



UNION BANCAIRE PRIVÉE

CHARACTERISTICS AND RISKS OF CERTAIN FINANCIAL OPERATIONS

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OF CERTAIN FINANCIAL OPERATIONS**

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I. INTRODUCTION

- 1 Union Bancaire Privée (hereafter “UBP”), whose registered office is in Geneva, is the principal bank of the UBP Group, with an international network of financial and banking branches and subsidiaries. The UBP Group ensures it complies with the laws of Switzerland and of all countries in which it operates, in particular as regards its duty to provide information on investment risk.
- 2 Without claiming to cover every possible situation, this brochure sets out to inform clients of UBP Group entities on the risks of investing in the main types of financial instrument.
- 3 Other documents issued by the UBP Group (see below) set out the client’s situation as regards applicable local laws and regulations.
- 4 The fiscal and legal implications of investing in securities (e.g. the obligation to declare) are not covered by this brochure. If necessary, expert advice should be sought.
- 5 Please read this brochure carefully and consult the UBP Group entity which handles your account if you have any further questions.

II. DÉFINITIONS

2.1 Financial intermediary

- 6 The term “financial intermediary” refers to the UBP Group entity with which you conduct business relations.

2.2 Financial instrument

In this document, the term “financial instrument” covers the following elements:

- 7 ■ The concept of “standardised security suitable for mass trading” within the meaning of Article 4 SESTO (Ordinance on Stock Exchanges and Securities Trading), namely standard securities and rights suitable for large-scale distribution (equities, bonds, units of investment funds, derivatives, etc.) which are offered to the public or sold to more than twenty clients in uniform units and standard form.
- 8 ■ The concept of “financial instrument” which, within the meaning of Annex C MiFID, covers
 - transferable securities
 - money market instruments,
 - units in collective investment undertakings,
 - options, futures, swaps, forward rate agreements and any other derivative contracts relating to securities, currencies, interest rates and yields, and other derivative instruments, financial indices or financial measures which may be settled physically or in cash,
 - options, futures, swaps, forward rate agreements and any other derivative contracts relating to commodities that must be settled in cash or may be settled in cash at the option of one of the parties (otherwise than by reason of a default or other termination event),
 - options, futures, swaps, and any other derivative contract relating to commodities that can be physically settled provided that they are traded on a regulated market and/or a multilateral trading system (hereafter: “MTF”),
 - options, futures, swaps, forwards and any other derivative contracts relating to commodities, that can be physically settled, not being for commercial purposes, which have the characteristics of other derivative financial instruments, having regard to whether, inter alia, they are cleared and settled through recognised clearing houses or are subject to regular margin calls,

- derivative instruments for the transfer of credit risk,
- financial contracts for differences,
- options, futures, swaps, forward rate agreements and any other derivative contracts relating to climatic variables, freight rates, emission allowances or inflation rates or other official economic statistics that must be settled in cash or may be settled in cash at the option of one of the parties (otherwise than by reason of a default or other termination event), as well as any other derivative contracts relating to assets, rights, obligations, indices and measures which have the characteristics of other derivative financial instruments, having regard to whether, inter alia, they are traded on a regulated market or an MTF, are cleared and settled through recognised clearing houses or are subject to regular margin calls.

2.3 Derivatives

- 9 Derivatives are financial instruments for which the price is derived from that of an underlying or basket of underlyings: assets (equities, bonds, units of mutual funds, precious metals and other commodities), benchmark rates (exchange rates, interest rates, indices), the occurrence of an event (credit incident, natural disaster), or derivatives (notes, certificates, warrants, futures, forwards, options, swaps).
- 10 For instance, in the case of an equity option, the equity is the underlying from which the option derives its value. The following chapters will illustrate the different types of derivatives, including forwards and structured products as well as options and swaps.

III. SPECIFIC LOCAL RULES

A. SWISS ENTITIES

- 11 The Federal Stock Exchanges and Securities Trading Act (SESTA) requires securities dealers to provide information to their clients on the risks linked to a **type of transaction**.
- 12 The obligation to provide information varies according to the **client's experience and financial knowledge**. It covers types of transaction involving potentially higher risks or having a complex risk profile, not the specific risk incurred in an individual transaction.

B. EUROPEAN ENTITIES

- 13 European Union Member States have been required to transpose into their own legislation the provisions of the European Directive on Markets in Financial Instruments (MiFID). UBP's website (www.ubp.ch), under its "Legal" heading, contains information on the effects of the MiFID on the relations of clients with the European entities of the UBP Group, depending on whether they are classified as "eligible counterparties", "professional clients" or "retail clients".
- 14 Clients of the European entities of the UBP Group should consult the documentation provided, and in particular the document "General Information", and contact their relationship manager if they have any further questions.

C. OTHER ENTITIES

- 15 Clients of entities of the UBP Group that are neither in Switzerland nor in Europe should contact their relationship manager directly to discuss any questions concerning the effects of local regulations on their dealings with the Group. If necessary, additional information will be provided by the entity with which they are dealing.

IV. GENERAL RISKS OF INVESTING IN FINANCIAL INSTRUMENTS

4.1 Normal risks

- 16 The term “normal risks” refers to the risks attached to widely-used financial instruments, such as equities, bonds and collective capital investments (e.g. units in mutual funds). These normal risks can also affect the underlyings of derivatives.

Normal risks include:

- **Counterparty risk**

- 17 The debtor (issuer) can encounter financial difficulties and become insolvent (credit and default risks).

- **Country risk**

- 18 Country risk arises if a country restricts securities trading, for instance by imposing economic sanctions or currency restrictions.

- **Settlement risk**

- 19 Settlement risk occurs when the client is required to pay the purchase price of a security in advance but does not actually receive the security until later. In this event, the risk is that the securities are delivered late or not at all, despite the fact that they have already been paid for. Settlement risk also arises where securities which have been sold are delivered before the sale proceeds are received. Settlement risks mainly occur in emerging markets (see 256).

- **Custody risk**

- 20 Financial instruments can be held either in Switzerland or abroad. Generally, they are held where they are most frequently traded, and are governed by the regulations that apply in the country concerned. In the case of the insolvency of a bank, Swiss law stipulates that financial instruments held on deposit are subject to a reservation of title in the client's favour and do not form part of the bankruptcy assets. However, insolvency proceedings can delay their transfer. If a third-party custodian becomes insolvent, the law in many foreign countries provides, like Swiss law, that the financial instruments deposited with that custodian by the bank are protected. In less advanced markets (see 241 ff.), however, financial instruments deposited may be included in the bankruptcy assets.

- **Liquidity risk**

- 21 Liquidity risk is the risk that it is impossible to redeem an investment at the desired time and price. When a market is in this condition, it is said to be ‘illiquid’. Liquidity risk occurs especially with shares in unlisted or poorly-capitalised companies, investments with sales restrictions, and certain structured products.

- 22 The Stock Exchange Act does not require the Bank to inform you about risks associated with investments in alternative (non-traditional) instruments or in emerging or developing markets. Given the increasing importance of these investments, the risks involved are explained in Section Two of this brochure (see 241 ff.).

4.2 Risks when dealing in negotiable securities

What do you particularly need to bear in mind when carrying out securities transactions?

- 23 Securities, and especially derivatives, entail financial risks. Derivatives are often composed of a number of financial instruments, which sometimes makes them difficult to understand. This is particularly true for “exotic” options. This brochure explains these financial instruments and their associated risks. However, it is no substitute for the product descriptions provided by issuers and financial intermediaries. If you have any further questions, please consult your bank.

Can risks be unlimited?

- 24 There are basically two distinct types of **financial instruments**: those with **limited risk** and those with **unlimited risk**. The purchase of equities or options involves limited risk. At worst, you will lose the entire amount of your invested capital and not make a profit.
- 25 **CAUTION: Certain types of derivatives can require an additional outlay of capital over and above the original investment. The obligation to respond to margin calls can amount to several times the purchase price of the securities. Unlimited risk is particularly associated with:**
- selling uncovered call options,
 - selling forwards and futures.
- 26 When selling a put option, the seller incurs a limited risk equal to the strike price of the underlying.

4.3 Transactions involving special risks

Options

What are your rights and duties in an option transaction?

- 27 As the **buyer** of an **option**, you have the right to buy a specified amount of an underlying from the **seller (call option)** or sell it to the **seller (put option)** at a predefined price (**strike price**) up until a set time (**expiration date**). The price you pay for this right is called the **premium**.
- 28 As the **seller (writer)** of an option, you must sell the underlying to the buyer at the strike price (call option) or buy the underlying from him/her at the strike price (put option) up until the expiration date, irrespective of the market value of the underlying asset at the time, if he/she chooses to exercise the option.

What is the “leverage effect” in the context of options?

- 29 The price of an option is closely linked to that of the underlying. Any change in the market value of the underlying will result in a greater change in the price of the option. This is termed the **leverage effect**. It means you participate disproportionately with a higher coefficient in any rise or fall in the market value of the underlying.

Which underlyings can options be based on?

