

# DERIVATIVES

APPENDICE 1 TO THE GUIDE FOR INVESTORS  
(THE "INVESTOR GUIDE")

Main characteristics and risk warnings

- Preliminary remarks

**This booklet supplements and is an integral part of the Investor Guide. The Investor Guide and its supplements, as may be amended from time to time, are available on the Bank's website (<http://www.cai-ndosuez.com>) by selecting the section "Our compliance approach" of the "Indosuez in Luxembourg" tab of the menu on the Luxembourg site.**

This booklet contains general information about derivative contracts (also called derivative products or derivative instruments). In this document, the Bank provides its clients with information about the main characteristics and general warnings about the risks associated with such financial instruments, as a supplement to the general risks, and specific risks related to derivatives, presented in the Investor Guide).

This booklet cannot be construed as an advertisement for any specific derivative contracts, but only aims at providing to the Bank's clients or potential clients with a description of the general nature and risks of derivative contracts.

This booklet shall neither be construed as an offer, a legal or tax advice nor as any other professional advice or a representation that any investment or strategy is appropriate or suitable to individual circumstances, or otherwise constitutes a personal recommendation to any specific investor.

Investing in derivative contracts may not be suitable for all investors given their complexity and significant risks. Derivative contract are intended to for investors who are in a position to understand their features, including, as the case may be, the absence of listing and resulting potential lack of liquidity and the risks involved, and who are financially able to bear a loss of their investment and willing to accept such a risk.

Any document or material relating to financial instruments referred to in this booklet do and shall neither constitute nor be construed as an offer, a solicitation or a recommendation to buy, subscribe for, enter into or make any investment in any financial instruments (derivative contracts...), or participate in any particular investment strategy, in any jurisdiction where offering or solicitation would be unlawful.

Transactions and payments relating to financial instruments (including derivative contracts) may be subject to taxes, duties and/or withholding taxes. Their tax treatment depends on their features and the investor's individual circumstances and may be subject to change in the future. Each prospective investor should consult his/her/its professional tax adviser with respect to purchasing, holding and disposing of any financial instruments considering his/her/its specific circumstances. Tax laws, regulations and authoritative practices are subject to change, including with retroactive effect. The Bank expressly excludes all liabilities in respect of any tax implications.

This booklet contains samples of derivative contracts with their respective rationales and variations. Any samples of investment solutions are for illustrative purposes only. Some of the commercial items will only be determined at the time the client places an order to enter into a derivative contract. The features described in one product illustration may apply to other varieties of the same type of product.

**Do not to enter into a derivative contract unless you fully understand and are willing to assume the risks associated with it. If you are in any doubt about the risks involved in the financial instrument, please clarify with your relationship manager.**

- Table of Contents

<b>OVERVIEW</b>	
Option contracts	p4
Warrants (Equity Options)	p5
Futures contracts	p5
Forwards	p5
Swaps	p6
<b>DERIVATIVES RISK WARNINGS</b>	
General risks and warnings for Derivative Contracts (Derivative Contracts)	p7
Specific risks and warnings for Over-The-Counter Derivative Contracts (OTC Derivative Contracts)	p8
Specific risks and warnings for Exchange-Traded Derivative Contracts (ETD Derivative Contracts)	p9
<b>SAMPLE OF DERIVATIVE TYPES - MAIN CHARACTERISTICS</b>	
ACCUMULATORS & REVERSE ACCUMULATORS ON EQUITIES AND ETF	p10
01 Accumulators	p11
02 Reverse Accumulators	p13
ACCUMULATED BOOSTED FORWARD (ABF), TARGET REDEMPTION FORWARD (TRF), AND PIVOT TARGET REDEMPTION FORWARD (PTRF)	p15
01 Accumulated Boosted Forward (ABF)	p16
02 Target Redemption Forward (TRF)	p19
03 Pivot Target Redemption Forward (PTRF)	p22
<b>WARNINGS ABOUT THE RISKS INVOLVED IN OPTION TRANSACTIONS</b>	p25
<b>WARNINGS ABOUT THE RISKS INVOLVED IN FORWARD FOREX TRANSACTIONS AND OTHER FORWARD AGREEMENTS ON CURRENCY</b>	p28

## • Overview

Derivatives are contracts that give one person the option or right to obtain from another person over the course of the investment period or on maturity of the derivative itself, an asset the price of which is subject to fluctuation, or interest rate, for a price or obligations determined at the conclusion of the contract. The parties can negotiate on market or by mutual agreement (OTC).

These instruments are referred to as "derivatives" because they represent rights and financial commitments the value of which varies or is derived from underlying assets or liabilities.

There are various types of derivatives differentiated by the nature of the underlying instrument (shares, bonds, money-market instruments, interest rates or exchange rates, stock exchange indices or commodities etc).

There are very many combinations of products in which it is possible to invest and therefore derivatives are characterized by very diverse risk profiles. Some are characterised by limited risk and unlimited potential upside for one party while the other party takes an inverse position because it exposes itself to potentially unlimited losses and potentially limited gains.

In the same way, the mode of settlement of a product may have a significant impact on the types of risks associated with that product. Whilst derivatives that are settled by a cash payment are mainly subject to counterparty risk and market risks, those that are physically settled with the delivery of the underlying instrument are subject to the same risks and directly to risks linked to the relevant underlying instrument after its delivery.

Besides the structure of the relevant product, such of the risk associated with derivatives contracts results from the fact that these contracts are leveraged. This means that it is necessary only to pay a part (by paying a premium or a deposit) of the total exposure to market risk to open and maintain a position. The actual exposure to market risk with derivatives contracts can be an amount that is several times the premium paid, or deposit paid or pledged in favour of the Bank .

For derivatives, market risk encompasses the exposure to changes in the value of market parameters such as interest rates, exchange rates, share prices, index movement or commodities prices, but also exposure to variations in the price of the underlying instrument or to other factors such as the implied volatility or the time value.

Given the wide range of risk profiles as regards derivatives, it is important to understand the specific risk/yield of any strategy in relation with the relevant product.

### **Option contracts**

The buyer of an option acquires the right, but not the obligation, to buy (call) or to sell (put) to the seller a given quantity of an underlying instrument at a price determined beforehand (the strike price), or to receive an amount of monies equal to the difference between the strike price and the current price of the underlying instrument, on a definite date (a "European Option ") or at any time until the maturity date (an "American Option").

The price paid for this right is called the premium. The seller of an option makes a commitment to the buyer to sell (call) or to buy (put) the underlying instrument or to receive an amount equal to the difference in the price of the underlying instrument, at the strike price, whatever is the current price of the underlying instrument. Market risk will be limited for the buyer of an option to the amount of the premium (revalued as the case may be) and it will be considerably higher for a seller. The buyer takes counterparty risk on the counterparty with which it has negotiated the option.

## • Overview

### Warrants (Equity Options)

A warrant is a listed security which gives a buyer the Right, not the obligation, to buy (call) or to sell (put) an underlying instrument, at a price determined initially by the parties, called the "strike price", on a definite date, the "maturity date" for the payment of a premium.

The underlying instrument can be a share or a stock exchange index. The bearer does not receive the underlying instrument. The bearer may receive a redemption price in cash which corresponds to an amount equal to the difference between (i) the price of the underlying instrument and the strike price divided by its parity (call), or (ii) the strike price and the price of the underlying instrument divided by its parity (put).

Over the term of the investment, the price of the call or the put varies according to different variables, in particular the price of the underlying instrument, the implied volatility or the risk less interest rate. The passing of time works to the disadvantage of the bearer. For a call, the strike price is the price at which the investor can buy the underlying instrument. For a put it is the price at which the investor can sell the underlying instrument. The buyer of warrants has a buy or sells option that offers the opportunity to realize potentially high gains, while losses are limited to the invested premium. The interest in warrants lies in this "asymmetrical" earnings profile. It is impossible to short sell a warrant.

The price of warrants evolves according to variations in the following elements: the relationship between the price of the underlying instrument and the strike price, the maturity date, the level of the interest rate, the dividend yield and the implicit volatility level.

### Futures contracts

A party to a futures contract makes a commitment to receive or to deliver when due, a definite quantity of an underlying instrument, at a price determined at the time the contract is agreed. They can be used to hedge or speculate on volatility in an underlying assets price like an option, but they differ in that options contracts provide the holder the right to option, where futures contracts give the holder an obligation to fulfil the contract.

A party to a futures contract can receive a payment if the value of the underlying instrument increases, while the other party can receive a payment in case of decrease in the value of the underlying instrument between two dates.

Futures are standardized instruments traded on a stock exchange (regulated or organised markets). They are contracts standardized as regards the quantity of the underlying instrument and the due dates for delivery or payment. Futures on commodities or physical goods can be generally distinguished from purely financial futures where the underlying instrument is a financial instrument.

