

# INVESTMENT – RELATED INFORMATION DISCLOSURE OF RISK

Vienna, November 2017

Version 1.1

## INDEX

1. GENERAL INVESTMENT RISKS	2
2. BONDS	4
3. SHARES	5
4. INVESTMENT FUNDS	6
5. REAL ESTATE FUNDS	7
6. WARRANTS	8
7. FORWARD SECURITIES TRANSACTIONS ON THE STOCK EXCHANGE (OPTIONS AND FUTURES CONTRACTS)	9
8. MONEY MARKET INSTRUMENTS	10
9. STRUCTURED PRODUCTS	11
10. HEDGE FUNDS, CTA	14
11. FORWARD-EXCHANGE DEALS	15
12. CURRENCY SWAPS	16
13. INTEREST RATE SWAPS (IRS)	16
14. FORWARD RATE AGREEMENTS (FRA)	17
15. INTEREST-RATE FUTURES	18
16. OVER-THE-COUNTER (OTC) OPTIONS	18
17. CURRENCY OPTIONS	19
18. INTEREST-RATE-OPTIONS	20
19. CROSS CURRENCY SWAPS (CCS)	22
20. COMMODITY SWAPS & COMMODITY OPTIONS WITH CASH SETTLEMENT („COMMODITY FUTURES TRANSACTIONS“)	22
21. INFORMATION ON BANK RESOLUTION UNDER THE AUSTRIAN ACT ON BANK RECOVERY AND RESOLUTION (“BaSAG“)	24

## PREFACE

This paper describes various financial instruments and the associated risks and opportunities.

Risk means the possibility of failing to achieve the expected return on an investment and/or losing all or part of the invested capital. Such risk may be due to a variety of causes, depending on the specific structure of the product concerned. Such causes may be inherent in the product, the markets, or the issuer. Since risks are not always foreseeable, the following information must not be considered to be conclusive.

In any case, investors should pay particularly close attention to any risk related to the credit rating of the issuer of a product, which always depends on the individual case.

The description of the investment products is based on the most typical product characteristics. The decisive factor is always the specific structure of the product in question. For that reason, the following description is no substitute for a thorough examination of the specific product by the investor.

## 1. GENERAL INVESTMENT RISKS

### Currency risk

In the case of transactions in foreign currency, the return and performance of an investment depends not only on the local yield of the security in the foreign market, but also heavily on the exchange rate development of the respective foreign currency relative to the currency of the investor (e.g. euro). This means that exchange rate fluctuations may increase or decrease the return and value of the investment.

### Transfer risk

Depending on the respective country involved (e.g. foreign debtor), securities of foreign issuers pose the additional risk that political or exchange-control measures may complicate or even prevent the realisation of the investment. In addition, problems in connection with the settlement of an order may occur. In the case of foreign-currency transactions, such measures may obstruct the free convertibility of the currency.

### Country risk

The country risk is the creditworthiness of a given country. The political or economic risk posed by a country may have negative consequences for all counterparties residing in this country.

### Liquidity risk

Tradability (liquidity) refers to the possibility of buying or selling a security or closing out a position at the current market price at any time whatsoever. The market in a particular security is said to be narrow if an average sell order (measured by the usual trading volume) causes perceptible price fluctuations and if the order cannot be settled at all or only at a substantially lower price.

### Credit risk

Credit risk refers to the possibility of counterpart default, i.e. the inability of one party to a transaction to meet obligations such as dividend payments, interest payments, repayment of principal when due or to meet such obligations for full value. Also called repayment risk or issuer's risk. Such risks are graded by means of "ratings". A rating is scale of evaluation used to grade an issuer's creditworthiness. The rating is prepared by rating agencies, notably on the basis of credit risk and country risk. The rating scale ranges from "AAA" (best credit rating) to "D" (worst credit rating).

### Interest rate risk

The risk that losses will be incurred as a result of future interest rate movements in the market. A rise in interest rates on the market will lower the market price of a fixed-interest bond, whereas a fall in such interest rates will raise the market price of the bond.

### Price risk

The risk of adverse movements in the value of individual investments. In the case of contingent liability transactions (e.g. forward exchange deals, futures, option writing, etc.), it is therefore necessary to provide collateral (margin requirement) or to put up further margin, which means tying up liquidity.

### Risk of total loss

The risk that an investment may become completely worthless, e.g. due to its conception as a limited right. Total loss can occur, in particular, when the issuer of a security is no longer capable of meeting its payment obligations (insolvent), for economic or legal reasons (insolvency). In addition, total loss can occur when the issuer of a security is in financial difficulties and the responsible authority applies resolution tools, e.g. deletion of shares or bail-instrument on unsecured bonds, which can result in a complete write-down of the bond's nominal value.

### Buying securities on credit

The purchase of securities on credit poses an increased risk. The credit raised must be repaid irrespective of the success of the investment. Furthermore, the credit costs reduce the return.

### Placing orders

Buy or sell orders placed with the bank must at least indicate the designation of the investment, the quantity (number of securities/principal amount) to be purchased or sold, at what price the transaction should be carried out and over what period of time the order is valid.

### Price limit

If buy or sell orders are placed with the instruction "at best" (no price limit), deals will be executed at the best possible price. This way, the capital requirement/selling proceeds remain uncertain. With a buy limit, the purchase price and thus the amount of capital employed is limited. No purchases will be made above the price limit. A sales limit stipulates the lowest acceptable selling price; no deals will be carried out below this price limit.

Important note: A stop market order will not be executed until the price formed on the stock reaches the selected stop limit. Once the order has been executed, it will enter into effect as an "at best" order, i.e. with no price limit. The price actually obtained may therefore differ significantly from the selected stop limit, especially in the case of securities on a tight market.

### Time limit

You can set a time limit to determine the validity of orders. The period of validity of unlimited orders depends on the practices of the respective stock market.

Your investment adviser will inform you of further additions which can be made when placing an order.

### Guarantee

The term "guarantee" may have a variety of meanings. The first meaning is the commitment made by a third party other than the issuer in order to ensure that the issuer will meet its liabilities. Another meaning is a commitment made by the issuer itself to perform a certain action regardless of the trend in certain indicators that would otherwise determine the amount of the issuer's liability. Guaranties may also be related to a wide variety of other circumstances.

Capital guaranties are usually enforceable only until end of term (repayment), so that price fluctuations (price losses) are quite possible during the term. The quality of a capital guarantee depends to a significant extent on the guarantor's creditworthiness.

### Tax aspects

Your investment adviser will provide you with information on the general tax aspects of the individual investment products. The impact of an investment on your personal tax bill must be evaluated together with a tax consultant.

### Risks on stock markets, especially secondary markets (e.g., Eastern Europe, Latin America, etc.)

There is no direct line of communications with most of the stock exchanges on secondary markets, i.e. all the orders must be forwarded by telephone. This can lead to mistakes or time delays.

In certain secondary stock markets, limited buy and sell orders are generally not possible. This means that limited orders cannot be given until the request has been made by telephone with the local broker, which can lead to time delays. In certain cases, such limits cannot be executed at all.

In certain stock markets it is difficult to receive the current prices on an ongoing basis, which makes it difficult to assess the customer's existing position. If a trading quotation is discontinued on stock exchange, it may no longer be possible to see such securities on the exchange in question. A transfer to another stock market may also cause problems. In certain exchanges of secondary markets, the trading hours by no means correspond to Western European standards. Short trading hours of only three or four hours per day can lead to bottlenecks or failure to process securities orders.

## 2. BONDS

### Definition

Bonds (= debentures, notes) are securities that obligate the issuer (= debtor) to pay the bondholder (= creditor, buyer) interest on the capital invested and to repay the principal amount according to the bond terms. Besides such bonds in the strict sense of the term, there are also debentures that differ significantly from the above-mentioned characteristics and the description given below. We refer the reader in particular to the debentures described in the "Structured Products" section. Especially in that area, it is not the designation as a bond or debenture that is decisive for the product-specific risks but rather the specific structure of the product.

### Return

The bond yield is composed of the interest on the capital and any difference between the purchase price and the price achieved upon sale/redemption of the bond.

Consequently, the return can only be determined in advance if the bond is held until maturity. With variable interest rates, the return cannot be specified in advance. For the sake of comparison, an annual yield (based on the assumption of bullet repayment) is calculated in line with international standards. Bond yields which are significantly above the generally customary level should always be questioned, with an increased credit risk being a possible reason. The price achieved when selling a bond prior to redemption (market price) is not known in advance. Consequently, the return may be higher or lower than the yield calculated initially. In addition, transaction costs, if any, must be deducted from the overall return

### Credit risk

There is always the risk that the debtor is unable to pay all or part of his obligations, e.g. in the case of the debtor's insolvency. The credit standing of the debtor must therefore be considered in an investment decision.

Credit ratings (assessment of the creditworthiness of organisations) issued by independent rating agencies provide some guidance in this respect. The highest creditworthiness is "AAA" (e.g. for Austrian government bonds). In the case of low ratings (e.g. "B" or "C"), the risk of default (credit risk) is higher but by way of compensation the instruments generally pay a higher interest rate (risk premium). Investments with a rating comparable to BBB or higher are generally referred to as "investment grade".

