3. Currency risk None for securities in Czech korunas. Low, moderate to high, depending on exchange rate movements against the Czech koruna.
- 4. Interest-rate risk Low for short-term bonds and high for long-term bonds. The price of a bond on the secondary market varies with interest-rate



fluctuations. Investors may incur a loss if the bond is sold prior to maturity. This is the case if the nominal bond rate is lower than the market rate for the respective bond or security in the same currency that is of comparable quality and has the same remaining term to maturity. If it is lower, investors will realise a gain. The longer the bond's remaining term to maturity and the lower the coupon, the higher the interest-rate risk. Nominal interest rates are also affected by the anticipated inflation rate.

#### 2.5 **Convertible bonds, bonds cum warrant and equity-linked bonds**

#### A. <u>Description</u>

A convertible bond is a bond which may, at the request of the holder, be converted into shares in the company concerned, during a certain period and at conditions determined in advance. If the company issues different classes of shares, the types of shares to which the bonds can be converted must be specified.

The conversion price – i.e. the price at which bonds may be converted into shares – is determined in advance. The conversion price is generally expressed as the nominal value of the bond divided by the number of shares to which holders are entitled when they exercise their conversion right.

With automatically convertible bonds (ACBs), investors have a choice between conversion and redemption of the bond loan, but it they opt for conversion, their bonds must be converted on a predetermined date. However, investors may opt for early conversion.

The coupon yield offered is lower than for conventional bonds in the same currency, with the same term to maturity and comparable credit risk. The reason for this is that the option (warrant) price is included in the price of the bond and its yield. A definition is provided in the text below.

Bonds cum warrant are bonds accompanied by an option (warrant), which gives holders the right to subscribe to one or more shares in the same company within a predetermined period and at conditions fixed in advance. The bonds and warrants are traded and listed separately on the stock exchange. In this they differ from convertible bonds. Upon conversion, a convertible bond ceases to be a bond and becomes a share. When an option (warrant) is exercised, the holder acquires a share and the bond continues to run.

There are various types of equity-linked bonds. Depending on its specific characteristics, this investment instrument is also like an indirect investment in shares, and not just a fixed-income investment. The coupon yield is lower than the market yield, often even considerably lower. Investors usually invest in bonds with capital protection, which means they always recoup their initial investment. Investors therefore share in gains in the index or shares to which the bond is linked, but not in possible losses.

#### B. Strengths

Depending on the formula, holders have the advantage of a fixed (minimum) yield.

These instruments entitle investors to benefit from the rise in the price of a share or share index, but do not require them to share in any loss. This does not apply to ACBs.

#### C. <u>Weaknesses</u>

The interest paid to investors is lower than the yield on ordinary bonds.



Although there is a secondary market, these bonds are usually not easily negotiable.

- D. <u>Risks</u>
- 1. Credit risk Low, moderate to high. Depends on the quality of the issuer, which is assessed by rating agencies. The higher the rating (e.g., AAA), the lower the risk.
- 2. Liquidity risk Moderate. This risk can be higher, since the secondary market in investments of this kind is generally limited.
- 3. Currency risk None for securities in Czech korunas. Low, moderate to high, depending on exchange rate movements against the Czech koruna.
- 4. Interest-rate risk Low for short-term convertible bonds to high for long-term convertible bonds. These investment instruments are more subject to interest-rate risk than Eurobonds are. This means that they are also more affected by the anticipated inflation rate.
- 5. Price volatility Low, moderate to high, as the price of these investment instruments is affected by the volatility of the price of the underlying shares.

#### 2.6 **Reverse convertibles**

#### A. <u>Description</u>

Reverse convertibles owe their name to the fact that their features are the reverse of those of a standard convertible bond. It is the issuer rather than the investor which has the option of redeeming the loan in cash or shares at maturity at the price agreed at the time of issue.

Issuers will take the latter option if the price of the offered share is quoted below the conversion price at the time of maturity. To offset this risk of a capital loss, investors receive a high rate of annual interest (standard convertible bonds: a low rate).

Reverse convertibles may also be linked to a stock market index. If the index does not go down in value during the term to maturity of the reverse convertible, investors will recoup 100% of their invested capital. In addition, they will receive a high annual interest rate. On the other hand, if the index is lower at maturity than at the start, investors will receive 100% of their capital at maturity less the percentage by which the index has gone down. In that event, the loss is (partially) offset by the high coupon.

#### B. <u>Strengths</u>

Holders of reverse convertibles receive a high coupon for a relatively short investment period.

#### C. <u>Weaknesses</u>

There is a risk of a (possibly sizeable) capital loss if the share price or the underlying index falls.

These bonds are not easily negotiable on the secondary market.

- D. <u>Risks</u>
- 1. Credit risk

Low, moderate to high. Depends on the quality of the issuer, which is assessed by rating agencies. The higher the rating, the lower the risk.



2.	Liquidity risk	High, since the secondary market in investments of this kind is generally limited.
3.	Currency risk	None for securities in Czech korunas. Low, moderate to high, depending on exchange rate movements against the Czech koruna.
4.	Interest-rate risk	Moderate. The nominal interest rates are also influenced by the anticipated inflation rate.
5.	Price volatility	Low, moderate to high, since investors will suffer a capital loss in the case of a drop in the price of the underlying assets.

#### 2.7 Bond funds

The term "funds" refers here to collective investment funds and qualified investor funds.

#### 2.7.1 Bond funds without capital protection

#### A. Description

Bond funds invest mainly in ordinary, standard bonds. The advantage for investors is that in exchange for their investment they can gain access indirectly to a diversified bond portfolio. The investment strategy is set out in the bond fund's prospectus.

The investment strategy may, for instance, place restrictions on the choice of currency, debtor or maturity of the bonds in which the investment is made. The bond fund's currency policy may be that it can only invest in one specific currency or in a limited number of currencies. Other funds may be able to diversify without restriction across a number of currencies.

In terms of maturities, a distinction is made between short, medium and long maturities within the bond portfolio. In order to manage borrower risk, many bond funds invest exclusively in securities issued by prime debtors. However, certain bond funds may deliberately opt for lower quality securities (for instance, corporate bonds) in order to take advantage of the higher yield these offer.

#### B. <u>Strengths</u>

Limited risk. The currency risk and credit risk are limited by the diversification over a large number of bonds.

Professional management. The portfolio is kept up to date on a daily basis.

Good negotiability. The price is calculated and published every day; investors can thus buy or sell shares every day at the net asset value on the day in question.

Extensive range of investment options with their specific features in terms of credit risk, interestrate risk and currency risk.

#### C. <u>Weaknesses</u>

The risk of the effect of any changes to the interest rate is usually high due to the fact that there is no maturity date.

- D. <u>Risks</u>
- 1. Credit risk

Low, moderate to high, depending on the fund. The variety of securities in the portfolio reduces the credit risk considerably. The credit risk is higher for bond funds which specialise in loans with a poorer credit rating.



- Liquidity risk
  Low. These securities can usually be sold at conditions that are in line with the market conditions or the fund prospectus.
  Currency risk
  Low, moderate to high. Depends on the investment strategy. The
- 3. Currency risk Low, moderate to high. Depends on the investment strategy. The currency risk is non-existent if the bond fund invests exclusively in bonds denominated in Czech korunas. The currency risk is high if the fund invests predominantly or solely in volatile currencies.
- 4. Interest-rate risk Usually high, depending on the fund's investment strategy.

#### 2.7.2 Bond funds offering capital protection and structured bond funds

#### A. <u>Description</u>

These funds have a fixed maturity date and aim to achieve a minimum return, as set out in the prospectus. The capital protection only applies in the currency of issue and at maturity upon fulfilment of the conditions set out in the prospectus. Investors thus recoup their entire initial investment or part thereof at maturity (this usually applies for subscriptions within the issue period).

#### B. <u>Strengths</u>

The credit risk is lower in the case of bond funds with capital protection.

