Risk Disclosure
Financial Instruments
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The information provided herein is intended to serve as basic information for your investments in money and capital market instruments, allowing you to determine and keep investment risk within limits. In addition, the risk disclosures are meant to be of use when providing verbal advice, although they cannot replace the personal interview between you and your account manager.

**We therefore ask you to read this document carefully. Your account manager will be happy to answer any questions you may have.**

Financial instruments are designed and sold to meet the needs of an identified target market of end clients within the relevant category of clients. This is duly taken into account in the relevant investment service.

Risk is the failure to achieve an anticipated yield on the capital invested and/or suffering the loss of the capital invested, up to its total loss. Depending on the nature of the product, on the markets and the issuers, a number of different reasons can give rise to such risk. This risk cannot always be determined ahead of time, which is why the explanations provided below should not be regarded as conclusive.

The risk arising from the credit standing of the issuer varies from case to case, and the investor should thus pay particular attention to such risk.

The description of the investment products is based on standard product features. The configuration of the individual product at hand is decisive. The present description can thus not replace the investor's close scrutiny of the specific product.

As a rule, the following needs to be considered when investing in securities:

- In every investment, the potential return depends directly on the risk involved. The higher the potential return, the higher the risk will be.
- Furthermore, irrational factors (investor sentiment, opinions, expectations, rumours) may likewise influence the share price and thus the return on your investment.
- Spreading an investment over several different securities reduces the risk of the investment as a whole (principle of risk diversification).
- Each client is responsible for ensuring the proper payment of tax on their investments. The credit institution is not permitted to advise on tax matters outside the scope of its investment advice.
1. GENERAL INVESTMENT RISK

CURRENCY RISK

With foreign currency transactions, the return on and the performance of the investment depend not only on the local yield on investment in the foreign market, but also greatly on the performance of the foreign currency with respect to the investor's reference currency (e.g. the euro). A change in the exchange rate can therefore either increase or decrease the return and value of the investment.

TRANSFER RISK

Transactions involving foreign countries (e.g. foreign borrowers) entail the additional risk - depending on the specific country - that political action or exchange control may make the realisation of the investment difficult or impossible. Also, problems may occur when processing an order. In foreign-currency transactions, the currency may end up no longer being freely convertible as a result of such action.

COUNTRY RISK

Country risk is the credit risk of a country. When the country in question has a political or economic risk, all the partners residing in that country may be adversely affected.

LIQUIDITY RISK

The option of selling or settling an investment at a fair market price at all times is called negotiability (= liquidity). A market is considered liquid when investors are able to sell their securities without an average-sized selling order (relative to the market's normal trading volume) leading to noticeable price fluctuations that make it impossible to execute the order or only allow execution at a substantially different price level.

CREDIT RISK

Credit risk refers to the possibility of the counterparty's default, i.e. the possibility that a partner may be temporarily or permanently unable to meet liabilities such as dividend payments, interest payments, repayment of principal, etc. Alternative terms for credit risk are borrower risk or issuer risk. This risk can be assessed using what are called "ratings". Ratings are used to assess an issuer's credit standing. Rating agencies assign the ratings,
paying particular attention to credit and country risk. The rating scale ranges from "AAA" (best credit standing) to "D" (worst credit standing).

**INTEREST RATE RISK**

Interest rate risk results from the possibility of future interest rate movements in the market. During the term of fixed-interest bonds, a rise in interest rates will cause prices to drop, whereas a decline in market interest rates will cause prices to increase.

**PRICE RISK**

Price risk is the risk of potential changes in the value of individual investments. In the case of transactions involving future transfer of ownership (e.g. foreign exchange forwards, futures, writing of options), price risk may make it necessary to post collateral (a margin) or to raise the existing margin, i.e. to tie up liquid assets.

**RISK OF TOTAL LOSS**

The risk of total loss is the risk that an investment becomes worthless, for instance because it is devised as a right that is subject to a time limit. A total loss is especially likely to occur when the issuer is no longer in a position, for financial or legal reasons, to meet their payment obligations (insolvency). The risk of total loss also arises when issuers of securities find themselves in financial straits and the authorities in charge resort to resolution instruments, cancelling the shares of shareholders, for example, or using the bail-in option for unsecured bonds, which may lead to a complete write-off of the bonds' face value.

**BUYING SECURITIES ON CREDIT**

Buying securities on credit comes with an increased risk. The credit obtained must be repaid regardless of whether the investment is a success or not. Any credit costs that are incurred further reduce the return on the investment.

**ORDER PLACEMENT**

Buying or selling orders placed with the bank must specify at least the following: the type of investment, the quantity/notional, the price and the time period over which the instruments are to be bought/sold.

- **Price limit**
  If you add the instruction "at best" (no price limit) to an order, you accept any possible price; as a result, you will be unable to anticipate how much capital you will be expected to invest or, as the case may be, how much you will earn. A buy limit puts a cap on the
purchase price and thus the amount of capital to be employed; no purchases will be made above the price limit. A sell limit stipulates the lowest acceptable selling price; no deals will be carried out below this price limit.

N.B.: A stop-market order is activated only when the price on the stock exchange reaches the selected stop limit. Order are valid once you activate them as "at best orders" or when they have no limit. The price actually achieved may thus vary considerably from the selected stop limit, particularly in the case of securities with low trading volume.

- **Time limit**
You may stipulate that your order should expire once a certain time limit is reached. The period of validity for unlimited orders depends on the practices of the respective stock market. For any other additional instructions, please consult with your account manager.

**GUARANTIES**

The word guarantee can be used in different senses. On the one hand, it is understood to mean the commitment a third party other than the issuer undertakes to pay the issuer's liabilities. On the other hand, it may designate the commitment undertaken by issuers themselves to provide a specific payment irrespective of the trends of certain indicators that would otherwise determine the amount of the liability. Guarantees may involve a wide range of different other conditions.

Capital guarantees are usually valid only at maturity (redemption), which is why price fluctuations may well occur until such time. The quality of a capital guarantee essentially depends on the guarantor’s credit standing.

**TAX ISSUES**

Your account manager will be happy to advise you on general tax matters relating to the various investments. You should ask your tax advisor to help you assess the effects of an investment on your personal tax situation.

**RISK AT STOCK EXCHANGES, PARTICULARLY SECONDARY MARKETS (E.G. EASTERN EUROPE, LATIN AMERICA, ETC.)**

There is no direct connection to most stock exchanges in secondary markets, i.e. all orders need to be forwarded by telephone. Errors and delays may occur.

In some secondary stock markets, limited buy and sell orders are generally not available. Therefore, limited orders can only be placed after consulting with the broker on site by telephone, which may lead to delays. Sometimes, such limits may simply be ignored.
In various stock exchanges it is difficult to obtain information on current prices, making any up-to-date assessment of current client positions difficult. If a security is no longer listed in a stock exchange, the sale of these securities may no longer be possible via the relevant stock exchange. A transfer to another stock exchange may likewise be problematic. The opening times of some stock exchanges in secondary markets are well out of line with Western European standards. Short trading hours of three or four hours per day, for example, can lead to bottlenecks and the non-execution of orders.

2. BONDS

DEFINITION

Bonds (= debentures, annuities) are securities by which the issuer (= borrower, issuing firm) accepts an obligation towards the holder (= creditor, buyer) to pay interest on the capital received and to redeem the bond according to the agreed terms. Alongside bonds in the narrow sense, there are debt securities that differ substantially from the above-mentioned characteristics and the description provided below. Please refer to the description of debt securities in the section "Structured products". Especially in the present context, product-specific risk is determined not by the designation as bonds or debentures but by the specific configuration of the individual products.

RETURN

The return on a bond consists of interest paid to the bond holder plus any difference between the purchase price and the realisable selling price/redemption price.

It is therefore possible to anticipate the return only if the bond is held until redemption. In the case of variable interest rates, the return on a bond cannot be calculated in advance. Yield (at maturity), which is calculated according to established international standards, is used as an indicator/reference for the return. Where a bond offers a yield that is substantially higher than that of bonds with comparable maturities, specific reasons are likely responsible, such as an elevated credit risk. When a bond is sold prior to redemption, the realisable selling price cannot be anticipated; the return may therefore turn out to be higher or lower than the yield originally estimated. Any transaction costs charged need to be deducted from the overall return as well.
CREDIT RISK

There is a risk that borrowers defaults on all or part of their obligations, e.g. in the event of insolvency. The debtor’s credit standing must therefore be taken into account when deciding on an investment.

An indication for assessing the borrower’s credit standing is the “rating” (= evaluation of the borrower’s credit standing) by an independent rating agency. An AAA rating represents the best credit standing; the lower the rating (e.g. B or C), the higher the credit risk - but the rate of return on the security (risk premium) will presumably also be higher due to the costs resulting from the borrower’s higher default risk (credit risk). Investments with a comparable BBB rating or higher are called "investment grade" investments.