### Forwards

Forwards are similar to futures contracts but differ in that they are traded by mutual agreement (OTC) and their terms may be either standardized, or agreed between the buyer and the seller.

In a forward sale, underlying instruments must be delivered at the price at the time the contract is agreed, even if the price of the underlying instrument has risen above this agreed price in the meantime. The risk of loss thus lies in the difference between these two values. In theory as prices can have an unlimited upside, the exposure to potential loss is also potentially unlimited.

In a forward purchase, the delivery of underlying instruments must be at the agreed price at the time the contract is agreed, even if the price of the underlying instrument has fallen below the agreed price in the meantime. The risk of loss thus lies in the difference between these two values. At most it is possible to lose the amount corresponding to the agreed initial price.

- Overview

### Swaps

At its most general, a swap is a contract by which the parties to it exchange interest flows or currencies.

Swaps can be distinguished according to their subject matter, the two main types of swap being the currency swap (or the exchange swap) and the interest rate swap

The first one is a double transaction on currencies by which one party sells to another party at the spot price, an amount of currency and as a counterpart buys an amount in another currency, and agrees to buy it back at maturity at an agreed price which corresponds to the spot price increased or reduced by the difference in the interest rate between two investments having equivalent term as of the swap in each of the relevant currencies.

The main risk linked to this type of swap is thus interest rate risk on both exchange rates, foreign exchange risk only on the implicit interests, liquidity risk and counterparty risk.

The second type is a contract by which the parties "exchange" interest rates, that is, make a commitment to pay, on an agreed frequency, amounts corresponding to the application to a given nominal amount of different interest rates. The main risk linked to this type of swap is interest rate risk and counterparty risk. There are also swaps which allow the exchange of the performance of an underlying instrument.

## • Derivative risk warnings

Like any financial transaction, derivative contracts involve a number of risks. We recommend that Clients read the investor guide, including this supplement, which can be viewed at all times on the Bank's website ([www.ca-indosuez.com](http://www.ca-indosuez.com)).

If Clients would like further explanations regarding the warnings presented in the investor guide, including this supplement, our Bank is at their disposal.

### General risks and warnings for Derivative Contracts (Derivative Contracts)

#### 01. MARKET RISK

**Derivative Contracts involve a risk of fluctuations in the price of the underlings in question, which may be subject to unforeseeable fluctuations and may be highly volatile.**

Certain events relating to the underlying of the derivative contracts (such as a distribution of dividends, the disappearance of the underlying or certain other disruptive events) may lead to certain adjustments to the economic conditions of the derivative contracts.

Exposure to the evolution of an underlying by virtue of a derivative contract may also not correspond to a direct exposure to the same underlying.

The volatility of the price of the underlings may be particularly detrimental when the Derivative Contracts are accompanied by leverage, for example when the Client pays only a margin of cover or a premium corresponding to a small percentage of the value of the Derivative Contract; in such a case, considerable variations in the value of the Derivative Contracts may result from rather small fluctuations in the price of the underlying. As a result, the Client may be forced to respond to daily margin calls of considerable magnitude. The Client's attention is therefore drawn to the possibility that the value of its positions may vary significantly over an extremely short period of time (including during a single day).

The Bank does not in any way guarantee the price of the underlings or, where applicable, the financial health of their issuer, and does not provide any recommendation as to the appropriateness of investing in the underlying.

#### 02. LEVERAGE

Derivatives allow the Client to take large positions with relatively low capital. However, **this leverage can amplify losses as well as gains.**

#### 03. MARGIN CALLS

**Clients** must cover an initial margin with assets deposited with the Bank and **may be subject to significant additional margin calls to cover potential losses if the market changes unfavourably.**

#### 04. COMPLEXITY

**Derivatives are complex derivatives whose value depends on many factors**, such as the price of the underlying asset, market volatility, time to maturity, interest rates, etc. A misunderstanding of these factors can lead to significant losses.

#### 05. OPERATIONAL RISKS

Operational risk associated with derivative contracts relates to human error, IT system failures, transaction processing problems and other operational incidents. These risks may result in financial losses related to incorrect or ineffective execution of derivative transactions. The Bank has put in place control systems and operational risk management mechanisms to minimise these incidents, but not all risks can be eliminated.

## • Derivative risk warnings

In particular, it is recalled that, in accordance with the Bank's General Terms and Conditions, following the conclusion of any Derivative Contract, the Client is required, in order to limit this risk, to carefully read the confirmation sent by the Bank and to send it any observations within a certain period of time from the date of its notification, and that after this period, the confirmation shall be deemed to be accurate and approved by the Client, unless there is a manifest error.

### 06. REGULATORY RISK

Derivative Contracts are governed by complex regulations that are subject to change. Changes in rules and regulatory requirements may have significant impacts on the way these contracts are entered into and processed. Clients must be attentive to regulatory developments and adapt their strategies accordingly, and ensure that the Derivative Contracts comply with any new applicable standards. Proactive management of regulatory risk is essential to avoid unforeseen consequences on Derivative Contracts.

### 07. RISKS ASSOCIATED WITH EARLY TERMINATION/SELL

**The occurrence of certain events may result in the early termination and/or sell of all or part of the Derivative Contracts.** In this situation, the Client may be required to pay the related liquidation balance (determined in accordance with framework contractual documentation applicable between the Client and the Bank ) before the initial maturity date of the relevant OTC Derivative Contracts.

**Where a Derivative Contract is unwounded/sold before maturity** (including where the Bank, at its sole discretion, agrees with the Client to unwind an OTC Derivative Contract before maturity at the expenses of the Client), **the unwinding costs for the Client may be very substantial**, depending inter alia on the mark-to-market price of the Strategy. The mark-to-market price of the Strategy depends from many variables (including inter alia the market price and the volatility of the Underlying, interest rates...).

### Specific risks and warnings for Over-The-Counter Derivative Contracts (OTC Derivative Contracts)

#### 01. RISKS RELATED TO THE COUNTERPARTY'S SOLVENCY

**Uncleared derivative contracts involve risks inherent in the default or insolvency of the counterparty to the contract**, such as the inability of the Bank to fulfil its payment or delivery obligations in respect of any OTC Derivative Contract, or the potential loss of any asset pledged to the Bank (in particular assets pledged as Initial Margin and Variable Margin). In particular, as the Bank enters into the OTC Derivative Contracts as counterparty to the Client, the Client's claims against the Bank in respect of the OTC Derivative Contracts rank pari passu with those of the Bank's other ordinary creditors (other than subordinated claims or claims secured by pledge). Furthermore, the Client's claims in respect of the OTC Derivative Contracts shall not be covered by a deposit guarantee granted by the Bank, or by any guarantee commitment of other entities of the Crédit Agricole group.

#### 02. LIQUIDITY RISKS

OTC Derivative Contracts are over-the-counter contracts between the Client and the Bank that may only be assigned or transferred by one party with the agreement of the other party or may only be early terminated:

- by mutual agreement of both parties; or,
- in the event of the occurrence of a case of early termination event foreseen in the framework contractual documentation applicable between the Client and the Bank; or,

## • Derivative risk warnings

- where applicable, under the conditions provided for by the confirmation of any OTC Derivative Contract.

**In the event of low liquidity in the underlying market, the valuation of the OTC Derivative Contracts following their early termination may therefore prove impossible or occur under very unfavourable conditions. The loss suffered can be very substantial.**

In addition, to the extent that the OTC Derivative Contracts are not standardised products, the valuation (mark-to-market) of one or more OTC Derivative Contracts or the assessment of risk exposure may also be impossible.

Entering into a reverse transaction with a third party to offset a position taken in respect of an OTC Derivative Contract does not result in the termination of the OTC Derivative Contract entered into with the Bank and does not necessarily provide an ideal hedge as there may be no other counterparty offering similar transactions.

### **03. WARNINGS RELATED TO THE FINANCIAL CONDITIONS OF THE OTC DERIVATIVE CONTRACTS**

The terms of the OTC Derivative Contracts are negotiated over-the-counter. No central price source is available, so participants are free to offer different prices for identical OTC Derivative Contracts. The Bank gives no guarantee that the prices it will offer the Client will be the most advantageous that the Client can obtain.

#### **Specific risks and warnings for exchange-traded derivative contracts (ETD Derivative Contracts)**

##### **01. VOLATILITY OF FUTURES AND OPTIONS MARKETS**

The markets on which ETD Derivative Contracts (futures and options) are traded are often liquid, but this liquidity is accompanied by high volatility. **Prices can change rapidly**, which can lead to risks such as slippage (execution of an order at a price different from the desired one).