Bond funds with capital protection and funds with conditional capital protection aim to achieve at least a minimum return. The ultimate yield may be higher.

#### C. <u>Weaknesses</u>

With bond funds offering capital protection or conditional capital protection, investors have to expect higher charges.

- D. <u>Risks</u>
- 1. Credit risk Low. The credit risk on the underlying assets is minor.
- 2. Liquidity risk Moderate. The net asset value (NAV) of the fund is calculated only in periodical intervals.
- 3. Currency risk Low, moderate to high, depending on exchange rate movements against the Czech koruna. It also depends on the investment strategy (see the prospectus). The currency risk is non-existent if the fund invests exclusively in bonds denominated in Czech korunas. The currency risk is high if the fund is invested solely in volatile currencies with no hedging of exchange rates and if the capital protection is not denominated in Czech korunas.
- 4. Interest-rate risk Low for short-term funds and high for long-term funds. Investors may incur a loss if they sell prior to maturity. This will be the case if the residual yield to maturity is higher than the market rate. If it is lower, investors will realise a gain. Interest rates are also affected by the anticipated inflation rate.

## **3.** Shares and similar securities

- 3.1 Shares
- 3.2 Equity funds
  - 3.2.1 Equity funds without capital protection



#### 3.2.2 Capital-protected and structured equity funds

- 3.3 Closed-end equity investment companies
- 3.4 Exchange-traded funds (ETFs)

#### 3.1 Shares

#### A. <u>Description</u>

A share is a security issued by a joint-stock company. It represents a right to a share of the company's profits (dividends) or to a subscription of additional shares should there be an increase in the registered capital. Shareholder rights are also tied to shares, i.e., the right to take part in the company's management, take part in the General Meeting and vote at it, be elected to the company's bodies etc. Shares comprise the registered capital of a joint-stock company. Their number and nominal value has to be recorded in the Commercial Register. Shares are traded on stock exchanges.

Shares can be classified according to various criteria such as class, form or type. As regards class, shares can be either common shares or preferred shares. Common shares are ordinary shares with no special rights or obligations. Preferred shares have priority over common shares in the payment of dividends or upon liquidation or both. The Articles of Association may stipulate that under certain conditions no voting rights will be tied to preferred shares.

Share can be in two forms: physical shares and dematerialised shares. Dematerialised shares are registered in a central or independent registry of the Central Securities Depository or at a foreign central depository or similar authorised institution. Patria records its clients' dematerialised shares in a follow-up registry.

With regard to form, there are bearer shares, which are considered securities in bearer form, and registered shares, which are negotiable by agreement, endorsement or delivery.

Listed shares can be bought and sold on the stock exchange. Some unlisted shares can be traded at a public auction.

The price of listed shares is determined by supply and demand on the financial markets. Both external and internal factors play a role in pricing.

Factors intrinsic to the company concerned include: the company's financial, technical and commercial situation, investment strategy, outlook and the economic sector to which it belongs.

In addition, the stock exchange in general and each share in particular are influenced by external factors, such as political events, the international and domestic economic and monetary situation, and emotional and irrational factors which may exacerbate stock-market fluctuations (be it upwards or downwards).

The combination of all these factors can give rise to sharp price fluctuations. Stock market transactions are subject to charges, brokerage fees, stock market tax and possibly a fee for delivery of the securities in physical form.

#### B. <u>Strengths</u>

Investments into shares yield high returns and enjoy high liquidity.

#### C. <u>Weaknesses</u>

Neither the profit nor the dividend is known in advance or guaranteed.





Investing in shares requires knowledge of the market and sound, regular monitoring of all factors influencing share prices. Investing into shares is intended chiefly for investors prepared to take charge of capitalising their investment.

D. <u>Risks</u>

1.	Credit risk	Shares are capital that bears a certain amount of risk, as there is no guarantee that investors will recoup their money. In the event of the issuer's bankruptcy, the shares may be eliminated from trading on the regulated market, drop in value or become completely worthless.
2.	Liquidity risk	Low, unless the securities market is unstable and the company has low market capitalisation.
3.	Currency risk	None for securities in Czech korunas. Low, moderate to high, depending on exchange rate movements against the Czech koruna. Depends on the "home country" of the share and the type of share.
4.	Interest-rate risk	Low, moderate to high, depending on the share and the investment climate. Generally speaking, a rise in interest rates will have a negative impact on share prices. Some shares are more sensitive than others to changes in interest rates.
5.	Price volatility	Low, moderate to high, depending on the volatility of the share. Depends largely on the quality, the company, trends in the sector to which the company belongs and general stock-market trends. Speculative shares (e.g. very young technology firms) are riskier than shares in companies with stable business activities (such as companies offering public services, e.g. in the energy sector). Since there is considerable risk of price volatility, it is possible that

investors may lose their investments into shares.

#### 3.2 Equity funds

The term "funds" refers here to collective investment funds and qualified investor funds.

#### 3.2.1 Equity funds without capital protection

#### A. <u>Description</u>

These funds invest mainly in shares (and related instruments), enabling investors to participate indirectly in a well-diversified share portfolio. Depending on the investment strategy, which is set out in the fund's prospectus, the fund will invest in one country or sector, in a specific region or worldwide. The portfolio may also consist of shares with common characteristics (such as a high dividend yield). The management style may be active or passive. In the case of passive management, the fund manager tracks a specific stock-market index. With active management, the fund manager attempts to outperform a stock market index or the market by picking the right stocks. The funds may be incorporated under Czech or foreign law. In the case of capitalisation, the fund dividend income is capitalised and re-invested.

#### B. <u>Strengths</u>

Easy, flexible way of investing in shares. Investors automatically get access to a diversified portfolio managed by professionals.



Easy negotiability: the net asset value is usually calculated and published daily. Investors can thus buy into or sell shares in the fund every day at the net asset value on the day in question.

Intended for long-term investment. From a historical perspective, shares have offered a higher return than bonds over the long term.

Great diversity of investment options, each with its own specific characteristics.

C. <u>Weaknesses</u>

The regional and/or sectoral diversification of actively managed equity funds is subject to fundamental change, depending on what the manager expects the markets to do, and may not precisely reflect the investor's wishes.

Their highly volatile trend is typical of shares, certainly in the short term.

- D. <u>Risks</u>
- 1. Credit risk Low. Although the credit risk is low, there is the risk of failure by the issuer, the issuer's counterparty or the issuer of the assets held by a fund to fulfil its obligations.
- 2. Liquidity risk Low. These securities always tend to be tradable.
- 3. Currency risk None for securities in Czech korunas. Low, moderate to high, depending on exchange rate movements against the Czech koruna. Depends on the market in which the fund is invested. The currency risk is non-existent for funds which invest solely in shares in Czech korunas. The risk is higher for funds which invest exclusively in stock markets denominated in a foreign currency.
- 4. Interest-rate risk Low, moderate to high, depending on the share and the investment climate. Generally speaking, a rise in interest rates will have a negative impact on the fund price.
- 5. Price volatility Low, moderate to high, depending on the volatility of the underlying shares. Is largely determined by the general investment climate prevailing on the stock exchange on which the fund invests. Volatility is lower than for an individual share since the risk is spread over several shares.

#### 3.2.2 Capital-protected and structured equity funds

#### A. <u>Description</u>

These funds invest to at least ensure that the initial net asset value (before costs) is repaid at maturity. The return at maturity of the fund is linked to changes in the value of a stock market index or a basket of shares. The capital or investment protection only applies in the currency of issue and at maturity upon fulfilment of the terms and conditions set out in the prospectus. Investors will thus recoup their entire initial investment or part of it upon redemption. In some types of fund, there is a minimum return guarantee in addition to the capital protection.

There are various types of funds; details are always given in the fund prospectus.

The investment result achieved by the fund is linked to a benchmark, which is one of the chief means of comparison. Most often the stock market index, composite index or, if no suitable index is available, own index act as the benchmark. Comparing performance and risk indicators of the



fund against the benchmark is one of the ways to ensure that the assets of the fund are managed well.