PRICE RISK

If a bond is held to maturity, the investor is paid the redemption price as stated in the bond terms. In this regard, please consider - if provided in the terms of issue - the risk of early termination on the part of the issuer. If a bond is sold prior to maturity, the investor is paid the market rate (price). This rate is determined by supply and demand, which in turn also depend on the current level of interest. The price of fixed-rate securities, for example, will fall if the interest on bonds with comparable maturities rises. Conversely, bonds will gain in value if the interest on bonds with comparable maturities falls. A change in the borrower’s credit standing may also affect the price of bonds. When the interest rate curve is levelling out or flat, the price risk of bonds whose interest rates are aligned to capital market interest rates of floating-rate notes are markedly higher than those of bonds whose interest rates depend on money market interests.

"Duration" indicates the price change of a bond in response to a change in the interest rate. The duration depends on the bond’s time-to-maturity. The greater the duration, the stronger a change in general interest rates will impact the price, either in a positive or in a negative way.

LIQUIDITY RISK

The negotiability of bonds may depend on a variety of factors, including the volume issued, time-to-maturity, stock exchange practices and the market situation. It may be difficult or impossible to sell a bond under certain circumstances, in which case it must be held to maturity.
BOND TRADING

Bonds are generally traded in the stock exchange or over the counter. Your bank will generally advise you on the purchase and selling prices of certain bonds on request. However, there is no entitlement to negotiability.

For bonds traded in the stock market, the prices quoted in the stock exchange may vary substantially from over-the-counter prices. Adding a limit will cap the risk of weak trading.

CALL OPTION AND REPURCHASE LIMIT

Subordinated bonds may not be called at the bond holder’s discretion. Before any issuer rights to call or repurchase subordinated bonds may be exercised, approval must be obtained from the competent authorities.

2.1 SPECIFIC TYPES OF BONDS

SUBORDINATED BONDS ("TIER 2")

According to Art 63 of the CRR, subordinated bonds are Tier 2 instruments. These bonds establish direct, unconditional, unsecured and subordinated liabilities on the part of issuers with a maturity of no less than 5 years. The creditors enjoy no call option. In the event of the issuer’s liquidation or insolvency, the claims of Tier 2 bond holders are subordinate to the claims of non-subordinated bond holders.

HIGH-YIELD BONDS

High-yield bonds are securities where an issuer with low credit standing (= debtor) accepts an obligation towards the holder (creditor, buyer) to pay fixed or variable interest on the capital received and to redeem the bond according to the agreed terms.

CONVERTIBLE BONDS FOR HOME LOANS

Convertible bonds for home loans are issued by home loan banks and have the purpose of financing homes (new construction and refurbishment). Such bonds certify the claim to payment of capital and interest in the form of a convertible bond. According to the terms of the bond, they can be converted into participation rights of a home loan bank (= redeemed). Once converted, the rank of the participation rights corresponds with that of ordinary shares. Payments on participation rights depend on the profit made; there is no
follow-up payment for remuneration not paid in individual years. Currently, tax incentives are available for convertible bonds for home loans. Prior to purchase, applicability of such incentives should be verified.

**OTHER SPECIFIC TYPES OF BONDS**

For other specific types of bonds, including bonds with options, convertible bonds and zero coupon bonds, please consult with your account manager.

### 3. SHARES

**DEFINITION**

Shares (stock) are securities that evidence equity interest in a company (stock corporation). The shareholder’s main rights are to receive a share in the company’s profits and to vote in the general meetings of shareholders (with the exception of preferential shares).

**RETURN**

The return on investments in shares consists of the dividend payments and price gains/losses and cannot be anticipated with certainty. The dividend is the profit distributed on the basis of a resolution of the general meeting. The amount of the dividend is quoted either as an absolute amount per share or as a percentage of the notional. The profit from the dividend relative to the share price is called the dividend yield. Generally, this yield is substantially less than the dividend expressed as a percentage.

The greater part of returns from investments in shares is usually achieved from the stock’s performance/price trend (see Price risk).

**PRICE RISK**

A share is a security usually traded in the stock exchange. Generally, a price is determined daily on the basis of supply and demand. Investments in shares may lead to substantial losses.

In general, the price of a share depends on the business success of a given company as well as the general economic and political environment. Besides, irrational factors (investor sentiment, public opinion) may also influence the share price and thus the return on an investment.
CREDIT RISK

As a shareholder, you hold an interest in a company. That interest may become worthless, particularly in case of insolvency.

LIQUIDITY RISK

In the case of securities with low trading volumes (especially over-the-counter trading), negotiability may be problematic. Even when a share is listed in several stock exchanges, there may be differences in the negotiability at the different international stock markets (e.g. an American share listed in Frankfurt).

SHARE TRADING

Shares are traded in the stock exchange and, in certain cases, over the counter. When trading in the stock market, it is necessary to take into account the rules and practices of the specific stock exchange (units of trading, types of orders, currency regulations, etc.). Shares listed in different stock markets in different currencies (e.g. a US share listed in euros at the Frankfurt Stock Exchange) entail both a price risk and a currency risk. Your account manager will be happy to advise you. When buying a share at a foreign stock market, it must be noted that foreign stock markets always charge "third-party fees" in addition to the usual banking fees. Your account manager will be happy to advise you on the exact amount.

4. INVESTMENT FUNDS

4.1 DOMESTIC INVESTMENT FUNDS

GENERAL

Austrian investment fund shares (investment certificates) are securities that securitise joint ownership in an investment fund. Investment funds invest the shareholders’ funds in accordance with the investment fund’s investment strategy, adhering to the principle of risk diversification. Traditional investment funds are typically subdivided into three main types: bond funds, equity funds and mixed funds, which invest in both bonds and equity shares. Investment funds may invest in domestic and/or foreign securities.

The investment range of domestic investment funds includes not only securities but also money market instruments, liquid financial assets, derivatives and other investment fund shares.
Furthermore, distributing investment funds are distinguished from non-distributing when it comes to taxes. Unlike a distributing investment fund, a non-distributing fund accumulates returns and reinvests these in the investment fund. In umbrella funds, returns are invested in other domestic and/or foreign investment funds. Guarantee funds involve a binding commitment - relating to disbursements during a certain time period, repayment of the capital or performance - on the part of a guarantor appointed by the management company.

**RETURN**

The return on investment funds consists of the annual dividends and the change in the fund’s calculated value and cannot be anticipated. The trend in value depends on the investment policy established by the fund terms and the market trend of the fund’s individual asset components. Depending on the composition of an investment fund, the risk disclosure for bonds, shares and options should be observed.

**PRICE/VALUATION RISK**

Investment fund shares may usually be returned at the redemption price at any time. In the event of exceptional circumstances, redemption may be temporarily suspended until the assets of the investment fund have been sold and the proceeds have been received. Should many unit-holders decide to return their unit certificates all at the same time, the investment fund - if no relevant arrangements are provided for in the fund terms - may suspend redemption of investment fund units due to a liquidity bottleneck. Any such suspension must be implemented in strict compliance with legal requirements and also require notification of the Financial Market Authority (FMA) as well as a public announcement. The purpose of such a suspension is to give the investment fund an opportunity to raise additional liquidity. If unsuccessful, the investment fund may be closed. Your account manager will inform you of any costs payable and, as the case may be, the execution date for your buying or selling order. The term of an investment fund depends on the fund terms and is usually unlimited. Please note that, unlike with bonds, there is generally no redemption and thus no fixed redemption price in the case of investment fund units. When investing in a fund the risk is determined by the investment policy and the respective performance of the investment fund’s assets. The possibility of a loss can generally not be ruled out. Although the investment can usually be redeemed at any time, investment funds are investment products that generally pay off only if held for a lengthy period of time.

Just like equities, investment funds can be traded in stock markets: they are then known as exchange-traded funds (ETF). It must be pointed out that an investment fund qualifies as an ETF only if the management company has entered into an appropriate agreement with
a market maker. Prices that form at the relevant stock market may vary from the redemption price. In this respect, risk disclosures for equities should be taken into account.

**TAX EFFECTS**

Depending on the type of investment fund, returns are taxed differently.

### 4.2 FOREIGN INVESTMENT FUNDS

Foreign investment funds are subject to legal requirements applicable in other (EU) countries, which may vary from the regulations applicable in Austria. In particular, prudential law in other countries (outside of the EU) may be less strict than in Austria. What also needs to be taken into account is that the investment funds available in other (EU) countries may be different than those available in Austria, such as fund structures under company law. Such investment funds are geared towards supply and demand and not towards the intrinsic value of the investment fund, which is why they are comparable to equities. Please note that the dividends and dividend equivalents of foreign investment funds (e.g. non-distributing funds) are subject to other tax laws, regardless of their legal form.

### 4.3 EXCHANGE-TRADED FUNDS

Exchange-traded funds (ETFs) are investment fund units that are traded in a stock market like equities. An ETF is usually a basket of securities (e.g. basket of equities) that reflects the composition of an index, i.e. tracking the index in a security by means of the securities included in an index and their current weighting, which is why ETFs are often also designated index stocks.

**RETURN**

The return is determined by the performance of the underlying assets in the basket of securities.