##### **02. LIQUIDITY RISK**

Although ETD Derivative Contracts markets are generally liquid, **there may be times when it is difficult to find a dealer to close a position, especially if the market is stressed or dysfunctional.**

##### **03. COUNTERPARTY RISK**

Although clearing houses reduce this risk, there is still a possibility that one of the parties will not comply with its contractual obligations.



## SAMPLE OF DERIVATIVE TYPES MAIN CHARACTERISTICS

### *Accumulated Boosted Forward (ABF)*

Accumulator or reverse accumulator strategies are complex derivatives and are suitable for investors with an high risk appetite.

Accumulator or reverse accumulator allow the investor to purchase or to sell a fixed number of shares at a pre-determined price subject to a knockout event that terminates the contract immediately.

Accumulator or reverse accumulator are mostly leveraged strategies, this enables investors to enjoy a more attractive strike price, but the downside risk is higher.

### RATIONALE

The strategy allows the client to buy shares progressively at a discounted price, i.e. over performing a direct equity investment in moderately bearish to bullish markets.

### OBJECTIVE

To allow the client to buy shares at a discount to the current market price at inception over a period through a zero-cost strategy (and so to allow to gradually build a long position in a specific underlying).

### INVESTOR'S MARKET VIEW

Expect moderately bearish to bullish underlying.

### OPTION STRUCTURE

- At inception, the client does not pay any premium.
- Every day, the client buys a fixed number of shares at discount from the initial price.
- The accumulated shares are delivered at the end of a period (e.g. a month).

- If on one day the share price close above the knock-out level:
  - The buying program stops,
  - The shares accumulated until then are delivered at the end of the defined period.

### MAIN CHARACTERISTICS

- **Strike level:** it is the predefined price level at which the underlying shares will be bought.
- **Leverage:** if the underlying share close below the strike level, the investor accumulates a multiple of the daily amount (usually x2).
- **Knock-out level:** if the underlying share closes above this level, the accumulation stops.
- **Guaranteed accumulation period:** (optional) protects investors from an early knock-out if the underlying share appreciates too quickly.

## 12-MONTH ACCUMULATOR



BUYER	Client	UNDERLYING	Citigroup Inc
SELLER	CA Indosuez Wealth (Europe)		
CURRENCY	USD		
TENOR	1 year (257 business days)		
KNOCK-OUT LEVEL	105% of initial spot level.		
STRIKE LEVEL	87.65% of initial spot level.		
NOMINAL SIZE	Client buys 75 shares per day (19'275 shares in total).		
SIZE WITH LEVERAGE OF 2X	Client buys 150 shares per day (38'550 shares maximum in total).		
PURCHASE MECHANISM	<p>1) for every day that closing is at or above the strike level and strictly below the knock-out level, client will buy 75 shares at the strike level.</p> <p>2) for every day that closing is strictly below the strike level, client will buy 150 shares at the strike level.</p> <p>3) if at one day closing is at or above the knock-out level, client will stop buying shares and the accumulator strategy ends.</p>		
SETTLEMENT	Monthly (client receives shares and pays cash).		



### PROS

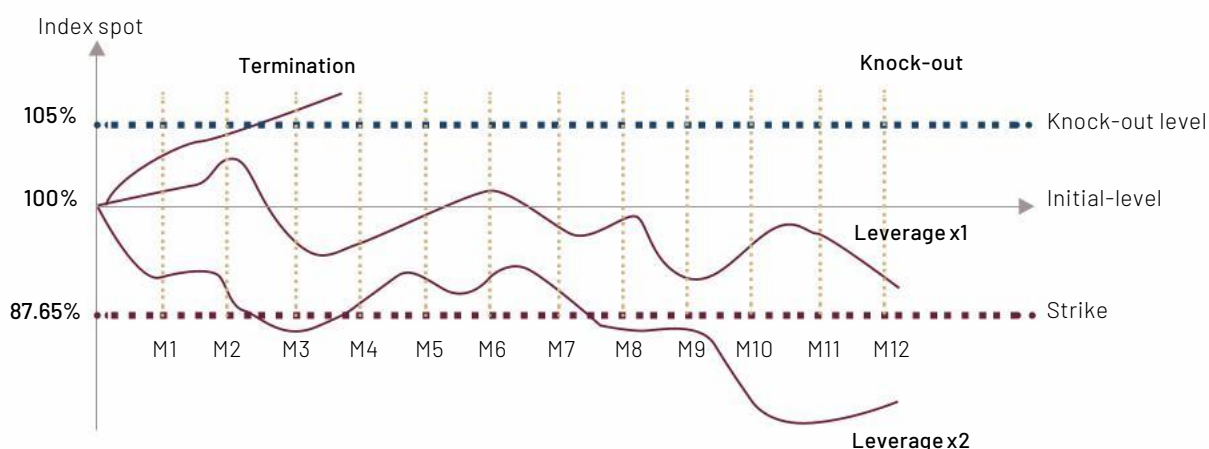
- Buy shares with a discount from the initial spot price.
- Less cash consuming than delta-one strategy.



### CONS

- The strategy can stop early.
- For each day the spot closes below the strike level, the client will have to buy twice the daily nominal size at the strike level (ie at a less favorable level than the existing market conditions).

CHART 1



### RATIONALE

- The client is selling the shares at a premium price compared to current market price. Attractive for clients who hold a large position on a stock, and are ready to sell those shares at a pre-determined level.

### OBJECTIVE

- To allow the client to sell shares at a premium to the current market price at inception over a period through a zero-cost strategy (and so to allow to gradually sell a long position hold on a specific underlying).

### INVESTOR'S MARKET VIEW

- Expect a moderately bullish or bearish underlying.

### OPTION STRUCTURE

- At inception, the client does not pay any premium.
- Every day, the client sells a fixed number of shares at a premium compared to the initial price.
- The decumulated shares are sold at the end of a period (e.g. a month).

- If on one day the underlying share price close below the knock-out level:
  - The selling program stops,
  - The shares decumulated until then are delivered at the end of the defined period.

### MAIN CHARACTERISTICS

- **Strike level:** it is the predefined level at which the underlying shares will be sold.
- **Leverage:** if the underlying share closes above the strike level, the investor decumulates a multiple of the daily amount (usually x2).
- **Knock-out level:** if the underlying share closes below this level the decumulation stops.
- **Guaranteed decumulation period:** (optional) protects investors from an early knock-out if the underlying depreciates too quickly.

## 12-MONTH REVERSE ACCUMULATOR



SELLER	Client	UNDERLYING	Carrefour SA
BUYER	CA Indosuez Wealth (Europe)		
CURRENCY	EUR		
TENOR	1 year (257 business days)		
KNOCK-OUT LEVEL	95% of initial spot level.		
STRIKE LEVEL	112.40% of initial spot level.		
NOMINAL SIZE	Client sells 874 shares per day (224'618 shares in total).		
SIZE WITH LEVERAGE OF 2X	Client sells 1'748 shares per day (449'236 shares maximum in total).		
SALE MECHANISM	<p>1) For every day that closing is at or lower than the strike level and strictly above the knock-out level, client will sell 874 shares at the strike level.</p> <p>2) For every day that closing is strictly above the strike level, client will sell 1'748 shares at the strike level.</p> <p>3) If at one day closing is at or below the knock-out level, client will stop selling shares and the reverse accumulator strategy ends.</p>		
SETTLEMENT	Monthly (client sells shares and receives cash).		



### PROS

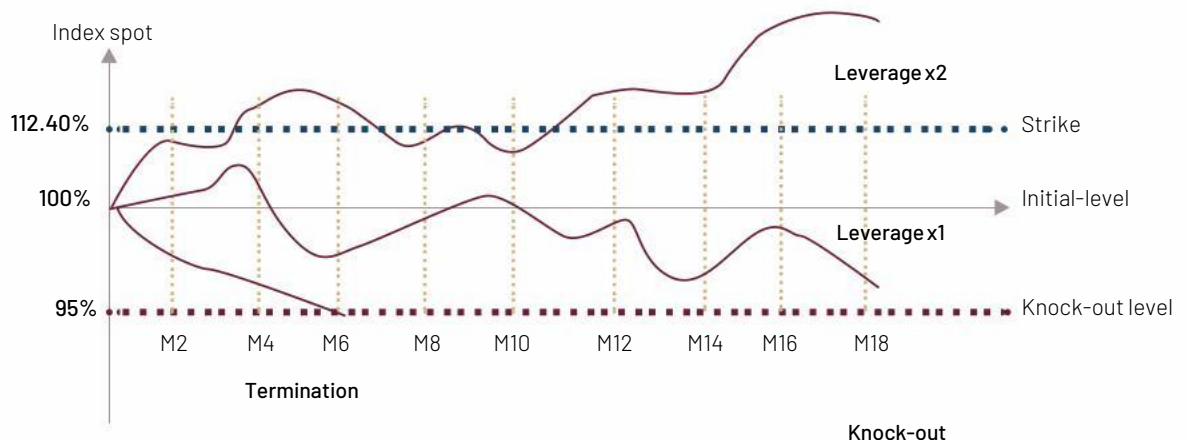
- Sell shares at a premium from the initial spot level.



