# Your securities, Opportunities and Risks in Treasury

**DEAR CUSTOMER,**

The range of treasury products and services has considerably widened in recent years. This makes it increasingly difficult to keep track of them as well as to understand all the opportunities and risks involved. This brochure is intended as a guide for the prudent manager, explaining the basics and providing information on the risks involved in treasury products. It provides a general overview of treasury instruments, the knowledge of which we consider crucial to reaching sound decisions. Take advantage of the manifold opportunities of the treasury products offered and, at the same time, identify and limit the risks involved.

Yours UniCredit Bank

# CONTENTS

## 1. RISK CLASSIFICATION OF SECURITIES, MONEY MARKET INSTRUMENTS AND DERIVATIVE PRODUCTS

The classification of risks is based on general as well as special (product-specific) risks as they were internationally recommended. The general risks inherent in investments in securities, money market instruments and derivative products to be taken into account are explained on the following pages:

## 2. FOREIGN EXCHANGE FORWARD CONTRACTS

A foreign exchange forward contract is the firm undertaking to buy or sell a certain amount in a foreign currency at a specified date in the future or during a specified period of time at a price agreed upon conclusion of the contract. Delivery and receipt of the counter currency take place at the same value.

### RETURN

The return (profit/loss) to be achieved by speculative users of foreign exchange forward contracts is the difference between the exchange rates at a given time during the term or at maturity of the forward operation, according to the contract specifications. The use of foreign exchange forward contracts for hedging purposes means that an exchange rate is locked in so that the cost of and return on the hedged transaction will neither increase nor decrease as a result of any exchange rate fluctuations.

### CURRENCY RISK

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

### CREDIT RISK

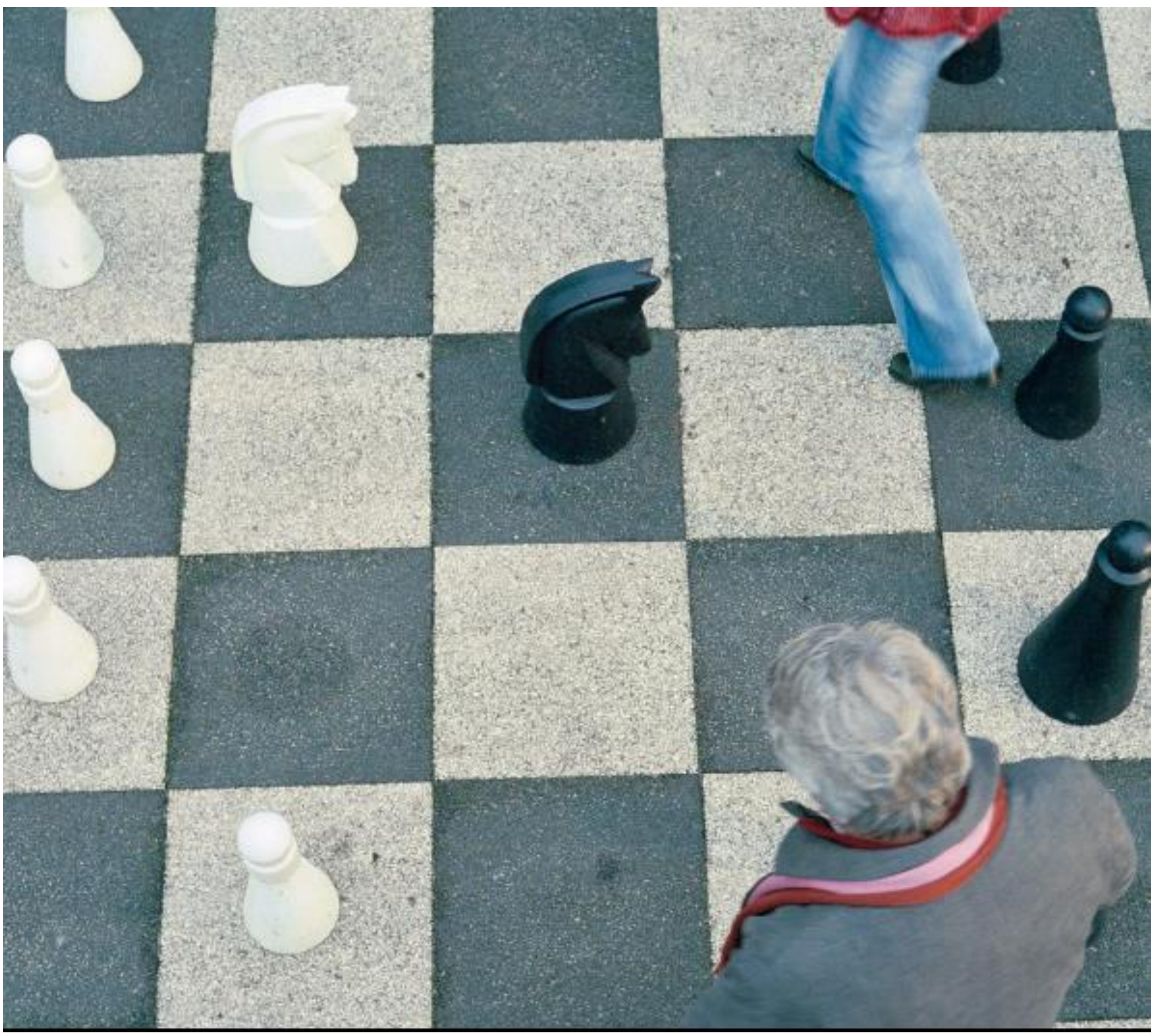
The credit risk in connection with foreign exchange forward contracts consists in the possibility of the counterparty's default due to insolvency, i.e. one party's temporary or permanent inability to fulfill the foreign exchange forward contract, making more expensive covering transactions in the market necessary.