The investment result achieved by the fund (its performance) is shown by a percentage change in the net asset value of the fund between two dates. The investment result is an important indicator of the quality of the management of the fund, but can in no way be seen as the only indicator. It should be understood that the investment result of a fund conveys nothing about the possible investment risk.

#### B. <u>Strengths</u>

Capital protection at maturity (before costs). Investors can profit from a rise in the stock market with limited risk of a capital loss.

Selection of own strategy. A broad spectrum of funds offering all genuine investment strategies.

Diversification. Most funds spread their investments across various regions, instruments and sectors, which substantially reduces the impact of a negative market development on the fund's assets.

Professional management. Fund managers are professionals who have extensive capital market experience.

Low initial investment. Compared to other investment products, the initial investment can be substantially lower. The fund stipulates the minimum amount that a client can choose to invest.

#### C. <u>Weaknesses</u>

Investors will not always share fully in the rise in the benchmark index. There may be a cap on the maximum return.

In the case of share funds offering capital protection, investors have to account for higher charges.

The fund's net asset value is calculated at market conditions. This means that the capital protection only applies at maturity and that in the interim the net asset value does not always track developments in the benchmark index.

- D. <u>Risks</u>
- 1. Credit risk Low. Although the credit risk is low, there is the risk of failure by the issuer, the issuer's counterparty or the issuer of the assets held by the fund to fulfil its obligations.
- 2. Liquidity risk Low, these securities can always be sold under conditions that are in line with the prospectus. Exit fees will apply.
- Currency risk
  None for securities in Czech korunas. Low, moderate to high, depending on exchange rate movements against the Czech koruna. Depends on the currency in which the fund offers capital protection.
- 4. Interest-rate risk Low for short-term capital-protected funds to high for long-term capital-protected funds. The capital protection is only guaranteed at maturity.





#### 3.3 Closed-end equity funds

#### A. <u>Description</u>

Closed-end equity funds invest in shares in a specific sector or country. The large variety of these country and sector funds are marketed in the US and UK. In the case of closed types, the investment fund or investment company does not buy back already issued shares or units, nor does it issue additional shares or units. The volume of the managed assets is thus determined already at the time the fund is created and any changes to it take place exclusively as a result of the earnings or losses attained during its investment operations.

In some cases, these finds are established for a limited period of time with a final maturity date. These funds are then wound up for net asset value. These funds usually do not offer capital protection.

Closed-end equity investment companies are usually listed on the stock exchange. After the issue period, investors can buy into and sell shares in these funds at the price of the day, which may however differ considerably from their net asset value. In that case, they are quoted at a premium (stock market price higher than the net asset value) or discount (stock market price lower than the net asset value), depending on public interest (or lack thereof). The premiums or discounts can fluctuate considerably, in line with the mood on the market.

#### B. Strengths

This is an attractive investment instrument for investing indirectly in segments of the share markets which would otherwise be difficult or impossible to access. These segments often yield a higher return in the long term.

They are as a rule listed (i.e., traded on the stock exchange).

Unlike more traditional open-end funds, transactions with closed-end equity fund shares are based on their market value, which is governed by market supply and demand. Of interest is that the stock market price is often quoted at below the value of its basic portfolio (or net asset value).

#### C. <u>Weaknesses</u>

The portfolio composition is not always transparent

Volatility. These funds sometimes show greater price fluctuations than the markets in which they invest.

The securities are less liquid.

They may be sold at a discount.

- D. <u>Risks</u>
- 1. Credit risk Low. Although the credit risk is low, there is the risk of failure by the issuer, the issuer's counterparty or the issuer of the assets held by the fund to fulfil its obligations.
- 2. Liquidity risk Low. These securities can always be traded on the market; however, listing is not a guarantee that they will always be easily negotiable.





3.	Currency risk	None for securities in Czech korunas. Low, moderate to high,
		Depending on exchange rate movements against the Czech koruna. Depends on the market in which the fund is invested. The currency
		risk is non-existent for funds which invest solely in Czech koruna- area shares. The risk is higher for funds which invest in stock markets denominated in a foreign currency.

- 4. Interest-rate risk Low, moderate to high, depending on the share and the investment climate. Generally speaking, a rise in interest rates will have a negative impact on fund price.
- 5. Price volatility Low, moderate to high, depending on the volatility of the underlying shares. Is largely determined by the general investment climate prevailing on the stock exchange on which the funds invest. Volatility is lower than for an individual share since the risk is spread over several shares.

#### 3.4 Exchange-traded funds (ETFs)

#### A. <u>Description</u>

An exchange-traded fund or ETF is a modern financial instrument allowing the purchase of a whole base of the chosen share index or other underlying assets via a single transaction. The investment can be chosen according to index (STOXX50, Dow Jones, Nasdaq), business segment (energy, pharmaceutical, telecommunications, automotive etc.) and, last but not least, geographical area (Asia, Europe, the emerging markets, etc.).

In the simplest of terms, ETFs are open-end collective investment funds of sorts, with the securities issued by them being tradable on the stock exchange. ETFs comprise property composed of various assets. The most popular index ETS are equity funds, commodities (Exchange Traded Commodities, ETCs) or various forms of bonds (Exchange Traded Notes, ETNs).

ETNs represent structured bonds issued for a fixed period. Their rate of return is similar to that of ETFs, depending on the development of the underlying asset, which determines the price of such note. They are essentially a combination of the features of ETFs and bonds.

Investors who are not looking for long-term financial investments but rather short-term speculation may make use of leverage ETFs, as their rates are more sensitive to developments of the underlying asset and, therefore, the investor can achieve, much like in the case of derivatives, either greater profit or heavier losses, but at the cost of greater risk and higher costs.

#### B. <u>Strengths</u>

Easy, flexible way of investing in a diversified basket of shares or in various underlying assets in a single transaction.

Easy negotiability: ETFs are listed continuously and can therefore be bought or sold at any time during stock market opening hours.

Low management costs that are much lower than in the case of equity funds. These costs are different for each ETF (depends on the issuer).

No fees for subscription and redemption; only brokerage fees are payable.



#### C. <u>Weaknesses</u>

There is sometimes a wide spread between supply and demand.

As a rule, ETFs are issued in foreign currencies, chiefly USD or EUR. Investors are not permitted to invest in Czech korunas.

There is no guarantee that an ETF will follow developments of the underlying index or assets exactly. It is always recommended to review the prospectus thoroughly.

- D. <u>Risks</u>
- Credit risk
  Low. Although the credit risk is negligible, there is the risk of failure by the issuer, the issuer's counterparty or the issuer of the assets held by the fund to fulfil its obligations. Credit risk arising from assets held by the fund depends on the quality of the issuer.
- 2. Liquidity risk Low. The liquidity of ETFs depends on the liquidity of the underlying assets and the volume of foreign currency in the fund. Liquidity is guaranteed by the market makers through the establishment and acquisition process.
- 3. Currency risk Low, moderate to high, depending on exchange rate movements of the foreign currency against the Czech koruna.
- 4. Interest-rate risk Low, moderate to high, depending on the ETF investment strategy and portfolio composition.
- 5. Price volatility Depends on the general stock-market trends and on the assets in which the ETF is invested.
- 6. Rollover risk Especially the case of ETCs and ETNs compare with the "risk of the character of the underlying assets" in the case of the certificates discussed in part 6.4 below, which can be even more amplified in the case of leverage ETFs.

## 4. Real estate

- 4.1 Real estate certificates
- 4.2 Closed-end real estate investment companies
- 4.3 Open-end real estate investment companies

#### 4.1 **Real estate certificates**

#### A. <u>Description</u>

Real estate certificates are issued to fund commercial premises or office buildings. The holder of a certificate is not part-owner of the property but has a claim on the issuing company. The certificate entitles the holder to a share in the net income generated by the lease and, when the certificate matures, a share in the residual value on sale of the property. When issued, real estate certificates generally have a term to maturity of between 15 and 25 years. The certificate is redeemed at maturity and cannot be extended.