### CONS

- The strategy can stop early.
- For each day the spot closes above the strike level, the client will have to sell twice the daily nominal size at the strike level (ie at a less favorable level than the existing market conditions).

CHART 2





### RATIONALE

The Accumulated Boosted Forward (ABF) enables investors to buy or sell a currency (or a precious metal) at a better rate than the prevailing market forward rate as long as the predefined Knock-Out level is not reached.

### INVESTOR'S MARKET VIEW

Expect moderately bullish or bearish underlying currency pair.

### OPTION STRUCTURE

- The investor does not pay an upfront premium. (Zero cost strategy).
- On every fixing, the investor buys or sells a fixed amount of a currency against another (or a precious metal) at a discount rate.
- The settlement and the fixing frequencies can be chosen by the investor: weekly, monthly, at maturity.
- The fixing and settlement frequencies can be different but the settlement frequency will always be above or equal than the fixing frequency (eg: Weekly fixing and bi-weekly settlement).
- All accumulated amounts can be sold at any time to the respective settlement date.

- **ABF with American Knock-out:** If at anytime, the knock-out level is touched, the structure ceases to exist and no further accumulation will take place.
- **ABF with European Barrier:** If, on any fixing day, the barrier level is touched, the accumulation process is interrupted for that fixing day and will resume on the following fixing on which the fixing is again below / above the barrier.

### MAIN CHARACTERISTICS

- **Strike level:** it is the predefined exchange rate at which the amounts will be bought (or sold).
- **Guaranteed Fixings:** this feature allows a guaranteed number of fixings unaffected by the knock-out event.

### RISKS

- If the Knock-Out level is reached, the strategy ceases to exist and not further accumulation will take place.
- If the exchange rate fixes below (or above) the strike level, the investor is obliged to buy (or sell) at less favourable conditions than the prevailing market conditions. He accumulates (or decumulates) a multiple of the amount (usually x2).
- If the investor requests for an early cessation of the ABF, the Bank may, at its sole discretion, undertake reasonable efforts to accommodate the request, subject to the investor bearing the related costs, which may be high.

## ACCUMULATED BOOSTED FORWARD (ABF) BUYER EUR/USD WITH AMERICAN KO



BUYER EUR / SELLER USD	Investor	UNDERLYING FIXING	EUR/USD BFX London 1pm
SELLER EUR / BUYER USD	CA Indosuez Wealth (Europe)	FIXING FREQUENCY	Weekly
TENOR	1 year (52 weeks)	SETTLEMENT FREQUENCY	Weekly
		GEARING	2x

SPOT REFERENCE	1.0535
52-WEEKS MARKET FORWARD RATE	1.0710
STRIKE LEVEL	1.0200
KNOCK-OUT LEVEL	1.1000
FIXING AT OR ABOVE STRIKE ACCUMULATION AMOUNT	20'000 EUR (1'040'000 EUR in total)
FIXING BELOW STRIKE ACCUMULATION AMOUNT	40'000 EUR (2'080'000 EUR maximum in total)
STRATEGY	<p>On every fixing day on which the EUR/USD spot exchange rate fixes at or above the Strike Level (i.e. 1.0200) at 1.00 PM London time, the investor will buy EUR 20,000 against USD at the Strike Level, value as of the immediate following Settlement Date.</p> <p>On every fixing day on which the EUR/USD spot exchange rate fixes below the Strike Level (i.e. 1.0200) at 1.00 PM London time, the investor will buy EUR 40,000 against USD at the Strike Level, value as of the immediate following Settlement Date.</p>
INTERRUPTION OF STRATEGY	<p>If, at any time starting from the Transaction Date and time to the Last Fixing, the EUR/USD spot exchange rate trades at or above the Knock-Out Level (i.e. 1.1000), the accumulation process ceases immediately and no further accumulation will take place. The EUR amount that has been accumulated prior to the Knock-Out Event will not be affected by the Knock-Out Event and be settled on the immediate following Delivery Date against USD.</p>

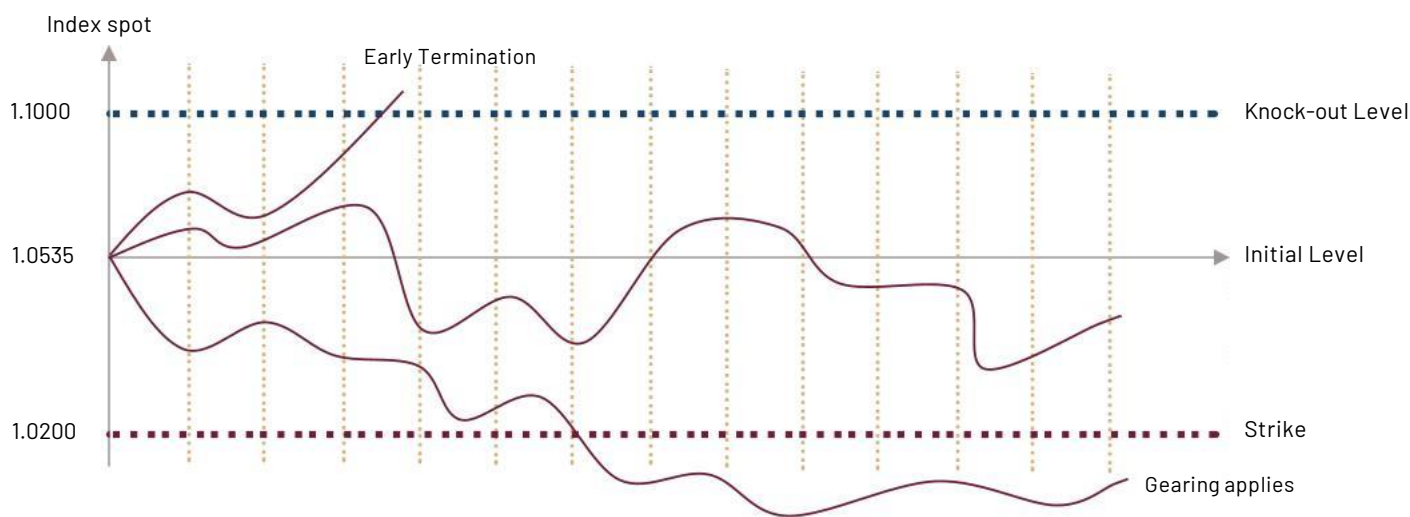
**+** PROS

- The investor has the opportunity to buy EUR and sell USD at 510 pips better than the current 52-weeks market forward rate.
- This product does not require the payment of any upfront premium.
- All accumulated EUR amounts can be sold at any time until the respective Settlement Date.

**-** CONS

- If, at any time, the EUR/USD spot exchange rate trades at or above the Knock-Out Level, the Strategy ceases to exist and no further accumulation will take place.
- On every fixing day that the EUR/USD spot exchange rate fixes below the Strike Level, the investor is obliged to buy the Fixing Below Strike Accumulation Amount at less favourable conditions than the prevailing market conditions and assumes full conversion risk of the EUR amount which he will receive on the respective Settlement Date.
- In case the investor requests an early cessation of the Accumulator, the Bank may, at its sole discretion, undertake reasonable efforts to accommodate the request, subject to the investor bearing the related costs, which may be high.

CHART 3



### RATIONALE

The Target Redemption Forward (TRF) enables investors to buy or sell a currency at a better rate (than the prevailing market rate) through the application of a gearing and a knock-out event.

### INVESTOR'S MARKET VIEW

Expect moderately bullish or bearish underlying currency pair.

### OPTION STRUCTURE

- The investor does not pay an upfront premium. (Zero cost strategy).
- At every fixing, the investor buys or sells a fixed amount of a currency against another at a discount rate.
- The settlement and the fixing frequencies can be chosen by the investor: weekly, monthly, at maturity...
- The fixing and settlement frequencies can be different but the settlement frequency will always be above or equal than the fixing frequency (eg: Weekly fixing and bi-weekly settlement).
- All accumulated amounts can be sold at any time to the respective settlement date.

There are several Target Redemption Forwards payouts available:

- Vanilla Target Redemption Forward (TRF),
- European Knock-In Target Redemption Forward (EKI TRF),
- Pivot Target Redemption Forward (Pivot TRF),
- European Knock-In Pivot Target Redemption Forward (EKI Pivot TRF).