**RISK**

The risk is determined by the underlying assets in the basket of securities.
5. REAL ESTATE FUNDS

GENERAL

Real estate funds are special assets owned by a real estate investment company that holds and manages the special assets in trust. Unit certificates evidence interest held in such special assets. Based on the principle of risk diversification, real estate funds invest the funds provided to them by the unit-holders in landed property, buildings, shares in real estate companies, comparable assets and own construction projects; they also hold liquid financial assets (liquidity assets), such as securities and cash on deposit. The purpose of liquidity assets is to ensure that forthcoming payment obligations on the part of the real estate fund can be met (for the purchase of real estate properties, for example).

RETURN

From the perspective of unit holders, the total return on real estate funds consists of the annual distributions (provided it is a distributing fund) and performance of the calculated share in the fund’s value and cannot be anticipated. The performance of real estate funds depends on the investment policy established by the fund regulations, the market trend, the individual real properties held in the fund and other asset components of the fund (securities, cash on deposit). The historical performance of a real estate fund is no indication for its future performance. Among other factors, real estate funds are subject to a return-related risk on account of the potential vacancies in the buildings. Especially in own construction projects, problems may arise when it comes to renting out for the first time. Furthermore, vacancies may negatively affect the value of the real estate fund and lead to reduced dividends. Investing in real estate funds can also lead to a reduction of the invested capital.

Aside from cash on deposit, real estate funds also invest liquid funds in other types of investments, particularly in interest-bearing securities. These components of the fund assets are then subject to specific types of risk inherent in the selected form of investment. When real estate funds invest in foreign projects outside the euro zone, the unit-holder is exposed to additional currency risk, as the market value and capitalised earnings of such a foreign property needs to be converted every time the subscription price and the repurchase price are calculated.

PRICE/VALUATION RISK

Unit certificates may usually be returned at any time at the repurchase price. It should be noted that real estate funds may have constraints on the repurchase of unit certificates. In exceptional circumstances, the repurchase of certificates can be temporarily suspended.
until the fund assets are sold off and the sales proceeds are received. In particular, fund regulations may provide that the repurchase of unit certificates be suspended for lengthy period of up to two years once substantial repurchases have been made. In such a case, the repurchase price will not be paid out during this period. Real estate funds are typically classified as long-term investment projects.

6. Warrants

Definition

Warrants are non-interest bearing and non-dividend securities that give the holder the right to buy (call options) or to sell (put options) an underlying asset (e.g. shares) at a price specified in advance (exercise price) on a specified date or in a specified time period.

Return

By purchasing a call option, the owner sets the purchase price of the underlying asset. A return is earned if the market price of the underlying instrument less the option’s purchase price is higher than the exercise price payable. The option holder may then buy the underlying instrument at the exercise price and sell it immediately at the market price. Generally, a rise in the price of the underlying instrument causes a comparatively strong increase in the price of the option (leverage effect), so that most investors realise their return on the investment by selling the option. Inversely, the same applies to put options: their price usually rises when the price of the underlying asset declines. Returns on option investments cannot be anticipated. The maximum loss is limited to the amount of the capital invested.

Price Risk

The risk inherent in option investments is that, by the time options expire, the underlying instrument may not have performed as you anticipated when you bought the options. In extreme cases, this can lead to the total loss of the invested capital. The price of an option also depends on other factors. The most important are:

- The volatility of the underlying instrument (indicator for the fluctuation margin of the underlying instrument expected at the time of purchase and also the most important parameter determining the price of the option). High volatility generally translates into a higher price for the option.
- **Maturity of the option** (the longer the maturity of an option, the higher the price).

Even if your expectations with respect to the price performance of the underlying instrument are met, a decline in volatility or a decrease in the time-to-maturity may cause the price of the option to remain unchanged or fall. Generally, we would advise not to buy an option shortly before it expires. Buying an option when volatility is high makes your investment more expensive and is thus highly speculative.

**LIQUIDITY RISK**

Options are generally issued only in small quantities. This increases the liquidity risk. As a result, individual options are prone to particularly strong price fluctuations.

**OPTION TRADING**

For the most part, options are traded over the counter (OTC). As a rule, there is a difference between purchase and selling price. This difference is for your account. When trading options in the stock market, low liquidity is frequently very low.

**OPTION TERMS**

Options are not standardised. It is therefore extremely important to find out the exact terms and conditions, especially with respect to:

- **Type of exercise**: can the option be exercised at any time (American-style option) or only on the exercise date (European-style option)?
- **Subscription ratio**: How many options are necessary to obtain the underlying instrument?
- **Exercise**: Delivery of the underlying instrument or cash settlement?
- **Expiration**: When does the right expire? Please note, that the bank will not exercise your option rights without your express instruction to do so.
- **Last trading day**: In many cases, this day comes before the day of expiration, so that option holders cannot take for granted that options will have been sold by the day of expiration.
7. EXCHANGE TRADED DERIVATIVES (OPTION AND FUTURES CONTRACTS)

While options and futures come with high odds of positive returns, they also entail a very high loss risk. As your bank, we see it as one of our tasks to advise you on the risk involved before you invest in options and futures.

7.1 BUYING OPTIONS

Buying options involves the purchase (opening = to buy an option, long position) of calls (options to buy) or puts (options to sell), by which you acquire the right to delivery or acceptance of the underlying security or, if that is impossible, as with index options, the right to payment of an amount equal to the positive difference between the price of the underlying instrument at the time you purchased the option and the market price at the time you exercise the option. American-style options may be exercised at any time before the agreed expiration date, whereas European-style options can be exercised only on the agreed expiration date. To obtain the right under an option, you need to pay the option price (option premium). The price may fail to live up to the expectations you had when you bought the option and the value of your option may decline, possibly even becoming completely worthless by the expiration date. Your risk of loss is therefore the price you pay for the option.

7.2 SELLING OPTIONS AND BUYING/SELLING FORWARDS

SELLING CALLS

Selling calls involves the disposal (opening, short position) of calls (options to buy), by which you accept the obligation to deliver the underlying security at a specified price at any time prior to the expiration date (in the case of American-style call options) or on the expiration date (in the case of European-style call options). You are paid the exercise price for assuming that obligation. Should the price of the underlying security rise, you will be expected to deliver the underlying security at the agreed price even if the market price is significantly higher. Your risk of loss, which cannot be anticipated and is, as rule, unlimited, lies in this difference. If you do not own the underlying securities (uncovered short position), you will need to purchase them by means of a spot transaction (cover transaction) and, in that case, your risk of loss cannot be anticipated. If you own the underlying securities, you are protected against cover losses and will also be able to ensure timely delivery. However, as such securities must be blocked until the
Expiration date of your option, you will not have them at your disposal during that time, which means you will be unable to sell them to protect yourself against falling prices.

SELLING PUTS

Selling puts involves the disposal (opening, short position) of puts (options to sell), by which you accept the obligation to purchase the underlying security at a specified price at any time prior to the expiration date (in the case of American-style call options) or on the expiration date (in the case of European-style call options). You are paid the exercise price for assuming that obligation. Should the price of the underlying security fall, you will be expected to buy the underlying security at the agreed price even if the market price is significantly lower. This difference between exercise price and the option premium constitutes your basic risk of loss which cannot be anticipated. Any immediate disposal of the securities will only be possible at a loss. However, should you wish retain ownership and not sell the securities immediately, you will need to take into account the costs this will entail.

BUYING/SELLING FORWARDS

This involves the disposal or, as the case may be, purchase of forwards at a specified time in the future, by which you assume the obligation to accept or, as the case may be, deliver the underlying security at a specified price at the end of the agreed maturity. Should the price of the underlying security rise, you will be expected to deliver the underlying security at the agreed price even if the market price is significantly higher. Should the price of the underlying security fall, you will be expected to buy the underlying security at the agreed price even if the market price is significantly lower. Your risk of loss lies in this difference. If you commit yourself to buying, the full amount in cash required must be available at the time of maturity. If you do not own the underlying securities (uncovered short position), you will need to purchase them by means of a spot transaction (cover transaction) and, in that case, your risk of loss cannot be anticipated. If you own the underlying securities, you are protected against cover losses and will also be able to ensure timely delivery.

7.3 CASH SETTLEMENTS

If, in a futures contract, acceptance or delivery of the underlying securities is impossible (e.g. in the case of index options or index futures), you will be required to pay a cash amount (cash settlement) resulting from the difference between the price of the underlying security at the time you sign the option or futures contract and the market price at the time of exercise or maturity if the market did not perform as you anticipated. Your risk of loss, which cannot be anticipated and is, as rule, unlimited, lies in this
difference and you need to ensure that you have sufficient liquid assets to cover the transaction.

**7.4 POSTING SECURITY (MARGINS)**

In the case of an uncovered sale of options (opening, uncovered short position) or, as the case may be, the purchase or sale of future contracts, a security needs to be posted in the form of a “margin”. You are required to post such a margin at the time of opening and as needed (if price performance is not as you expect it to be) at any time prior to expiration of the option or futures contract. If you are unable to post any additional margin required, we will unfortunately be compelled to close out your position immediately and use any previously posted margin to cover the transaction in accordance with section 5(1) of Sonderbedingungen für börsliche und außerbörsliche Optionen- und Termingeschäfte (Special Terms and Conditions for Exchange-traded and OTC Options and Futures Contracts).