## TRANSFER RISK

In the case of individual foreign currencies, the possibilities of transfer may be restricted, in particular as a result of exchange-control regulations imposed by the country issuing that currency. The due and proper execution of the foreign exchange forward contract would then be at risk.

## 3. FOREIGN CURRENCY SWAPS

A currency swap is the exchange of two currencies over a specified period of time. The interest rate differential between the two currencies is reflected in a premium/discount to the re-exchange rate. Delivery and receipt of the counter currency take place at the same value.



## RETURN

The return (profit/loss) for the user of foreign currency swaps results from the positive/negative development of the interest rate differential and may be achieved in the course of a counter transaction during the maturity of the currency swap.

## CREDIT RISK

The credit risk in connection with currency swaps consists in the possibility of the counterparty's 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

In the case of individual foreign currencies, the possibilities of transfer may be restricted, in particular as a result of exchange-control regulations imposed by the country issuing that currency. The due and proper execution of the foreign currency swap would then be at risk.

## 4. INTEREST RATE SWAPS (IRS)

An interest rate swap regulates the exchange between two parties of interest obligations at different rates in respect of a notional principal amount. As a rule, fixed interest rates are exchanged for variable ones. Both payment streams are denominated in the same currency and relate to the same principal amount. This means that only interest payments are swapped, whereas no flow of capital takes place.

## RETURN

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

## INTEREST RATE RISK

The interest rate risk results from the uncertainty as to future changes in market interest rates. The buyer/seller of an interest rate swap incurs a loss if interest rates fall/rise.

## CREDIT RISK

The credit risk for the buyer of an interest rate swap consists in the possibility of the counterparty's default, making more expensive covering transactions in the market necessary.