The commonest underlyings for options are:

- 30
- assets such as equities, bonds, units in mutual funds, precious metals and other commodities;
 - benchmark rates such as currencies, interest rates and indices;
 - derivatives;
 - any item whether tangible or intangible (inflation, unemployment, the weather, natural risks, etc.), or
 - any combination of the above.

What are “American-style” options?

- 31 “American-style” options can normally be exercised on any trading day up to the expiration date.

What are “European-style” options?

- 32 “**European-style**” options can only be exercised on the expiration date, in other words the date set out in the contract. This does not, however, normally affect their tradability on the secondary market (e.g. on a stock exchange).

When are options settled physically, and when are they settled in cash?

- 33 Where a call option provides for **physical settlement**, you can require the seller of the option (writer) to deliver the underlying asset when you exercise the option. With a put option, the writer is obliged to buy the underlying asset from you.
- 34 If an option provides for **cash settlement**, you are only entitled to a sum of money corresponding to the difference between the strike price and the current market value of the underlying asset.

When is an option

- 35 ■ **in the money**,
■ **out of the money**,
■ **at the money?**

A call option is **in the money** if the current market value of the underlying asset is above the strike price. A put option is in the money if the current market value of the underlying asset is below the strike price. An option that is in the money is said to have an **intrinsic value**.

- 36 A call option is **out of the money** if the current market value of the underlying asset is below the strike price. A put option is out of the money if the current market value of the underlying asset is above the strike price. In this case, the option has **no intrinsic value**.
- 37 If the current market value of the underlying asset is the same as the strike price, the option is **at the money**. In this case, it has **no intrinsic value**.

What determines the price of an option?

- 38 The price of an option depends on its intrinsic value and on what is referred to as the **time value**. The latter depends on a variety of factors, including the remaining life of the option and the volatility of the underlying. The time value reflects the chance that the option will be in the money. It is higher for options with a long duration and a very volatile underlying and for options that are at the money.

What types of options are there?

- 39 **Warrants** are options in securitised form that are traded on an exchange or over the counter (OTC).
- 40 **Exchange Traded Options** are non-securitised, but are traded on an exchange.
- 41 **OTC (Over-the-Counter) options** are neither securitised nor traded on-exchange. They are agreed directly off-exchange between the seller and the buyer. If you wish to cancel (**close out**) an OTC option before the expiration date, you must make a corresponding offsetting trade with your counterparty or with another counterparty. OTC options with precious metals and currencies as their underlying are offered publicly as standardised products. **Tailor-made OTC options**, by contrast, are specially created for individual investors.

What is "margin cover"?

- 42 If you sell an option, you have to deposit either an amount of the underlying asset or another form of collateral for the entire duration of the contract. The level of this collateral or **margin** is determined by the financial intermediary. The exchange stipulates a minimum margin for traded options.
- 43 **CAUTION: If the margin cover proves insufficient, the financial intermediary can require you to provide additional collateral (via a margin call).**

What risks do you face as the buyer of an option?

- 44 Generally speaking, if the market value of the underlying asset falls, so does the value of your **call option**. The value of your **put option** tends to fall if the underlying asset rises in value. Normally, the less your option is in the money, the larger the fall in the option's value. In such cases, value reduction normally accelerates close to the expiration date.

45 The value of your call option can drop even when the value of the underlying remains unchanged or rises. This can happen as the time value of your option falls or if supply and demand factors are unfavourable. Put options behave in precisely the opposite manner.

46 **CAUTION: You must therefore be prepared for a potential loss in the value of your option, or for it to expire entirely without value. In such a scenario, you risk losing the whole of the premium you paid.**

What risks do you face as the seller (writer) of a covered call option?

47 If, as writer of a call option, you already have a corresponding quantity of the underlying at your disposal, the **call option** is described as **covered**. If the current market value of the underlying exceeds the strike price, your opportunity to make a profit is lost since you must deliver the underlying to the buyer at the strike price, rather than selling the underlying at the (higher) market value. You must have the underlying assets freely available as long as it is possible to exercise the option, i.e. they may not, for example, be blocked by being pledged for other purposes. Otherwise, you are essentially subject to the same risks as when writing an uncovered call option (see below).

What risks do you face as the seller (writer) of an uncovered call option?

48 If, as writer of a call option, you do not have a corresponding quantity of the underlying at your disposal, the **call option** is described as **uncovered**. In the case of options with physical settlement, your potential loss amounts to the price difference between the strike price paid by the buyer and the price you must pay to acquire the underlying assets concerned. Options with cash settlement can incur a loss amounting to the difference between the strike price and the market value of the underlying.

49 **CAUTION: Since the market value of the underlying can move well above the strike price, your potential loss cannot be determined and is theoretically unlimited.**

50 As far as American-style options in particular are concerned, you must also be prepared for the fact that the option may be exercised **at a highly unfavourable time when the markets are against you**. If you are then obliged to make physical settlement, it may be very expensive or even impossible to acquire the corresponding underlying assets.

51 American options on equities with physical delivery are liable to be exercised as the dividend date approaches.

52 You must be also aware that your potential losses can be far greater than the value of the underlying assets you lodged as collateral (margin cover) either when entering into the contract or thereafter.

What risks do you face as the seller (writer) of a put option?

53 As the writer of a put option, you must be prepared for potentially substantial losses if the market value of the underlying falls below the strike price you have to pay the seller. Your potential loss corresponds to the difference between these two values.

54 As the writer of an American-style put option with physical settlement, you are obliged to accept the underlying assets at the strike price if the buyer exercises the option, even though it may be difficult or impossible to sell the assets and may well entail substantial losses.

55 **CAUTION: Your potential losses can be far greater than the value of any underlying assets you may have lodged as collateral (margin cover). You could in a worst case lose your entire capital invested.**

What is a covered option?

- 56 With a **covered option (sale of a covered call)**, you purchase an underlying (equity, bond or currency) and simultaneously write a call option on that same underlying. In return, you are paid a premium, which limits your loss in the event of a fall in the market value of the underlying asset. By the same token, however, your potential return from any increase in the asset's market value is limited to gains up to the option's strike price. **Traditional covered options** require that the underlying asset be lodged as collateral, which makes **you the covered writer**.
- 57 Synthetic **covered options** are based on the idea of replicating traditional covered options. However, this is achieved by means of only one transaction. Both the purchase of the underlying and the writing of the call option are carried out synthetically using derivatives. The purchase price of such a product is identical to that of the underlying, less the premium received for the sale of the call option. Hence, the synthetic product is sold more cheaply than its underlying.

What are the risks of a covered option?

- 58 Covered options do **not contain a hedge against falls in the market value of the underlying**. However, by writing a call option (traditional covered option) or by calculating the return from the sale of a call option into the product price (synthetic covered option), any loss in market value of the underlying has less impact than it would in the case of a direct investment. In effect, the option premium thereby limits any loss in the market value of the underlying. Either cash settlement or physical delivery of the underlying takes place on the expiration date. If the market value of the underlying on expiration is higher than the strike price, the holder of an option with cash settlement is paid a specified cash amount as settlement.
- 59 **CAUTION: If, however, the market value of the underlying is lower than the strike price, the holder of an option with physical settlement receives physical delivery of the underlying asset. In this case, the option holder bears the full risk associated with the underlying.**

What are option strategies?

- 60 If you acquire two or more options, based on the same underlying, which differ in either the option type (call or put), the quantity, the strike price, the expiration date or the type of position (long or short), this is referred to as an **option strategy**.
- 61 **CAUTION: Given the large number of possible combinations, we cannot go into detail here about the risks involved in any particular case. Before entering into any such transaction, be sure to consult your financial intermediary about the particular risks involved.**

What are exotic options?

- 62 Unlike the "plain vanilla" put and call options described above, exotic options are linked to additional conditions and agreements. Exotic options come in the form of tailor-made OTC options or as warrants.
- 63 Given the special composition of **exotic options**, their price movements can vary markedly from those of their "plain vanilla" cousins.
- 64 **CAUTION: You must be aware that larger transactions can trigger price movements even shortly before expiration and that these can render an option worthless. Before buying or selling any exotic options, be sure to seek comprehensive advice about the particular risks involved.**
- 65 There is no limit to the possible structures for exotic options. We cannot describe in full here the risks involved in any particular case.

66 The examples of exotic options listed below can be broadly divided into two categories: path-dependent options and options on more than one underlying.

What are path-dependent options?

67 Unlike “plain vanilla” options, for **path-dependent options**, it is not just when the option expires or is exercised that the market value of the underlying is important. You also need to take into account fluctuations in the market value of the underlying during the life of the option when contemplating such an investment. The following are examples of path-dependent options:

68 – Barrier options

Your exercise rights for **knock-in barrier options** only arise if the market value of the underlying reaches a fixed threshold (**barrier**) within a specified period. Exercise rights for **knock-out barrier** options expire if the market value of the underlying reaches the specified barrier during the given time period.

69 If this barrier is between the market value of the underlying at the time the option was entered into and its strike price, it is referred to as a **kick-in/kick-out** barrier option.

70 **Double-Barrier options** have both an upper and a lower barrier and may take the form of knock-in and knock-out barrier options.