Coupons on real estate certificates are directly linked to the net result of the operation of the building. In the owner's (issuer's) accounts, the payment corresponds to the depreciation of the building.



#### B. <u>Strengths</u>

Direct investment in a specific property with a limited amount of capital.

Under normal circumstances, dividend income will rise in line with inflation due to the fact that rental income is index-linked.

#### C. <u>Weaknesses</u>

Rental income is not always guaranteed. Renovations could mean (long-term) vacancy and could result in considerable expense.

The property market is cyclical and is sensitive to fluctuations in interest rates and the business cycle. This could also result in the existence of unleased space.

Some certificates are not very negotiable on the stock market or at public auctions.

- D. <u>Risks</u>
- 1. Credit risk Low, since the certificates are usually guaranteed by the stipulated financial institution.
- 2. Liquidity risk Moderate to high, the liquidity of listed certificates depends on the volume of the issue. Certain certificates cannot be traded on the stock exchange.
- 3. Currency risk Low, moderate to high, depending on exchange rate movements against the Czech koruna.
- 4. Interest-rate risk Moderate, real estate certificates are sensitive to interest-rate fluctuations. Simply said, an increase in market interest rates will result in a fall in the value of the certificate.
- 5. Price volatility Moderate, depends largely on developments on the property market and intrinsic features of the building (location, age, quality of tenants and so forth).
- 6. Risk of income loss Moderate, the income paid is variable and depends on factors such as the occupancy rate for the building and the indexation of rents.

#### 4.2 **Closed-end real estate investment companies**

#### A. <u>Description</u>

A closed-end real estate investment company is usually a listed company with fixed capital, whose aim is to pool investors' funds and invest them mainly in real estate, subject to the relevant legal restrictions. These funds always issue income (i.e. distribution) shares.

#### B. <u>Strengths</u>

Gives investors (indirect) access to the property market with a limited amount of capital and to investment in a diversified portfolio. Thanks to this diversification, the risk is spread across various property investments.

Investments into real estate funds are able to provide investors with a relatively stable yield, which is derived from regular income (rent) and from any increase in the price of the real estate.



The composition of the portfolio is published periodically. The value of the property is determined by independent appraisers.

#### C. <u>Weaknesses</u>

The rental income from the buildings is not guaranteed. Contracts may be terminated early.

The property market is cyclical and is sensitive to fluctuations in interest rates and the business cycle.

The stock market price may differ considerably from the net asset value of the portfolio.

D. <u>Risks</u>

1. Credit risk Low.

- 2. Liquidity risk Moderate to high. These securities are listed, so there is a secondary market in them; this, however, is no guarantee of easy negotiability.
- 3. Currency risk Low, moderate to high, depending on the market in which the real estate investment company invests.
- 4. Interest-rate risk Moderate. In principle, an increase in interest rates has a negative effect.
- 5. Price volatility Moderate. Strongly influenced by developments in the property sector and the intrinsic quality of the portfolio.
- 6. Risk of income loss Moderate. Considerable expense for renovation and vacancy could result in the dividend flow being interrupted.

#### 4.3 **Open-end real estate investment companies**

#### A. <u>Description</u>

Open-end real estate investment companies invest in negotiable securities relating to property (such as real estate certificates, real estate funds or shares in property companies). They do not offer capital protection however. Depending on the investment strategy, which is set out in the prospectus, the investment company may invest solely in one country, a region or worldwide.

#### B. <u>Strengths</u>

Open-end real estate investment companies are the easiest and safest way to invest in property. Investors automatically get access to a diversified portfolio managed by professionals.

Easily negotiable. The net asset value is calculated and published daily. Investors can buy into or sell shares in the fund every day at the net asset value on the day in question.

#### C. <u>Weaknesses</u>

The portfolio composition can undergo radical changes (in accordance with the manager's concrete expectations) and may not conform exactly to the investor's wishes.

#### D. <u>Risks</u>

1. Credit risk Low.





2. Liquidity risk Low, these securities can always be sold at conditions that are in line with the market conditions. 3. Currency risk Low, moderate to high, depending on the market in which the real estate investment company invests. 4. Interest-rate risk Moderate. In principle, an increase in interest rates has a negative effect. Moderate, strongly influenced by developments in the property 5. Price volatility sector and the intrinsic quality of the portfolio. 6. Risk of income loss Moderate, considerable expense for renovation and vacancy could result in the dividend flow being interrupted.

## 5. Undertakings for collective investment (UCITS)

#### 5.1 Introduction

- 5.2 Investment funds
- 5.3 Open-end investment companies
- 5.4 Closed-end investment companies

#### 5.1 Introduction

The term collective investment indicates the aggregation of the financial resources of investors based on proportional risk sharing for the purpose of optimising returns. It is possible to make a distinction between two types of collective investment: investment companies – companies whose sole line of business is investing in financial instrument; and investment funds – special asset funds without legal personality. Investment companies usually exists in the form of joint-stock companies and can be further divided up into investment companies with variable capital and investment companies with fixed capital.

In this brochure, the general term "fund" is used for three types of collective investment entities. Depending on the investment strategy, a distinction is drawn between:

- Money market funds (see point 1.1.)
- Bond funds without capital protection (see point 2.7.1.)
- Bond funds with capital protection (see point 2.7.2.)
- Equity funds without capital protection (see point 3.2.1.)
- Equity funds with capital protection (see point 3.2.2.)
- Closed-end real estate investment companies (see point 4.2.)
- Open-end real estate investment companies (see point 4.3.)
- Mixed funds: funds which invest in shares, bonds or money market instruments.
- Fund of funds (Umbrella funds): a fund which invests in another specialised fund with the aim of creating a highly diversified portfolio.

#### 5.2 **Investment funds**

An investment fund has no special legal personality, and investors are only shareholders in respect of the assets in the fund, not shareholders in the company. The pooled assets are entrusted to a professional manager.

Only an investment company is authorised to create and manage an investment fund. The investment company collects assets for the investment fund by issuing securities – units.



#### 5.3 **Open-end investment companies**

A typical feature of an open-end investment company is that the number of issued securities is in no way limited and the securities are issued continuously. Another feature is the investment company's obligation to buy back the shares at any time or, more precisely, redeem the owners for their securities. A security is bought or sold at its current net value.

Some jurisdictions (but not the Czech Republic) allow investment companies to split their assets into sub-funds, which are managed separately. This means that such companies (e.g., SICAVs - Société d''Investissement à Capital Variable) can issue different classes of shares, where the right to a share in the profit created by the various sub-funds is tied to the various classes of shares.

Collective investment funds fulfil their client information obligation chiefly through their prospectuses and annual and half-yearly reports. Each fund is under the obligation to publish its current equity value and its current unit or share value at last once every two weeks.

Collective investment funds choose different investment policies which differ especially in terms of risk (from money market funds to equity funds). Investment policies are subject to statutory restrictions (e.g. minimum diversification of portfolio assets, investment limits and so on). The investment strategy is described in the fund's prospectus.

SICAV funds may not be established in the Czech Republic. It is however possible for a SICAV fund fulfilling the relevant European legislation to have a European passport, which means it can be offered to investors in other European countries without the need for further approval.

As regards collective investment securities, a distinction is made between distribution (or income) and capitalisation (or growth) shares. Holders of distribution shares are entitled to regular dividends. With capitalisation shares, dividends are added to the invested capital and reinvested.

#### 5.4 **Closed-end investment companies**

A typical feature of a closed-end investment company is that its capital is in principle fixed (it can only be increased/reduced as for an ordinary company). The investment company issues a certain number of securities which the issuer is not obliged to buy back from investors and which investors can only sell on the capital market.