This table shows a summary of the parameters that are specified in each TRF variation:

Trade	One Strike	Two Strikes	Pivot	EKI
Vanilla TRF	x			
EKI TRF	x			x
Pivot TRF		x	x	
EKI Pivot TRF		x	x	x

### MAIN CHARACTERISTICS

- **Strike level:** it is the predefined exchange rate at which the amounts will be bought (or sold).
- **Target:** on every observation where there is a favourable difference between Strike and Fixing Rate (a.k.a. Intrinsic Value), this difference is accumulated. The Target is the maximum amount of Intrinsic Value that can be accumulated, after which the structure ceases to exist.

The Target Redemption Forward (TRF) is quite similar to an Accumulated Boosted Forward (ABF). The main difference is the knock-out event which is determined by the Target (number of big Figures) instead of a Barrier level for the ABF.

- **European Knock-In (EKI) barrier (optional):** The EKI Target Redemption Forward offers a protection thanks to its European Knock-In barrier. In this structure, the Gearing doesn't apply immediately, only below (or above) the EKI level.

### RISKS

- If the Target accumulated Intrinsic Value is exceeded, the strategy ceases to exist and not further accumulation will take place.
- If the exchange rate fixes below (or above) the strike level, the investor is obliged to buy (or sell) at less favourable conditions than the prevailing market conditions. He accumulates (or decumulates) a multiple of the amount (usually x2).
- If the investor requests for an early cessation of the TRF, the Bank may at its sole discretion undertake reasonable efforts to accommodate the request, subject to the investor bearing the related costs, which may be high.

## TARGET REDEMPTION FORWARD WITH EUROPEAN KNOCK-IN (EKI TRF) BUYER XAU/USD



BUYER XAU / SELLER USD	Investor
SELLER XAU / BUYER USD	CA Indosuez Wealth (Europe)
TENOR	1 year (52 weeks)

UNDERLYING FIXING	XAU/USD GOLD London 3pm
FIXING FREQUENCY	Weekly
SETTLEMENT FREQUENCY	Weekly
GEARING	2x

SPOT REFERENCE	2'940
52-WEEKS MARKET FORWARD RATE	3'055
STRIKE LEVEL	2'740
EUROPEAN KNOCK-IN LEVEL	2'640
FIXING AT OR ABOVE STRIKE ACCUMULATION AMOUNT	10 XAU (520 XAU in total)
FIXING BELOW STRIKE ACCUMULATION AMOUNT	20 XAU (1'040 XAU maximum in total)
KNOCK-OUT ACCUMULATED INTRINSIC VALUE	500 USD/oz

### STRATEGY

On every Fixing Date on which the XAU/USD spot exchange rate fixes AT OR ABOVE the Strike Level (i.e. 2'740.00) at 3.00pm London time, the investor will Buy XAU 10 against USD at the Strike Level, value as of the immediate following Settlement Date. The related Intrinsic Value, if any, will be accumulated.

On every Fixing Date on which the XAU/USD spot exchange rate fixes AT OR ABOVE the European Knock-In Level (i.e. 2'640.00) and Strictly BELOW the Strike Level (i.e. 2'740.00) at 3.00pm London time, the investor will not have to Buy XAU/USD as no settlement will be made. The Intrinsic Value is zero.

On every Fixing Date on which the XAU/USD spot exchange rate fixes Strictly BELOW the European Knock-In Level (i.e. 2'640.00) at 3.00pm London time, the investor will Buy XAU 20 against USD at the Strike Level, value as of the immediate following Settlement Date. The Intrinsic Value is zero.

### INTERRUPTION OF STRATEGY

If, on any Fixing Date, the accumulated Intrinsic Values, including that for the current Fixing Date, reach or exceed the Knock-Out Accumulated

Intrinsic Value (the Knock-Out Event), the investor will, for the last time, Buy an amount in XAU equal to the Adjusted At or Above Strike Amount (as defined below) against USD at the Strike Level, value as of the immediate following Settlement Date, and thereafter the accumulation process will immediately terminate and no further settlement will take place. The XAU/USD amount that has been bought prior to the Knock-Out Event will not be affected by the Knock-Out Event.

As soon as the accumulated Intrinsic Values reach or exceed the Knock-Out Accumulated Intrinsic Value, the Fixing At or Above Strike Amount applicable to the current Fixing Date for the last purchase of XAU against USD at the Strike Level will be adjusted (the Adjusted At or Above Strike Amount), as per the formula hereafter, so that the accumulated Intrinsic Values to that date exactly match the Knock-Out Accumulated Intrinsic Value).

Formula: Adjusted At or Above Strike Amount = [Fixing At or Above Strike Amount x (Knock-Out Accumulated Intrinsic Value - accumulated Intrinsic Values prior to the current Fixing Date) / Intrinsic Value]

**+** PROS

- The investor has the opportunity on every Fixing Date to Buy XAU and Sell USD at 315 USD better than the current 52-week market forward rate.
- The European Knock-In feature provides a protection for the investor should the Underlying Currency Pair fix on any Fixing Date Strictly Below the Strike Level and At or Above the European Knock-In Level, in this case no settlement will be made.
- This Strategy does not require the payment of an upfront premium.
- All accumulated XAU amounts can be sold at any time until the respective Settlement Date.

**-** CONS

- If, on any Fixing Date, the accumulated Intrinsic Values reach or exceed the Knock-Out Accumulated Intrinsic Value, the investor will, for the last time, buy the Adjusted At or Above Strike Amount at the Strike Level following which the Strategy will terminate and no further purchase process will take place. The upside of the Strategy for the investor is therefore capped at the Knock-Out Accumulated Intrinsic Value.
- On every Fixing Date that the XAU/USD spot exchange rate fixes Strictly Below the European Knock-In Level, the investor is obliged to Buy the "Fixing Below Knock-In Amount" at less favourable conditions than the prevailing market conditions and assumes full conversion risk of the XAU amount which he will Buy on the respective Settlement Date.
- In case the investor requests an early termination of the Strategy, the Bank may, at its sole discretion, undertake reasonable efforts to accommodate the request, subject to the investor bearing the related costs, which may be high.

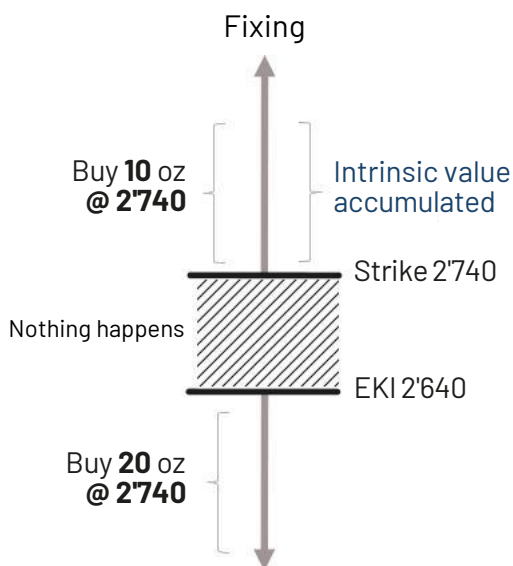
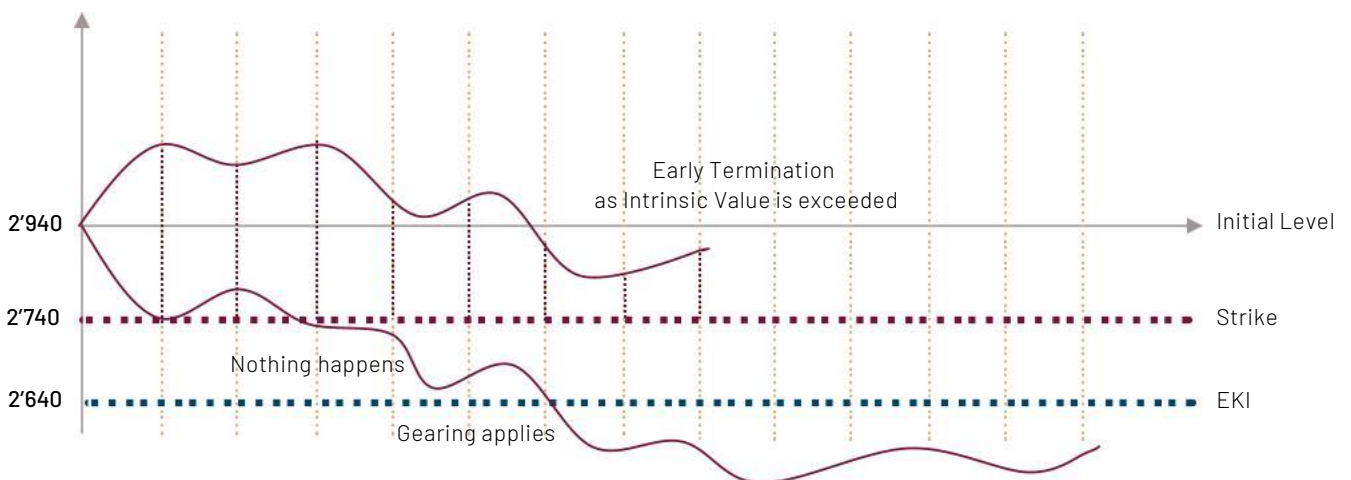