### Price risk

If a bond is kept until maturity, the investor will receive the redemption price as stated in the bond terms. Please note the risk of early calling-in by the issuer, to the extent permitted by the terms and conditions of the issue.

If a bond is sold prior to maturity, the investor will receive the current market price. This price is regulated by supply and demand, which is also subject to the current interest rate level. For instance, the price of fixed-rate securities 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 issuer's creditworthiness may also affect the market price of a bond.

In the case of variable-interest bonds whose interest rate is indexed to the capital market rates, the risk of the interest being or becoming flat is considerably higher than with bonds whose interest rate depends on the money market rates.

The degree of change in the price of a bond in response to a change in the interest level is described by the indicator "duration". The duration depends on the bond's remaining time to maturity. The bigger the duration, the greater the impact of changes of the general interest rate on the price, whether in a positive or negative direction.

### Liquidity risk

The tradability of bonds depends on several factors, e.g. issuing volume, remaining time to maturity, stock market rules and market conditions. Bonds which are difficult to sell or cannot be sold at all must be held until maturity.

### Bond trading

Bonds are traded on a stock exchange or over-the-counter. Your bank will quote buying and selling rates for certain bonds upon request. There is no entitlement to tradability, however. In the case of bonds that are also traded on the stock market, the prices formed on the exchange may differ considerably from over-the-counter quotations. The risk of weak trading may be restricted by adding a limit on the order.

#### Right of termination and buy-back limits

Subordinated bonds must not be terminated by the bondholder. Any rights of the issuer for termination or buy-back of subordinated bonds are dependent on prior approval from the responsible authority.

### 2.1 Some special bonds

#### Subordinated bonds ("tier 2")

These are capital instruments and subordinated loans pursuant to Article 63 CRR which constitute direct, unconditional, unsecured, subordinated liabilities of the issuer with a minimum term of five years. The creditors have no right of termination. In case of liquidation or insolvency of the issuer, claims of tier 2 creditors are subordinate to claims of creditors of non-subordinated bonds.

#### High-yield bonds

High-yield bonds are securities committing the issuer with a low credit rating (=debtor, issuer) to pay to the holder (=creditor, buyer) fixed or variable interest on the capital and to repay the capital subject to the bond terms.

#### Housing construction convertible bonds

Housing construction convertible bonds are issued by housing construction banks and serve to finance housing construction and revitalization projects. They evidence the right to demand for payment of capital and interest as well the right for conversion. Pursuant to the bond terms, housing construction convertible bonds can be converted into participation rights of a housing construction bank. Participation rights are equal in rank to ordinary shares. Payments on participation rights are dependent on profit. No subsequent payments will be made for years when no profit was generated. Currently, these convertible bonds benefit from tax advantages. Before acquiring such bonds kindly check whether such benefits are still applicable.

#### Further Special Bond Typs

Your customer adviser will be pleased to inform you about further special bond types such as bonds with warrants, convertible bonds, zero-coupon bonds, etc.

## 3. SHARES

#### Definition

Shares are securities evidencing an interest held in an enterprise (public limited company). The principal rights of shareholders are participating in the company's profits as well as the right to vote in the shareholders' meeting. (exception: preferred stock)

#### Return

The yield on equity investments is composed of dividend payments as well as price gains or losses and cannot be predicted with certainty. The dividend is the distribution of earnings to shareholders as decided at the shareholders' meeting. The dividend amount is expressed either as an absolute amount per share or as a percentage of the nominal value of the stock. The yield obtained from the dividend in relation to the share price is called dividend yield. In general, it is considerably lower than the dividend indicated as a percentage of the nominal value.

The greater part of earnings from equity investments is usually achieved from the stock's performance/price trend (see price risk).

#### Price risk

Stocks are usually traded on a public exchange. As a rule, prices are established daily on the basis of supply and demand. Investments in stocks may lead to considerable losses.

In general, the price of a stock depends on the business trend of the respective company as well as the general economic and political setting. Besides, irrational factors (investor sentiment, public opinion) may also influence the share price trend and thus the return on an investment.

#### Credit risk

As a shareholder, you hold an interest in a company. Consequently, your investments may be rendered worthless in particular by the company's insolvency.

#### Liquidity risk

Tradability may be limited in the case of shares with a narrow market (especially stocks quoted in the "Unregulated Market, over-the-counter trade). If a stock is quoted in several stock exchanges, that may lead to differences in its negotiability on different international stock exchanges (e.g., quotation of an American stock in Frankfurt).

### Stock trading

Stocks are traded on a public exchange and sometimes over-the-counter. In the case of stock exchange trading, the relevant stock exchange rules (trading lots, order types, contract settlement, etc.) must be observed. If a share is quoted at different stock exchanges in different currencies (e.g. a US stock quoted in euros at the Frankfurt Stock Exchange) it also entails an exchange rate risk. Please contact your investment adviser for further details. When purchasing a stock in a foreign exchange, please bear in mind that foreign exchanges always charge "third-party fees" that accrue in addition to the bank's usual fees. For the exact amount of such fees, contact your customer adviser.

## 4. INVESTMENT FUNDS

### 4.1 Austrian Investment Funds

#### General

Shares in Austrian investment funds (investment fund certificates) are securities which evidence joint ownership in an investment fund. Investment funds invest the funds provided by investors in accordance with fund's investment policy and pursuant to the principle of risk diversification. The three basic types of investment funds are bond funds, stock funds as well as mixed funds, investing both in bonds and stocks. Funds may invest in domestic and/or foreign securities.

The range of investment of domestic investment funds includes not only securities but also money market instruments, liquid financial investments, derivative products and investment fund shares.

Moreover, funds are subdivided into distributing and non-distributing funds. Non-distributing funds do not pay out earnings but rather reinvest them in the fund. Funds of funds invest in other domestic and/or foreign funds. Guarantee funds are subject to a binding commitment by a guarantor commissioned by the fund with respect to distributions of dividends for a certain period, repayment of principal, or performance.

#### Return

The return on investment fund certificates is composed of the annual distributions (provided they are not distributing and non-accumulative funds) and the trend in the value of the certificates. It cannot be established in advance. The trend in value depends on the investment policy specified in the fund terms, as well as the market trends of the individual assets held by the fund. Depending on the composition of a fund's portfolio, the relevant risk warning notices for bonds, stocks or warrants must be taken into account.

#### Price/rating risk

Investment fund certificates can normally be returned at any time at the repurchase price. Under exceptional circumstances, the repurchase of certificates can be temporarily suspended until the sale of fund assets and the receipt of sales proceeds. Your investment adviser will be pleased to inform you about any fees charged and the execution date of your buy and sell orders. Should many holders return their investment fund certificates at the same time, the investment fund may temporarily postpone the redemption due to liquidity shortage unless otherwise stipulated in the fund terms. Such postponement is regulated by law and must be notified to the FMA and the general public. The purpose of a postponement is to procure additional liquidity for the investment fund. If sufficient liquidity cannot be raised, this might result in a closure of the fund. Your investment adviser will be pleased to inform you about any fees charged and the execution date of your buy and sell orders.

The term of an investment fund depends on the fund conditions and is usually unlimited. Please keep in mind that investment fund certificates, unlike bonds, are not normally redeemed and, consequently, do not carry a fixed redemption price. The risk of investment fund certificates depends, as already mentioned, on the fund's stated investment objectives and the market trends. A loss cannot be ruled out. Although investment fund certificates can normally be returned at any time, they are instruments designed for investments over a prolonged period of time.

Like stocks, funds can be traded on exchanges (Exchange Traded Fund, ETF). Investment funds are ETFs if the management company has concluded a respective agreement with the market maker. The prices that arise on the exchange in question may differ from the redemption price. In that regard please see the information on risks related to stocks.

#### Tax considerations

The tax treatment of investment fund distributions varies according to the type of investment fund.

## 4.2 Foreign Investment Companies

Foreign investment companies are governed by separate legal provisions of the respective (EU) country, which may substantially differ from those applicable in Austria. In particular, stipulations on supervision are often less severe than in Austria. Moreover, there are other types of investment funds in foreign (EU) countries that do not exist in Austria such as funds ruled by corporate law, whose prices are regulated by supply and demand rather than the intrinsic value of the fund, which is roughly comparable with shares. Regardless of their legal form, distributions and income equivalent to distributions of foreign investment companies (e.g. non-distributing funds), are subject to other tax stipulations.

## 4.3 Exchange traded Funds

Exchange Traded Funds (ETFs) are fund shares that are traded like equities on a stock exchange. An ETF generally represents a basket of securities (e.g., a basket of stocks) that reflects the composition of an index, i.e. that tracks the index in one certificate by means of the securities contained in the index and their current weighting, so that ETFs are often referred to as "index stocks".

### Return

The return depends on the price trend of the underlying securities in the securities basket.

### Risk

The risk depends on the underlying securities in the security basket.