**7.5 CLOSING OUT POSITIONS**

When trading in forwards and American-style options, you also have the option of closing out your position prior to expiration. However, do not expect this option to be available at all times. The availability of this option always depends very much on the market situation and in a difficult market, you may have to perform trades at an unfavourable market price resulting in losses.

**7.6 OTHER RISK**

Options entail both rights and obligations – futures contracts entail obligations only – with a short term and specified expiration or delivery dates. On this account, and because of the rapidity of such transactions, additional risk arises. In particular, this risk consists of:

- Options that are not exercised or closed out in a timely manner lapse and become worthless.
- If the required additional margin is not provided in a timely manner, we will close out your position and use up any previously paid margin, notwithstanding any obligations you may have to cover outstanding balances.
- In the case of options (short positions), the necessary steps will be taken without prior notification in the event of assignment. Any securities assigned in the course of exercising puts will be sold if the cover available is insufficient.
- Should you undertake futures contracts in foreign currencies, unfavourable trends in the currency market may heighten your risk of loss.
8. MONEY MARKET INSTRUMENTS

DEFINITION

Money market instruments encompass certificated money market investments and borrowings, including certificates of deposit (CDs), medium-term bonds, global note facilities, commercial papers and all notes with a maturity for the principal of up to about five years and fixed interest rates for periods of up to about 1 year. Moreover, money market transactions also include repo deals and agreements.

RETURN AND RISK COMPONENTS

The return and risk components of money market instruments largely correspond to those of “bonds/debt securities/annuities”. Differences result mainly from the liquidity risk.

LIQUIDITY RISK

For money market instruments, there is typically no regulated secondary market, so there is no guarantee that you will be able to sell them any time you wish. Liquidity risk becomes immaterial if the issuer guarantees repayment of the invested capital at all times and has sufficient credit standing to do so.

MONEY MARKET INSTRUMENTS – EXPLAINED IN SIMPLE TERMS

Certificates of deposit: money market instruments issued by banks with terms of usually between 30 and 360 days.

Medium-term bonds: money market instruments issued by banks with a term of up to 5 years.

Commercial papers: money market instruments, short-term promissory notes issued by corporates with maturities of between 5 and 270 days.

Global note facilities: a variant of commercial paper facilities allowing the issue of commercial papers in the US and European markets at the same time.

Notes: short-term capital market papers with maturities of usually 1 to 5 years.
9. STRUCTURED PRODUCTS

"Structured investment instruments" are investment instruments with variable returns and/or capital repayments that depend on specific future developments or trends. Furthermore, these investment instruments may be structured in such a manner as to allow the issuer to call in the product early if the targets specified beforehand are reached or they may even be subject to automatic call-in.

You will find a description of the different product types below. These product types are designated using collective terms which are generally accepted but not consistently used in the market. The diverse points of departure, combinations and payment options constitutional of these investment instruments have given rise to very different types of investment instruments with names that are not always reflective of their respective structure. For this reason, it is always necessary to check the specific terms and conditions of each product. Your account manager will be happy to advise you on the various structures of these investment instruments.

RISK

1) Any interest and/or return payments that have been agreed may be contingent on future events or trends (indices, baskets, individual shares, specific prices, commodities, precious metals, etc.) and therefore end up not being made at all or only in part.

2) Capital repayments may be contingent on future events or trends (indices, baskets, specific prices, commodities, precious metals, etc.) and thus end up not being made at all or only in part.

3) When it comes to interest and/or return payments as well as capital repayments, special consideration must be given to interest rate, currency, business, sector-specific, country-specific and credit risks (possibly no right no separation and recovery of assets that do not belong to the bankrupt estate) as well as tax-related risk.

4) The types of risk set forth in sections 1) through 3) may lead to high price fluctuations (losses) during the term, notwithstanding any interest rate, return or capital guarantees provided, making any sale during the term difficult, if not impossible.

9.1 CONSTANT MATURITY SWAPS

These products, which are structured like debt securities, are initially issued with a fixed coupon. Once the fixed-rate period has expired, variable interest rates becomes applicable. Most of these coupons have a one-year term and their performance depends on the current interest rate situation (e.g. interest rate curve). In addition, these products
may also be issued with a target rate, i.e. once an agreed target rate is achieved, the product is called in early.

**RETURN**

In the fixed-rate period, the investor usually obtains a higher coupon rate than with conventional bonds available in the market. In the variable-rate period, investors can achieve achieving higher coupons than with fixed-interest bonds.

**RISK**

Before maturity, market conditions may cause price fluctuations, which may turn out to be significant, depending on the interest rate trend.

**9.2 GUARANTEE CERTIFICATES**

When guarantee certificates reach maturity, the initial face value or a certain percentage thereof is paid out regardless of how the underlying security performed (“minimum redemption”).

**RETURN**

As set forth in the terms and conditions of the certificate, the maximum return that can be obtained through the performance of the underlying security may be subject to a maximum redemption price or other limitations on the extent to which the investor gets to benefit from the performance of the underlying security. The investor is not entitled to any dividends and similar disbursements on the underlying security.

**RISK**

During the maturity period, the value of the guarantee certificate may fall below the agreed minimum redemption price. However, the value of the certificate at maturity will generally be at the minimum redemption price. The minimum redemption price is determined by the issuer’s credit standing.

**9.3 TWIN-WIN CERTIFICATES**

At maturity, the issuer of twin-win certificates pays out a redemption price that is determined by the performance of the underlying instrument. The certificates have a barrier. If the price does not reach the barrier of the twin-win certificate or if it falls below the barrier before it matures (as is generally the case), the investor gets to share in the absolute performance of the underlying instrument starting from the base price set by the
issuer, i.e. even losses in the price of the underlying instrument can be translated into gains on the certificate. If the price reaches the barrier of the twin-win certificate or if it falls below the barrier prior to maturity, the certificate is redeemed at a price at least equal to the current price trend of the underlying instrument. A disproportionate share in the performance of the underlying instrument is possible above the base price (if the issuer so decides). However, the maximum redemption price may be limited.

RETURN

Where the price does not reach the barrier, investors also get to profit from the negative performance of the underlying instrument, as they share in the absolute performance; price losses in the underlying instrument may thus be translated into gains. Depending on a number of different factors (e.g. volatility of the underlying instrument, time to maturity, distance of the underlying instrument from the barrier), the certificate may react more or less strongly to the price fluctuations of the underlying instrument.

RISK

Twin-win certificates are high-risk investments instruments. Should the price of the securities underlying the respective twin-win certificate move unfavourably, all or much of the invested capital may be lost.

9.4 EXPRESS CERTIFICATES

With express certificates, the investor gets to share in the performance of the underlying instrument with the option of early redemption. Should the underlying instrument reach the threshold specified by the issuer on one of the effective dates, the certificate expires early and is automatically redeemed by the issuer at the redemption price applicable on the relevant effective date. If the underlying instrument fails to reach the threshold on the final effective date, the certificate is redeemed at the closing price of the security underlying the certificate established at maturity/on the final effective date. In that case, if the issuer sets a barrier when issuing the certificate and the price of the underlying instrument neither reaches nor breaches the barrier during the monitoring period, the certificate is redeemed at a price of at least the minimum redemption price as defined by the issuer.

RETURN

With express certificates, investors have the option of realising the underlying instrument's positive performance early. Even if the specified threshold is not reached, the minimum redemption price may be paid out if the barrier has not been reached or breached. Depending on a number of different factors (e.g. volatility of the underlying instrument,
time to maturity, distance of the underlying instrument from the barrier), the certificate may react more or less strongly to the price fluctuations of the underlying instrument.

**RISK**

Express certificates are high-risk investments instruments. Should the price of the securities underlying the respective express certificate move unfavourably, all or much of the invested capital may be lost.

**9.5 DISCOUNT CERTIFICATES**

With discount certificates, investors get to obtain the underlying security (e.g. the underlying share or index) at a discounted current price (safety buffer), but, in return, their share in the growth of the underlying security is limited to a certain ceiling (cap or reference price). At maturity, the issuer either gets to redeem the certificate at the maximum value (cap) or deliver the shares or, if the underlying security is an index, to pay a cash settlement equal to the index value.

**RETURN**

The potential return results from the difference between the discounted purchase price of the underlying security and the price ceiling determined by the cap.

**RISK**

If the price of the underlying security falls sharply, shares are delivered once the instrument reaches maturity (at this point in time, the value of the delivered shares will be below the purchase price). Since shares can be assigned, the risk disclosures for shares must be taken into account.