## SPECIAL FEATURES OF INTEREST RATE SWAPS

Interest rate swaps do not have standardized terms; they are customized products. Therefore, it is imperative that full information on the exact terms and conditions of interest rate swaps is gathered, in particular on:

- Principal (notional) amount
- Term (maturity)
- Interest rates agreed

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

The buyer of an option acquires the right (valid for a limited period of time) to buy (call option) or to sell (put option) the underlying instrument (e.g. securities, currencies etc.) at a fixed (strike) price or (as is the case with interest rate options) to receive a compensation payment resulting from a positive difference between the strike price and the market value at the time the option is exercised. Writing an option (opening) obligates the option writer (seller) to fulfill the rights of the option buyer. Options may differ according to the style of exercise: an American-style option is exercisable at any time up to the expiry date, whereas a European style option may be exercised only at expiry.

## RETURN

The buyer (holder) 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 (seller) receives a premium in return for granting this right. His return will be the premium if the option is not exercised by the holder.

## GENERAL RISKS

The value (price) of an option is determined by the strike price, the performance and the volatility of the underlying instrument, the option's 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 can be virtually unlimited. It is important to note that options not exercised on or before the expiry date cease to exist as financial instruments and will be taken off the books. Please note that your bank will not exercise your option without your explicit instruction!

## SPECIAL RISKS OF OTC OPTION AGREEMENTS

As a rule, OTC options do not have standardized terms, but, predominantly, they are customized investments. Therefore, it is imperative that full information on the exact terms and conditions (style of exercise, exercise, expiry etc.) is gathered. The credit risk taken by the buyer of an OTC option derives from the possibility of losing the premium due to the counterparty's default, which would indirectly make more expensive covering transactions in the market necessary. Being customized products, over-the-counter options are usually not traded on organized (secondary) markets. Consequently, no guarantee can be given that such options are tradable at any time.

## 6. FOREIGN CURRENCY OPTIONS

The buyer of a foreign currency option acquires the right, but not the obligation, to buy or sell a fixed amount of a foreign currency at a predetermined price at a predetermined date in the future or within a predetermined 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 of a specified currency at a predetermined price (exercise or strike price) on or before a specified date (delivery date). The seller of a call option undertakes to deliver/ sell, at the option holder's request, a fixed amount in a particular currency at the agreed strike price on or before a specified date. The buyer of a put option acquires the right to sell a fixed amount of a specified currency at a predetermined price (exercise or strike price) on or before a specified date (expiry date). The seller of a put option undertakes to buy, at the option holder's request, a fixed amount in a specified currency at the agreed strike price on or before a specified 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 (the purchase price of the option – the option premium - must be deducted from this profit). Then, the option holder may buy the foreign currency at the strike price and re-sell it immediately at the market price. 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 foreign currency rates.

## 6. 1 RISKS ATTACHED TO THE PURCHASE OF OPTIONS

**Risk of total loss**

The buyer (holder) of an option runs the risk of losing the full amount of the premium. This happens if the option holder does not exercise the option, for example, considering the prevailing market conditions.

**Credit risk**

The credit risk in connection with the purchase of foreign currency options results from the possibility of the counterparty's default. This would involve the loss of the premium already paid and thus indirectly the need to make more expensive covering transactions in the market.

**Currency risk**

The currency risk results from the possibility that the exchange rate of the relevant currency may develop differently during the life of the option than you expected when buying the option. In the worst case, the invested capital may be completely lost.

### 6.2 RISKS ATTACHED TO THE SALE OF OPTIONS

**Currency risk**

The currency risk results from the possibility that the exchange rate of the relevant currency may develop differently during the life of the option than you expected when selling the option. The resulting risk of loss is virtually unlimited for option writers. The premium (pricing) of a currency option is determined by the following factors:
-Volatility of the underlying currency (measure of the expected fluctuation margin of the exchange rate) -Agreed strike price -Life of the option -Prevailing exchange rate -Interest rate levels of both currencies

**Transfer risk**

In the case of individual foreign currencies, the possibilities of transfer may be restricted, in particular as a result of exchange-control regulations imposed by the country issuing that currency. The due and proper execution of the foreign currency option would then be at risk.