## 5. REAL ESTATE FUNDS

### General

Real estate funds are special funds owned by an investment trust that holds and manages the special fund in trust on behalf of the shareholders. The fund certificates represent a contractual claim to share in the profits of the special fund. Real estate funds invest the funds received from the shareholders according to the principle of risk diversification, especially in land, building, shares in property companies, and similar property holdings, as well as its own construction projects; they also hold liquid financial investments (investments in liquid assets), such as securities and bank deposits. The liquid investments serve to secure the real estate fund's outstanding payment obligations (e.g., due to purchase of real estate) and repurchase of fund certificates.

### Return

The total return of real estate funds from the shareholder's point of view consists of the annual distributions (to the extent that the funds distribute earnings instead of reinvesting them) and the price trend of the calculated share value of the fund. The amount of return cannot be determined in advance. The real estate fund's performance depends on the investment policy established in the fund regulations, the market trend, the specific properties held by the fund, and the other fund components (securities, bank balances). The historic performance of a real estate fund is not indicative of its future performance.

Real estate funds are exposed to the risk of reduced return due to vacancies in the buildings, among other things. Particularly in the case of the fund's own construction projects, there may be problems with initial rental. Vacancies may have a negative impact on the value of the real estate fund and lead to reduced dividends. Investing in real estate funds may also lead to a partial loss of the invested capital.

Real estate funds also invest liquid funds and cash in banks in other forms of investment, especially interest-bearing securities. That portion of the fund assets is therefore subject to specific risks applicable to the selected form of investment. When real estate funds invest in foreign projects outside the eurozone, the shareholder is also exposed to currency risk, since the market value and return from such foreign property are converted to euros when calculating the price of issue or redemption of the fund certificates.

### Price/rating risk

Fund certificates may usually be given back for the redemption price at any time. Please bear in mind that in the case of real estate funds, the redemption of fund certificates may be subject to restrictions. Under exceptional circumstances, redemption may be temporarily postponed until the underlying assets of the property fund have been sold and the proceeds from the sale have been received. In particular, the fund regulations may stipulate that following the restitution of a large number of fund certificates, redemption may be postponed for a lengthy period of up to two years. In such cases, the fund cannot disburse the redemption price during that period. Real estate funds are typically classified as long-term investment projects.

## 6. WARRANTS

### Definition

Warrants are securities without interest and dividends attached, granting the owner the right to buy (call warrants) or sell (put warrants) a certain underlying asset (e.g. shares) at a previously fixed price (exercise price).

### Return

The buyer of a call warrant has secured the purchase price of the underlying asset. A return can be obtained if the market price of the underlying asset exceeds the stipulated exercise price to be paid by the investor. The warrant holder may then buy the underlying instrument at the strike price and sell it immediately at the ruling market price.

An increase in the price of the underlying asset will usually lead to a proportionately higher percentage increase in the warrant price (leverage effect). Consequently, most warrant holders achieve a return through selling warrants.

The same applies, in the opposite direction, to put warrants. They usually rise in value if the price of the underlying asset decreases.

The return on warrant transactions cannot be established in advance. The maximum loss is limited to the amount of capital invested.

### Price risk

The risk inherent in warrant transactions is the possibility that, between purchase and expiration of the warrant, the underlying asset develops differently than expected at the time of purchase. In the worst case, the entire capital invested may be lost. The price of a warrant depends also on the following factors:

- Volatility of the underlying asset (a measure of the fluctuation margin anticipated at the time of purchase and, simultaneously, the most important input for determining the fairness of the warrant price). High volatility generally implies a higher price for the warrant.
- Remaining time to maturity (the longer the term of a warrant, the higher the price).

A decrease of volatility or diminishing time to maturity may cause the price of a warrant to remain unchanged or fall - even though the expectations in respect of the price trend of the underlying asset are met.

We generally advise against the purchase of warrants which are close to expiry. Buying warrants with high volatility makes your investment more expensive and is therefore highly speculative.

### Liquidity risk

Warrants are usually issued only in small quantities, which increases the liquidity risk for investors. Because of this, individual warrants may be subject to particularly heavy price fluctuations.

### Warrant trading

Warrants are traded on stock exchanges as well as over the counter (OTC). In many cases, the gap between the purchase price and selling price is larger for warrants traded OTC. This difference is for your account. With respect to stock exchange trading, it is important to remember that the market has very low liquidity.

### Warrant terms

Warrants do not have standardised terms. It is therefore imperative to obtain full information on the exact terms and conditions of a warrant, in particular:

**Style of exercise:** Is the warrant exercisable at any time during its life (American option) or only at expiry (European option)?

**Subscription ratio:** How many warrants are needed to obtain the underlying asset?

**Exercise:** Delivery of the underlying asset or cash settlement

**Expiry:** When does the option right expire? Please note that your bank will not exercise a warrant unless specifically instructed to do so!

**Last trading day:** This date is often a bit earlier than the expiry date, so that it cannot be taken for granted that the option can be sold at any time up to the expiry date.

## 7. FORWARD SECURITIES TRANSACTIONS ON THE STOCK EXCHANGE (OPTIONS AND FUTURES CONTRACTS)

When trading in options and futures, the high chances of gain are counterbalanced by high chances of loss. As your bank, we believe it is our duty to inform you of the risks of options or futures contracts before you make such transactions.

### **Purchase of options**

This means the purchase (opening = purchase for opening, long position) of calls (options to buy) or puts (options to sell), which entitles you to demand delivery or acceptance of the underlying security or, if that is impossible, as in the case of index options, you are entitled to demand payment of an amount of cash equal to the positive difference between the price of the underlying security at the time of purchase of the option and the market price at the time of exercise of the option. In the case of American-type options, the option may be exercised at any time before the agreed expiration date; in the case of European-type options, they can be exercised only on the agreed expiration date. In exchange for the grant of the option, you pay the option price (option premium). If the price changes in the opposite direction from what you hoped when you bought the option, your option may lose all its value by the expiration date. Your risk of loss is therefore the price you paid for the option.

### **Sale of options contracts and purchase or sale of futures contracts**

#### Sale of Calls

This means the sale (opening = sale for opening, short position) of a call (option to buy), by which you assume the obligation of delivering the underlying security at a specified price at any time before the expiration date (in the case of American-type call options) or on the expiration date (in the case of European-type call options). In exchange for assuming that obligation, you receive the option price. If the price of the underlying security rises, you must accept the risk of delivering the underlying security at the agreed price even if the market price is significantly higher than that price. That price difference constitutes your risk of loss, which cannot be determined in advance and in principle is unlimited. If the underlying securities are not in your possession (uncovered short position), you will have to purchase them through a cash transaction (replacement transaction) and your risk of loss in that case cannot be determined in advance. If the underlying securities are in your possession, you are protected against replacement losses and will also be able to make timely delivery. Since such securities must be kept blocked until the expiration date of your option transaction, however, you will not be able to dispose of them during that time, which means you cannot sell them to protect yourself against falling prices.

#### Sale of Puts

This refers to the sale (opening = sale for opening, short position) of a put (short position), by which you assume the obligation of purchasing the underlying security at a specified price at any time before the expiration date (in the case of American-type call options) or on the expiration date (in the case of European-type call options). In exchange for assuming that obligation, you receive the option price. If the price of the underlying security falls, you must accept the risk of buying the underlying security at the agreed price even if the market price is significantly lower than that price. That price difference, which is calculated on the basis of the exercise price minus the option premium, constitutes your risk of loss, which cannot be determined in advance and is in principle unlimited. An immediate sale of the securities will be possible only at a loss. If you do not wish to sell the securities immediately, however, and want to retain possession of them, you will have to pay the amount necessary to do so.

#### Sale or purchase of futures contracts

This refers to the purchase or sale of futures, by which you assume the obligation to accept or deliver the underlying value at the specified price at the end of the agreed term. If prices rise, you must accept the risk of having to deliver the underlying securities at the agreed price, even if the market price is significantly higher than that price. If prices fall, you will have to accept the risk of purchasing the underlying securities at the agreed price even if the market price is considerably lower. That price difference constitutes your risk of loss. In the case of an obligation to purchase, you must have all the necessary cash available at maturity. If the underlying securities are not in your possession (uncovered short position), you will have to purchase them through a cash transaction (replacement transaction) and your risk of loss in that case cannot be determined in advance. If the underlying securities are in your possession, you are protected against replacement losses and will also be able to make timely delivery.

#### Cash settlement transactions

If delivery or acceptance of the underlying securities is not possible in a futures transaction (e.g., in the case of index options or index futures), you will be required to pay a cash amount (cash settlement) if the market did not move in the direction you anticipated. The amount of that difference can be calculated from the difference

between the price of the underlying security at the time you signed the option or futures contract and the market price at the time of exercise or maturity. That constitutes your risk of loss, which cannot be determined in advance and is in principle unlimited. In that case, you must ensure that you have sufficient liquid assets to cover the transaction.