**9.6 BONUS CERTIFICATES**

Bonus certificates are debt securities that, in addition to the notional, pay out at maturity a bonus or appreciated price of an underlying security (individual shares or indexes) subject to certain requirements. Bonus certificates have fixed maturities. The terms and conditions of the certificate usually stipulate the payment of funds, or the delivery of the underlying security, at maturity. The type and amount of redemption at maturity depend on the performance of the underlying security. Three levels are set for a bonus certificate: a starting level, a barrier underneath the starting level, and a bonus level above the starting level. If the underlying security falls to the level of the barrier or below it, the bonus is forfeited and the certificate is redeemed at the price of the underlying security. Otherwise, the minimum redemption price is determined by the amount of the bonus.
Once the certificate reaches maturity, the bonus is paid out along with the amount initially paid for the notional value of the certificate.

**RETURN**

With bonus certificates, investors acquire a money claim against the issuer for payment of an amount determined by the performance of the underlying security.

**RISK**

The risk is determined by the underlying security. Should the issuer go bankrupt, the investor has no right to claim separation and recovery of assets that do not belong to the bankrupt estate with respect to the underlying security.

**9.7 CASH OR SHARE BONDS**

These consist of three components and their risk is borne by the buyer of the bond: the investor buys a bond (the bond component) whose interest rate includes an option premium. This structure thus gives rise to an interest rate that is higher than for a comparable bond with the same maturity. The bond may be redeemed either in cash or in shares, depending on the price trend of the underlying shares (stock component).

Bond purchasers are therefore the writers of a put (option component) and sell to a third person the right to transfer shares to them, by virtue of which they agree to assume any adverse effects of a downturn in prices. Bond purchasers thus bear the risk of the price trend and receive a premium in exchange, the amount of which essentially depends on the volatility of the underlying stock. If the bond is not held to maturity, that risk is compounded by interest rate risk. Any change in the interest rate affects the bond’s price and thus the bond’s net yield relative to its maturity.

Please also observe the related risk disclosure in the sections on credit risk, interest rate risk and price risk of shares.

**9.8 INDEX CERTIFICATES**

Index certificates are debt instruments (usually publicly listed) by which investors get to acquire interest in a certain index without having to own the securities included in the index. The underlying index is generally represented on a 1:1 basis and any changes in said index are taken into account.
RETURN

With index certificates, investors acquire a claim against the issuer for payment of an amount that is determined by the performance of the underlying index. Returns depend on the performance of the underlying index.

RISK

The risk is determined by the underlying securities included in the index. Should the issuer go bankrupt, the investor has no right to claim separation and recovery of assets that do not belong to the bankrupt estate with respect to the underlying security.

9.9 BASKET CERTIFICATES

Basket certificates are debt instruments by which investors get to share in the going-forward performance of a specific basket of securities without having to own the securities included in the index themselves. The make-up of the underlying basket is the issuer’s responsibility. The securities included in the basket may be weighted equally or differently. The make-up may be adjusted at specified times (e.g. once annually).

9.10 KNOCK-OUT CERTIFICATES (TURBO CERTIFICATES)

Knock-out certificate is a term used to designate certificates that evidence the right to buy or sell a specific underlying security at a specific price if the underlying security fails to reach the specified price threshold (knock-out threshold) prior to maturity. This type of certificate expires early as soon as the threshold is reached the first time and, ordinarily, most of the investment is lost. Depending on the performance of the underlying security, a distinction is made between knock-out long certificates, which bank on a bull market, and knock-out short certificates, which are especially designed specifically for bear markets. Aside from regular knock-out-certificates, there are “leveraged” knock-out certificates, which are usually styled “turbo certificates” (or leverage certificates). The lever (turbo) effect causes the turbo certificate to be affected more strongly by the price movement, causing the value of the turbo certificate to rise or fall more forcefully. Therefore, small investments may achieve higher gains, but the risk of loss is likewise increased.

RETURN

A return is achieved if there is a favourable difference between the acquisition price or market price and the exercise price (making it possible to buy the underlying security at the lower exercise price or to sell it at the higher exercise price).
RISK

If the knock-out threshold is reached before maturity, either the certificate expires and becomes worthless or an estimated residual value is paid out (the product is “knocked out”). With some issuers, all it takes is to reach the knock-out threshold during the trading day (intraday) for the certificate to be knocked out. The closer the current stock market quotation is to the exercise price, the stronger the leverage effect. However, at the same time there is an increased risk that the price will fall below the knock-out threshold, either causing the certificate to become worthless or resulting in a pay-out of the estimated residual value.

9.11 SPREAD CERTIFICATES

As a share price or index is expected to move within a certain price range (spread) defined by a starting point and a stopping point, spread certificates give investors a chance to share disproportionately in the performance of the underlying security.

RETURN

A return may result from the disproportionate share in the performance of the underlying security.

RISK

However, if the final price established on the value date is below the starting point, the certificate will merely represent the price performance of the underlying security. If the price falls below the stopping point, the investor receives a fixed maximum redemption price at maturity with no right to share in the price increase.

10. HEDGE FUNDS, CTAS

10.1 HEDGE FUNDS

(Hedge funds, hedge funds of funds, hedge fund index certificates and other products with hedge strategies as underlying investment)
GENERAL

Hedge funds are funds whose investment policy is subject to no or only minor legislative or other constraints. They endeavour to increase their capital through alternative, sometimes non-transparent investment strategies, using all types of investment available.

EXAMPLES OF INVESTMENT STRATEGIES:

- **Long/short**: Undervalued securities are bought and at the same time overvalued securities are sold short.
- **Event-driven**: The objective is to take advantage of specific corporate events such as mergers, acquisitions, reorganisation or bankruptcy.
- **Global macro**: This style attempts to use macroeconomic analysis of major economic and political developments with a view to identifying and exploiting market inefficiencies.

Hedge funds of funds are funds that invest in individual hedge funds. Hedge fund index certificates are debt securities whose price and performance is determined by the average performance of several hedge funds that are combined into a single index to provide a basis of calculation. Hedge funds of funds and hedge fund index certificates offer investors the advantage of improved risk diversification.

RETURN AND RISK COMPONENTS

Hedge funds have the potential of providing very high yields, but the risk of losing your invested capital is equally high. The performance of hedge fund products is particularly influenced by the following factors, which generate both opportunities and risk:

- The performance of hedge funds tends not to be affected by international stock and bond market trends. Depending on the hedge fund strategy, the general market trend may either be amplified or result in a pronounced trend in the opposite direction.
- The performance of hedge funds is influenced especially by the market segment they represent.
- Owing to its make-up, hedge fund assets may be highly volatile, which means that the share prices may be subject to significant upward and downward movements within short periods of time. In extreme cases, unsecured hedge fund products may lead to a total loss.
- Concentrating on just one or a few strategies raises the risk further – that risk can be reduced by diversifying hedge funds of funds or hedge fund index certificates.
- The individual funds and their composition are determined by the manager of the fund of funds in keeping with the fund’s desired risk/return profile or by an index.
committee in accordance with a system of distribution across various countries and sectors.

- It is impossible to ensure transparency of the underlying hedge funds for the fund of fund management/index committee at all times.

**LIQUIDITY RISK**

Since hedge funds require complex strategies and careful management, it takes longer to determine the price of hedge fund products than the price of traditional funds. As a result, hedge fund products are less liquid than traditional funds. The prices are generally determined on a monthly rather than a daily basis, so that shares can frequently be redeemed only once a month. To be able to return the shares at this point in time, investors must issue an irrevocable letter of intent to return their shares well in advance of the redemption date. Share prices may change significantly between the time of the letter of intent to return the shares and the time of redemption, but investors then no longer have the option of reacting accordingly since their letters of intent are irrevocable. The specific terms of redemption depend on the individual product. The limited liquidity of the individual funds and the instruments they invest in can therefore compromise the negotiability of hedge fund product.

**10.2 CTAS**

Most CTAs use fully automated systems for trading in derivatives, i.e. computer programmes that take decisions automatically. The goal is to predict, up to a certain degree, individual trends and future market developments by studying the immediate past.

**RETURN**

The return consists of the remunerative investment made on the basis of a fully-automated decision exploiting the trends previously identified.

**RISK**

The risk lies in the possibility that the predicted trends will fail to materialize or that the automated trading system will fail to recognize a trend.
11. FOREIGN-EXCHANGE FORWARDS

DEFINITION

A foreign-exchange (FX) forward is a firm commitment to buy or sell a certain amount of foreign currency at a later point in time or within a specified time period at an exchange rate agreed at the start of the contract. The quote currency is delivered/received on the same value date.

RETURN

For speculators in FX forwards, the return (profit/loss) results from the difference between the exchange parities during or at maturity of the forward contract, in accordance with the terms and conditions of this forward contract. Their use for hedging purposes means locking in an exchange rate so that the costs of the hedged transaction as well as its return will neither increase nor decrease as a result of any exchange rate fluctuations.

CURRENCY RISK

In case of FX forwards used for hedging purposes, the currency risk is that buyers/sellers may be able to buy/sell the foreign currency more advantageously during or at the end of the term of the forward exchange contract than at the time when they first enter into the transaction. In the case of open trades, the currency risk is that buyers/sellers may have to buy/sell less advantageously. The risk of loss may significantly exceed the original price of the contract.