Czech law allows investment companies to exist only in the form of closed-end companies. Investment companies may be established either as open-end or closed-end. In foreign jurisdictions, a closed-end company is known as a SICAF (Société d''Investissement à Capital Fixe).

Unlike SICAVs, the stock market price of SICAFs can differ considerably from their net asset value. The price is determined on the basis of supply and demand on the stock exchange. Market sentiment and the level of public interest play an important role in this.

## 6. Derivatives

- 6.1 Introduction
- 6.2 Options
- 6.3 Warrants
- 6.4 Certificates
- 6.5 Leverage certificates
- 6.6 Swaps
- 6.7 Forwards
- 6.8 Futures

25 / 38





#### 6.9 Hedge funds

#### 6.1 Introduction

Derivatives are financial instruments whose value is derived from the value of the underlying assets. The value of a derivate is also determined by a number of other factors, such as interest rate trends, the term to maturity and the volatility of the underlying asset.

Derivatives are useful as a tool for managing market risk. Derivatives need no or just a small initial net investment that is a fraction of what other kinds of instruments would require. Derivatives are negotiated and settled at a future date, with the agreed term to maturity being longer than in the case of spot operations.

Derivatives are flexible instruments that allow for a quick response to certain market conditions and that are used:

- to safeguard a portfolio against certain market risks
- to enter a specific position pending direct investment at a later stage
- to speculate on a specific market movement.

However, despite the mentioned benefits, investing in derivatives is risky and is not appropriate for every investor. If investors do not fully understand the transaction conditions and the extent of potential losses that can equal, and in certain cases exceed, the investment, they should refrain from such transactions. Investors should be aware that when trading futures contracts and writing options, the transaction risk is not limited to the account value and can even exceed it. Investing in derivatives is only appropriate for individuals that are well-versed in the capital and financial markets.

Although the initial investment in a financial derivative may be small (if any), even a negligible change in market conditions can lead to a substantial fall or rise in the value of the financial derivative (leverage effect) and a marked discrepancy between the amounts paid by the parties to a concluded financial derivative. Depending on the market position and the direction that the market is taking, the leverage effect may be either disadvantageous or advantageous for the investor. The risk ensuing from the financial derivative is usually not limited.

Investing in derivatives is risky. The experience, intentions, financial resources, regulatory framework and other relevant circumstances pertaining to the investor should all therefore be thoroughly assessed.

The size of the risk, expressed as a ratio of possible loss to nominal value, varies depending on the category of derivatives. Derivatives with the highest risk are loan derivatives. Here the risk lies in the change to the credit risk of the debtor (e.g., the issuer of a debt security), i.e., a change in risk-bearing interest as well as in risk-free interest or the exchange rate. The risk then rises successively according to the size of the commodity risk, equity risk and currency derivative risk. Interest derivatives are the least risky. Here the risk lies in the change in the risk-free interest rate.

Another important factor to consider is the place where the respective derivatives are traded. The conditions of over-the-counter (OTC) derivatives have not been standardised. For this reason, you should carefully review – perhaps also with the help of your financial or legal advisors – the contractual terms and conditions of each derivative that you plan to invest in. A disadvantage of OTC markets is poor transparency, as contracts between partners are agreed in private. Conversely, the advantage of stock exchange markets is high transparency, as contractual conditions and prices



are public. Another advantage of stock exchange markets is the marked-to-market system, which eliminates the partners' credit risk.

#### 6.2 **Options**

#### A. <u>Description</u>

An option is a contract between a buyer (holder) and a seller (writer) establishing the right to exchange the underlying assets at a certain date in the future.

A distinction is made between:

- call options, which give the holder the right to buy a specific quantity (set out in the contract) of a financial asset (the underlying asset) at a predetermined price during a predetermined period (the life of the option) or at a specific time. The other party the seller undertakes to deliver the agreed amount at the strike price if the holder exercises his right.
- put options, which give the holder the right to sell a specific quantity of a financial asset at a predetermined price during a specific period or at a specific time. The other party the buyer undertakes to buy the agreed quantity at the strike price if the holder exercises his right.

An option thus provides the buyer with a right. However, it involves an obligation on the part of the seller, who receives a premium in exchange. The obligation will lapse if the buyer does not exercise his right. In this respect, a distinction is made between European-style and American-style options. With European-style options, buyers may only exercise their right when the contract matures. With American-style options, the right may be exercised at any time during the life of the contract and the seller can be called upon to deliver at any time.

The buyer is entitled to exercise the option or, by not exercising it, to allow it to expire. If the buyer allows the option to expire, the loss from the respective option transaction will equal the total investment in the transaction, including the option premium and the transaction costs incurred. On the other hand, exercising the option means the obligation to settle the option transaction by delivering the underlying assets for an agreed purchase price (in the case of a put option) or by withdrawing the funds necessary to purchase the underlying assets for a pre-agreed price (in the case of a call option), unless the parties to the contract have agreed to financial settlement of the option transaction. When buying an option that allows for the underlying asset to be purchased at a price determined high above its current market value or an option to be sold at a price set well below its current value, one has to realise that the probability of attaining profit from such a transaction is generally low.

The seller in an option transaction generally bears substantially greater risk than the buyer. Although the premium (representing the seller's gains from the concluded option transaction) is determined as a fixed amount, the total amount of the seller's possible losses is not so clearly limited and can substantially exceed the premium if the respective market values of the underlying asset continue to develop to the seller's disadvantage. Should the buyer exercise the option, the seller is exposed to the risk of being obliged to settle the transaction by delivering (in the case of a call option) or withdrawing (in the case of a put option) the respective underlying asset against payment of the purchase price for a predetermined amount, which can differ substantially from the market price prevailing at the time of settlement of the transaction, or to settle the respective difference in cash without delivering the underlying assets.

Options have a specific value and can be traded in the secondary market. Options trading can occur via a regulated market/exchange or over the counter (OTC). OTC transactions are arranged directly between the parties involved.



To make options easier to trade, the contractual terms (except the price) are standardised in the regulated market (underlying instrument, maturity, strike price). For equity options, the contract always involves a precise number of shares, i.e., the multiplier (e.g. 100), and the strike price is expressed per share.

At any given time, there is a whole range of options series in circulation, with terms of between 3 months and some years and with different strike prices for each term.

Example:

Purchase of Total Call, March 2013 for 55.00 EUR on 28 August 2006 provides the buyer with the right to buy 100 Total shares at a price of 55 EUR per share on Friday, 22 March 2013 (the expiry date).

For this right, the buyer pays an option premium of 2.9 EUR per share – a total of 290 EUR. At that time, i.e., 22 March 2013, Total shares are trading at 53.50 EUR. For the option holder, exercising the right is not advantageous. On 22 March 2013, the holder will exercise the option provided the price of Total shares is above 55 EUR, e.g. 59 EUR, since he can immediately sell the shares purchased at a better price. On an investment of 290 EUR, he will receive 400 EUR, a return of 110 EUR, or 37.9%. He could also have bought 100 Total shares directly. For an investment of 5 350 EUR, he would then have realised a return of 10.28%.

If the share price does not rise above 55 EUR, exercising the option is no longer advantageous and it becomes valueless. So, for the holder of the option the loss is limited to the premium paid and the potential profit is in theory unlimited.

There are options contracts on a number of financial assets: individual shares, stock market indices, bonds, currencies and gold. For each of these underlying assets, various series are traded at any one time, with different strike prices or different expiry dates. The parties may agree that the underlying assets must be delivered in physical form or – this is generally the case, to avoid costs – they may opt for cash settlement on the expiry date.

Options are an investment instrument which can be used for a variety of purposes: to hedge against a market risk, to achieve an additional return (writing options on an existing portfolio) or to speculate on a rise or fall in the price of a financial asset. The risk can be reduced (or increased) by buying and/or selling options in combinations (options strategies).

#### B. <u>Strengths</u>

Options can be used to hedge an investment portfolio. Put options offer protection against a fall in the price of the financial assets in an investment portfolio.