71 **CAUTION: When buying a barrier option, you must be aware that your exercise rights only arise when the market value of the underlying reaches the barrier (knock-in/kick-in option) or that they expire irrevocably when that barrier is reached (knock-out/kickout option).**

72 – Payout options

Payout options accord you the right to payment of a fixed amount agreed in advance.

73 In the case of a **digital** (otherwise known as “**binary**”) **option**, you receive payment if the market value of the underlying reaches a fixed value once during a specified time period (**one-touch digital option**) or precisely on the day of expiration (**all-or nothing option**). For the one-touch digital option, payment occurs either immediately the barrier is reached or on the date of expiration (**lock-in option**).

74 With **lock-out options**, you only receive the fixed payment if the market value of the underlying does not reach the agreed barrier during a specified time period.

75 **CAUTION: If you sell a payout option you owe the fixed amount if the barrier is reached, regardless of whether or not the option is in the money when exercised or on the expiration date, or to what extent. This means that the amount you owe can be considerably larger than the option’s intrinsic value.**

76 – Asian options

For Asian options, an average value is derived from the market value of the underlying over a specified time period. This average is used to determine the underlying’s value for an **average-rate option** and to calculate the strike price for an **average-strike option**.

77 **CAUTION: The calculation of an average value for the underlying in the case of the average-rate option can result in the value of the option on the expiration date being considerably lower for the buyer and considerably higher for the writer than the difference between the strike price and the current market value on expiry.**

78 **CAUTION: For an average-strike option, the average strike price of a call option can be considerably higher than the price originally set. For an equivalent put option, the strike price can similarly be lower than the price originally set.**

79 – **Lookback options**

With a **lookback option**, the market value of the underlying is recorded periodically over a specified time period.

80 For a **strike-lookback option** the lowest value (call option) or the highest value (put option) of the underlying becomes the strike price.

81 The strike price remains unchanged for a **price-lookback option**, with the highest value (call option)/lowest value (put option) being used in calculating the option value of the underlying.

82 **CAUTION: For lookback options, both the calculated strike price and the calculated value of the underlying can vary considerably from the market prices prevailing on the expiration date. If you sell an option of this type, you must be aware that it will always be exercised at the most unfavourable value for you.**

83 – **Contingent options**

When you buy a **contingent option** you must pay the premium only if the market value of the underlying reaches or exceeds the strike price during the life of the option (American-style option) or on the expiration date (European-style option).

84 **CAUTION: You will have to pay the entire premium even if the option is only just at the money or just in the money.**

85 – **Cliquet and Ladder options**

For **cliquet options** (also known as **ratchet options**), the strike price is modified for the following period, normally at regular intervals, in line with the market value of the underlying. Any intrinsic value of the option is locked in. All lock-ins arising over the entire life of the option are accumulated.

86 For **ladder options**, these modifications take place when the underlying reaches specified market prices, rather than at regular intervals. Normally, only the highest intrinsic value is locked in. In rare cases, all the intrinsic values recorded are added together.

87 **CAUTION: If you sell a cliquet option, you are required on the expiration date to pay the buyer all the accumulated lock-ins in addition to any intrinsic value of the option. If you sell a ladder option you must pay the buyer the highest lock-in amount, which can be considerably higher than the option's intrinsic value on the expiration date.**

What are options on more than one underlying?

88 Examples of options on more than one underlying are:

– **Spread and outperformance options**

Both spread and outperformance options are based on two underlyings. With a **spread option**, the absolute difference in movement between the two underlyings forms the basis for calculating the option's value. By contrast, the value of an **outperformance option** is based on the relative difference, i.e. the percentage outperformance of one underlying compared to the other.

89 **CAUTION: Even if the underlying performs positively, the difference between the underlyings may be equal or lower in absolute as well as relative terms, thus having a negative impact on the value of the option.**

90 – **Compound options**

Compound options have an option as their underlying, i.e. they are options on options.

91 **CAUTION: Compound options can have an especially large leverage effect. If you sell an option of this type, you can be faced with very substantial obligations.**

92 – Credit default options

With a credit default option, a credit risk of the original risk-taker (risk seller) is transferred to a third party (risk buyer), who receives a premium in return. If the defined credit event occurs, the risk buyer is obliged to effect a cash settlement or take on the non-performing loan (or another delivery obligation) by way of physical settlement at a previously determined price. Credit default options are a form of credit derivatives.

- 93 **CAUTION: The risk of chain reactions on the credit market is high and can easily be underestimated. There is also the risk that lack of liquidity will lead to price distortions when volumes are low. This may mean that the investment can only be sold at a low price, longer term or even not at all.**

SWAPS

What is a swap?

- 94 A swap is a contract between two counterparties negotiated over-the-counter to exchange future cash flows over a specified period; it only involves an exchange of the difference in value between a fixed and a variable amount.

What duties and obligations do you have in a swap transaction?

- 95 The **floating amount payer** has to pay the variable amount of the swap. The **fixed amount payer** has to pay the fixed amount of the swap.
- 96 The cash flows (variable and fixed amounts) are based on a theoretical principal sum (the **notional**) on **one or several** predetermined **dates** during the life of the contract, or on the **expiration** date.

What are the possible underlyings for swaps?

- 97 The underlyings for a swap can be:
- assets such as equities, bonds, precious metals and other commodities;
 - benchmark rates such as exchange rates, interest rates or indices;
 - derivatives;
 - any tangible or intangible item (inflation, unemployment, the weather, natural risks, etc.), or
 - any combination of the above.

When does physical settlement take place and when is there cash settlement?

- 98 For swaps with **physical settlement**, you can require the swap counterparty to deliver the underlying on expiration, or on the payment dates if there are several of them.
- 99 When the swap contract stipulates **cash settlement**, you merely receive a sum of money equal to the difference between the fixed amount and the floating amount (these amounts being calculated on the notional principal sum).

What are the different types of swap?

- 100 The most common swap contracts are:
- a 'plain vanilla' interest rate swap which exchanges the interest on a notional variable-rate loan or deposit for interest at a fixed rate;
 - a currency swap, in which there is an exchange of the interest and principal on the maturity of a loan or deposit in one currency for its value in another;
 - a credit default swap, in which there is an exchange of protection on the credit risk of the issuer of a bond for periodic and regular payments over the life of the swap;

- a commodity swap, which exchanges a fixed price, calculated when the swap contract is signed, for a variable price, normally calculated as the average of an index for a future period.

101 However, there are many other types of swap, including:

- a cross-currency swap, or currency interest rate swap (CIRS) in which there is an exchange of medium- or long-term interest rates in two different currencies;
- a standard basis swap, which exchanges two variable rates indexed to short-term benchmark rates in the same currency or in two different currencies;
- a constant maturity interest rate swap, which allows a variable rate indexed to a short-term interest rate to be exchanged for another variable rate indexed to a medium- or long-term rate with a constant maturity (i.e. the maturity of the interest rate is repeatedly converted into medium or long term);
- an asset swap is a combination of two products: a fixed-rate bond and a corresponding swap (an over-the-counter contract with an exchange of fixed interest for variable interest between two counterparties in accordance with a predetermined timetable). The fixed leg of the swap replicates the precise characteristics of the bond so that the asset swap enables a synthetic variable-rate bond to be created out of a fixed-rate bond.
- an equity swap;
- a variance swap and volatility swap pay the volatility of an underlying;
- a correlation swap pays the correlation of a basket of assets – i.e. correlation either between the assets themselves or against a benchmark;
- an inflation swap, in which a fixed or variable rate is swapped for an inflation rate;
- a total-return swap, which exchanges the income and market risk of the value of two different assets over a given period. For example: one leg of the swap is a variable short-term rate, the other is a fixed amount linked to any type of financial investment (an index, equity, bond, etc.).

What is a margin cover?

102 When you sign a swap contract, you will have to deposit collateral for the entire duration of the contract in the form of a corresponding number of underlyings or other assets to cover the appreciation or depreciation of that contract or its underlying. The amount of the collateral required (the **margin**) is defined by the counterparty.

103 **CAUTION: If the margin cover proves insufficient, the counterparty can require you to provide additional collateral (via a margin call).**

What risks do you run as a party to a swap contract?

104 The principal risk in a swap is counterparty risk. However, margin calls or the deposit of collateral can virtually eliminate this risk.

105 Counterparty risk is the potential loss incurred by the party to the swap as a result of a future default of his counterparty. This risk covers two intrinsically different risks: settlement risk and credit risk.

106 Settlement risk is involved in any market transaction involving a simultaneous exchange of financial flows. Settlement risk arises from the failure to make the simultaneous transfers over the time required to complete the transaction.

107 Credit risk can be defined as the total loss incurred in a transaction if the counterparty defaults. It is also sometimes referred to as 'signature risk'.

108 However, in a floating rate swap (i.e. one in which payment of the financial flows is made on regular predetermined dates and not on maturity), in the event of default by the counterparty, the only loss will be the latest performance, as the non-defaulting party will stop paying if the (defaulting) counterparty does not meet its contractual obligations.