#### Posting of security (margins)

In the case of uncovered sale of options (opening = sale for opening, uncovered short position) or the purchase or sale of futures (future transactions), it is necessary to post security in the form of a "margin". You are required to post such security at the time of opening and whenever needed (if the price moves contrary to your expectations) at any time before the expiration of the option or futures contract. If you are not capable of posting the additional security that is required, we will unfortunately be forced to close out your position immediately and use the hitherto posted security to cover the transaction (see section 5(1) of the "Special Terms and Conditions for Options and Futures Transactions traded on the Stock Exchange or Over the Counter).

#### Liquidation of Positions

When trading in American-type options and futures contracts, you have the possibility of liquidating your position before the expiration date (Closing). You cannot always be sure that that will be possible at any time, however. It always depends very strongly on the market situation; in a difficult market, you may have to perform trades at an unfavourable market price, so that losses may be incurred.

#### Other Risks

Options entail both rights and obligations – futures contracts entail obligations only – with a short maturity and predetermined expiration or delivery dates. For those reasons, and because of the rapidity of such transactions, the following additional risks are created, in particular:

- Options that are not exercised in a timely manner will expire and become worthless.
- If you are unable to post the required additional security in a timely manner, we will liquidate your position and draw upon your previously posted security, without prejudice to your obligation to cover the outstanding balance.
- In the case of option transactions (short position), we will perform the necessary steps for you without prior information in the event of allotment. We will not sell securities allotted because of the exercise of a put if there is insufficient cover.
- If you perform futures transactions in foreign currency, an unfavourable trend in the foreign exchange market may increase your risk of loss.

## 8. MONEY MARKET INSTRUMENTS

#### Definition

Money-market instruments include certificated money market investments and borrowings such as certificates of deposit (CDs), cash deposit certificates, global note facilities, commercial paper as well as all notes with a maturity of up to five years for the repayment of principal and fixed interest rates for up to one year. Money market transactions also include genuine repurchase transactions and agreements.

#### Return and risk component

The return and risk components of money market instruments are largely equivalent to those of bonds/debentures. Differences relate mainly to the liquidity risk.

#### Liquidity risk

As a rule, there are no organised secondary markets for money market instruments. Consequently, it cannot be guaranteed that the instruments can be sold readily

Liquidity risk becomes of secondary importance if the issuer guarantees payment of the invested capital at any time and is sufficiently creditworthy to do so.

#### Money market instruments– explained clearly

<b>Certificates of Deposit</b>	Money market securities issued by banks, generally with a maturity of 30 to 360 days.
<b>Public notes</b>	Money market securities issued by banks, generally with a maturity up to 5 years.
<b>Commercial Paper</b>	Money market securities, short-term notes issued by major corporations, generally with a maturity of 5 to 270 days.
<b>Global Note Facility</b>	A variation on the commercial paper facility that enables the issuing of commercial paper simultaneously in the USA and on markets in Europe.
<b>Notes</b>	Short-term capital market instruments, generally with a maturity of 1 to 5 years.

## 9. STRUCTURED PRODUCTS

"Structured investment instruments" are investment instruments for which the return and/or repayment of capital are not generally fixed but rather depend on certain future events or developments. Moreover, such investment instruments may be structured in such a way that the issuer may call them in early if the product reaches the target value; in such cases, they be even be called in automatically.

This section will describe the individual product types. We will use generic terms to refer to these product types, but those terms are not used uniformly on the market. Due to the many possibilities of linking, combining and disbursement related to such investment instruments, they have developed a wide variety of different structures whose selected names do not always follow the structures uniformly. For that reason, it is always necessary to examine the specific terms and conditions of the product. Your customer adviser will be happy to inform you of the various structures of such investment instruments.

### Risks

1. When the terms provide for payments of interest and/or dividends, such payments may depend on future events or developments (indexes, baskets, individual stocks, certain prices, commodities, precious metals, etc.) and may therefore be reduced or even eliminated in the future.
2. Repayments of principal may depend on future events or developments (indexes, baskets, individual stocks, certain prices, commodities, precious metals, etc.) and may therefore be reduced or even eliminated in the future.
3. With respect to payments of interest and/or dividends as well as repayments of principal, it is necessary to take into account interest risk, currency risk, corporate risk, sector risk, country risk and credit risk (and possibly a lack of secured creditor rights and no claim for separation and recovery of assets not belonging to the bankrupt estate) as well as tax risks.
4. The risks defined by paragraphs 1) through 3) above may lead to strong price fluctuations (price losses) during the term of the instrument regardless of any guarantees of interest, earnings, or principal; such risks may also make it difficult or impossible to sell the instrument before it reaches maturity.

### **9.1. Interest spread securities products (constant maturity swaps)**

These products, which are structured like debt securities, initially feature a fixed coupon. After the fixed-interest phase, the products are converted to a variable interest rate. The coupon, which is generally annual, depends on the current interest situation (e.g., the interest curve). In addition, such products may involve target interest rate variant; i.e. if a predetermined target interest rate is achieved, the product will be called in early.

### Return

In the fixed-interest phase, the investor generally obtains a higher coupon than with conventional bonds on the market. In the variable-interest phase, investors have the opportunity of achieving higher coupons than from fixed-interest bonds.

### Risk

Before maturity, market-related price fluctuations may occur. Such fluctuations may prove significant, depending on the interest rate trend.

### **9.2. Guarantee certificates**

When guarantee certificates reach maturity, they pay out the initial face value or a certain percentage thereof regardless of the performance of the underlying security ("minimum redemption").

### Return

The maximum return obtainable from the performance of the underlying security may be limited by a maximum redemption price or other restrictions on participation in the performance of the underlying security established in the terms and conditions of the certificate. The investor is not entitled to dividends and similar distributions on the underlying security.

### Risk

The value of the certificate before maturity may fall below the agreed minimum redemption price before maturity. At maturity, the value will generally be at the level of the minimum redemption price, however. The minimum redemption price depends on the issuer's creditworthiness.

### **9.3. Twin win certificates**

When Twin Win certificates reach maturity, the issuer pays out a redemption price that depends on the performance of the underlying instrument. The certificates have a barrier. If (as a general rule) the price does not

reach or falls below the barrier of the Twin Win certificate before it matures, the investor shares in the absolute performance of the underlying instrument starting from the base price set by the issuer; this means that even price losses of the underlying instrument may translate into gains on the certificates. If the price reaches or falls below the barrier of the Twin Win certificate before maturity, the certificate will be redeemed at a price at least equal to the current price trend of the underlying instrument. The issuer may stipulate that disproportionate sharing in the performance of the underlying instrument is possible above the base price. There may be a limit on the maximum redemption price, however.

#### Return

If the price does not reach the barrier, the investor may also profit from the negative performance of the underlying instrument, since he shares in the absolute performance; price losses in the underlying instrument may therefore translate into gains. The certificate may react more or less strongly to the price fluctuations of the underlying instrument depending on various influencing factors (e.g., volatility of the underlying instrument, time to maturity, distance of the underlying instrument from the barrier).

#### Risk

Twin Win certificates are risky investment instruments. If the price of the securities underlying the Twin Win certificate changes unfavourably, all or much of the invested capital may be lost.

### **9.4. Express certificates**

An express certificate lets the investor share in the performance of the underlying instrument with the option of early redemption. If on one of the valuation dates the underlying instrument satisfies the trigger criterion specified by the issuer, the certificate expires early and will be automatically redeemed by the issuer at the redemption price applicable on the valuation date in question. If the underlying instrument does not satisfy the specified trigger criterion even on the final valuation date, the certificate will be redeemed at the closing price of the security underlying the certificate established at maturity/on the final valuation date. In that case, if the issuer set a barrier at the start of the issue of the certificate and the price of the underlying instrument neither reaches nor breaks through the barrier during the observation period, the certificate will be redeemed at a price at least equal to the minimum redemption price defined by the issuer.

#### Return

Express certificates offer the possibility of early realisation of the positive performance of the underlying instruments. Even if the specified trigger criterion is not satisfied, there may be a payout of the minimum redemption price, if the barrier has not been reached or broken.

The certificate may react more or less strongly to the price fluctuations of the underlying instrument depending on various influencing factors (e.g., volatility of the underlying instrument, time to maturity, distance of the underlying instrument from the barrier).

#### Risk

Express certificates are risky investment instruments. If the price of the securities underlying the Express certificate changes unfavourably, all or much of the invested capital may be lost.

### **9.5. Discount certificates**

In the case of discount certificates, the investor receives the underlying security (e.g., the underlying stock or index) at a discount off the current price (safety buffer) but in exchange his interest in the growth of the underlying security is limited to a certain ceiling (cap or reference price). At maturity, the issuer has the option of either redeeming the certificate at the maximum value (cap) or delivering stocks or, if an index is used as the underlying security, a cash settlement equal to the index value.

#### Return

The difference between the discounted purchase price of the underlying security and the price ceiling determined by the cap represents the possible return.

#### Risk

If the price of the underlying security falls sharply, shares will be delivered when the instrument reaches maturity (the equivalent value of the delivered shares will be below the purchase price at that time). Since allocation of shares is possible, it is necessary to take into account the risk notification for shares.