Leverage effect. With a fraction of an investment in the underlying asset, the same nominal return can be achieved as with a direct investment in the asset. Expressed as a percentage, a much higher return may be realised with options than with an investment in the underlying security.

Immediate income (premium) when the option is written.

#### C. <u>Weaknesses</u>

Not suitable for all investors. Options are intended for investors who are thoroughly conversant with instruments of this kind and can keep close track of market developments.

Both the buyer and the seller of the option should become acquainted with the type of option transaction (call option or put option) that they plan to invest in and with the specific risks tied to



the specific type of transaction. They should perform a calculation to ascertain the extent to which the price of the underlying asset (or directly the price of the respective option transaction) could change, so their trade position under the concluded option transaction becomes, or remains, profitable, with account taken of the option premium and all related transaction costs.

When writing a 'naked' option, profit is limited to the premium received. The loss can be considerable and in principle unlimited.

- D. <u>Risks</u>
- 1. Credit risk None for transactions on a regulated stock exchange. For OTC transactions, the risk depends on the counterparty's creditworthiness.
- 2. Liquidity risk Moderate to high for transactions on a regulated stock exchange. Moderate for OTC transactions.
- 3. Currency risk None for securities in Czech korunas. Low, moderate to high, depending on exchange rate movements against the Czech koruna.
- 4. Interest-rate risk Moderate to high, depending on the term and structure of the option. Interest-rate fluctuations have both a direct influence on the price of options and even an indirect influence due to their impact on the underlying securities.
- 5. Price volatility High. Depending on the underlying assets, the option could lose all its value.
- 6. Other risks Low to high. When an option is being written, the obligations taken on may be disproportionate to the premium received and should be proportionate to the position in the underlying asset in the portfolio.

#### 6.3 Warrants

#### A. <u>Description</u>

Warrants fall under financial derivatives and are considered high risk securities. In terms of their nature and the way they are valued and traded, they are similar to options, with certain restrictions pertaining chiefly to the writing possibilities. Warrants are thus securities that give the holder the right to acquire (call warrants) or sell (put warrants) a predetermined quantity of the underlying asset (share, share index, currency, commodity) for a predetermined price (strike price) on a fixed date (European type) or during the term of the warrant (American type). If the right holder (investor) decides to exercise his right, his counterparty (warrant seller – issuer) has to meet his obligation to sell or his obligation to buy the underlying asset in question for a predetermined price. These are thus option certificates.

Actual performance, that is the purchase or sale of the underlying asset for the exercise (strike) price, is not practiced in reality. Instead, the issuer pays the warrant holder the difference between the strike price and the actual rate of the underlying asset. The investment will be profitable if the price of the underlying assets is higher than the strike price of the warrant, with it being necessary to deduct the purchase price of the warrant.

The basic feature of a warrant that so attracts investors is the possibility to make use of financial leverage. When utilising the leverage effect, an investor purchases a warrant for much less than he would if he had to purchase the underlying asset directly. A warrant responds strongly to changes



in the rate of the underlying asset. This, on the one hand, means greater profit and, on the other, a greater risk of loss. The leverage effect affects a warrant in both directions. The greater the leverage of the warrant, the riskier the investment. In certain cases, this development could even lead to a complete loss of the invested capital.

The yield from investing in warrants cannot be determined in advance. In any case, this instrument should only be a part of the portfolio of an investor who is able to identify and assess all of the risks. Warrants may be issued independently or attached to a security (usually a bond).

The warrant price depends not only on the value of the underlying assets and strike price (the difference between the two is determined by the intrinsic value of the warrant), but also on the time to maturity of the warrant. This period determines the time value of the warrant, which decreases over time. The closer the expiration date, the faster the value falls, reaching zero at maturity. A high time value can mean a higher rate risk. For the above reasons, investing in warrants with a high value just before expiration is very risky. We principally do not recommend purchasing a warrant immediately prior to its expiration.

As warrants are traded on stock exchanges or OTC markets, their price is also influenced by investor supply and demand, volatility of the underlying asset or the interest rate. The purchase of a warrant with high volatility means an expensive investment and is thus highly speculative. The higher liquidity risk stems from the fact that warrants are generally issued in a smaller quantities. This can lead to especially high fluctuations in the rate of certain warrants or to problems executing orders.

Failure to exercise the rights tied to a warrant or a drop in the value of the underlying asset to below the strike price of the warrant leads to a total loss of the investment.

Warrants are issued by major global banks (e.g. Commerzbank, Deutsche Bank, Raiffeisenbank, and Sal. Oppenheim), which also stipulate the conditions of the warrant in the prospectus. These institutions are obliged to publish buy and sell quotes at the time of trading. This ensures market liquidity.

Warranty may be issued on various kinds of underlying assets. Investor thus can participate in the development of the value of the shares (domestic and foreign), share indexes, foreign currencies or commodities. The Stuttgart derivatives exchange EUWAX or the Frankfurt Zertifikate exchange offers over 300 000 warrants. Investors can chose various warrant strike prices or maturity dates with regard to a specific title.

#### B. <u>Strengths</u>

An interesting feature of warrants is the leverage effect, which allows for a much smaller investment than a direct investment. The price of a warrant is derived from the price of the underlying asset. The leverage affect however means that a small percentage change in the rate of the underlying asset leads to a substantial change in the value of the warrant. This applies to profits as well as losses.

The price of warrants are usually in cents or EUR, which makes them available to small investors and private clients as well.

As in the case of options, warrant holders know their total risk exposure in advance (unlike issuers as the sellers, who can incur unlimited losses from such transactions).





#### C. <u>Weaknesses</u>

A warrant may expire without any value if the value of the underlying asset falls below the strike price of the warrant.

The stock market price may differ considerably from the theoretical value of the warrant.

Often, the liquidity of the secondary market is limited, as warrants are usually issued in small quantities. This can be caused by substantial exchange rate fluctuations or problems with the complete execution of the order.

- D. <u>Risks</u>
- 1. Credit risk The risk is that the issuer may become insolvent and not be able to meet his obligations. In such case, the investor may even lose all invested capital.
- 2. Liquidity risk Moderate to high. Liquidity is usually not very high, since the volumes traded on the secondary market are often low. Liquidity then comprises chiefly the buy and sell quotes of the company issuing the warrant. The volume, stability and the price spread of such quotes are not enforceable by the warrant holder; furthermore, they can change over time even to the detriment of the issued warrant, impacting its liquidity and value.
- 3. Interest-rate risk Moderate to high, depending on the term and structure of the warrant. Interest-rate fluctuations have both a direct and indirect influence on the price of a warrant due to their impact on the underlying asset.
- 4. Price volatility Moderate to high. Depending on the underlying assets, a warrant could lose its entire value. The warrant value also influences the life span of the warrant. This leads to the time value of a warrant changing daily, and its exchange rate can fall even if the value of the underlying asset does not change. The shorter the time to maturity of the warrant, the lower the time value of the warrant, becoming zero on the maturity date. A high time value can mean a higher rate risk.
- 5. Leverage risk May be moderate to high. The value of the warrant responds to changes in the value of the underlying assets by fluctuating widely, depending on the parameters of the warrant. This is the basis for a substantial yield but also heavy losses. As the maturity of the warrant draws near, the leverage effect goes up.
- 6. Currency risk Average to moderate. According to the currency in which the underlying asset is traded, warrant value may depend on mutual exchange rates. This may either work in favour of the value of a warrant (the currency that the warrant is traded in weakens against the currency that the underlying asset is traded in) or against it.
- 7. Leverage effect risk Average to moderate. As a warrant is tied to a specific underlying asset, the value of the warrant is dependent on the development of the underlying asset. The risk related to the underlying asset is then exponentially reflected in the risk of the warrant through the



leverage effect. In extraordinary case, this can be the reason for all funds invested in a warrant being lost.