109 **CAUTION: For each type of swap, there is a specific risk linked to the underlying or to the financial flows exchanged. Your bank will be pleased to provide any further information.**

110 For instance, a variable-rate borrower wishes to fix his cost of borrowing, and signs a swap contract as the payer of a fixed rate. Having previously been liable for a variable rate, he is now liable for a fixed rate, regardless of the level of the variable rate. Thus, the borrower has hedged his risk of an increase in the cost of borrowing. The risk for the party paying the fixed rate is of not receiving the benefit of any fall in the variable rate and therefore missing the opportunity of cheaper borrowing. Conversely, the counterparty paying the variable rate bears the risk of an increase in interest rates.

FORWARDS AND FUTURES

What obligations do you have with forwards and futures?

111 With **forwards** and **futures** you undertake to deliver or take delivery of a defined quantity of an underlying on a specified expiration date at a price agreed on the contract date. Unlike with options, which (for the buyer at least) only give rise to rights, forwards and futures involve both parties entering into obligations. You do not have to pay a premium when the contract is concluded.

112 **CAUTION: Forwards and futures can involve special risks. You should therefore only make investments of this type if you are familiar with this type of instrument, have sufficient liquid assets and are able to absorb any losses that may arise.**

What is the difference between futures and forwards?

113 **Futures** are traded on an exchange. They take the form of contracts in which the quantity of the underlying and the expiration date are standardised.

114 **Forwards** are not traded on an exchange; hence they are referred to as OTC (over-the counter) forwards. Their specifications may also be standardised; otherwise they may be individually agreed between the buyer and seller.

What underlyings can provide the basis for forwards and futures?

115 The **most common underlyings** for forwards and futures are:

- assets (equities, bonds, precious metals and other commodities);
- benchmark rates such as currencies, interest rates and indices;
- any asset.

What is a margin?

116 When you buy or sell (short) an underlying asset on the futures market, you must supply a specified **initial margin** when entering into the contract. This is usually a percentage of the total value of the contracted instruments. In addition, a **variation margin** is calculated periodically during the life of the contract. This corresponds to the book profit or loss arising from any change in value in the contract or underlying instrument. The way in which the variation margin is calculated will depend on the rules of the exchange concerned and/or the conditions of the contract.

117 As the investor, you are obliged to deposit the required initial and variation margin cover with the financial intermediary for the entire life of the contract.

118 **CAUTION: In the event of a book loss, the variation margin can be several times larger than the initial margin.**

How is a transaction closed out?

119 As the investor, you are entitled to close out the contract at any time prior to the expiration date. How this is done depends on the type of contract or stock exchange practice. You either “sell” the contract or agree an offsetting trade with identical terms. Concluding such an offsetting trade means that the obligations to deliver and receive cancel one another out, but the initial contract is not cancelled: two contracts with opposite strategies are open.

120 **CAUTION: If you do not close out the contract prior to the expiration date, you and the counterparty must settle it.**

How is the transaction settled?

121 If the underlying in your contract is a **physical asset**, settlement is achieved by physical delivery or a cash payment. Generally, the asset is physically delivered. Only in exceptional cases do the contract provisions or stock exchange practice call for cash settlement. All other fulfilment specifications, especially the definition of the place of fulfilment, can be found in the relevant contract provisions.

122 The difference between **physical delivery** and **cash settlement** is that with physical delivery, underlyings amounting to the entire contractual value must be delivered, whereas with cash settlement, only the difference between the agreed price and the market value on settlement needs to be paid. This means that you need more funds available for physical delivery than for cash settlement.

123 If the underlying in your contract is a **reference rate** or **benchmark**, fulfilment by physical delivery is not permitted (except for currencies). Instead, settlement is always in cash, except for futures on benchmark rates where, at the end of the contract, there is a physical delivery of bonds (the least expensive, regardless of the reference currency or issuer) in accordance with the terms of the contract.

What special risks do you need to bear in mind?

124 For **forward sales**, you must deliver the underlying at the price originally agreed even if its market value has since risen above the agreed price. In such a case, you risk losing the difference between these two amounts.

125 **CAUTION: Theoretically, there is no limit to how far the market value of the underlying can rise. Hence, your potential losses are similarly unlimited and can substantially exceed the margin requirements.**

126 **CAUTION: For forward purchases, you must take delivery of the underlying at the price originally agreed even if its market value has since fallen below the agreed price. Your potential loss corresponds to the difference between these two values. Your maximum loss therefore corresponds to the originally agreed price. Potential losses can substantially exceed the margin requirements.**

127 In order to limit price fluctuations, an exchange may set price limits for certain contracts. Find out what price limits are in place before effecting forward or futures transactions. This is important since closing out a contract can be much more difficult or even impossible if a price limit of this type is reached.

128 **CAUTION: If you sell forward an underlying which you do not hold at the outset of the contract, this is referred to as a short sale. In this case, you risk having to acquire the underlying at an unfavourable market value in order to fulfil your obligation to effect delivery on the contract's expiration date.**

What special factors apply to OTC forwards?

- 129 The market for standardised **OTC forwards** is transparent and liquid. Hence, contracts can normally be closed out without difficulty. There is no actual market for OTC forwards agreed individually, and hence the positions they entail may only be closed out with the agreement of the counterparty.

What special factors apply to combinations?

- 130 Since **combinations** comprise a number of elements, closing out individual elements can considerably alter the risks inherent in the overall position. Before entering into any such transaction, be sure to consult your financial intermediary about the particular risks involved.
- 131 Given the many possible combinations, we cannot go into detail in this brochure about the risks involved in any particular case. Before making a purchase, be sure to seek comprehensive advice about these risks.

STRUCTURED PRODUCTS

What are structured products?

- 132 Structured products are issued either publicly or privately. Their **redemption value depends on the performance of one or more underlyings**. They may have a fixed or unlimited term and consist of one or more components. They can be static or actively managed by the issuer of the structured product or by a third party. Dividends may or may not be reinvested.

What are the common types of structured products?

- 133 With such large numbers of structured products available on the market, this brochure does not claim to cover all risks of investing in this type of instrument. We illustrate below the characteristics and risks associated with investment in the structured products most frequently used by our Group.
- 134
- capital protection products (see 116 ff. below);
 - yield enhancement products (see 126 ff. below);
 - participation products (see 130 ff. below);
 - leverage products (see 135 ff. below).

Can products of this type be traded on an exchange?

- 135 Structured products may be listed for trading **on an exchange**, but do not have to be.

Can you sell a structured product?

- 136 The tradability of a structured product depends on whether the issuer or a market maker is prepared to make a price. Even if they are, **liquidity risks** can still arise. If the market is not liquid, you run the risk of having to either hold the financial instrument until the end of its term or sell it during the term at an unfavourable price. It can also be difficult or impossible to determine a fair price or even compare prices at all, as there is often only one market maker.

What is the issuer risk?

- 137 You bear the risk that the debtor of a structured product may become insolvent (**issuer risk**). The instrument's value is therefore dependent not only on the performance of the underlying asset but also on the creditworthiness of the issuer, which may change over the term of the structured product. In the event of a default of the issuer, all or part of the investment may be lost, regardless of the type of product.

What special risks do you need to bear in mind?

- 138 Every structured product has its **own risk profile**, and the risks of its individual components may be reduced, eliminated or increased. In particular, it may profit to different degrees from rising, constant or falling market values of the underlying, depending on the product involved.
- 139 **CAUTION: It is extremely important to find out exactly what the risks are before acquiring a product of this kind. This information can be found in, for example, the issue documents or the product description concerned.**

Are structured products covered by the European UCITS Directive?

- 140 Structured products are **not categorised as collective investments** under the European UCITS Directive. Unlike with collective investments, the issuer is liable with his or her own assets (as is any guarantor, to the extent of a guarantee they have provided), and there is no backing from specially protected assets. You therefore need to bear in mind that in addition to a potential loss resulting from a decline in the market value of the underlyings (market risk), you may in the worst case lose your entire investment because the issuer or guarantor becomes insolvent (issuer or guarantor risk).

Do you have an entitlement to voting rights and dividends?

- 141 You do not normally have any entitlement to voting rights or dividends if you buy a structured product. Some structured products provide for the payment or reinvestment of dividends.

CAPITAL PROTECTION PRODUCTS

What types of capital protection are there?

- 142 Some structured products offer capital protection. The level of this protection is fixed by the issuer when the product is issued and indicates the percentage of the **nominal value** that will be repaid to the investor on expiration. However, capital protection generally only applies at the end of the term and may, depending on the product conditions, be (far) lower than 100% of the invested capital.
- 143 **CAUTION: Some structured products offer only conditional capital protection, which can be lost if the value touches, falls below or rises above a predefined threshold (barrier, knockout level). Repayment is then dependent on the performance of one or more underlyings.**

What are structured products with capital protection?

- 144 **Structured products with capital protection** consist of two elements, such as a fixed income investment (especially a bond or a money market investment) and an option. This combination enables the holder to participate in the performance of one or more underlyings (via the option or **participation component**) while at the same time limiting potential losses (via the fixed-income investment or **capital protection component**). The capital protection component may only cover a portion of the capital invested.

What is the purpose of the capital protection component?

- 145 The **capital protection component** determines the minimum repayment you receive on expiration, regardless of how the participation component performs.

What does the capital protection relate to?

