



Risk disclosure

VTB Bank (Europe) SE i.L.
Rüsterstraße 7-9
D-60325 Frankfurt am Main
Tel: +49 69 2168-0
Fax: +49 69 2168-6319
E-Mail: service@vtb.eu

Index

Preface	3
1. General investment risks and key terms.....	4
2. List of products.....	7
2.1 Bonds / Debentures / Securitised Notes	7
2.2 Shares	9
2.3 Structured investment products.....	10
2.4 Money market instruments	11
2.5 Forward-exchange deals	12
2.6 Currency swaps	13
2.7 Interest rate swaps (IRS).....	15
2.8 Currency options	16
2.9 Interest-rate options.....	18
2.10 Commodity Swaps & Options with Cash Settlement (“Commodity futures transactions”).....	20

Preface

This paper describes various financial instruments and key associated risks and opportunities and is not an exhaustive list of potential financial instruments to be traded. This document also does not replace any advisory activities to be performed by VTB Bank (Europe) SE i.L.. For detailed information and client advice on financial instruments and the specific risks adhered to these financial instruments please contact your account manager.

Risk means the possibility of failing to achieve the expected return on an investment and/or losing all or part of the invested capital. Specific (leveraged) financial instruments (such as sold options) might lead to a loss increasing the invested capital. In general, 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 and predictable, the following discussion and information provided must not be considered to be conclusive and exhaustive.

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 and a more detailed discussion with the account manager.

1. General investment risks and key terms

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, 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 a 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 (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.

Legal Risk

Legal risk is the risk of financial or reputational loss that can result from lack of awareness or misunderstanding of, ambiguity in, or reckless indifference to the way law and regulation apply to the business, its relationships, processes, products and services.

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.

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 market 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 account manager 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 the guarantor will meet the issuer's obligations. 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 at the end of term (repayment), so that price fluctuations (price losses) are quite possible during the term. The quality of a capital guaranty depends to a significant extent on the guarantor's creditworthiness.

Tax considerations

Your account manager will provide you with information on the general fiscal 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 growth-markets, unregulated markets (e.g., Eastern Europe, Latin America, etc.)

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

In certain growth-markets, unregulated markets 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 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 sell such securities on the exchange in question. A transfer to another stock market may also cause problems.

In certain exchanges on growth-markets, unregulated 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. List of products

2.1 Bonds / Debentures / Securitised Notes

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 German 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 for 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 curve 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 residual time to maturity. The bigger

the duration, the greater the impact of changes of the general interest rate level 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. Some bonds are difficult to sell or cannot be sold at all. Such illiquid bonds have to 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 negotiability, however.

In the case of bonds that are also traded on the stock market, the prices formed on the exchange may differ considerably from the off-the-market quotations. The risk of weak trading may be restricted by adding a limit on the order.

Examples for special bonds

Supplementary capital bonds: These are special subordinated bonds issued by Austrian banks. Interest payment can only be made if the bank has posted sufficient net profit for the year (before movement of reserves). Repayment of the capital prior to liquidation is subject to prorated deduction of the net loss accrued throughout the term of the supplementary capital bond.

Subordinated bank bonds: In case of the debtor's liquidation or insolvency, the investor will receive money only after all other, non-subordinated liabilities of the bond debtor have been settled. It is not possible to offset the claims to repayment arising out of the subordinated bond against the holder of the bond. Effects of bail in suitable bank bonds have to be discussed separately with the account manager.

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

2.2 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 markets, 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.

2.3 Structured investment products

Definition

Structured investment products 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 some 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 names do not always reflect the structure. 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 entirely 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 entirely 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.

Cash or Share-Bonds (reverse 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.

2.4 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

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

2.5 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.

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 between the currency rates during or at the end of the maturity of the forward deal and the currency rates agreed in the contract.

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 the following:

- In the case of hedging transactions: Possibility that the buyer/seller could buy/sell the foreign currency at a more favourable price during or at the end of the maturity.
- In the case of speculation 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 potentially 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.

Market Volatility

Foreign currency exchange rates may be volatile and subject to intermittent market disruptions or distortions due to numerous factors specific to each foreign country, including among others government regulation and intervention, lack of liquidity and the participation of speculators. Foreign currency exchange rates can be fixed by the sovereign government, allowed to float within a range of exchange rates set by the government, or left to float freely. Governments may intervene in the currency markets through their central banks or by imposing regulatory controls or taxes. Governments may issue a new currency to replace an existing currency, or fix the exchange rate or alter the exchange rate or relative exchange rate characteristics by devaluation or revaluation of a currency. They may also restrict or suspend convertibility or transferability of a currency, or restrict participation in foreign exchange markets and funding markets, either in general or based on the nature of specific participants or transactions. In countries with less established markets, these events are more likely to occur and have occurred in the recent past. Any such event can cause unexpected losses with respect to an FX Transaction.

Disruptions may also occur as a result of non-governmental events, such as actions taken by, or force majeure events affecting, relevant exchanges or price sources. You should be aware of the potential risks of any market disruptions and should understand their effect on each prospective FX Transaction.

2.6 Currency swaps

Definition

A currency swap is a deal in which counterparties agree to exchange interest payments (at fixed or floating rates), calculated based on notional in different currencies, agreed at deal date. Cross-currency swap may imply initial and final exchange of notionals.