#### 6.4 Certificates

#### A. <u>Description</u>

Investment certificates are modern structured products. They represent an alternative to investments in shares or bonds. From the legal perspective, certificates are debentures. This means that the issuer can temporarily use the investor's funds.

The underlying asset – which can be individual shares, share indexes, share baskets, bond indexes, currencies or commodities – form the basis of certificates. This means that the price of a certificate is always dependent on the price of the underlying asset. This, however, depends on the type of certificate and the degree to which the price of the underlying asset is reflected in the price of the certificate. If a certificate is issued for shares, the holder has no shareholder rights; of course, certain certificates represent the right to the payment of dividends.

Trading takes place on a stock exchange or directly with the issuer. The most familiar issuers are reputable German and Austrian banks (e.g., Deutsche Bank, Commerzbank, Sal Oppenheim and Raiffeisenbank), Hundreds of thousands of various certificates are offered on derivatives exchanges at this time. Certificates usually have a maturity of a number of years. Most recently, open-end certificates with unlimited maturity have begun to be issued.

Discount certificates, for instance, are popular among investors. These certificates are investment instruments whose value depends on the value of the underlying asset, e.g., share index. When bought, the issuer provides a discount to the investor; the investor's risk is limited to a predetermined maximum amount known as a cap.

#### **Types of certificates**

- Index
- Bonus
- Discount
- Guaranteed
- Outperformance
- And others (new products combining basic types and specific conditions for payment of the premium or a refund of the deposit made are being developed constantly)

#### B. <u>Strengths</u>

- Transparency the price can usually be verified with the broker or directly with the issuer in real time.
- **Liquidity** the issuer undertakes to set the buy and sell price on a continuous basis, thereby guaranteeing that the market continues to function. Limits to this obligation are specified in the prospectus.
- **Universality** certificates allow profit to be generated from a growing, falling or stagnating market.
- **Flexibility** the minimum quantity that can be traded is generally one piece, which is attractive to smaller investors.
- **Favourable costs** for a majority of certificates, there is one fee for buying or selling, so trading is cheaper than investing in individual shares or funds



#### C. <u>Risks</u>

- 1. Investment risk Low to high according to the specifications of the certificate in question. The risk increases with the price paid as a premium for exercising the price benefits at the time of maturity of the certificate.
- 2. Liquidity risk Certificate liquidity is guaranteed chiefly by the issuer by providing continuous buying and selling quotes. The volume, stability and spread of the price of these quotes is not enforceable by the certificate holder, however; furthermore, the risk can change over time to the detriment of the issued certificate with an impact on its liquidity and value.
- 3. Underlying asset risk Commodities in particular can have an intangible underlying asset constituting financial futures contracts. In such case, the costs of rolling between the various contracts can cause the value of the certificate to fall if the price of the commodity stagnates. In extreme cases, the issuer can suspend trading of the certificate and pay out the current value to holders.
- 4. Currency risk As in the case of other investment instruments, each certificate issued in a foreign currency is subject to this risk, and thus the risk is variable.

#### 6.5 Leverage certificates

#### A. <u>Description</u>

Leverage certificates (sometimes termed knockout or turbo certificates) are based on the principle of margin trading; they are therefore categorised as very high risk investment instruments. The certificate issuer finances a certain part of the value of the underlying asset himself; the rest is financed by the investor. This part is also the price of the certificate. The result is a financial leverage that multiplies profits as well as losses. A fundamental parameter for determining the value of a certificate is the strike price.

Another important attribute tied to these investment instruments is the knock-out limit. In the case of a long certificate (the investor bets on growth), if the value of the underlying assets falls below this limit, the life of the certificate is terminated and the investor is paid out the remaining value (provided the structure of the certificate allows for this). In the case of short certificates (the investor bets on a drop in value), the knock-out limit is set in the opposite direction and the same situation occurs if the underlying assets hits this value.

The strike price is not constant over time (in the case of leverage certificates with unlimited maturity). It is increased by the daily interest charged to the investor by the issuer from the amount financed by him. Therefore, if the price of the underlying assets were constant over time, the value of the certificate would fall. The knock-out limit is set at a distance from the strike price by a % stipulated by the issuer, and even this limit gradually increases (in the case of long leverage certificates) or decreases (in the case of put certificates). It is easy to calculate the leverage. It is determined as the ratio of the value of the underlying assets to the certificate price.

With regard to the above, the probability that all invested capital will be lost is high, in the case of higher financial leverages and even in a very short timeframe. At the same time, however, turbo certificates offer a high profit potential.



In the case of turbo certificates, smaller quantities can be issued, which means greater liquidity risk. This can lead to substantial fluctuations in the rate of individual turbo certificates, especially near the knock-out limit. If the knock-out limit is reached, the invested capital is lost completely.

The turbo certificate rate is influence by a host of factors, especially the value of the underlying asset and the size of the financial leverage (external financing). This means that even if the underlying asset does not change, the turbo certificate rate may fall.

- B. <u>Strengths</u>
- Transparency due to the simple structure, the investor can easily calculate the approximate price of the leverage certificate depending on estimates of the future price of the underlying asset.
- **Broad spectrum of underlying assets** these can be shares, share indexes, foreign currencies or commodities.
- Zero time value leverage certificates have none (unlike warrants); thus only the value of the underlying assets affects the price of the certificate. Contributing to the long-term fall in the value of a certificate, however, is financing, which is covered by the issuer and reflected in the market price.
- C. <u>Risks</u>
- 1. Risk related to The same as for leverage certificates. See above. certificates generally
- 2. Leverage risk The value of the leverage certificate responds to the value of the underlying assets even by a several-fold change that depends on the parameters of the leverage certificate, especially the distance of the strike price from the price of the underlying asset. This is the basis for a possible substantial yield, but also heavy losses.
- 3. Knock-out limit If the knock-out limit is reached prior to maturity, the validity of the leverage certificate is terminated and the certificate become worthless or the residual value is paid out (determined under predefined conditions). Just a single transaction executed for a price equal to the knock-out limit on the respective underlying assets at a specified trading hour is sufficient to activate the knock-out limit.

#### 6.6 **Swaps**

Swaps are agreements between two parties on exchanging future payments from the underlying asset, such as dividends or rate changes in shares prices or share indexes, interest payments from bonds or loans or changes to commodity prices.

Swaps are used in part to manage risk and to speculate and especially to reduce transaction costs, in which case the advantage is taken of the fact that domestic entities have access to their home market at better interest conditions than foreign entities do, and so they offer these more advantageous conditions to each other.

Swaps are negotiated by both parties individually, which makes them OTC transactions.



#### 6.7 Forwards

#### A. <u>Description</u>

Forwards are non-standardised time contracts that are fully binding on both parties, who negotiate the specific conditions of transactions individually. As such contracts are not standardised, they are traded chiefly outside the market (so-called OTC derivatives).

Unlike futures transactions, forwards are executed physically, that is the underlying assets are delivered.

Practically speaking, this is a contract for the exchange of underlying instruments on a certain future date. Forward transactions can be split into interest, share, commodity and currency transactions. A fixed amount in cash in one currency may be exchanged for a hitherto unknown (variable) amount in cash or for a bond, credit facility, deposit or loan (interest or credit forward), or a fixed amount in cash in one currency may be exchanged for a fixed amount in a different currency (currency forward), for an equity instrument (equity forward) or for a commodity instrument (commodity forward).

A forward price states for how much an underlying instrument is bought or sold on a specific date in the future. The forward price can be higher (forward with premium) or lower (forward with discount) than the actual market price of the underlying instrument, depending on the transaction costs and market expectations as to the how the price of the underlying instrument will develop.

Forward rate agreements, or FRAs, are the most well-known kind of forward transactions. These allow for the interest rate to be fixed for a specified period of time. The contractual parties exchange the differences in the interest rate agreed in the FRA and the actual market interest rate, thereby guaranteeing stable interest payments from their variable, interest bearing debt or receivables. The FRA purchaser thus hedges his variable interest-bearing debt against growing interest rates; the FRA seller in turn hedges his variable interest-bearing receivables against falling interest rates.