- 146 The capital protection is linked to the nominal value rather than the issue price or purchase price. Hence, if the issue/purchase price you pay exceeds the nominal value, **only the nominal value** is capital-protected. The protection of your capital outlay drops accordingly. If, however, the issue/purchase price is less than the nominal value, the protection of your capital outlay rises accordingly.

Is the invested capital fully protected?

- 147 The capital protection component can be well under 100% of the capital invested, depending on the product. Capital protection does not therefore mean 100% repayment of nominal value or the purchase price for all products. Structured products with capital protection generally offer lower returns than direct investments in the underlying, as the capital protection costs money.

Does the capital protection still apply if you sell the product during its term?

- 148 **CAUTION: If you wish to sell a structured product with capital protection before it expires, you may receive less than the capital protection component as the capital protection only applies if you keep the product until the redemption date.**

What is the purpose of the participation component?

- 149 The **participation component** determines how you benefit from price movements in the underlying(s) when you buy a structured product. In other words, it fixes the level of your potential return over and above the capital protection component. Some structured products with capital protection offer only a limited potential participation (those with a cap); some (those without a cap) offer unlimited potential participation. Others require the market value of the underlying to touch, rise above or fall below a specific barrier before you can make a profit. There are numerous variations in the participation component. You must read the documentation carefully and/or refer to your adviser for an explanation of how to calculate performance on maturity.
- 150 The risk on the participation component is **the same as that on the corresponding option or combination of options**. Depending on the movements in the market value of the underlyings, the participation component may therefore be zero.

What is the maximum possible loss?

- 151 **CAUTION: Your maximum loss on a structured product with capital protection is limited to the difference between the amount invested and the amount protected, provided you continue to hold the product until expiration. You may also miss out on a profit due to the fact that full or partial repayment of the capital is guaranteed but no income (interest) is paid. Please be aware that there is also issuer risk (see 137).**

YIELD ENHANCEMENT PRODUCTS

What are structured products with yield enhancement?

- 152 **Structured products with yield enhancement** consist of two elements, such as a fixed-income investment and an option (mainly on equities or currencies), and possibly a currency swap. This combination enables you to participate in the performance of one or more underlyings (via the option component). However, these financial instruments offer **no or only conditional capital protection**. The interest that is paid means you receive a higher return than with a direct investment if the price of the underlying remains essentially unchanged. On the other hand, you will not benefit from the full potential return of the underlying.
- 153 If the market value of the underlying rises, you will receive the stipulated interest and the nominal value on expiration (equally, the product may provide for a discount on the issue price). If the market value of the underlying rises sharply, you could possibly have earned a higher return on a direct investment. However, if the market value of the underlying falls, you will receive both the interest payment and the underlying on expiration or the equivalent in cash (i.e. the shortfall) in the event of cash settlement (unless the product offered a discount on the issue price).

- 154 **What special risks do you need to bear in mind?**

Many products with yield enhancement refer to several underlyings. You as investor receive the security with the worst performance on expiration (either physically or in the form of cash) if the underlying touches, rises

above or falls below a predefined barrier during the term of the financial instrument. If the performance of the underlying is negative, the financial instrument can trade some way below the issue price during its term even if the barrier is not touched, exceeded or undershot.

- 155 The level of interest rate is directly related to the level of the barrier. The nearer the barrier is to the market price of the underlying on the day of issue, the higher the interest you receive will generally be, but the higher the risk that the barrier will be reached, and vice versa.

What is the maximum possible loss?

- 156 **CAUTION: When you invest in a structured product with yield enhancement, you could in the worst case scenario lose the entire capital that you have invested, apart from the coupon which is guaranteed (except in the event of the issuer's default).**

PARTICIPATION PRODUCTS

What are structured products with participation?

- 157 **Structured products with participation** enable you to participate in the performance of one or more underlyings. However, they offer **no capital protection, or the protection offered is limited or conditional**. If the participation product offers conditional capital protection, the risk is smaller than with a direct investment provided the market value of the underlying does not reach a specific barrier (termed the "knock-out").

- 158 If the market value of the underlying touches, rises above or falls below the barrier, you will lose the capital protection.

What special risks do you need to bear in mind?

- 159 The **risk of a structured product** with participation is generally the same as that of the underlying. Unlike with a direct investment, however, you do not receive voting rights and you are not entitled to a dividend. You do, though, bear the credit risk of the product's issuer.

- 160 Many products with participation refer to several underlyings. You as investor receive the security with the worst (or sometimes best) performance on expiration (either physically or in the form of cash) if the market value of the underlying touches, rises above or falls below a predefined barrier during the term of the financial instrument. The financial instrument can trade some way below the issue price during its term even if the barrier is not touched, exceeded or undershot. Moreover, the level of participation is directly related to the level of the barrier. If you have a higher risk tolerance when selecting the barrier, you will enjoy a higher participation.

What is the maximum possible loss?

- 161 **CAUTION: When you invest in a structured product with participation, you could in the worst case scenario lose the entire capital that you have invested.**

LEVERAGE PRODUCTS

What are structured products with leverage?

- 162 **Structured products with leverage** enable you to achieve a leverage effect by investing less capital than you would have to if you invested directly in the underlying. This means you can benefit from short-term trends while committing very little cash or only a fraction of the face value.

- 163 Structured products with leverage are suitable for short-term speculation but also for strategically hedging a portfolio.

What special risks do you need to bear in mind?

164 Because of the leverage effect, you need to carefully and regularly monitor the underlying, since structured products with leverage can produce a profit or loss proportionate to the amount of leverage used.

What is the maximum possible loss?

165 **CAUTION: When you invest in a structured product with leverage, you could in the worst case lose the entire capital that you have invested more quickly than with a direct investment in the underlying.**

PRODUCTS USED FOR FINANCING OR RISK TRANSFER

What exactly are these products?

166 The financial instruments discussed in this section have the same or similar profit and loss structures as certain conventional financial instruments (equities or bonds).

167 Such financial instruments may be listed for trading on an exchange, but do not have to be.

168 The risks associated with these products are not necessarily the same as those of the financial instruments they contain. It is therefore extremely important to find out exactly what the risks are before acquiring a product of this kind. This information can be found in, for example, the product description concerned.

What are credit and catastrophe derivatives?

169 There are some products that are mainly used to transfer risks. These include credit and catastrophe derivatives. They are financial instruments where the “underlying” is an event such as a credit event (default of a loan or bond) or a natural disaster. Derivatives of this type can be used by the bearer of a risk to transfer it to others. Credit derivatives come in the form of swaps, options or hybrid financial instruments.

170 **CAUTION: Credit and catastrophe derivatives involve a liquidity risk. Often such instruments cannot be sold before the end of their term, because there is no market for them.**

171 Credit bonds securitise the risks and transfer them to third parties as credit-linked notes, collateralised debt obligations and asset-backed securities.

172 As a result, the buyer takes on the risk associated with a loan portfolio.

Credit-linked notes (CLN)

173 CLN are bonds whose redemption and interest payments depend on the performance of a specific underlying or benchmark portfolio (e.g. loan, bond).

174 **CAUTION: Look closely at the creditworthiness of the debtor to which the CLN is linked, as the CLN can end up being valueless if a credit event occurs. There is an issuer risk, i.e. a credit risk of the issuing bank, just as with structured products. The secondary market for CLN is highly illiquid, and you should therefore assume that you will not be able to sell one before the end of its term.**

Collateralised debt obligations (CDO)

175 CDO are bonds backed by a diversified debt portfolio (mostly loans, bonds or credit default swaps). They give you access to investments that are unattractive or even unattainable for individual investors. Since CDO are often divided up into a number of tranches with differing credit risks, you can decide what credit risk you wish to take on. If a debtor in the debt portfolio experiences a credit event, the equity-like tranches are affected first: they may be only partially redeemed, or not redeemed at all. If a number of debtors default, this affects the remaining tranches in order of creditworthiness, until finally the tranche with the highest credit rating (comparable to that of first-class bonds) may only be partially redeemed, or not redeemed at all.

- 176 The value of a CDO is based primarily on the probability of a credit event affecting the individual companies in the portfolio. This probability of default is determined using statistical methods and on the basis of historical data, and can cease to be meaningful in extreme market conditions.
- 177 Before you invest in a CDO, you should also look at the track record of the manager in charge of it: he or she will receive a performance-related bonus and will often have a holding in the CDO him/herself. If the portfolio is not run by a manager (which is termed a “static” portfolio), its composition remains unchanged throughout its term. In this case you should pay special attention to the composition of the portfolio.
- 178 **CAUTION: CDO typically have a term of several years. As there is generally no secondary market, you should assume that you will not be able to sell the CDO before the end of its term.**

Asset-backed securities (ABS)

- 179 In ABSs, risks (such as a range of receivables) are grouped together and transferred to a special purpose vehicle (SPV). The SPV finances this transaction by issuing securities backed by a pool of assets or a portfolio. If the collateral is a mortgage, this kind of instrument is called a **mortgage-backed security (MBS)**. The individual components of the portfolio would be unattractive or even unobtainable in this form for individual investors. However, the composition of the portfolio makes it possible to combine together and sell a range of assets and risks. By grouping together different types of credit risk, different risk profiles can be created.
- 180 Even if a pool or portfolio is created, lack of diversification can lead to a concentration of risk.
- 181 **CAUTION: Credit bonds are often issued by particular types of offshore companies (SPV). In this event you should pay special attention to the issuer risk and the quality of government supervision of such SPVs.**

4.4 Further information

Alternative (Non-Traditional) Investments

What are alternative or non-traditional investments?