CREDIT RISK

Credit risk in FX forwards refers to the possibility that the partner will default, i.e. that the partner may temporarily or permanently be unable to carry out the foreign-exchange forward, making it necessary to provide additional cover in the market at less favourable terms.

TRANSFER RISK

Foreign currency transfers may be subject to constraints, particularly those imposed by the currency’s home country. This could jeopardise put the proper execution of the FX forwards.
12. FOREIGN EXCHANGE SWAPS

DEFINITION

Foreign exchange (FX) swaps involve the exchange of specified amounts of one currency for another currency over a certain period of time. The interest rate differential of the two currencies involved is factored in by a premium/discount to the re-exchange price. The quote currency is delivered/received on the same value date.

RETURN

The return (gain/loss) for anyone trading in FX swaps results from the positive/negative movement of the interest rate differential and can, in the event of a countertrade, be generated during the term of the FX swap.

CREDIT RISK

Credit risk in FX swaps refers to the possibility that the partner will default, i.e. that the partner may be temporarily or permanently unable to carry out the foreign-exchange swap, making it necessary to provide additional cover in the market at less favourable terms.

TRANSFER RISK

Foreign currency transfers may be subject to constraints, particularly those imposed by the currency’s home country. This could jeopardise the proper execution of the FX swap.

13. INTEREST RATE SWAPS (IRS)

DEFINITION

Interest rate swaps involve the exchange between two contracting parties of varyingly defined interest liabilities for a fixed notional amount. As a rule, fixed interest rates are swapped for variable ones. Therefore, an exchange of interest payments occurs, but no flow of capital.
RETURN

Buyers of an interest rate swaps (fixed-rate payers) benefit from a rise in market interest rates. Sellers of interest rate swaps (fixed-rate receivers) earn a return on their investment if market interest rates fall. Returns on interest-rate swaps cannot be determined in advance.

INTEREST RATE RISK

Interest rate risk results from the uncertainty over future market interest rate movements. Buyers/sellers of IRSs are exposed to loss if interest rates fall/rise.

CREDIT RISK

With interest rate swaps, credit risk refers to the possibility of the counterparty’s default, making it necessary to provide additional cover in the market at less favourable terms.

SPECIAL TERMS FOR IRS

IRS are not standardised. The specifics for the execution of IRS must be contractually agreed ahead of the transaction. They are custom-made products. It is therefore imperative to be fully briefed on the exact terms of interest-rate swaps, in particular:

- notional amount
- maturity
- interest rate definitions

13.1 CONSTANT MATURITY SWAPS (CMS)

DEFINITION

Constant maturity swaps involve the exchange between two contracting parties of varyingly defined interest liabilities for a fixed notional amount. Usually, a variable money market interest rate (e.g. 3-month EURIBOR) is swapped for a capital market interest rate (e.g. 10-year EUR IRS). However, this capital market interest rate does not remain fixed for the entire maturity, but is adjusted at regular intervals.

RETURN

Buyers of CMS (payer of the capital market interest rate) earns a return when the interest rate curve levels out, i.e. when capital market interest rates fall and money market interest rates rise. Returns on constant maturity swaps cannot be determined in advance.
INTEREST RATE RISK

Interest rate risk results from the uncertainty over future movements in capital market and money market interest rates. Buyers/sellers of CMS are exposed to loss if interest rates curve levels out/becomes steeper.

13.2 CMS SPREAD-LINKED SWAPS

DEFINITION

In CMS spread-linked swaps involve the exchange of variously defined interest rate liabilities. Generally, money market interest rates (e.g. 3-month EURIBOR or, alternatively, a fixed interest rate for the full term of the swap), on the one hand, and the difference between two CMSs (e.g. 10-year EUR CMS less 2-year CMS), to which a certain multiple is applied (e.g. multiplied by 2), on the other. For a specified initial period, CMS spreads have a fixed coupon.

RETURN

Buyers of CMS spread-linked swaps (payers of the CMS difference) earn a return once the two involved capital market interest rate curves level out (e.g. 10-year EUR IRS and 2-year EUR IRS). Returns on CMS spread-linked swaps cannot be determined in advance.

INTEREST RATE RISK

Interest rate risk results from the uncertainty over future interest rate movements in the short-term capital market relative to the long-term capital market in relation to the money market interest rate (or the amount of the fixed interest rate).

14. FORWARD RATE AGREEMENTS (FRA)

DEFINITION

In forward rate agreements, the interest rates of future interest periods is agreed in advance. Since trading is carried out on the inter-bank market rather than in stock exchanges, FRAs are not standardised. Unlike interest rate futures, FRAs are custom-made products when it comes to their principal, currency and interest period.
RETURN

By buying/selling FRAs, the buyers/sellers fix the interest rate for a specified period. If, at maturity, the reference rate is higher than the agreed interest rate (FRA price), the buyers of FRAs receive a compensation payment. If, at maturity, the reference rate is lower than the agreed interest rate, the sellers of FRAs receive a compensation payment.

INTEREST RATE RISK

Interest rate risk results from the uncertainty over future market interest rate movements. Generally, this risk is higher, the more pronounced the interest rate rise/fall is.

CREDIT RISK

With FRAs, credit risk refers to the possibility of the counterparty’s default, which would cause the loss of positive cash values and thus necessitate additional cover in the market at less favourable terms.

SPECIAL TERMS FOR FRAS

FRAs are not standardised. They are custom-made products. It is therefore imperative to be fully briefed on the exact terms of interest-rate swaps, in particular:

- notional amount
- maturity
- interest rate definitions

15. INTEREST RATE FUTURES

DEFINITION

Interest rate futures are futures contracts for short-term investments, money market or capital market instruments with standard maturities and standard contract volumes which are traded in the stock market. In interest rate futures, the yield on an investment (interest rate or price) is fixed in advance. Furthermore, unconditional commitments are made, which must be fulfilled regardless of the future performance even if the above-referenced risk comes to bear.
RETURN

For speculators in interest rate futures, the return (profit/loss) results from the difference in the interest rate or price at maturity of the contract, in accordance with the terms and conditions of this forward contract. Using interest rate futures for hedging purposes reduces the financial risk of existing or future positions.

INTEREST RATE RISK

The value of interest rate futures is primarily determined by the trend in the yield on the underlying instrument. The buyer’s risk position is therefore comparable to the risk of the party holding the underlying instrument. The risk results from the uncertainty of future movements in the market interest rate.

Buyers/sellers of futures contracts are exposed to interest rate risk in that they are obliged to increase the margin or to meet their obligation at maturity if the market interest rate level rises/falls. Generally, this risk is higher, the more pronounced the interest rate rise/fall is. The resulting risk of loss may amount to a multiple of the original capital investment (margin).

LIQUIDITY RISK

With futures contracts, liquidity risk refers to the possibility of settlements (sale/repurchase) in certain markets leading to noticeable adverse price movements when either supply or demand is excessive.

16. OTC OPTION TRADING

16.1 STANDARD OPTIONS – PLAIN VANILLA OPTIONS

The buyers of options acquire a temporary right to buy (call) or sell (put) the underlying asset (e.g. securities, currencies, etc.) at a fixed exercise price or (e.g. in the case of interest rate options) the right to compensatory payment calculated as the positive difference between the exercise price and market price at the time of exercise. By writing an option, you agree to satisfy the rights of the buyer of the option. Options may involve varying exercise terms:

American style: can be exercised at any time up to expiration.

European style: can be exercised at the end of the term.
16.2 EXOTIC OPTIONS

Exotic options are financial instruments derived from standard options (plain vanilla options).

16.3 BARRIER OPTIONS

In addition to the exercise price, barrier options have a threshold value (barrier) at which the option is either activated (knock-in option) or deactivated (knock-out option).

16.4 DIGITAL (PAYOUT) OPTIONS

This option involves a fixed payout, which the buyer of the option receives in exchange for paying a premium once the price (interest rate) of the underlying security moves below or above (depending on the option) the threshold (barrier).

RETURN

Option holders make a profit if the price of the underlying instrument rises above the exercise price in the case of call options or falls below the exercise price in the case of put options and they get to exercise or sell (plain vanilla option, activated knock-in option, non-deactivated knock-out option). If a knock-in option is not activated or a knock-out option is deactivated, the option expires and becomes worthless. The holders of digital (payout) options earn a return if the threshold is reached before or at maturity, which means they receive the payout.

GENERAL RISK

The value (price) of options depends on the exercise price, performance and volatility of the underlying instrument, the term, the interest-rate structure and the market situation. The capital invested (option premium) may therefore even be lost completely. If the price of the underlying instrument does not move in the direction anticipated by the seller of an option, the resulting potential loss may be virtually unlimited (plain vanilla option, barrier option) or, as the case may be, amount to the agreed payout (digital option). Special consideration must be given to the fact that option rights not exercised in a timely manner will lapse on expiration of the exercise period and will therefore be cancelled as worthless in the accounts. Please note that your bank will not exercise an option unless specifically instructed to do so.
SPECIAL RISK IN OTC TRADING

As a rule, over-the-counter options are not standardised. They are usually custom-made instruments. It is therefore imperative to be fully briefed on the exact terms and conditions (style of exercise, exercise and expiration). When buying OTC options, credit risk refers to the possibility of losing the premium as a result of the counterparty’s default, indirectly adding to the cover paid in the market. As custom-made products, OTC options are usually not traded in organised (secondary) markets. Consequently, the negotiability of such options cannot be guaranteed at all times.