CHART 4



## PIVOT TARGET REDEMPTION FORWARD (PTRF) XAG/USD



COUNTERPARTY A	Investor
COUNTERPARTY B	CA Indosuez Wealth (Europe)
TENOR	1 year (52 weeks)

UNDERLYING FIXING	XAG/USD SLVRLN 12 pm London
FIXING FREQUENCY	Weekly
SETTLEMENT FREQUENCY	Weekly
GEARING	2x

SPOT REFERENCE	32
52-WEEKS MARKET FORWARD RATE	32.75
UPPER STRIKE LEVEL	37
PIVOT RATE	32.00
LOWER STRIKE LEVEL	27
FIXING ABOVE UPPER STRIKE AMOUNT	1000 XAG (52'000 XAG maximum in total)
FIXING AT OR BELOW UPPER STRIKE AMOUNT	500 XAG (26'000 XAG in total)
FIXING AT OR ABOVE LOWER STRIKE AMOUNT	500 XAG (26'000 XAG in total)
FIXING BELOW LOWER STRIKE AMOUNT	1000 XAG (52'000 XAG maximum in total)
KNOCK-OUT ACCUMULATED INTRINSIC VALUE	25 USD/oz

### STRATEGY

On every Fixing Date on which the XAG/USD spot exchange rate fixes AT OR ABOVE the Lower Strike Level (i.e. 27) and Strictly BELOW the Pivot Rate (i.e. 32.00) at 12.00pm London time, the investor will Buy XAG 500 oz (Fixing At or Above Lower Strike Amount) against USD at the Lower Strike Level, value as of the immediate following Settlement Date. The related Intrinsic Value, if any, will be accumulated.

On every Fixing Date on which the XAG/USD spot exchange rate fixes Strictly BELOW the Lower Strike Level (i.e. 27) at 12.00pm London time, the investor will Buy XAG 1'000 oz (Fixing Below Lower Strike Amount) against USD at the Lower Strike Level, value as of the immediate following Settlement Date. The Intrinsic Value is zero.

On every Fixing Date on which the XAG/USD spot exchange rate fixes AT OR BELOW the Upper Strike Level (i.e. 37) and AT OR ABOVE the Pivot Rate (i.e. 32.00) at 12.00pm London time, the investor will Sell XAG 500 oz (Fixing At or Below Upper Strike Amount) against USD at the Upper Strike Level, value as of the immediate following Settlement Date. The related Intrinsic Value (see above), if any, will be accumulated.

On every Fixing Date on which the XAG/USD spot exchange rate fixes Strictly ABOVE the Upper Strike Level (i.e. 37) at 12.00pm London time, the investor will Sell XAG 1'000 oz (Fixing Above Upper Strike Amount) against USD at the Upper Strike Level, value as of the immediate following Settlement Date. The Intrinsic Value is zero.

## INTERRUPTION OF STRATEGY

If, on any Fixing Date, the accumulated Intrinsic Values, including that for the current Fixing Date, reach or exceed the Knock-Out Accumulated Intrinsic Value (the Knock-Out Event), and

i) the XAG/USD spot exchange rate fixes Strictly ABOVE the Lower Strike Level (i.e. 27) and Strictly BELOW the Pivot Rate (i.e. 32.00) at 12.00pm London time, the investor will, for the last time, Buy an amount in XAG equal to the Adjusted "At or Above Lower Strike" Amount (as defined below) against USD at the Lower Strike Level, value as of the immediate following Settlement Date,

OR

ii) the XAG/USD spot exchange rate fixes Strictly BELOW the Upper Strike Level (i.e. 37) and AT OR ABOVE the Pivot Rate (i.e. 32.00) at 12.00pm London time, the investor will, for the last time, Sell an amount in XAG equal to the Adjusted "At or Below Upper Strike" Amount (as defined below) against USD at the Upper Strike Level, value as of the immediate following Settlement Date,

AND thereafter the Strategy will immediately terminate and no further settlement will take place. The XAG amount that has been bought (see (i) above), respectively sold (see (ii) above), prior to the Knock-Out Event will not be affected by the Knock-Out Event.

TO (i) ABOVE:

As soon as the accumulated Intrinsic Values reach or exceed the Knock-Out Accumulated Intrinsic Value, the Fixing At or Above Lower Strike Amount applicable to the current Fixing Date for the last purchase of XAG against USD at the Lower Strike Level will be adjusted (the Adjusted At or Above Lower Strike Amount), as per the formula hereafter, so that the accumulated Intrinsic Values to that date exactly match the Knock-Out Accumulated Intrinsic Value.

Formula: Adjusted "At or Above Lower Strike" Amount = [Fixing At or Above Lower Strike Amount x (Knock-Out Accumulated Intrinsic Value - accumulated Intrinsic Values prior to the current Fixing Date) / Intrinsic Value]

TO (ii) ABOVE:

As soon as the accumulated Intrinsic Values reach or exceed the Knock-Out Accumulated Intrinsic Value, the Fixing "At or Below Upper Strike" Amount applicable to the current Fixing Date for the last sale of XAG against USD at the Upper Strike Level will be adjusted (the Adjusted "At or Below Upper Strike" Amount), as per the formula hereafter, so that the accumulated Intrinsic Values to that date exactly match the Knock-Out Accumulated Intrinsic Value.

Formula: Adjusted "At or Below Upper Strike" Amount = [Fixing "At or Below Upper Strike" Amount x (Knock-Out Accumulated Intrinsic Value - accumulated Intrinsic Values prior to the current Fixing Date) / Intrinsic Value]

**+** PROS

- The investor has the opportunity on every Fixing Date to (i) Buy XAG and Sell USD at 575 cts better, respectively (ii) Sell XAG and Buy USD at 425 cts better, than the current 52-week market forward rate.
- This strategy does not require the payment of an upfront premium.
- All accumulated, respectively de-accumulated, XAG amounts can be sold, respectively bought, at any time until the respective Settlement Date.

**-** CONS

- If, on any Fixing Date, the accumulated Intrinsic Values reach or exceed the Knock-Out Accumulated Intrinsic Value, the investor will, for the last time, (i) Buy an amount in XAG equal to the Adjusted At or Above Lower Strike Amount at the Lower Strike Level, respectively, (ii) Sell an amount in XAG equal to the Adjusted At or Below Upper Strike Amount at the Upper Strike Level following which the Strategy will terminate and no further Buy, respectively Sell, process will take place. The upside of the Strategy for the investor is therefore capped at the Knock-Out Accumulated Intrinsic Value.
- On every Fixing Date that the XAG/USD spot exchange rate fixes (i) Strictly Below the Lower Strike Level, the investor is obliged to Buy the Fixing Below Lower Strike Amount, respectively fixes (ii) Strictly Above the Upper Strike Level, the investor is obliged to Sell the Fixing Above Upper Strike Amount, in both cases at less favourable conditions than the prevailing market conditions and assumes full conversion risk of the XAG amount which he will (i) Buy, respectively (ii) Sell on the respective Settlement Date.
- In case the investor requests an early termination of the Strategy, the Bank may at its sole discretion undertake reasonable efforts to accommodate the request, subject to the investor bearing the related costs, which may be high.