### **9.6. Bonus certificates**

Bonus certificates are debt securities that, subject to certain requirements, pay out at maturity a bonus or appreciated price of an underlying security (individual shares or indexes) in addition to the nominal value. Bonus certificates have a fixed maturity. The terms and conditions of the certificate regularly stipulate the payment of cash or delivery of the underlying security at maturity. The type and price of redemption at maturity depend on

the price 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 down to the barrier or below, the bonus is forfeited and the certificate will be redeemed at the price of the underlying security. Otherwise, the minimum redemption price results from the bonus level. When the certificate reaches maturity, the bonus is paid out along with the amount initially paid for the face value of the certificate.

#### Return

With a bonus certificate, the investor acquires a money claim against the issuer for payment of an amount determined by the performance of the underlying security.

#### Risk

The risk depends on the underlying security. If the issuer goes bankrupt, the investor has no secured creditor rights or claim for separation and recovery of assets not belonging to the bankrupt estate with respect to the underlying security.

### **9.7. Cash or share-bonds (reserve convertible bonds)**

These consist of the components, whose risk is borne by the bond purchaser:

The investor purchases a bond (the bond component) whose interest rate includes an option premium. This structure therefore results in a higher interest rate than 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 stock (stock component).

The bond purchaser is therefore the writer of a put option (option component) that sells to a third party the right to sell shares to him; in so doing, the bond purchaser agrees to accept the consequences if the share price changes in a direction that is contrary to his interests. The bond purchaser there bears the risk of the price trend; in exchange, he receives a premium, the amount of which basically depends on the volatility of the underlying stock. If the bond is not held to maturity, that risk is compounded by interest rate risk. A change in the interest rate will affect the bond's price and thus the bond's net yield relative to its maturity.

Please also see the corresponding risk notification 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 quoted) that offer investors the possibility of acquiring an interest in a certain index without having to own the securities contained in the index. The underlying index is generally represented on a 1:1 basis; changes in the relevant index are taken into account.

#### Return

With an index certificate, the investor acquires a money claim against the issuer for payment of an amount that depends on the level of the underlying index. The return depends on the performance of the underlying index.

#### Risk

The risk depends on the securities underlying the index.

If the issuer goes bankrupt, the investor has no secured creditor rights or claim for separation and recovery of assets not belonging to the bankrupt estate with respect to the underlying security.

### **9.9. Basket certificates**

Basket certificates are debt instruments that offer investors the opportunity to acquire an interest in the performance of a certain securities basket without having to own the securities contained in the basket. The composition of the underlying basket is up to the issuer. The various securities in the basket may be weighted equally or differently. The composition may be adjusted at specified times (e.g., annually).

### **9.10. Knock-out-certificates (turbo certificates)**

The term "knock-out-certificate" means a certificate that evidences the right to buy or sell a certain underlying security at a certain price if the underlying security fails to reach the specified price threshold (knock-out threshold) before maturity. If it does reach the threshold level, the certificate will expire early and most of the investment will generally be lost. Depending on the price trend 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 for bear markets. Besides normal knock-out-certificates, "leveraged" knock-out certificates are issued, usually under the name of "turbo certificates" (or leverage certificates). When the price of the underlying security rises, the increase in the value of the turbo certificates will be disproportionately greater due to the lever (turbo) effect; the same effect occurs in the opposite direction when prices fall, however. Thus, high

gains can be earned through small investments, but the risk of loss is increased, as well.

#### Return

A positive return can be earned 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"). In the case of certain issuers, it suffices to knock out the certificate if the price reaches the knock-out level during the trading day (intraday). The closer the current stock market quotation is to the exercise price, the stronger the leverage effect. At the same time, however, the risk increases that the price will fall below the knock-out threshold and either the certificate will become worthless or the estimated residual value will be paid out.

### **9.11. Spread certificates**

Spread certificates offer investors the possibility of sharing disproportionately in the performance of the underlying security in expectation of a share price or index varying within a certain price range (spread) defined by a starting point and a stopping point.

#### Return

A return can result from the share that is disproportionate to the performance of the underlying security.

#### Risk

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, CTA**

### **10.1 Hedge funds**

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

#### General information

Hedge funds are funds that are subject to few or no restrictions of a statutory or other nature with respect to the principles of investment. They endeavour to use all forms of investment to increase their capital through alternative, sometimes non-transparent investment strategies.

#### Examples of investment strategies:

Long/Short:	Undervalued securities are bought and overvalued securities are simultaneously 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 trends in order to identify and exploit 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 trend depend on the average trend 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 offer an opportunity for very high returns, but the risk of losing your invested capital is correspondingly high. The price trend of hedge fund products is especially influenced by the following factors, which generate opportunities and risks:

- Hedge funds trends tend to be independent from international stock and bond market trends; depending on the hedge fund strategy the general market trend may either be exaggerated or result in a pronounced trend in the opposite direction.
- Hedge fund trends are particularly influenced by their market share.

- Due to their components, hedge fund assets may be highly volatile, which means that the share prices may be subject to significant upward and downward fluctuations within short periods of time. In extreme cases, unsecured hedge fund products may lead to a total loss.
- Concentrating on just one strategy or only a few exacerbates the risk– that risk may be reduced through diversification in the case of hedge funds of funds or hedge fund index certificates.
- The manager of the fund of funds selects the individual funds and their composition in keeping with the fund's desired risk/return profile or according to a system of distribution among various countries and sectors determined by an index committee.
- It is impossible for the underlying hedge funds to be transparent at all times to the fund of fund management/index committee.

#### Liquidity risk

Since hedge funds require complex strategies and are difficult to manage, it takes longer to determine the price of a hedge fund product than with traditional funds. Hedge fund products are therefore less liquid than traditional funds. The prices are generally determined on a monthly rather than daily basis, so that shares can frequently be redeemed only once a month.

To be able to return the shares at the time, the investor must give an irrevocable declaration of intent to return his shares well in advance of the redemption date. The share price may change significantly between the time of the declaration of intent to return the shares and the time of redemption, but the investor does not have the right to such price changes since his declaration of intent is irrevocable. The specific terms of redemption depend on the individual product. The limited liquidity of the individual funds and instruments can therefore decrease the negotiability of hedge fund product.

#### **10.2. CTA**

To trade futures, most CTAs use fully automated trading systems which take decisions autonomously. The aim is to predict to a certain degree future trends and market developments based on studies relating to the immediate past.

#### Return

The return is achieved by making fully-automated profitable investments based on identified trends.

#### Risk

The risk is that forecasted trends do not materialize or the automated trading system fails to identify trends.

## 11. FORWARD-EXCHANGE DEALS

#### Definition

A forward-exchange deal is the firm undertaking to buy or to sell a certain foreign currency amount at a specified date in the future or over a specified period of time at a price agreed upon conclusion of the contract. The interest rate differential between the two currencies is reflected in a premium/discount to the re-exchange price.

#### Return

The return (profit/loss) achieved by speculative investors is the difference between the currency rates during or at the end of the maturity of the forward deal in line with the contract specifications.

The use of currency forwards 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

The currency risk inherent in forward-exchange deals is, in the case of hedging transactions, the possibility that the buyer/seller could buy/sell the foreign currency at a more favourable price during or at the end of the maturity or, in the case of unmatched positions, the possibility that the buyer/seller must buy/sell the currency at a less favourable price. The potential loss may substantially exceed the original contract value.

#### Credit risk

The credit risk in connection with currency forwards derives from the possibility of counterparty default due to insolvency, i.e. one party's temporary or permanent inability to complete the forward-exchange deal, making more expensive covering transactions in the market necessary.

### Transfer risk

The transfer of some foreign currencies may be restricted, in particular as a result of exchange-control regulations in the country issuing that currency. The orderly execution of the forward-exchange transaction would then be at risk.

## 12. CURRENCY SWAPS

### Definition

A transaction in which specified amounts of one currency are exchanged for another currency over a certain period of time.

The interest rate differential between the two currencies is reflected in a premium/discount to the re-exchange price.

### Return

The return (profit/loss) for anyone trading in currency swaps results from the positive/negative development of the interest rate differential and can be made in the case of a countertrade during the maturity of the currency swap.

### Credit risk

The credit risk in connection with currency swaps derives from the possibility of counterparty default due to insolvency, i.e. one party's temporary or permanent inability to complete the currency swap, making more expensive covering transactions in the market necessary.

### Transfer risk

The transfer of some foreign currencies may be restricted, in particular as a result of exchange-control regulations in the country issuing that currency. The orderly execution of the currency swap would then be at risk.

## 13. INTEREST RATE SWAPS (IRS)

### Definition

An agreement between two parties to exchange interest obligations at different rates in respect of a notional principal amount. As a rule, fixed interest rates are exchanged for variable ones. This means that only interest payments are swapped, whereas no exchange of principal takes place.

### Return

The buyer of an interest rate swap (pays fixed interest rates) benefits from a rise in interest rates. The seller of an interest-rate swap (receives fixed interest rates) benefits from a fall in interest rates. The return on an interest-rate swap cannot be determined in advance.

### Interest risk

The interest-rate risk results from the uncertainty over future changes in market interest rates. The buyer/seller of an IRS is exposed to loss if interest rates fall/rise.