Single currency basis swap:

In a single currency basis swap, periodic payments are exchanged based on two floating reference rates, both denominated in the same currency, which may include two floating reference rates that are different designated maturities of the same underlying rate. The value of a basis swap generally is sensitive to changes in the relationship between the two floating rates, which in turn depends on market conditions affecting the supply and demand for funds or debt instruments in markets relevant for each reference rate. If the floating rates have different designated maturities, the value of the basis swap will be particularly sensitive to the shape of the relevant yield curve, and changes in its steepness or an inversion of the yield curve may result in significant losses. Accordingly, a basis swap with floating rates of the same underlying rate but different designated maturities may sometimes be referred to as a “steepener” or “flattener.” If leverage is applied to the applicable difference in the reference rates, or “basis,” any adverse movements of the reference rates from your perspective will be magnified.

Cross currency rate swap:

In a cross-currency rate swap, payments are exchanged based on either two floating reference rates, one floating rate and one fixed rate, or two fixed rates, each with a corresponding notional amount denominated in a different currency. Notional amounts are exchanged on the effective date and the maturity date, although in some transactions notional amounts are not exchanged, creating a coupon-only cross currency rate swap. In a mark-to-market cross-currency swap, the notional amount in one currency (the “variable currency”) will be adjusted to maintain a constant value in terms of the other notional currency (the “constant currency”), and in addition to the other amounts payable on a payment date the parties will exchange a mark-to-market payment based on the change in the value of the variable currency relative to the constant currency over the payment period. The value of a cross-currency rate swap will depend on interest rates and yield curves in each currency, as well as the spot and forward exchange rates between the two currencies. Cross-currency rate swaps generally involve an exchange of different currencies, in which case settlement risk will be present unless the parties have arranged an effective mechanism for payment-versus-payment settlement. See “Settlement Risk” in the Disclosure Annex for Foreign Exchange Transactions, published by the International Swaps and Derivatives Associations, Inc.

In some cases, the terms of a cross-currency rate swap may provide that amounts calculated in one or both of the notional currencies are converted into a settlement currency (which may be one of the notional currencies or may be a different currency) and netted. See the FX Disclosure Annex generally regarding considerations relevant to payments in foreign currencies and calculations based on exchange rates, including in particular the discussion of disruption events and disruption fallbacks.

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 potentially 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.

Market Volatility

Foreign currency exchange rates may be volatile and subject to intermittent market disruptions or distortions due to numerous factors specific to each foreign country, including among others government regulation and intervention, lack of liquidity and the participation of speculators. Foreign currency exchange rates can be fixed by the sovereign government, allowed to float within a range of exchange rates set by the government, or left to float freely. Governments may intervene in the currency markets through their central banks or by imposing regulatory controls or taxes. Governments may issue a new currency to replace an existing currency, or fix the exchange rate or alter the exchange rate or relative exchange rate characteristics by devaluation or revaluation of a currency. They may also restrict or suspend convertibility or transferability of a currency, or restrict participation in foreign exchange markets and funding markets, either in general or based on the nature of specific participants or transactions. In countries with less established markets, these events are more likely to occur and have occurred in the recent past. Any such event can cause unexpected losses with respect to an FX Transaction.

Disruptions may also occur as a result of non-governmental events, such as actions taken by, or force majeure events affecting, relevant exchanges or price sources.

You should be aware of the potential risks of any market disruptions and should understand their effect on each prospective FX Transaction, including the consequences, if any, of any such event specified under the terms of the FX Transaction.

2.7 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.

In traditional interest rate derivative terminology an IRS is a fixed leg versus floating leg derivative contract referencing a near-time exchange index IBOR (Fixed-for-floating) as the floating leg plus or minus a spread. Alternatively the floating leg can also be defined to be an overnight index, such as EONIA (Overnight Indexed Swap).

Fixed-for-floating: In a fixed-for-floating interest rate swap, one party makes periodic payments based on a fixed rate that is agreed upon at the execution of the swap, while the other party makes payments based on a floating rate that may be reset periodically. From the perspective of a fixed rate payer, an increase in the overall level of fixed interest rates of the relevant tenors in the swap market (e.g., an upward shift of the relevant yield curve) will generally cause the swap to increase in value, because the fixed rate payer's contractually specified fixed rate obligations will be lower than the fixed rate then prevailing in the market. Conversely, if the overall level of fixed interest rates falls, the value of the swap to the fixed rate payer will generally decline. From the perspective of the floating rate payer, the corresponding value changes will be reversed.

Overnight indexed swap: The term "overnight indexed swap" ("OIS swap") generally refers to a fixed-for-floating swap in which the floating reference rate is an overnight interbank rate. Because the interval between payments under an OIS swap typically encompasses multiple daily observations of the overnight rate, the payment computation must take these multiple values into account. Various methods are possible, including arithmetic averaging and daily compounding with various compounding conventions. The compounding conventions may be included within the definition of the reference rate, or may be explicitly provided for in the swap confirmation.

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. The potential loss can be hedged.

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 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:

- principal amount
- term
- interest rates agreed

2.8 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 on 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 falling currency rates.

Risks in connection with 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 potentially 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 in connection with 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)
- the agreed strike price
- the amount of time remaining until expiration
- the current exchange rate
- the 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 at all times.

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.

2.9 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 cap or lower than the strike price of the floor. 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
- the amount of time remaining until expiration
- 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.

2.10 Commodity Swaps & 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.

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 seller 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.

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 margin / collateral 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 writer.

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 accounting 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. E.g. most commodity futures exchanges are authorised to set limits on price fluctuations. Such limits prohibit asks or bids beyond certain limits during a certain period. This may make it difficult or impossible to liquidate certain positions.

Limit Orders/Stop 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 its own reasonably exercised discretion.