17. CURRENCY OPTION TRADING

DEFINITION

Buyers of currency options acquire the right but not the obligation to buy or sell a certain amount of currency at specified exchange rates and/or on specified dates. The seller (writer) of the option grants the buyer the relevant right. In exchange for this option, the buyer pays the seller a premium. The following types of options are available:

Buyers of call options acquire the right to buy a set amount of a particular currency at a specified price (exercise price or strike price) on or before a particular date (delivery date).

In selling call options, sellers agree to deliver/sell a specified amount of a particular currency at the base price on or before a particular date.

In buying put options, buyers acquire the right to sell a specified amount of a particular currency at the base price on or before a particular date.

In selling put options, sellers agree to sell, at the request of the buyer, a specified amount of a particular currency at the base price on or before a particular date.

RETURN

A return is earned on a call option if the market price of the currency is higher than the exercise price payable by the buyer. Overall performance is determined after deducting the purchase price of the option (= premium). The buyer then has the option of buying the foreign currency at the exercise price and re-selling it immediately at the market price. The seller of the call option is paid a premium for selling the option. By analogy, the same applies for put options when the currency is expected to depreciate.
RISK WHEN BUYING OPTIONS

RISK OF TOTAL PREMIUM LOSS

Buying currency options comes with the risk of losing the whole premium, as it becomes payable regardless of whether the option is exercised or not.

CREDIT RISK

Credit risk with currency options, credit risk refers to the possibility of the counterparty's default, in which case the previously paid premium is lost, indirectly adding to the cover paid in the market.

CURRENCY RISK

Currency options come with the risk that, by the time the option expires, the exchange parity of the underlying instrument may not develop as you had anticipated when you bought the option. In extreme cases, this can lead to the total loss of the premium.

RISK WHEN SELLING OPTIONS

CURRENCY RISK

Selling options comes with the risk that, by the time that the option expires, the exchange rate of the foreign currency has not moved in the direction you had anticipated when you bought the option. There is no limit to the potential loss for the options written. The premium of the currency option depends on the following factors:

- volatility of the underlying exchange rate (indicator for the fluctuation margin of the exchange rate)
- selected exercise price
- the term of the option
- current exchange rate
- the interest rates of the two currencies
- liquidity

TRANSFER RISK

Foreign currency transfers may be subject to constraints, particularly those imposed by the currency's home country. The orderly execution of the deal would then be at risk.
LIQUIDITY RISK

For currency options, as custom-made products, there is usually no regulated secondary market.

This means that negotiability cannot be guaranteed at all times.

SPECIAL TERMS FOR CURRENCY OPTIONS

Currency options are not standardised. It is therefore imperative to be fully briefed on the exact terms, in particular:

**Type of exercise**: can the option be exercised at any time (American-style option) or only on the exercise date (European-style option)?

**Expiration**: When does the right expire? Please note, that the bank will not exercise your option rights without your express instruction to do so.

18. INTEREST RATE OPTIONS

DEFINITION

Interest rate options are agreements that set an upper limit, a lower limit or an option on interest rate swaps. They are used for one of the following purposes:

**a)** for hedging purposes or

**b)** speculative trading to realise a gain.

A distinction is made between calls and puts. Common variants include caps, floors and swaptions, etc. By purchasing a cap, buyers secure an upper interest rate limit for future borrowing that is set by the strike price. In speculative trading, the value of a cap increases as interest rates rise. Selling a cap can be used only as a speculative instrument. Sellers receive the premium and commit themselves to compensating the buyer for any difference in interest rates. For buyers, floors secure a certain minimum interest rate on a future investment. In speculative trading, the value of a floor increases as interest rates fall.

**with respect to a) hedging purposes:**

Depending on the agreed reference periods, the current 3-month or 6-month interest rate is compared with the agreed strike price every 3 or 6 months. If the market rate is higher than the exercise price, the holder of the cap is compensated for the difference.
with respect to b) speculative trading to realise a gain:

The value of a cap increases as interest rates rise. In this case, however, the forward rates (future interest rates traded today) are more important than the current interest rates.

The same applies by analogy when a floor is purchased/sold. The buyer of a floor secures a lower limit for interest rates, whereas the seller holds a speculative position. A swaption is an option on an interest rate swap (IRS = agreement to exchange interest obligations). A basic distinction is made between the payer swaption (=payer of the fixed interest rates) and the receiver swaption (receiver of the fixed interest rates under the IRS agreement). Both types can be either bought or sold. A further distinction is made between two types of performance with difference risk profiles:

**SWAPTIONS WITH PHYSICAL SETTLEMENTS**

The purchaser becomes a party to the swap when the swaption is exercised.

Buyers of payer swaptions acquire the right to make fixed interest payments at the exercise price on the delivery date based on a notional amount and to receive variable interest payments.

Sellers of payer swaptions undertake to receive fixed interest payments at the agreed exercise price on the delivery date based on a notional amount and to make variable interest payments.

Buyers of receiver swaptions acquire the right to make fixed interest payments at the exercise price on the delivery date based on a notional amount and to receive variable interest payments.

Sellers of receiver swaptions undertake to make fixed interest payments at the agreed exercise price on the delivery date based on a notional amount and to receive variable interest payments.

**SWAPTIONS WITH CASH SETTLEMENTS**

When swaptions are exercised, the purchasers receive the difference between the cash value of the swaps and the swaption interest rate or current market interest rate.

**RETURN**

Holders of interest rate options earn a return on their investment if the market interest rate level on the exercise date is above the cap’s exercise price or below the floor. With swaptions, a return on the investment is earned if the market interest rate level on the
exercise date is above the agreed exercise price in the case of payer swaptions or below the agreed exercise price in the case of receiver swaptions. Sellers get to keep the premium no matter whether the option is exercised or not.

**INTEREST RATE RISK**

Interest rate risk results from the possibility of future interest rate movements in the market. Buyers/sellers of interest-rate options are exposed to interest rate risk in the form of price losses that results when the market interest rate level rises/falls. Generally, this risk is higher, the more pronounced the interest rate rise/fall is. There is no limit to the potential loss for option writers.

The amount of the interest-rate option premium is determined by the following factors:

- volatility of the interest rate (range of fluctuation of the interest rates)
- selected exercise price
- the term of the option
- market exchange rate
- current financing costs
- liquidity

As a result of these factors, the price of the option may remain unchanged or drop, even if the interest rate of the option moves in the direction you originally anticipated.

**CREDIT RISK**

When buying interest rate options, credit risk refers to the possibility of the counterparty’s default, which would cause the loss of positive cash values and thus necessitate additional cover in the market at less favourable terms.

**RISK OF TOTAL LOSS ON PURCHASE**

Buying currency options comes with the risk of losing the whole premium, as it becomes payable regardless of whether the option is exercised or not.

**SPECIAL TERMS FOR INTEREST RATE OPTIONS**

Interest rate options are not standardised. They are all custom-made products. It is therefore imperative to be fully briefed on the exact terms, in particular:

**Type of exercise:** can the option be exercised at any time (American-style option) or only on the exercise date (European-style option)?
Exercise: Delivery of underlying instrument or cash settlement? Expiration: When does the right expire? Please note, that the bank will not exercise your option rights without your express instruction to do so.

19. CROSS CURRENCY SWAPS (CCS)

DEFINITION

In cross-currency swaps, two contracting parties swap either different interest obligations or different currencies in respect of a fixed notional amount. Generally, fixed interest rates in one currency are exchanged for fixed interest rates in a second currency. However, the swap may also involve the exchange of floating rates in one currency against floating rates in another. The payments flow in different currencies based on the same amount of capital, which is determined by the prevailing spot rate on the date of the trade. In addition to the exchange of interest rates payable or interest rates receivable, this type of swap also involves the exchange of capital both at the beginning (“initial exchange”) and on expiration (“final exchange”) of the swap. Depending on the requirements of the individual trading partners, the initial exchange can be omitted.

RETURN

Returns on cross currency swaps cannot be determined in advance. If the exchange rate and the interest rate differential move in the trader’s favour, a return may be realised by liquidating the CCS prior to maturity. If CCSs are used to improve the interest rate differential, a return may be realised from the lower interest rates of another currency. However, any such gain may be neutralised by exchange losses. A positive development in the relation between the currencies may result in a further increase of the return.

INTEREST RATE RISK

The interest rate risk arises from the uncertainty of future change in the market interest rate. The buyer/seller of an IRS is exposed to the risk of loss if the market interest rate falls/rises.