- 182 **Alternative or non-traditional investments** are investments that do not fall within the traditional asset classes, such as equities, bonds or money market products. They include a **wide range of instruments and strategies**. This section focuses on the classes that are most important in terms of risk information:
- hedge funds (see 189 ff. below);
 - private equity (see 217 ff. below);
 - real estate (see 225 ff. below);
 - precious metals and other commodities (see 232 ff. below).
- 183 This list is not exhaustive and this brochure cannot point out all the risks and issues that need to be taken into account in connection with **alternative or non-traditional investments**.
- 184 **CAUTION: Be sure to obtain comprehensive advice before investing in alternative or non-traditional investments, and examine the offering carefully.**

What do you need to bear in mind when making direct investments?

- 185 Instruments allowing for **direct investment** can make sense in terms of diversifying a portfolio (risk distribution) because their returns are less dependent on factors such as the performance of the markets and levels of interest rates than those of conventional investments. However, the minimum outlay required for direct investments is generally very high, and they are often not accessible to all investors.

What about indirect investments?

- 186 To overcome these obstacles and avoid the risks of the large direct investments required, the financial sector has developed instruments for **indirect investment**. They include certificates, notes, investment funds, funds of funds, commodity futures and forward contracts. All these structures are based on one or more of the asset classes mentioned below. If you are interested in indirect investments, you need to bear in mind not just the risks of alternative investments as an asset class, but also the risks of the instrument concerned – the risks associated with structured products, for example. Please note that this section does not deal with the risks of structured products, forward contracts and futures, as these were discussed in the preceding sections (see “Forwards and Futures” and “Structured Products”).

What are offshore funds?

- 187 Offshore investments are often structured as funds or partnerships (such as limited partnerships) and domiciled in countries where legislation and supervision can be weak – hence the name “offshore funds”. The Swiss financial supervisory authority does not permit the public distribution of such funds in Switzerland.
- 188 **CAUTION: The legislation and supervision applying to offshore funds are much less strict than for traditional investments, which means that investors may enjoy less protection. They may find it difficult to enforce their rights, and problems and delays may occur when settling buy and sell orders for units of such funds.**

HEDGE FUNDS

What are hedge funds?

- 189 Hedge funds are the best-known form of alternative or non-traditional investments. Despite what their name suggests, **hedge funds** do not necessarily have anything to do with hedging. Indeed, they take on sometimes very high levels of risk in order to obtain an above-average return. Hedge funds include all forms of investment funds, investment companies and partnerships that use derivatives not just for hedging but also for investment, that are able to engage in short selling or take on significant leverage by borrowing. Other features typical of hedge funds include their freedom to choose their asset classes, markets (including emerging markets) and trading methods. Hedge funds normally require high minimum investments. They frequently offer only **limited opportunities for subscription and redemption**, with **long notice periods**. The portfolio managers of hedge funds receive performance-related bonuses and often hold a personal stake in the funds.

What should you particularly bear in mind about hedge funds?

CAUTION: Pay special attention to the following:

- 190 ■ **A hedge fund may be less transparent than a traditional investment fund, for example, as investors are not always informed about planned strategies and changes to them, or changes of portfolio manager. Hedge funds are also not subject to any disclosure requirements.**

- 191 ■ Unlike traditional collective investments, hedge funds have limited liquidity (units may generally only be redeemed once a month, quarterly or annually). Normally, investors can only invest in a hedge fund at specific times. There are generally long notice periods for redemptions and long lock-up periods (periods during which investors are obliged to leave their capital in the fund).
- 192 ■ Delays may occur, and unfavourable prices may result, when settling buy and sell orders for hedge fund units. There is no guarantee that investors will be able to enforce their rights.

What are funds of hedge funds or multi-manager hedge funds?

- 193 Investors invest in **funds of hedge funds or multi-manager hedge funds** in order to reduce risk. These funds invest their capital in a number of hedge funds and spread it across a range of hedge fund managers that cover different investment styles, markets and instruments. There are also structured products that you can use to invest in hedge funds or hedge fund indices.

What strategies do hedge funds pursue?

The main hedge fund **strategies** seen on the market are as follows:

194 - **Equity hedge (“long”, “short”)**

Equity hedge funds identify undervalued (buy or long position) and overvalued (short selling or short position) equities in specific regions or market segments and attempt to make profits in the belief that sooner or later these positions can be closed out at a profit.

195 - **Arbitrage**

Arbitrage strategies identify price differences between identical or similar investments in different markets and try to exploit them. Such strategies include equity-market neutral, fixed-income arbitrage, convertible-bond arbitrage and mortgage-backed securities arbitrage.

196 - **Event-driven**

Managers that pursue this kind of strategy try to make a profit from events such as upcoming changes in a company (mergers, takeovers, restructurings, turnarounds, etc.). Examples of such strategies are merger arbitrage, distressed securities and special situations.

197 - **Global macro**

Hedge funds that pursue global macro strategies attempt to identify macro-economic developments such as changes in interest or exchange rates at an early stage and exploit them for profit. This category includes growth funds and emerging market funds.

198 - **Managed futures**

This type of hedge fund deals in futures (standardised, exchange-listed contracts) on financial instruments, currencies and commodities.

What risks do you take on when you invest in a hedge fund?

- 199 Generally speaking, hedge fund managers do not need to be licensed by an authority and are **largely unregulated**. In particular, hedge funds are not subject to the numerous investor protection regulations that apply to authorised collective investments. These include rules on liquidity, redemption of fund units at any time, avoiding conflicts of interest, fair prices for fund units, disclosure and limitations on borrowing.
- 200 Since these rules do not apply to hedge funds, they can use much more leverage than traditional authorised funds, and engage in complex investment transactions that are not permitted for traditional collective investments. A hedge fund is allowed to adopt **aggressive strategies** including the widespread use of short selling, leverage, swaps, arbitrage, derivatives and programme trading.

Their investment strategies are often highly complex and lacking in transparency. You will often receive little or no information about changes of strategy that may lead to a significant increase in risk, or receive such information only at a late stage.

201 As part of their investment strategy, hedge funds can also use derivatives such as futures, options and swaps that may be listed for trading on an exchange but do not have to be. These instruments may be subject to significant price volatility, resulting in a high risk of loss for the fund. The low margins typically required to build up a position in such instruments mean that high levels of borrowing can be used. Depending on the instrument, a relatively small change in the price of the contract can therefore lead to a large profit or loss in comparison with the capital lodged as collateral and hence to further, unforeseeable losses that can exceed any margin cover.

202 **CAUTION: Investment vehicles that are not listed on an exchange also involve further risks as there is neither an exchange nor a secondary market where units can be sold or open positions closed out. It may be impossible to unwind an existing position or determine the value or risk of a position. If a hedge fund sells uncovered options on securities, it may be exposing itself to an unlimited risk of loss.**

What are side pockets?

203 Within the portfolio of an investment fund, side pockets are a way of separating illiquid investments (primarily private equity or real estate) from liquid ones. As a general rule, only investors who were initial subscribers for the units of a given fund (or who are holders of the fund at the time when an investment in the portfolio is separated) will make a profit or incur a loss from this illiquid investment when it is sold or when some event affecting its liquidity occurs (e.g. an IPO).

How are investors' rights of repayment affected by side pockets?

204 Investors may continue to exercise their redemption right in respect of the liquid portion of their investment in a fund.

205 However, that right may not be exercised for any portion of their investment which is segregated in a side pocket.

206 The portion placed in a side pocket will therefore remain invested either until it is sold or until some event affecting its liquidity occurs. At that point, an investor exercising his redemption right can receive the net amount less performance and management fees and any other charges applicable.

What are the drawbacks of side pockets?

207 When an investor exercises his redemption right, he will not be redeemed for his entire investment; the liquid part of the investment will be repaid in cash, and he will remain invested in side pockets which may take several years to be sold. Investors may therefore be unable to realise their investment in full for an indefinite period, and consequently the value of that investment could fall (or rise) over that period.

208 Furthermore, there is no guarantee that an investment segregated in a side pocket can be disposed of by the fund at its published value when an event affecting its liquidity occurs or where it may have to be realised urgently.

209 Side pockets are not normally transferable.

210 Investors should also bear in mind that the creation of a side pocket may occur between the time a redemption request is made and the repayment date.

What are gates?

- 211 These are redemption limits expressed as the maximum percentage of units in a mutual fund which can be redeemed on each liquidity date (normally 20/25% for funds with annual liquidity and 10% for those with more frequent liquidity). These limits are intended to protect unit holders remaining in the fund in the event of massive withdrawals from the fund by other investors; they also enable managers to increase exposure to illiquid assets without the fear of liquidity problems when approaching a date on which sale orders are permitted.