### Credit risk

The credit risk encountered with IRS is derived from the possibility of counterparty default, causing the loss of positive cash values or making more expensive covering transactions in the market necessary.

### Special features of IRS

Interest-rate swaps do not have standardised terms. The processing details must be contractually agreed upon in advance. It is therefore imperative to obtain full information on the exact terms and conditions of interest-rate swaps, in particular:

- nominal amount
- term
- definition of interest

### **13.1. Special form: constant maturity swap (cms)**

#### Definition

A Constant Maturity Swap is an exchange of different interest rates payable on a fixed nominal amount by two contracting parties. It is generally an exchange of a variable money market interest rate (e.g., the 3-month

EURIBOR) against a capital market interest rate (e.g., the 10-year EUR-IRS). That capital market interest rate does not remain fixed for the life of the swap, however, but rather is periodically adjusted.

#### Return

The purchaser of the CMS (who pays the capital market interest rate) earns a return in the event that the interest curve levels out, e.g., if the capital market interest rates fall and the money market interest rates rise. The return from a CMS cannot be determined in advance.

#### Interest rate risk

Interest rate risk results from the uncertainty of future changes in the interest level of the capital market and money market. The buyer or seller of a CMS is exposed to a risk of loss if the interest curve becomes steeper or levels out, respectively.

### 13.2. Special form: cms spread linked swap

#### Definition

In the case of a CMS spread-linked swap, different interest rates payable are swapped, as above. Such swaps generally involve the exchange of a money market interest rate (e.g., the 3-month EURIBOR; or alternatively a fixed interest rate for the life of the swap), on the one hand, and the difference between two CMSs (e.g., the 10-year EUR CMS minus the 2-year CMS), often increased by a certain multiple (e.g., x 2). The CMS spread is often provided with a fixed coupon for a certain initial period.

#### Return

The buyer of the CMS spread-linked swaps (who pays the difference between the CMSs) earns a return if the two capital market curves involved (e.g., the 10-year EUR IRS and 2-year EUR IRS) level out.

The return from a CMS spread-linked swap cannot be determined in advance.

#### Interest rate risk

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

## 14. FORWARD RATE AGREEMENTS (FRA)

#### Definition

Forward Rate Agreements are used to agree on interest rates to be paid at a specified time in the future. Since FRAs are dealt in on the interbank market and not on a stock exchange, they do not have standardised terms. Unlike interest-rate futures, FRAs are customised investment products in terms of principal amount, currency and interest period.

#### Return

Through buying/selling an FRA, the investor fixes the interest rate for the period in question. If the reference rate is higher than the agreed interest rate (FRA price) at the maturity date, the buyer of the FRA will be compensated for the movement in interest rates. If the reference rate is lower than the agreed interest rate at the maturity date, the seller of the FRA will receive a compensation payment.

#### Interest-rate risk

The interest-rate risk results from the uncertainty over future changes in interest rates. Generally, this risk is all the higher, the more pronounced the increase/decrease in interest rates is.

#### Credit risk

The credit risk with FRAs derives from the possibility of counterparty default, causing the loss of positive cash values or making more expensive covering transactions at a lower price in the market necessary.

#### Special features of FRAs

FRAs do not have standardised terms, but are customised investment products. It is therefore imperative to obtain full information on the exact terms and conditions of the contract, in particular:

- nominal amount
- term
- definition of interest

## 15. INTEREST-RATE FUTURES

### Definition

Interest-rate futures are exchange-traded forward contracts on short-term investments, money market or capital market instruments, which are standardised in terms of maturity and tick size. Consequently, the return on such an investment (interest rate or price) can be fixed in advance. Also with interest-rate futures, unconditional commitments are made, which must be fulfilled once the risks below occur no matter how the futures develop.

### Return

The gains or losses achieved by speculative users of interest futures result from the interest rate or price differential at the end of the future period subject to the terms of the contract.

The use of interest-rate futures for hedging purposes reduces the financial risk of existing or future positions.

### Interest-rate risk

The value of an interest-rate future depends primarily on the yield trend of the underlying instrument. The buyer's exposure is therefore comparable to that of a holder of the underlying instrument. The risk results from the uncertainty over future interest rate changes in the market.

The interest-rate risk encountered by the buyer/seller of a futures contract is the obligation to put up further margin or to complete the deal upon maturity, if interest rates rise/fall. Generally, this risk is all the higher, the more pronounced the increase/decrease in current interest rates is. The resulting potential of loss may be many times higher than the original capital invested (initial margin).

### Liquidity risk

In some markets, the closing out of futures positions (sale/repurchase of contracts) may lead to heavy adverse price movements in case of either excessive supply or excessive demand.

## 16. OVER-THE-COUNTER (OTC) OPTIONS

### 16.1. STANDARD OPTION – PLAIN VANILLA OPTION

The buyer of an option has the right, on or before a specified date, to buy (call option) or sell (put option) the underlying instrument (securities, currency, etc.) at a fixed (strike) price or (e.g. in the case of interest-rate options) to receive a compensation payment resulting from the positive difference between strike price and market value at the time the option is exercised. The option writer (seller) is obligated to fulfil the rights of the option buyer. Options may differ according to the style of exercise:

An American option is exercisable at any time up to the expiry date, whereas a European option may be exercised only at expiry.

### 16.2. EXOTIC OPTIONS

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

### 16.3. SPECIAL FORM: BARRIER OPTION

In addition to the exercise price, there is a threshold value (barrier). When that barrier is reached, the option is either activated (knock-in option) or deactivated (knock-out option)

### 16.4. SPECIAL FORM: DIGITAL (PAYOUT) OPTION

Option with a specified payout, which the buyer of the option receives in exchange for paying a premium, if the price (interest rate) of the underlying security is below or above (depending on the option) the threshold value (barrier).

### Return

The buyer of an option will make a profit if the price of the underlying instrument rises above the strike price (in the case of a call option) or falls below the strike price (in the case of a put option). The option holder may either exercise the option or sell it. The option writer receives a premium in return for conferring this right. (plain vanilla option, activate knock-in option, non-deactivated knock-out option). If a knock-in option is not activated or knock-out option is deactivated, the option expires and becomes worthless.

The holder of digital (payout) options receives a return if the threshold value is reached before maturity or at maturity, which means he receives the payout.

### General risks

The value (price) of an option depends on the strike price, the performance and volatility of the underlying instrument, the option life, the level of interest rates and the market situation. In the worst case, therefore, the

capital invested (option premium) may become completely worthless. If the price of the underlying instrument moves contrary to the expectation of the option writer, the potential loss will be virtually unlimited (plain vanilla option, barrier option) or in the amount of the agreed payout (digital option).

Please note, in particular, that options not exercised in a timely manner will expire on the expiration date and will therefore be erased from the accounts as worthless. Important: The bank will not exercise your option without your express instructions.

#### Special risks of OTC transactions

As a rule, OTC options do not have standardised terms, but are customised investments. It is therefore imperative to obtain full information on the exact terms and conditions of an option (style of exercise, expiry, etc.).

The credit risk encountered by the buyer of an OTC option derives from the possibility of losing the premium due to counterparty default, making more expensive covering transactions in the market necessary.

Being customised products, over-the-counter options are usually not traded on organised (secondary) markets. Consequently, the tradability of such options cannot be guaranteed at any time.

## 17. CURRENCY OPTIONS

### Definition

The buyer of a currency option acquires the right, but not the obligation, to buy or sell a fixed quantity of currency at a particular price at a specified date in the future or within a specified period of time. The seller (writer) of the option grants this right to the buyer. In exchange for this right, the buyer pays the seller a premium. The following possibilities exist:

- The buyer of a call option acquires the right to buy a fixed amount in a specified currency at a particular price (exercise price or strike price) on or before a particular date (expiry date).
- The seller of a call option guarantees to deliver/sell, at the option holder's request, a defined amount in a particular currency at the agreed strike price on or before a particular date.
- The buyer of a put option acquires the right to sell a fixed amount in a specified currency at a particular price (exercise price or strike price) on or before a particular date (expiry date).
- The seller of a put option guarantees to buy, at the option holder's request, a defined amount in a particular currency at the agreed strike price on or before a particular date.

### Return

The buyer of a call option will make a profit if the market price of the currency rises above the agreed strike price, with the option premium to be deducted from this gain. The option holder may then buy the foreign currency at the strike price and re-sell it immediately in the market. The call option writer receives a premium in exchange for selling the option. The same applies, in the opposite direction, to put options, which are purchased in the expectation of rising currency rates.

### **Risks attached to the purchase of options**

#### Risk of forfeited premium

The buyer of an option incurs the risk of losing the entire amount of the premium, which must be paid irrespective of whether the option is exercised or not.

#### Credit risk

The credit risk in connection with the purchase of currency options results from the possibility of counterparty default. This will lead to the loss of the premium already paid and make more expensive covering transactions in the market necessary.

#### Currency risk

The currency risk derives from the possibility of adverse moves in the value of the respective currency during the life of the option. In the worst case, the invested capital may be lost.