#### B. <u>Strengths and weaknesses</u>

The advantage of forward transactions is their flexibility, which is due to the fact that the contractual parties can agree on the specific conditions of the transaction themselves (that is on the amount and date of delivery of the underlying asset). This "tailoring" of course also reduces the liquidity of such contracts.

#### 6.8 Futures

#### A. <u>Description</u>

Futures are understood as standardised financial derivatives that represent a bilateral agreement between two parties based on which the buyer is obligated to buy the underlying assets on the maturity date for the corresponding price and the seller is obligated to sell the underlying assets under the same conditions (a fixed transaction). Most futures are liquidated before maturity, where instead of delivering the underlying asset, the contract is settled in cash. The underlying assets may be commodities (gold, silver, corn, wheat), financial assets (shares, bonds), indexes, interest rates, energy (crude oil, natural gas) or currencies.

The major characteristic of futures is that they are formally standardised. The conditions which futures must fulfil are explicitly defined, in respect of both the quantity and quality of the product involved and the time of delivery. Contracts generally have a specified month (mostly March, June,



September or December) for delivery. Futures contracts are seldom held until maturity. Transactions with futures are carried out exclusively on the regulated markets (stock exchanges).

It is possible to speculate on their rise or fall, with the prices of futures usually differing only marginally from the actual prices of the various underlying assets. They are also used for hedging.

Futures are marked to market daily. The difference between the current price and the previous day's price is the variation margin. The obligations of a clearing house member of a futures exchange stemming from the variation margin are imposed through margin calls. When futures are bought or sold, a margin deposit (initial advance) has to be paid first. This deposit serves to cover losses that may occur as a result of open positions. If a clearing house member of a certain futures exchange sees positive developments in the price of the underlying instrument, an amount equal to the variation margin is released. A similar system is in place between the clearing house member and the customer.

The clearing house guarantees that the obligations under futures contracts are met, especially through the initial margin and maintenance margin based on daily settlement. If the margin based on the clearing house's calculation is not sufficient, the investor is obligated to deposit additional security based on his broker's request (a margin call). However, as the investor at the time of negotiating the futures contract does not pay the full amount of the underlying instrument but only the margin, which constitutes only a small part of the market value of the underlying asset, his position is high risk and a leverage mechanism is possible. A small percent change in the value of the underlying instrument can result in a greater percent change in the value of the additional margin.

The main difference between futures and forwards is that marking to market or settlement of profits or losses from a futures contact takes place on an ongoing basis (usually daily) and not at one time. Another difference between futures and forwards is that the conditions of a futures contract are standardised and that futures are traded only on special exchanges and not on OTC markets. The contract conditions, including standardisation of the underlying instrument, is determined in detail by the exchange on which the contract is traded.

#### B. <u>Strengths</u>

Futures are first and foremost instruments used to hedge the value of a portfolio. For instance, an investor wishing to hedge the value of his bond portfolio against the negative effects of an expected rise in interest rates may sell futures. The profit made on the sale will more or less offset the loss resulting from the fall in the price of the bonds.

It is possible to profit with futures on both the rising and falling value of the underlying asset even at relatively limited cost (initial deposit and daily variable deposits).

The futures market may offer an attractive alternative to spot buying and selling. By buying and selling futures, investors can determine their buying and selling prices for the underlying asset in the future, independent of how the prices actually develop.

#### C. <u>Weaknesses</u>

Like options and warrants, futures are intended for experienced and qualified investors who are well acquainted with the system in place for their trading and who keep close track of developments in the financial markets. They are sophisticated financial management instruments intended first and



foremost for institutional investors such as insurance companies, pension funds, trading and industrial companies and individuals with large portfolios.

The leverage risk results in greater profits but also heavier losses compared with a direct investment in the underlying asset. If the value of the underlying asset develops unfavourably, the investor has to deposit additional funds on his account. If he fails to do so, the broker is authorised to utilise funds from the margin deposit in full.

A full hedge is never possible, since the contracts are standardised.

Some futures holders may be unpleasantly surprised to learn that securities brokers are authorised to sell or buy futures (but also other derivatives) on the customer's account if the price reaches or exceeds a certain limit (stop order). The objective is to minimise losses in cases where the price of the futures moves contrary to the customer's position.

- D. <u>Risks</u>
- 1. Credit risk None. A clearing house guarantees settlement on the regulated exchange. A clearing house acts as counterparty for the buyer and seller.
- 2. Liquidity risk Low. Futures are easily negotiable on the organised exchanges as the market creator undertakes to set the purchase and sale price continuously, thereby ensuring that the market functions.
- 3. Currency risk None for securities in Czech korunas. Low, moderate to high, depending on exchange rate movements against the Czech koruna.
- 4. Interest-rate risk Moderate to high for interest-rate futures, low for equity futures.
- 5. Price volatility Moderate to high. Depending on the underlying assets, a futures contract could lose all its value.

#### 6.9 Hedge funds

#### A. <u>Description</u>

Hedge funds invest in all financial and commodity instruments and in almost all markets; for this reason, it is chiefly up to the fund manager to choose the strategy and decide on the results of the funds. The risk posed by hedge funds increases when the use of loans to run the investment strategy increases, such as loans to buy securities, which can result in a significant leverage effect.

The manager will often have a stake in the fund or receive performance-linked remuneration himself, which boosts his involvement and motivation. The aim is to achieve and maximise an absolute return, regardless of market circumstances.

"Traditional" investment undertakings, especially investment companies and investment funds, invest (buy) securities (shares, bonds, options, etc., depending on the investment strategy) using the final investors' funds. They take a long position in the market, which means they will achieve a positive investment result if the underlying securities go up in value. With hedge funds, however, the manager can also sell securities which the investors do not have, in the hope of buying them back more cheaply at a later date. He takes a short position in the market and will achieve a positive investment result if the underlying security goes down in value. The sale of securities always produces additional cash, which may be re-invested and create an additional return, thus forming the basis of a leverage effect.



The combination of a long and short position in two entirely different assets increases the risk. In the case of a combination of two related securities representing the same asset (e.g. a share and a warrant on the same share), the investment risk can conversely be reduced. Any profit on the long position will be offset by a loss on the short position. Strategies of this kind are used for the express purpose of eliminating a specific market risk (partially or entirely) and deriving a profit from market inaccuracies in pricing the securities. This risk is hedged, hence the name. Profit is made on pricing imbalances. For instance, a warrant may be listed at a price which is lower/higher than its net asset value or a convertible bond may be cheaper than the sum of its composite parts (the standard corporate bond and the warrant).

Consequently, the riskiness of one hedge fund may differ greatly from that of another. Often the investment strategy is described in very vague terms (that is the price of the extensive freedom of management) and is not very transparent. This constitutes another source of risk.

- B. <u>Risks</u>
- Credit risk Low, moderate to high, depending on the underlying instruments and the creditworthiness of the hedge fund manager.
  Liquidity risk High. It is often only possible to sell the hedge fund shares on a monthly basis. In many cases, the investor also has to make this known in advance.
- 3. Currency risk None for securities in Czech korunas. Low, moderate to high, depending on exchange rate movements against the Czech koruna.
- 4. Interest-rate risk Low, moderate to high, depending on the underlying instruments.
- 5. Price volatility Moderate to high, depending on the underlying instruments.

## 7. Taxation

Patria is not a tax advisor and has no authorisation for this field of business, in other words it does not provide legal assistance and financial and economic advice in matters of taxes, contributions, charges and other payments or in matters directly related to tax. All tax related information is merely a guide to give our company's clients a better idea of the potential tax liabilities ensuing from transactions on the capital markets. For that reason Patria is not liable for the accuracy and completeness of information for tax purposes or for any damages that may result from the use of this information. Customers are encouraged to consult potential legal and tax issues relating to the trading of investment instruments with their legal and tax advisors.