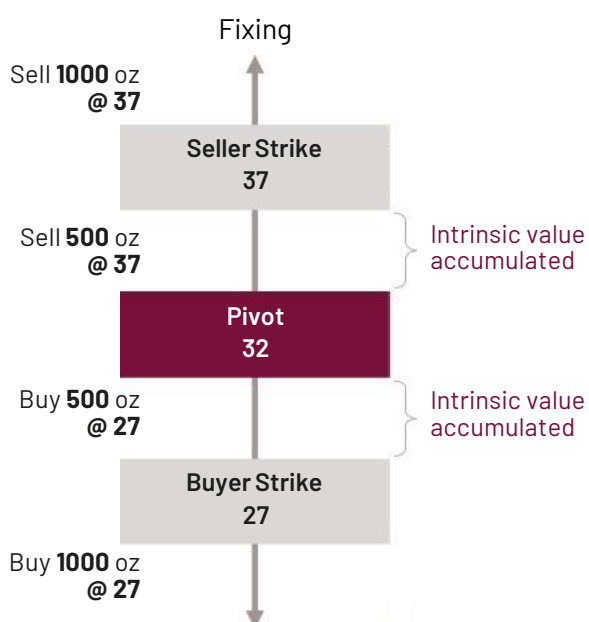
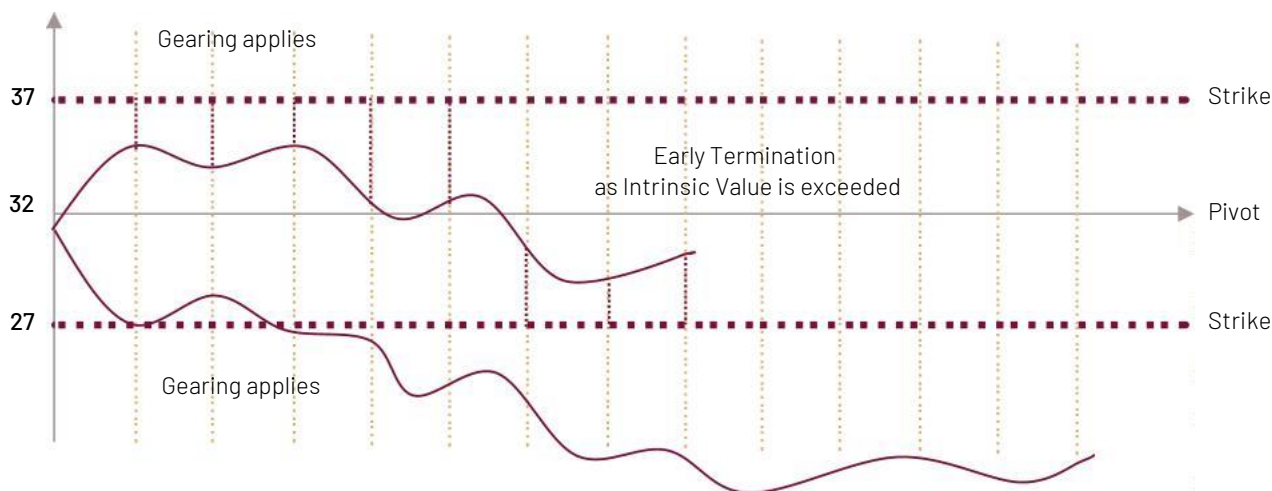


CHART 5



## • Warnings about the risks involved in option transactions

This part relates to the following transactions:

- purchase of a call
- purchase of a put
- sale of a call
- sale of a put

Before entering with such transactions, it is worth reminding you of the specific features (01.) and characteristics (02.) of these transactions, and, of course, the risks they involve (03.). The fourth section will focus on the specific requirements of optional strategies known as “accumulators” and “decumulators” (04.).

### 01. SPECIFIC FEATURES OF OPTION TRANSACTIONS

Options allow you to trade in, inter alia, equity markets, indexes, interest rates, commodities, precious metals or currencies. These are called the “underlying assets”.

Options offer a significant advantage: they do not require much capital to be raised at the time of the investment. They are characterised by a leverage effect: your stake in gains and losses on the underlying asset is more than proportional.

Some options are listed on a regulated market (indexes, equities). Others, such as precious metals or currencies, are negotiated over the counter. Their price is closely linked to that of the underlying asset. So-called American options can be exercised on any trading day up to maturity. In contrast, so-called European options can only be exercised at maturity.

Option transactions allow you to buy protection against a rise or fall in the price of the underlying asset. You can also bet on a rise or fall in the price of the underlying asset. In this case, the transaction will be speculative in nature. Whatever your strategy, our objective is to inform you to the best of our ability about the level of risk you incur.

### 02. CHARACTERISTICS OF OPTION TRANSACTIONS

#### WHAT ARE YOUR RIGHTS AND WHAT ARE YOUR OBLIGATIONS?

As the buyer of an option, you **can**, at a predetermined maturity (European option) or at any time until a given maturity (American option), buy (**call option**) or sell (**put option**) a certain quantity of underlying assets at a predetermined price (exercise or strike price). The price you pay for this right is called the premium.

As the seller (issuer) of an option, you **must**, if your buyer exercises his option at maturity (European option) or before maturity (American option), sell him the underlying asset at the exercise or strike price (**call option**) or buy from him the underlying asset at the exercise or strike price (**put option**).

In this case, you receive a premium in exchange for the right you confer.

#### HOW IS THE VALUE OF AN OPTION CALCULATED?

The value of an option depends on its **intrinsic value** and its **time value**, the **volatility of the underlying asset** and, if the underlying asset is equity, any **dividends received**.

The **time value** represents the hope of seeing the price of the underlying asset increase (call option) or fall (put option) during the option’s life. The greater this hope, the higher the time value.

The **intrinsic** value of an option represents the profit that would immediately be obtained if the option were exercised. It is calculated based on the difference between the price of the underlying asset and the option exercise price.

- **Warnings about the risks involved in option transactions**

The volatility of the underlying asset is the variation in its price over a given period. The greater the magnitude of these variations, the higher the probability that the exercise price will be reached.

If, before the option matures, a **dividend** is offered to shareholders, the price of the underlying asset will rise.

### **03. THE RISKS ASSOCIATED WITH OPTIONS**

Like any financial instrument, options are exposed to a range of risks (market risks, liquidity risks, counterparty risks, etc.) detailed in the Investor Guide.

#### **THE RISKS ASSOCIATED WITH THE PURCHASE OF A CALL OR PUT OPTION**

As the buyer of a call or put option, you risk seeing your option lose all its value. In this case, your loss is limited to the premium you paid.

#### **THE RISKS ASSOCIATED WITH THE SALE OF A CALL OPTION**

As the seller of a call option, two scenarios are possible. If the price of the underlying asset is higher than the exercise price at the maturity date, your buyer will ask you to deliver the underlying asset. You will have received a premium at the sale, but you will not have profited from the increase in the price of the underlying asset. If you do not own no underlying asset, you are exposed to a potentially unlimited risk of loss. Conversely, if the price of the underlying asset is lower than the exercise price at maturity, your buyer will not exercise his option. The premium received will offset, wholly or in part, any loss of value in the underlying asset.

#### **THE RISKS ASSOCIATED WITH THE SALE OF A PUT OPTION**

As the seller of a put option, if the price of the underlying asset is higher than the exercise price at maturity, the buyer will not exercise his option. Your gain will be equivalent to the premium received. Conversely, if the price of the underlying asset is below the exercise price at maturity, the buyer will exercise his option and you will have to buy the underlying asset at the exercise price. In this case, you will incur a loss equivalent to the difference between the exercise price and the price of the underlying asset. You are exposed to a potentially unlimited risk of loss. The premium received at the sale of the option will offset, wholly or in part, the difference between the exercise price and the price of the underlying asset.

### **04. ACCUMULATORS AND DECUMULATORS (ALSO CALLED REVERSE-ACCUMULATORS)**

The accumulator is a strategy for the purchase and sale of over-the-counter options, which allows an underlying financial instrument (currency, share, etc.) to be accumulated periodically for a given period of time, if certain conditions are met, at a price (the "strike") that is better than the market price available at the time of conclusion of the initial transaction. This bonus comes in particular from the fact that the Client sells options to the bank that oblige the Client, without necessarily receiving a premium, to buy the underlying financial instrument at a specified price and for a quantity that is dependent on the price of the underlying financial instrument. The settlement of the transaction takes place according to a previously defined schedule.

Compared to a conventional futures contract, there are other differences in this instrument. Leverage can improve the level of the strike, but increase the potential loss for the Client. Leverage is the multiplication of the amount of an underlying financial instrument that is accumulated when the price of the underlying financial instrument for a given period is less favourable for the Client. A deactivating barrier can also improve the level of the strike but limit the potential gain for the Client if the underlying financial instrument reaches the deactivation level. Once the barrier has been reached, and depending on what the Client agrees upon with the bank, the strategy can then be definitively deactivated for the remaining period even in the event of favourable market development for the Client, or may be reactivated depending on subsequent market development.

- Warnings about the risks involved in option transactions

This strategy is therefore particularly risky if markets are volatile, especially when the Client does not have the underlying financial instrument or its equivalent.

By entering into this type of over-the-counter derivative contract, the Client cannot know in advance the exact amount of the underlying financial instrument that it will be required to buy in cash or in the future. The Client will only know the minimum and maximum quantity of the underlying financial instrument to buy. Depending on the price movements observed during the term of the transaction, the underlying financial instrument quantity can therefore vary between zero (by the effect of the deactivating barrier) and a multiple of the nominal (by the effect of leverage).