#### Risks attached to the sale of options

### Currency risk

The currency risk results from the possibility of adverse moves in the value of the respective currency during the life of the option. The resulting risk of loss is virtually unlimited for option writers.

The pricing of an option depends on various factors:

- volatility of the underlying currency (measure of the expected fluctuation margin in the exchange rate)
- agreed strike price
- term of the option
- current exchange rate
- interest rate level in both currencies
- liquidity

### Transfer risk

The transfer of certain currencies may be restricted, in particular as a result of exchange-control regulations in the country issuing that currency. The orderly execution of the deal would then be at risk.

### Liquidity risk

Being largely customised products, there are usually no organised secondary markets for currency options. Consequently, it cannot be guaranteed that a currency option can be sold readily.

### Special features of currency options

Currency options do not have standardised terms. It is therefore imperative to obtain full information on the exact terms and conditions of the option, in particular:

**Style of exercise:** Is the option exercisable at any time during its life (American option) or only at expiry (European option)?

**Expiry:** When does the option right expire? Please note that your bank will not exercise an option unless specifically instructed to do so.

## 18. INTEREST-RATE-OPTIONS

### Definition

Interest-rate options are agreements on an upper or lower limit to interest rates or an option for interest rate swaps. They are used either

- a) for hedging purposes or
- b) for speculative trading to realise a gain.

Interest-rate options are either calls or puts. Common variants are caps, floors, swaptions, etc.

Through buying a call option, the buyer secures for himself an upper interest rate limit (= strike price) for future borrowings. In speculative trading, the value of a call option increases on rising interest rates.

Selling a call option can be used as a speculative instrument only. The seller receives the premium and undertakes to compensate the buyer for any difference in interest rates.

Floors secure the buyer a certain minimum interest rate on a future investment. In speculative trading, the value of a put option increases on falling interest rates.

#### **ad a)** hedging purposes

Depending on the agreed reference periods, the current three-month or six-month interest rate is compared with the agreed strike price every three or six months. If the market rate is higher than the strike price, the holder of the cap will be compensated for the difference.

#### **ad 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, in the opposite direction, to the purchase/sale of a floor. The buyer of a floor secures for himself a lower limit to interest rates, while the seller holds a speculative position.

A swaption is an option on an interest-rate swap (IRS = agreement to exchange interest obligations). There are two basic types of swaptions: payers swaptions (right to pay fixed interest rates) and receivers swaptions (right to receive fixed interest rates). Both variants can be either bought or sold.

A distinction is made between two different types of performance with different risk profiles:

#### Swaption with Swap Settlement

The purchaser becomes a party to the swap at the time of exercise of the swaption.

- The buyer of a payers swaption acquires the right to make fixed interest payments at the strike price on a notional principal amount at the delivery date and to receive variable interest payments in return.
- The seller of a payers swaption undertakes to receive fixed interest payments at the agreed strike price on a notional principal amount at the delivery date and to make variable interest payments in return.
- The buyer of a receivers swaption acquires the right to receive fixed interest payments at the agreed strike price on a notional principal amount at the delivery date and to make variable interest payments in return.
- The seller of a receivers swaption undertakes to make fixed interest payments at the agreed strike price on a notional principal amount at the delivery date and to receive variable interest payments in return.

#### Swaption with Cash Settlement

At the time of exercise of the swaption, the purchaser receives the difference between the cash value of the swaps and swaption interest rate or current market interest rate.

#### **Return**

The holder of an interest-rate option will realise a gain if on the exercise date the interest rate in the market is higher than the strike price of the call or lower than the strike price of the put. In the case of swaptions, a return can be achieved if on the exercise date the interest rate in the market is above the agreed strike price (with payers swaptions) or below the agreed strike price (with receivers swaptions). In any case, the premium must be deducted from the return. The option premium received stays with the seller, no matter whether the option is exercised or not.

#### **Interest-rate risk**

The interest-rate risk results from the possibility of future interest rate changes in the market. The buyer/seller of an interest-rate option may incur a price loss if interest rates rise/fall. This risk is all the higher, the more pronounced the increase/decrease in interest rates is. This results in a virtually unlimited potential of loss.

The pricing of the interest-rate option depends on the following factors:

- volatility of interest rates
- agreed strike price
- term of the option
- level of interest rates in the market
- current financing cost
- liquidity

This means that the price of an option may remain unchanged or decrease even though investors' expectations as to the movement of interest rates have been met.

#### Credit risk

The credit risk encountered by the buyer of an interest-rate option derives from the possibility of counterparty default, causing the loss of positive cash values or making more expensive covering transactions in the market necessary.

#### Risk of forfeited premium

The maximum loss in the case of buying an interest-rate option is the amount of the premium, which must be paid irrespective of whether the option is exercised or not.

#### Special features of interest-rate options

Interest-rate options do not have standardised terms, but are customised investments. It is therefore imperative to obtain full information on the exact terms and conditions of such options, in particular:

- Style of exercise:** Is the option exercisable at any time during its life (American option) or only at expiry (European option)?
- Exercise:** Delivery of the underlying instrument or cash settlement?
- Expiry:** When does the option right expire? Please note that your bank will not exercise an option unless specifically instructed to do so!

## 19. CROSS CURRENCY SWAPS (CCS)

### Definition

A Cross Currency Swap is an exchange of differently defined interest rates payable and different currencies on a fixed nominal amount between two contracting parties. It generally is an exchange of fixed interest rates in two different currencies. Both interest payments may also be in variable interest rates payable. The flow of payments occurs in different currencies based on the same amount of capital, which is determined on the basis of the current spot rate on the trade date.

Besides the exchange of interest rates payable or interest rates receivable, there is an exchange of capital both at the beginning (Initial Exchange) and at the end (Final Exchange). Depending on the needs of the individual trading partners, the Initial Exchange may be omitted.

### Return

The return from a CCS cannot be determined in advance. In the case of a positive trend in the exchange rate and in the difference between the interest rates, a capital gain may be realised from early liquidation of the CCSs. If the CCS is concluded with an improvement of the difference in interest rates, a capital gain may be realised from the lower interest rates of another currency. That gain may be neutralised in turn by exchange losses, however. If the currency relationship develops in a positive manner, the capital gain may be increased further still.

### Interest rate risk

The interest rate risk results from uncertainty concerning the future change in the market interest rate level. The buyer/seller of a CCS is exposed to a risk of loss if the market interest level rises/falls.

### Currency risk

The currency risk results from uncertainty concerning the future changes in the relevant exchange relationship of the currencies involved. In the case of a CCS with Final Exchange, it is especially important to note that currency risk exists not only in the case of the default of a contracting partner but also for the life of the swap.

### Credit risk

The credit risk in the case of buying/selling a CCS is the danger that the default of the transaction partner will result in an obligation to provide additional cover.

### Special terms and conditions for CCSs

CCSs are not standardised. They are customised products. It is therefore especially important to get accurate information about them, especially with respect to:

- nominal amount
- term
- Definition of interest
- Definition of currency
- Definition of exchange rate
- Initial exchange (yes or no?)

## 20. COMMODITY SWAPS & COMMODITY OPTIONS WITH CASH SETTLEMENT („COMMODITY FUTURES TRANSACTIONS“)

Commodity futures transactions 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. Commodity futures transactions are involved in the instruments described below, among others

### **20.1. Basic information about the individual instruments**

#### Commodity Swaps:

A Commodity Swap is an agreement involving the exchange of a series of commodity price payments ("fixed amount") against variable commodity price payments ("market price") resulting exclusively in a cash settlement ("settlement amount").

The buyer of a Commodity Swap acquires the right to be paid a settlement amount if the market price rises

above the fixed amount. In contrast, the buyer of a Commodity Swap is obligated to pay the settlement amount if the market price falls below the fixed amount.

The buyer of a Commodity Swap acquires the right to be paid a settlement amount if the market price falls below the fixed amount. In contrast, the seller of a Commodity Swap is obligated to pay the settlement amount if the market price rises above the fixed amount.

Both streams of payment (fixed/variable) are in the same currency and based on the same nominal amount. Whereas the fixed side of the swap is of the nature of a benchmark, the variable side is related to the trading price of the relevant commodities quoted on a stock exchange or otherwise published on the commodities futures market on the relevant fixing date or to a commodity price index.

#### Commodity Options with Cash Settlement:

The buyer of a Commodity Put Option pays a premium for the right to receive the difference between the strike price and the market price in relation to the nominal amount if the market price follows below the fixed amount.

The buyer of a Commodity Call Option pays a premium for the right to receive the difference between the strike price and the market price if the market price rises about the fixed amount.

#### 20.2. Risks – details on the various instruments

##### Risk of Commodity Swaps and Commodity Options with Cash Settlement:

If the trend does not live up to your expectations, you will have to pay the difference between the underlying price when you signed the agreement and the current market price when the transaction reaches maturity. That difference constitutes the loss. The maximum amount of loss cannot be determined in advance. It may possibly exceed the security posted.

##### Risk when buying Commodity Options – price loss

A price change in the underlying asset (e.g. of a raw material) that underlies the option as the subject matter of the contract may reduce the value of the option. A loss of value may occur in the case of a call option in the event that the prices fall; in the case of a put option, loss of value may occur if the price of the asset underlying the contract rises.