How is an investor's redemption right affected by gates?

- 212 We can illustrate this by taking the example of a fund with the following characteristics: 30 days' notice, monthly liquidity, exit gate of 10%. An investor places his sale order on 3 January 2009; the order is accepted on 3 January 2009 for 30 days hence, i.e. for 2 February 2009. As the fund's liquidity is monthly, the investor sells his units at the net asset value at the end of February. If sale orders for the same period exceed 10% of the units of the fund, redemptions will be reduced pro rata for each investor wishing to sell, based on the number of units for which each investor has submitted a redemption request. All units not redeemed during that month owing to application of the 10% limit will have priority the following month, up to the 10% limit, over units for which sale orders are placed in that month.

What are the disadvantages of gates?

- 213 If the limit on redemptions is applied, an investor naturally retains his investment in the fund in respect of those units not redeemed, and continues to be exposed to the investment risk. In the period between the date of his sale order and the date on which he receives the proceeds of his investment (which can be very long if successive gates are applied) performance can be poor.

What is a lock-up in a mutual fund?

- 214 A lock-up is a period in which the funds invested are frozen and are unavailable to the investor. In alternative investments where this condition applies, the lock-up period is normally one year.

How is an investor's redemption right affected by a lock-up?

- 215 In the case of a 'hard lock-up' the investor cannot seek redemption during the lock-up period. If it is a 'soft lock-up', he can apply for redemption during the lock-up period but will have to pay a redemption penalty.

What are the disadvantages of a lock-up?

- 216 An investor subject to a lock-up naturally has to remain invested for the lock-up period and therefore continues to be exposed to the investment risk, with no possibility of disposing of his investment during that period (except in the case of a 'soft lock-up' when he can sell on payment of a penalty).

PRIVATE EQUITY

What is private equity?

- 217 **Private equity** is a form of risk capital financing for companies that either are **not exchange-listed** or – occasionally – wish to delist. Investments are usually made at an early stage in a company's development, when its chances of success are uncertain and the risks are therefore high.

- 218 Where private equity flows into young companies (start-ups) or small companies with growth potential that are at an early stage in their development, the term **venture capital** is also used. Private equity now also extends to risk capital made available to a company immediately before it goes public (**late-stage financing, mezzanine financing**). Normally the financing is constructed in such a way that the proceeds of the initial public offering are used to wholly or partially redeem the holdings of the shareholder entrepreneurs. If a change of ownership is financed, for example a delisting, the term **“buyout”** is customarily used.
- 219 The success of a private equity investment depends on the correct timing of the “exit” or sale and – especially with indirect investments via a fund, for example – on the quality of the private equity manager. The exit can be effected by going public (initial public offering or IPO), a sale to another company (trade sale) or to another private equity fund (secondary sale), or a management buyout. The choice of solution will depend largely on the market conditions prevailing at the time. How easy or difficult the exit phase is, and whether the proceeds meet expectations, will depend on factors such as the performance of the equity markets.

What are the risks of private equity investments?

- 220 Private equity investments are **regulated less strictly than equities listed for trading on an exchange**. This means that investors may be exposed to more risks, for example due to lack of transparency (e.g. limited access to financial statements, lack of publication).
- 221 Private equity investments involve considerable risks and can lead to substantial losses. They are based on a long-term approach and are much less liquid than exchange-listed equities. Normally, private equity investments cannot be sold until some years after the original investment. You should be aware that your capital will be tied up, either completely or with access subject to restrictions, for a long time. No distributions are made prior to exit from investments. You do not normally have any entitlement to exit early. Companies that are potential candidates for private equity investments may have high levels of borrowing and therefore be more sensitive than established companies to negative market developments such as rising interest rates. There is also a greater danger of the company becoming insolvent and going bankrupt than with listed companies.
- 222 **CAUTION: It is not unusual for further calls for capital to be made at short notice after the initial investment. If you fail to comply with such a demand, you may lose all the capital you have invested up to that time.**
- 223 **CAUTION: A change of management in a young company where the personality of the individuals occupying key functions is a particularly important factor can have a highly detrimental effect on a private equity investment.**

What do you need to bear in mind when making indirect investments?

- 224 With **indirect investments**, there is no guarantee that the manager of a private equity fund will be able to make investments and generate profits that fulfil the expectations for this form of investment. The abilities of the private equity manager are therefore crucial to the success of an indirect investment.

REAL ESTATE

How can you invest in real estate?

- 225 Investments in real estate can be made directly or indirectly. Real estate comprises **office buildings, retail and industrial premises, residential property and special real estate** (such as hotels or hospitals). The variables that determine the value of a property are its location, construction, equipment fittings and the variety of ways in which it can be used.

What do you need to bear in mind when making direct investments?

- 226 A **direct investment** involves actually buying property. This will usually require a high capital outlay, a long-term investment horizon, in-depth knowledge of the sector, familiarity with the location and often personal involvement, as property needs to be professionally managed.

What about indirect investments?

- 227 **Indirect investments** in real estate generally require a lower capital outlay than direct investments. Indirect investments are divided into those that are exchange-listed and those that are not. Examples of unlisted indirect investments include real estate funds, shares of real estate companies that are not listed for trading on an exchange, and certificates on real estate funds. Real estate funds can reduce risk by diversifying across geographical areas and real estate categories. The main category of exchange-listed indirect investments is real estate investment trusts (REITs). These enable investors to invest in real estate without incurring certain disadvantages, such as illiquidity.

What risks do you need to be aware of?

- 228 Real estate investments are based on physical assets – land and buildings – that are ultimately unique, **and in which trading is not regulated.**
- 229 Where real estate is concerned, it is therefore often **difficult, or even impossible, to spread risks adequately or diversify investments sufficiently.** With direct real estate investments especially, the high capital outlay required and the illiquidity of the property market makes diversification difficult or even impossible.
- 230 Property markets are also frequently **lacking in transparency,** and require precise knowledge of local circumstances. It is therefore vital to involve local experts, which hampers access to the market.
- 231 Real estate often reacts to **interest rate changes** in a similar way to bonds: when interest rates are low, for instance, mortgages are cheap and it is easy to generate above-average profits. Conversely, high interest rates cause profits to contract. Fiscal incentives offered by the state to promote home ownership and attractive lending conditions can also lead to excessively high prices.

PRECIOUS METALS AND OTHER COMMODITIES

What are commodities?

- 232 Commodities are **physical goods that are produced via agriculture and mining, for example, and standardised for use as the underlying of a transaction.** Derivatives on commodities such as energy sources, precious and other metals, and agricultural products are traded on futures markets.
- 233 Contractual agreements allow investors to buy or sell **futures** linked to the performance of a particular commodity. This means that they can buy a standardised amount of a commodity at a specific time in the future for a specific price.
- 234 The commonest way in which private individuals invest indirectly in commodities is via structured products (see 132 ff. above). There are other alternatives, such as **commodity swaps and options** that are not listed for trading on an exchange. These are traded directly between the parties concerned and are tailor-made products. More information on how forwards and futures work can be found in a separate section of this brochure (see 111 ff. above).

235 **CAUTION: With commodity futures, you may receive physical delivery of the commodity concerned on expiration, while structured products normally provide for cash payment. If you prefer cash settlement, you will have to sell the futures before their expiration date. Such products are therefore more risky than, for instance, equities or collective investments.**

What are the risks of commodity investments?

236 The price of commodities is influenced by a number of factors. These include:

- the relationship between supply and demand;
- climate and natural disasters;
- state programmes and regulations, national and international events;
- state intervention, embargoes and tariffs;
- movements in interest and exchange rates;
- trading in commodities and the corresponding contracts;
- provisions relating to monetary policy, trading, fiscal and currency controls.

237 These variables can lead to additional investment risks.

238 Commodities investments are more volatile than conventional investments, and yields on commodities can collapse at short notice. The volatility of commodity prices also affects the value, and hence the price, of a futures contract based on those commodities.

239 Conventional futures on oil, base and precious metals are normally easy to trade, regardless of their term.

240 **CAUTION: When market activity is limited, a contract can become illiquid. Depending on how the yield curve moves, such illiquidity can lead to significant price changes. This is a typical feature of commodities.**

INVESTMENTS IN EMERGING MARKETS

What are emerging markets??

241 There is no standard definition of the term “emerging markets”. In the broadest sense it includes **all economies that are not regarded as “advanced”** (see 197 below). Common criteria for defining an emerging market are: per capita income, the level of development of the financial sector, and the proportion of the total economy that is made up by the service sector.

242 The creditworthiness of countries that fall within this definition can vary widely: from very high to very low, with – in the latter case – very high default risk.

243 Although they can be at very different stages in their economic development, most emerging markets have a political system that is very new (for instance they have only recently become democracies) or is currently changing. This means that the political system and its institutions may be less stable than in an advanced nation.

Which countries are deemed to be “advanced economies”?

244 The list of emerging markets is changing constantly. According to the criteria applied by the International Monetary Fund in October 2007, they include all countries except: Australia, Austria, Belgium, Canada, Cyprus, Denmark, Finland, France, Germany, Greece, Hong Kong, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Singapore, Slovenia, Spain, Sweden, Switzerland, Taiwan, the UK and the US. These nations are **classed as advanced economies**.