CURRENCY RISK

The currency risk results from the uncertainty of future movements in the exchange rate of the currencies involved. With CCSs that include a final exchange, it is particularly
important to note that a currency risk exists not only in the case of the partner's default, but also throughout the life of the swap.

**CREDIT RISK**

When buying/selling CCSs, credit risk refers to the possibility of the counterparty’s default, which would necessitate additional cover in the market.

**SPECIAL TERMS FOR CCSS**

CSSs are not standardised. They are custom-made products. It is therefore imperative to be fully briefed on the exact terms of interest-rate swaps, in particular:

- notional amount
- maturity
- interest rate definition
- currency definition
- exchange rate definition
- initial exchange, yes or no

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**20. COMMODITY SWAPS AND COMMODITY OPTIONS WITH CASH SETTLEMENT (COMMODITY FUTURES CONTRACTS)**

Commodity futures contracts are special contracts that involve rights or obligations to buy or sell certain commodities at a predetermined price and time or during a specified period. Some of the instruments that include commodity futures contracts are described below.
GENERAL INFORMATION ON THE INDIVIDUAL INSTRUMENTS

COMMODITY SWAPS

Commodity swaps are agreements involving the exchange of a series of commodity price payments (“fixed price”) for floating commodity price payments (“market price”) resulting exclusively in cash settlements (“settlement”).

Buyers of commodity swaps acquire the right to be paid a settlement if the market price rises above the fixed price. Conversely, buyers of commodity swaps are obliged to pay the settlement if the market price falls below the fixed price. Sellers of commodity swaps acquire the right to be paid a settlement if the market price falls below the fixed price. Conversely, sellers of commodity swaps are obliged to pay the settlement if the market price rises above the fixed price. Both series of payments (fixed/floating) are made in the same currency and based on the same notional amount. The fixed leg of the swap is similar to a benchmark, whereas the floating leg relates to the trading price of the relevant commodities quoted in a stock market or otherwise published in the commodities futures market on the relevant fixing date, or to a commodity price index.

COMMODITY OPTIONS WITH CASH SETTLEMENT

Buyers of commodity put options pay a premium for the right to receive, on every exercise day, the difference between the exercise price and the market price in relation to the notional if the market price falls below the fixed price. Buyers of commodity call options pay a premium for the right to receive, on every exercise day, the difference between the exercise price and the market price in relation to the notional if the market price falls below the fixed price.

RISK – DETAILS ON THE VARIOUS INSTRUMENTS

RISK CHARACTERISTIC OF COMMODITY SWAPS AND COMMODITY OPTIONS WITH CASH SETTLEMENT

If expectations are not met, the difference between the underlying price on signing the agreement and the market price applicable once the transaction reaches maturity is payable. This difference constitutes the loss. The maximum loss cannot be determined in advance and may exceed the security posted.
RISK WHEN BUYING COMMODITY OPTIONS – PRICE LOSS

Any change in the price of the asset (e.g. raw materials) that underlies the option in the contract may reduce the value of the option. With call options, a loss in value may occur if the prices fall. With put options, loss in value may occur if the price of the underlying asset rises. The value of options may decline even if the price of the underlying asset does not change, because the value of the option is also influenced by other pricing factors (e.g. term or frequency and intensity of changes in the price of the underlying asset).

RISK WHEN SELLING COMMODITY OPTIONS – LEVERAGE EFFECT

Selling commodity options comes with the risk that the value of the underlying asset has not moved in the direction the seller originally anticipated by the time the option expires. There is no limit to the potential loss for the options written.

GENERAL RISK OF COMMODITY FUTURES CONTRACTS

PRICE FLUCTUATIONS

The amount of the payment obligation arising from commodity futures contracts is determined by the prices at a specific commodity futures market. Commodity futures markets can be subject to strong price fluctuations. Numerous factors related to the commodity supply and demand can influence those prices. It is not easy to forecast or predict such pricing factors. Prices may be influenced considerably by unforeseen events, including natural disasters, illnesses, epidemics or official/government orders, and by unpredictable developments, including weather factors, variations in harvests or delivery, storage and transport risk.

CURRENCY RISK

In many cases, commodity prices are quoted in a foreign currency. When you enter into a commodity transaction where the obligation or right to a consideration is denominated in foreign currency or a foreign unit of account, or where the value of the object of the contract is determined by this foreign currency or foreign unit of account, you are exposed to added currency market risk.
CLOSING-OUT/LIQUIDITY

Commodity futures markets are generally narrower than financial futures markets and may therefore be less liquid. For this reason, you may be unable to wholly or partially close out a commodity futures position at the desired time as a result of insufficient market liquidity. In addition, the spread between bid and ask prices in a contract may be relatively wide. Thus, it may be difficult or even impossible to close out positions under certain market conditions. Most commodity futures exchanges are authorised to set limits on price fluctuations, and in so doing ban ask and bid prices outside certain limits over a specified period of time. This may make it difficult or impossible to close out certain positions.

LIMIT-/STOP-LOSS ORDERS

Limit orders or stop loss orders serve to limit trading losses in the event of certain market movements. Although such options to limit risk are permitted in most commodity futures markets, limit orders or stop loss orders can generally not be set for OTC commodities.

FUTURES AND SPOT MARKETS

Understanding the relationship between futures contract prices and spot market prices is particularly important. Although market forces may equalise the differences between the futures contract price and the spot market price of the commodities in question to the extent that the price difference on the delivery date is virtually zero, a host of market factors, including supply and demand, may still cause differences between the futures contract price and spot market price of the commodities involved.

DETERMINING MARKET PRICES

Market prices are either quoted in the commodity futures exchanges or published in conformity with market practices. Due to system failures, stock market disruptions or other causes, market prices can sometimes not be determined for the agreed fixing date. If no substitute method to determine prices has been agreed, the calculation agent is usually authorised to set a market price at its reasonable discretion.
INFORMATION ON CREDITOR PARTICIPATION ("BAIL-IN") IN BANK RESOLUTION AND RECOVERY PROCEEDINGS

To create a common European framework of rules and instruments for the recovery and resolution of banks, the EU issued a directive (Bank Recovery and Resolution Directive (BRRD) establishing a framework for the recovery and resolution of credit institutions and investment firms. This directive was transposed into Austrian law as Bundesgesetz über die Sanierung und Abwicklung von Banken (BaSAG, Federal Act on the Recovery and Resolution of Banks).

The Federal Act on the Recovery and Resolution of Banks (BaSAG) governs a number of different aspects, including the participation of a bank’s creditors (bail-in) in a bank’s resolution under prudential supervision. The purpose is to prevent the use of taxpayers’ money when a bank risks defaulting.

When a bank is at risk of failing, the competent resolution authority may apply a number of resolution tools:

**SALE OF BUSINESS**

All or part of a bank’s assets and/or liabilities are transferred to a buyer. For the bank’s clients and creditors this translates into a change in their contracting partner or debtor.

**BRIDGE INSTITUTION**

A public-sector institution takes over the liabilities and/or assets of the bank undergoing resolution. For the bank’s clients and creditors this again translates into a change of their contracting partner/debtor.

**ASSET SEPARATION**

This is the so-called bad bank mechanism. The assets and/or liabilities of the bank concerned are transferred to special-purpose vehicles for deleveraging. For clients and creditors this again translates into a change of their contracting partner/debtor.
BAIL-IN

When an authority orders the resolution of a bank, the bank’s equity and debt is written down in whole or in part or converted into equity. The purpose of this approach is to stabilise the bank affected. In such a case, shareholders and creditors may have to bear substantial losses as the resolution authority may reduce their claims, without their consent, in the extreme case even to zero.

Currently, instruments for loss absorption must be taken in the following order:

1. shares and other equity instruments
2. subordinated liabilities (e.g. supplementary and junior bonds – "Tier 2")
3. uncovered subordinated financial instruments/claims that are not part of additional Tier 1 or supplementary capital ("Tier 2")
4. uncovered non-subordinated financial instruments and claims (e.g. uncovered bank bonds and certificates)
5. lastly, deposits of enterprises and natural persons not covered by the deposit guarantee scheme

Exempted from bail-in are deposits subject to the deposit guarantee scheme as well as covered bank bonds ("covered bonds" or mortgage bonds) and separate assets (e.g. investment funds).

The BRRD rules have been implemented in the laws of member states across Europe. Bail-in may thus also be applied to bank bonds from other EU countries, for example, although the details of the rules may differ at national level.

RISK DISCLOSURE:

For a bank’s creditors, the bail-in proceedings described above which are provided for by the law may lead to a total loss of the capital invested. In recovery and resolution proceedings, the sale of bonds, for example, may become more difficult and possible only with a substantial loss in value. Even if the original issuing document or marketing material of a bank product does not specifically describe the bail-in option, the product may be affected by a bail-in under the law.

For further information, kindly consult the website of Österreichische Nationalbank at https://www.oenb.at/Finanzmarktstabilitaet/bankenunion/einheitlicher-abwicklungsmechanismus/sanierungs-und-abwicklungsrichtlinie.html
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