A loss in the value of the options may occur even if the price of the underlying assets does not change because the value of the option is also influenced by other price formation factors (e.g. the term or frequency and intensity of the price fluctuations of the underlying asset).

##### Your risk when selling Commodity Options – leverage effect

The risk in the case of selling commodity options is that the value of the underlying asset will not have moved in the direction originally anticipated by the seller by the time that the option expires. The resulting potential loss is unlimited for the options written.

#### 20.3. Risks of Commodity futures transactions in general

##### Price fluctuations

The amount of the payment obligation arising out of commodity futures transactions is determined by the prices on a certain commodity futures market.

Commodity futures markets may depend on strong price fluctuations. Many factors related to supply and demand for commodities may influence the prices. It is not easy to forecast or predict such pricing factors. Prices may be significantly influenced by unforeseen events, such as natural disasters, illnesses, epidemics, or orders given by the public authorities, as well as unpredictable developments, such as the effects of weather, variations in harvests, or transport and storage risks.

##### Currency risk

Commodity prices are often quoted in foreign currency. You will also be exposed to currency market risk if you enter into a commodity transaction in which your obligation or right to counter-performance is denominated in foreign currency or a foreign unit of account or the value of the subject matter of the contract is determined thereby.

##### Liquidation /Liquidity

Commodity futures markets are generally tighter than financial futures markets and may therefore be less liquid. You may be wholly or partially unable to liquidate a commodity futures position at the desired time because of insufficient market liquidity. Moreover, the spread between the bid and ask prices in a contract may be relatively wide. It may be difficult or impossible to liquidate positions under certain market conditions. Most commodity

futures exchanges are authorised to set limits on price fluctuations, for example. Such limits prohibit asks or bids outside beyond certain limits during a certain period. This may make it difficult or impossible to liquidate certain positions.

#### Limit Orders/Stop Loss Orders

Limit orders or Stop Loss Orders are instructions that limit trading losses in the event of certain market movements. Although such possibilities of limiting risk are permitted on most commodity futures markets, Limit Orders or Stop Loss Orders cannot generally be set for OTC commodities.

#### Forward Markets and Spot Markets

It is especially important to understand the relationship between forward contract prices and spot market prices. Although market forces may equalise the differences between the forward contract price and the spot market price of the commodities in question to such an extent that the price difference on the delivery date is practically null, a variety of market factors, including supply and demand, may still result in differences between the contract price and spot market price of the commodities in question.

#### Determination of the market price

Market prices are quoted either on the commodity futures exchanges or according to the usual market practices. Due to system failures, system malfunctions on the exchange or other causes, it sometimes happens that no market price can be determined for the agreed fixing date. If no arrangement is made for a substitute method of price determination, the calculation agent is usually authorised to set the market price according to his own reasonably exercised discretion.

## 21. INFORMATION ON BANK RESOLUTION UNDER THE AUSTRIAN ACT ON BANK RECOVERY AND RESOLUTION ("BASAG")

In Austria, the EU Bank Recovery and Resolution Directive (BRRD) was transposed into national law by the Austrian Act on Bank Recovery and Resolution ("BaSAG"). BaSAG entered into force on 1 January 2015.

BaSAG entrusts the financial market authority with a set of tools to intervene sufficiently early and quickly when institutions or institution groups violate or are likely to violate regulatory rules, so as to obviate a further deterioration in their financial status. In addition, it governs procedures to resolve and recover banks. The focus of BaSAG is to ensure that the owners of the bank (e.g. shareholders) and creditors (e.g. bond holders) bear losses first, before a resolution fund endowed by the banks bears losses. Those objectives should help avoid using taxpayers' money to recover or resolve a bank.

BaSAG pursues three principles:

- recovery and resolution of credit institutions without a severe impact on value
- protection of taxpayers in the course of bank recovery and resolution
- equal treatment of all creditors in a bail-in

#### Recovery

Since the Bank Intervention and Restructuring Act (BIRG) took effect, banks have been obliged to draw up and update recovery plans and to take recovery actions in their own responsibility. All recovery actions are based on private law and do not interfere with owners' or creditors' rights.

#### Resolution

If recovery fails, the Austrian Financial Market Authority (FMA), which fulfills the role of the national resolution authority, initiates a resolution procedure. FMA prepares resolution plans for individual institutions to provide for a prompt intervention of the regulator and to safeguard financial market stability.

Since 1 January 2016, the Single Resolution Board has taken over full responsibility for bank resolution under direct supervision by ECB.

An institution enters into resolution if it is deemed to be failing or likely to fail in one of the following circumstances:

- the institution infringes with capital adequacy requirements that are conditional for continuing authorisation in a way that would justify the withdrawal of the authorisation by ECB,
- the assets of the institution are or will, in the near future, be less than its liabilities,
- the institution is or will, in the near future, be unable to pay its debts or liabilities as they fall due,
- extraordinary public financial support is required except when, in order to remedy a serious disturbance in the economy and preserve financial stability, the extraordinary public financial support takes any of the following forms:

- a State guarantee to back liquidity facilities provided by central banks or for newly issued liabilities,
- injections of own funds or purchase of capital instruments to address capital shortfalls established in national, Union or Single Supervisory Mechanism-wide stress tests, in asset quality reviews or equivalent exercises by the ECB, EBA or national authorities confirmed by ECB,
- having regard to timing and other relevant circumstances, there is no reasonable prospect that any alternative private sector measures, including measures by Institutional Protection Scheme ("IPS"), or supervisory action (including early intervention measures or write down or conversion of relevant capital instruments) would prevent the failure of the institution,
- a resolution is necessary in the public interest; a resolution is treated as in the public interest if it is necessary for the achievement of and is proportionate to one or more of the resolution objectives and winding up of the institution under normal insolvency proceedings would not meet those resolution objectives to the same extent.

The resolution authority may exercise the power to write down and convert capital instruments (core capital, additional core capital, supplementary capital) immediately before of together with the application of the following resolution tools:

- transfer of shares or other instruments of ownership, assets, rights or liabilities of an institution under resolution to a purchaser that is not a bridge institution ("sale of business tool")
- transfer of assets, rights or liabilities of an institution to a bridge institution that is owned by public authorities ("bridge institution tool")
- transfer of assets, rights and liabilities to an independent legal entity (bad bank) owned by public authorities that has been created for the purpose of administering and disposing of nonperforming debts and assets, only together with another resolution tool ("asset separation tool"), and/or
- conversion of liabilities (including capital instruments eligible as own funds) into equity or reduction of the principal amount of claims or debt instruments during resolution to recapitalise the institution to the extent sufficient to restore its ability to carry out the activities for which it is authorised, to provide capital for a bridge institution or under the sale of business tool or the asset separation tool ("bail in tool")

The use of resolution tools by the resolution authority may disrupt the rights of shareholders and creditors and may be exercised without their consent. The resolution authority shall ensure that the application of resolution tools does not incur higher losses than under normal insolvency proceedings.

The "bail-in" tool covers various creditor groups. While some creditors are fully excluded from bail-in, others have to absorb losses in an exactly defined sequence ("loss absorption cascade"). Losses are absorbed on a tier basis, i.e. creditors of the next higher tier are only bailed in if the claims of the preceding tier of creditors are not sufficient to cover the losses.

Sequence of allocation of losses:

- 1<sup>st</sup> tier (e.g. common shares, the shareholders or holders of other instruments of ownership bear the highest risk of loss)
- 2<sup>nd</sup> tier, investors who have invested in Additional Tier 1 capital instruments (e.g. silent capital contributions)
- 3<sup>rd</sup> tier, creditors who have invested in Tier 2 capital instruments (e.g. participation rights)
- 4<sup>th</sup> tier, unsecured and subordinated claims of creditors (e.g. subordinated debt instruments)
- 5<sup>th</sup> tier, unsecured and non-subordinated liabilities and debt instruments (e.g. deposits not covered by deposit guarantee scheme)

#### Risks involved in bank resolution

**Liquidity risk:** Securities prices are sensitive to market fluctuations, especially securities issued by a bank for which a bail-in procedure was initiated. This means that investors are exposed to a risk that the securities issued by the bank cannot be sold or can only be sold at a lower price.

**Counterparty/credit risk:** The resolution authority may change the terms and conditions of the securities concerned, e.g. by changing the maturity date or deferring interest payments for a certain period. That means that creditors or investors of bank for which a bail-in procedure was initiated are exposed to a risk that they receive payments delayed and/or to a considerable lower extent than originally agreed upon (up to the risk of a total loss of the amount invested).

**Concentration risk:** The risk of losses increases the more securities of the bank under resolution are included in the investor's portfolio (up to the risk of a total loss of the amount invested).

Claims of creditors excluded from bail-in

There is no bail-in risk in relation to deposits covered by the deposit guarantee scheme or liabilities in a cover pool. Public financial support through additional financial stabilisation tools such as the bank resolution fund shall be used as last resort after having exploited the other resolution tools to the maximum extent practicable.