Which factors should you be especially aware of when making investments in emerging markets?

245 There are risks linked to investments in emerging markets that are not encountered in their advanced counterparts. This is also the case when the issuer or provider of a product has its headquarters or primary focus of activity in an emerging nation.

246 **CAUTION: Investing in products linked to emerging markets is therefore often speculative. Before investing in emerging markets, you should form an impression of them that allows you to assess the risks involved.**

What are the individual risks involved?

247 When investing in emerging markets, the following risks should be taken into account. The list is not exhaustive. Depending on the type of investment product, there may be additional risks involved as described elsewhere in this brochure.

Political risk

248 A government's political inexperience or the instability of the political system increases the risk of short-term, fundamental shifts in a nation's economy and politics. The consequences for you as an investor can include the confiscation of your assets with no compensation, the restriction of your rights of disposal over your assets, or government-imposed controls. State intervention in specific sectors of industry can result in a dramatic fall in the value of investments in those sectors.

Economic risk

249 Emerging market economies are more sensitive to changes in interest and inflation rates, which are in any case subject to greater swings than in the developed nations. The focus of such economies is often relatively narrow, allowing single events to have a magnified impact. In addition, emerging nations generally have a lower capital base. Finally, their financial markets often lack an adequate structure and sufficient supervision.

Credit risk

250 Investments in debt securities (e.g. bonds, notes) issued by emerging market governments or companies tend to entail higher levels of risk than advanced market debt. This can be due to inferior creditworthiness, a high level of government debt, debt restructuring, a lack of market transparency or a lack of information. It is also much more difficult to assess credit risk due to inconsistent valuation standards and the absence of ratings.

Currency risk

251 The currencies of emerging market nations are subject to unpredictable fluctuations in value that are larger than those of advanced countries. Some countries limit the export of their currency or can impose short-term restrictions, or stop pegging their currency to a reference currency such as the dollar. Hedging can help limit losses resulting from currency swings, but they can never be entirely eliminated.

Inflation risk

252 Large fluctuations in the value of the currency and an insufficiently developed financial market can make it difficult for an emerging market nation's central bank to stick to its inflation targets. As a result, inflation may fluctuate more than in advanced countries.

Market risk

253 Because there is little or no supervision of financial markets in emerging market nations, regulation, market transparency, liquidity and efficiency are often inadequate. Moreover, high volatility and large price differences are characteristic of these markets. Finally, the inadequacy or absence of regulatory measures gives rise to an increased danger of market manipulation or insider trading.

Market liquidity risk

- 254 Liquidity is dependent on supply and demand. The impact on the emerging markets of social, economic and political changes or natural disasters can involve a much more rapid and lasting change to this supply and demand equation than would be the case in the advanced markets. In an extreme case, illiquidity can be the result. This can make it impossible for an investor to sell his/her investments.

Legal risk

- 255 The absence or inadequacy of financial market supervision can lead to your legal rights being difficult or impossible to enforce. Moreover, legal uncertainty may exist due to the inexperience of the emerging nation's judiciary.

Settlement risk

- 256 Certain emerging markets have an array of different clearing and settlement systems. These are often outmoded and prone to processing errors as well as considerable delays in settlement and delivery. Some countries do not have any such systems at all (see 19 above).

Shareholder risk and creditor risk

- 257 Legislation to protect the rights of shareholders and creditors (e.g. duties of disclosure, insider trading ban, management responsibilities, minority shareholder protection) may often be inadequate or non-existent.

APPENDIX: GLOSSARY

Advanced market	244
All-or-nothing option	73
American-style option	31, 50ff., 83
Asian option	76
Asset-Backed Securities (ABS)	171, 179ff
At the money	35, 44, 75, 82
Average-rate, average-strike option	See Asian option
Barrier Option	68ff.
Binary option	See Digital option
Call Option	27ff.
Capital protection	146
Cash Settlement	33ff., 48, 92, 98, 121ff.
Certificate	186, 227
Clearing and Settlement	Exchange of securities for payment between securities traders, in Switzerland through SIS SegalnterSettle AG
Cliquet option	85, 87
Closing out	127, 130
Collateralised debt obligations (CDO)	171, 175ff.
Combination	130
Compound option	90ff.
Contingent option	83
Covered option	56ff.
Credit and catastrophe derivatives	142
Credit default swap (CDS)	Credit derivative whereby one counterparty undertakes to compensate the other counterparty for future credit losses (i.e. take on credit risks) in return for a premium 144
Credit-linked notes (CLN)	171, 173ff.
Credit risk	8, 92, 100, 105ff., 250
Creditor risk	257
Currency risk	251
Derivative	Financial contract for which the price is derived either from assets such as equities, bonds, commodities or precious metals, or from benchmarks such as currencies, interest rates and indices 9, 23ff., 57
Digital option	See Payout option
Double-barrier option	See Barrier option
Economic risk	248
Emerging market	160, 169, 245ff.
European-style option	32, 83
Exotic option	23, 62ff.

Expiration date	27, 31ff., 41, 58
Financial instrument	Generic term for all securities, book-entry securities and derivatives, including those that are not standardised and suitable for mass trading 6ff.
Financial intermediary	Natural person or legal entity that offers new financial instruments publicly on the primary market on a professional basis, and/or trades financial instruments on the secondary market or creates derivatives (see Derivative) which it offers publicly. 6
Force majeure	Events neither party in a transaction can influence or be held liable for, such as natural or man-made disasters, armed conflicts, terrorist attacks, uprisings, employment disputes (strikes and lockouts), embargoes, etc.
Hedge fund	189ff.
Hedge fund strategies	189ff.
Indirect investments	186
IPO (Initial public offering)	The first sale of previously unlisted shares by a company to the public, commonly known as “going public” (as distinct from issuance) 218
Issuance	Creation and placement of financial instruments in the primary market (as distinct from “Initial public offering [IPO]”) 139, 142, 146ff.
Issuer	23, 132ff., 140, 159, 174, 181, 245
Issuer risk	137, 140, 151, 174, 181
Kick-in, kick-out barrier option	See Barrier option
Knock-in, knock-out barrier option	See Barrier option
Ladder option	85ff.
Legal risk	255
Leverage effect	Enhanced exposure to losses and gains due to price changes 29, 162ff., 189
Lock-in, lock-out option	See Payout option
Lock-up period	191
Lookback option	79ff
Margin, margin cover, variation margin, margin requirement	25, 42ff., 52, 55, 102ff., 116ff., 125ff.
Market liquidity risk	254
Market maker	A financial intermediary (see “Financial intermediary”) which undertakes, either permanently or on request, to maintain firm bid and offer prices for one or more financial instruments (see Financial instrument)
Market risk	140, 253
Mortgage-backed securities (MBS)	179
Nominal Value	Face value or par value
Non-traditional investments, non-traditional funds	182ff.
Off-exchange trading	See OTC trading
Offshore investments	Investments (often in form of funds or limited liability partnerships) domiciled in countries where they are subject to a comparably weaker legislation and supervision 187f.

One-Touch digital option	73
On-exchange trading	Trading, especially with securities and rights not embodied in a certificate but with similar functions (book-entry securities; see Securities) on an organised, regulated market (the “secondary market”), as opposed to issuance (which takes place on the “primary market”; see Issuance)
Option	9ff., 23ff., 27ff.
OTC	Trading with financial instruments which are not traded on a stock exchange, are agreed on an individual basis and not standardised
OTC (over-the-counter) forward	114, 129
OTC option	41, 62
Out of the money	35
Outperformance option	88
Participation component	144ff.
Path-dependent option	67
Payout option	72ff.
Plain vanilla option	67ff.
Political risk	248
Price-lookback, strike-lookback option	See Lookback option
Private equity	82ff.
Put option	26ff., 33ff., 44ff., 53ff., 78
Ratchet option	See Cliquet option
Real estate investment trust (REIT)	227
Settlement risk	19, 256
Shareholder risk	257
Short put option	Sale of a put option whereby the seller (writer) undertakes to buy the underlying at the strike price on the strike date
Short selling	189, 194, 200
Spread option	88
Strike price	26ff., 34ff., 47ff.
Structured product	132ff.
Swap	Contract for the exchange of payment streams; not traded on-exchange or en masse.
Time value	38, 45
Traded option	40
UCITS Directive	Council Directive 85/611/EEC as amended by Directive 2001/107/EC and Directive 2001/108/EC of the European Parliament and of the Council
Underlying, underlying asset	The asset on which a derivative financial instrument is based. Examples include interest rates, equities, bills, etc. Increasingly, derivatives are also traded on alternative underlyings such as catastrophe risks and weather as well as credit risks, although these underlyings are not traded assets in their own right 9ff., 16ff., 26ff., 33ff., 42ff., 66ff., 88ff., 97ff., 111ff., 120ff., 137ff., 143ff., 162ff., 169ff., 232

Volatility	Range within which a price or rate is expected to fluctuate 38, 101, 238, 259
Warrant	39, 62
Writer (of an option)	Seller (of an option) 28, 33, 47ff., 53ff., 73

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