Unlike the accumulator, the decumulator (also called reverse accumulator) is a strategy that forces the Client to sell an underlying financial instrument for a given period of time. It is intended to enable the underlying financial instrument to be sold at a price that is better than the market price available at the time of conclusion of the initial transaction. The decumulator, possibly accompanied by a leverage effect and/or a deactivating barrier mechanism as described above, presents risks comparable to the accumulator. A document supplementing this explanation and providing a numerical illustration is available upon request through the bank.

When the investor does not hold the underlying, he incurs an unlimited risk. In principle, the Bank will ask him to fully cover this risk, and the investor is therefore likely to have to respond to margin calls from the bank depending on market developments.

- **Warnings about the risks involved in forward forex transactions and other forward agreements on currency**

## **01. FORWARD FOREX TRANSACTION**

### **DEFINITION AND CHARACTERISTICS**

A forward forex transaction is a transaction where the parties exchange currencies – buying or selling a particular currency against another currency – at a subsequent date determined by mutual agreement and at a price agreed at the time of the transaction. This price is called the forward price.

Forward forex contrasts with spot forex.

The forex market is an interbank market. This means that non-institutional investors may conclude forex transactions only through a bank.

Transactions take place over the counter, without the intervention of any stock exchange or regulated market. Hence, the forex market is deregulated.

### **OBJECTIVES**

A forward forex transaction may have a hedging objective: by acquiring a currency at a predetermined end date and at a predefined price, the buyer is protected against unfavourable movement in this currency.

In particular, this transaction enables companies active in international trade to control exchange rate risks. A European exporter whose goods are settled in US dollars (USD) can, by means of a forward forex transaction, nullify any unfavourable exchange rate risk by selling dollars forward against euros (buy EUR/sell USD) at an agreed price. An importer is protected against any exchange rate rise that would have the effect of increasing its purchase price.

A forward forex transaction may have a speculative objective: the investor anticipates a favourable movement in one currency against another. He thus intends to make a capital profit and not to be hedged against any risk.

### **DETERMINATION OF THE FORWARD PRICE**

The forward price depends on the spot price and the interest rates of the currencies concerned. It does not represent an anticipation of the forward movement of the currencies.

Thus buying a currency forward against the euro amounts to selling the euro spot and borrowing it over the given period, and to buying the counter currency spot and investing it over the given period.

Selling a currency forward against the euro amounts to buying the euro spot and investing it over the given period, and to selling the counter currency spot and borrowing it over the given period.

### **DISCOUNT/PREMIUM**

Each currency, for a given period, produces or generates interest. The interest rate differential makes it possible to calculate the swap points. If the interest rate of the counter currency is greater than that of the euro, there is a premium. Otherwise there is a discount. The forward price is the spot price plus the swap points in the case of a premium, and minus the swap points in the case of a discount.

### **EXAMPLE**

Spot, EUR 1 = USD 1.3000.

The premium is USD 0.0050.

The forward price is therefore USD 1.3050 (1.3000 + 0.0050).

The investor sells USD 100'000 in three months at a price determined today.

As a result, he will not be hit by any decline in the dollar or profit from any rise.

On expiry, the sale of USD 100'000 will generate a balance of EUR 76'628.35 (USD 100'000/1.3050).

- Warnings about the risks involved in forward forex transactions and other forward agreements on currency

## 01. FORWARD FOREX TRANSACTION

### DEFINITION AND CHARACTERISTICS

A forward forex transaction is a transaction where the parties exchange currencies – buying or selling a particular currency against another currency – at a subsequent date determined by mutual agreement and at a price agreed at the time of the transaction. This price is called the forward price.

Forward forex contrasts with spot forex.

The forex market is an interbank market. This means that non-institutional investors may conclude forex transactions only through a bank.

### ADVANTAGES/DISADVANTAGES OF FORWARD FOREX TRANSACTIONS

#### Benefits

- The exchange rate applied at the end of the transaction, whose amount is defined and date is predetermined, is guaranteed.
- The amount and duration of the transaction are defined on the basis of your needs.
- The premium benefits the seller of the euro and the discount benefits the buyer.
- The investor may, at any time up to two days before expiry, unwind his position if it is favourable.

#### Disadvantages

- The investor must know the precise end date.
- At the agreed end date, the investor has the obligation – and not the right – to sell/buy the currencies concerned. This is an irrevocable commitment. By way of example, if the commercial contract concluded between the importer and the exporter is cancelled, the forward forex transaction will remain valid and must be executed.
- The forex transaction does not make it possible to benefit from the favourable movement in the price of the currency sold (in the above example, the investor does not benefit from any rise in the dollar against the euro).
- If the forex transaction is not conducted with the aim of hedging, it exposes the investor to a forex risk with no limit on the amount.

## 02. FORWARD TRANSACTIONS ON A NON-DELIVERABLE CURRENCY

### DESCRIPTION

The Bank may conduct forward transactions with its Client's on certain currencies that are not deliverable, known as non-deliverable currency forward (or NDF).

The main non-deliverable currencies for which the Bank is likely, depending on market conditions, to handle forward transactions are as follows:

- BRL Brazilian Real
- CNY Chinese R Yuan
- IDR Indonesian Rupiah
- INR Indian Rupee
- KRW South Korean Won
- MYR Malaysian Ringgit
- PHP Philippine Peso
- TWD Taiwan Dollar

## • Warnings about the risks involved in forward forex transactions and other forward agreements on currency

In the same way as for the forward sale or purchase of a deliverable currency against another deliverable currency, forward forex transactions on a non-deliverable currency (hereinafter «NDF») allow the rate of parity between 2 currencies to be established.

However, at maturity the currencies in question are not exchanged, but the net payment is made in the deliverable currency (e.g.: USD or EUR) corresponding to the gap between the forward price agreed and the spot price noted at maturity.

Investors are asked to refer to the “Goals”, “Determination of the forward price” and “Discount/Premium” sections under title I.

### EXAMPLE

#### At the start of the transaction

Spot, 1 EUR = 2.6150 BRL (Brazilian Real)

The 3-month premium is + 0.0250 BRL

The forward price is therefore BRL 2.64 (2.6150 + 0.0250).

The Client sells 500'000 BRL in 3 months at a fixed price today of 2.64 which is 189'393.94 EUR in equivalent Euro value.

#### At maturity:

- **If the rate of the BRL has depreciated:**

Fixing EUR/BRL = 4, thus the equivalent of 500'000 BRL is 125'000 EUR:

The bank pays the Client: 64'393.94 EUR (i.e. 189'393.94 – 125'000)

- **If the rate of the BRL has appreciated:**

Fixing EUR/BRL = 2, thus the equivalent of 500'000 BRL is 250'000 EUR:

The bank receives from the Client: 60'606.06 EUR (i.e. 250'000 – 189'393.94)

If the rate of the BRL versus the EUR is 2.64 at maturity, no flow is paid at maturity.

### 03. SPECIFIC BENEFITS/DRAWBACKS

#### Specific benefits

- The NDF can be used to expose to, or protect against the risk associated with exchange of non-deliverable currencies
- The NDF can be considered to be a speculative tool when it is used for arbitrage of interest rates between a low-yield currency (borrowed by the investor) combined with a high-yield currency (placed by the investor).

#### Specific drawbacks

- The Client may not under any circumstances hold a non-deliverable currency in its account at the Bank.
- As part of a cover transaction, an NDF transaction provides a single exchange price, and does not yield an appreciation of the forward price in favour of the investor.
- The volatility of non-deliverable currencies is generally significantly higher than that of the rates of currencies of the G10 countries (AUD, CAD, CHF, EUR, GBP, JPY, NOK, NZD, SEK, USD). The prices of these non-deliverable currencies may rise or fall sharply, including over a short period. The client thus takes a higher exchange risk by exposing itself to speculative operations when the rate of a non-deliverable currency changes via an NDF transaction.

- Warnings about the risks involved in forward forex transactions and other forward agreements on currency

- The high volatility of the price of non-deliverable currencies and the interest rates related to these currencies, as well as the lower liquidity of the NDF interbanking market, may considerably force up the cost of closure of the NDF position of a Client before maturity, when market conditions allow the Bank to offer such a closure. The Bank cannot guarantee access in all circumstances to a secondary market to close an NDF early.
- The price of non-deliverable currencies and the product of NDFs at maturity may in particular be influenced by the political risk (monetary policy, exchange rate control, impossibility of obtaining an exchange rate, other legal and regulatory changes) which must be considered before concluding an NDF transaction.
- For the purposes of overnight calculation of the Risk Limit agreed between the Bank and the Client, the Bank will require a margin for NDFs that may be up to 100% of the nominal amount of the transaction. This rate will generally be higher than that used for forward forex transactions between the currencies of the G10 countries and will thus limit the magnitude of NDF transactions likely to be carried out by the Bank.
- Furthermore, NDFs carry the drawbacks mentioned previously concerning forward forex transactions.