**Liquidity risk**

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

### SPECIAL FEATURES OF CURRENCY OPTIONS

Currency options do not have standardized terms. Therefore, it is imperative that full information on the exact terms and conditions of the option is gathered, in particular:

**Style of exercise:** The option is exercisable at any time during its life (American option) or only at expiry (European option).
**Exercise:** Delivery of the underlying instruments or cash settlement.
**Expiry:** Please note that your bank will not exercise your option without your explicit instruction!

## 7. INTEREST RATE OPTIONS

Interest rate options are agreements on cap or floor interest rates. They are used either -for hedging purposes or -for speculative trading to realize a gain. Interest rate options are either calls or puts. There are also a number of widely used special variants, for example, caps, floors, swaptions etc. By buying a call option, the buyer locks in an interest rate cap (= strike price) for future borrowings. In speculative trading, the value of a call option goes up on rising interest rates.

The sale of 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. Put options guarantee the buyer a certain minimum return on a future investment. In speculative trading, the value of a put option increases on falling interest rates. Caps and floors are series of successive interest rate calls or puts.
They can be used for:
**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.
**Speculative trading to realize a gain** – The value of a cap increases along with rising interest rates. In this case, however, the forward rates (future interest rates traded for delivery a later time) are the decisive factor, not the current interest rates.

The same applies, in the opposite direction, to the purchase/sale of a floor. The buyer secures a floor interest rate for himself, while the seller holds a speculative position.

**Swaption** is an option on an interest rate swap.
There are two basic types of swaptions: call swaptions (the right to pay fixed interest rates) and put swaptions (the right to receive fixed interest rates). Both variants can either be bought or sold.

Furthermore, swaptions can be settled in two different ways with different risk profiles attached:

**Swaption with swap settlement**
The buyer enters into a swap agreement upon exercising the swaption:
– The buyer of a call swaption acquires the right to make fixed interest payments at the strike price on a notional amount on the delivery date and to receive variable interest payments in return.
– The seller of a call swaption undertakes to receive fixed interest payments at the agreed strike price on a notional amount on the delivery date and to make variable interest payments in return.
– The buyer of a put swaption acquires the right to receive fixed interest payments at the agreed strike price on a notional principal amount on the delivery date and to make variable interest payments in return.
– The seller of a put swaption undertakes to make fixed interest payments at the agreed strike price on a notional principal amount on the delivery date and to receive variable interest payments in return.

**Swaption with cash settlement**
When exercising the swaption, the buyer will receive the difference between the cash

values of the swaps at the interest rate agreed upon in the swaption and the current market interest rate.

**RETURN**

The holder of an interest rate option will realize a gain if on exercise date the market interest rate 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 exercise date the market interest rate is above the agreed strike price (with call swaptions) or below the agreed strike price (with put swaptions). In any case, the premium paid must be deducted from the return. The seller of an interest rate option will receive a premium. This will represent his return if the option is not exercised by the holder.

**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. The more pronounced the increase/decrease in interest rates is, the higher is the risk. This may result in a virtually unlimited potential of loss.

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

– Volatility of interest rates
– Agreed strike price
– Life of the option
– Market interest level
– Current financing cost

This means that the price of an option may remain unchanged or decrease even though interest rates may have developed as you expected.

**CREDIT RISK**

The credit risk taken by the buyer of an interest rate option derives from the possibility of the counterparty’s default. This would involve the loss of the premium already paid and thus indirectly the need to make more expensive covering transactions in the market.

**RISK OF TOTAL PREMIUM LOSS AT PURCHASE**

The risk involved in the purchase of interest rate options is the total loss of the premium. This happens if the option holder lets the option expire in view of the interest trend in the market.

**SPECIAL FEATURES OF INTEREST RATE OPTIONS**

Interest rate options do not have standardized terms, but they are exclusively customized investments. Therefore, it is imperative that full information on the exact

terms and conditions of such options is gathered, in particular:
**Style of exercise:** The option is exercisable at any time during its life (American option) or only at expiry (European option).
**Exercise:** Delivery of the underlying instruments or cash settlement.
**Expiry:** Please note that your bank will not exercise your option without your specific instruction!