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Lombard Odier (Europe) S.A.

Markets in Financial Instruments Directive (MiFID)

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1. Introduction

The purpose of this document is to provide you with information in accordance with the Markets in Financial Instruments Directive ("MiFID"). This Directive was recently subject to a series of changes which further increase investor protection. The updated Directive is commonly designated as MiFID II. Any reference to MiFID in this document should be read as a reference to MiFID II.

We believe that the impact of MiFID on our relationship is overwhelmingly positive. Your interests as an investor are given strong protection, and we are required to pay attention to your particular circumstances. This is achieved, in part, through a system of client categorisation.

MiFID distinguishes between two main categories of clients, "Retail clients" (hereafter "Private clients") in contrast to "Professional clients", and a separate and distinct third category of clients for a limited range of business "Eligible counterparties". Different levels of regulatory protection are given to clients within each category.

- Private clients are afforded the greatest regulatory protection;
- Professional clients are considered to possess the experience, knowledge and expertise to make their own investment decisions and properly assess the risks that they incur. They are therefore afforded less regulatory protection than Private clients;
- Eligible counterparties consist of regulated financial institutions and certain other undertakings. MiFID provides for a light regulatory regime for transactions between banks and Eligible counterparties.

We wish to highlight the fact that Lombard Odier (Europe) S.A. (the "Bank") has decided to treat all of its clients, including you, as Private clients.

MiFID provides flexibility for movement between categories, provided certain criteria are met. As a Private client you may be able to "opt up" to professional status.

If you inform us that you wish to opt up to professional status, we will need to evaluate whether this is warranted by the scope of your knowledge, expertise or experience.

We also need to ensure that you meet two out of three of the following specific criteria:

- You have carried out an average of ten substantial transactions per quarter on the relevant market over the previous four quarters;
- The value of your financial instrument portfolio, defined as including cash deposits and financial instruments, exceeds 500,000 EUR;
- You work or have worked in the financial sector for at least one year in a professional position which requires knowledge of the transactions or services envisaged.

If you meet the above criteria and wish to be treated as a Professional Client, please contact your relationship manager. In case we accept your request, we will advise you in writing of the protection and investor compensation rights that you stand to lose as a result of waiving your Private client status, and you would be required to confirm to us that you are aware of these consequences.

At the same time, before you can invest in financial instruments, you will be asked to complete a fact-finding assessment. This will enable us to determine whether certain products and services that we offer are suitable or appropriate for you, given your circumstances and particular level of knowledge and experience. Depending on the type of relationship you have with the Bank, you will be subject to a Suitability Assessment (for managed and advised accounts) or an Appropriateness Assessment (for non-managed accounts) unless exemptions apply. Your relationship manager will help you complete this important step. The reason for assessing suitability and appropriateness is to enable the Bank to act in your best interest.

There are other areas in which MiFID aims to ensure that clients are protected and informed. For instance, we are required to set up a "Best Execution" policy for client orders, as well as a "Conflict of Interest" policy, which we must adhere to in all our dealings with you and when acting on your behalf.

Our fee schedule is provided to you via a separate document. We recommend that you contact your relationship manager should you require additional details in this regard.

Finally, we may pay inducements (monetary or non-monetary benefits) to third parties, or receive inducements from third parties (including other Lombard Odier Group companies) in the course of providing investment and related ancillary services to our clients. Such inducements are designed to enhance the quality of the services you receive. Details of these inducements may be found in Section 6 of this document.

If you wish to discuss any of the issues addressed in this Appendix, or any other matter that is of concern to you, please contact your local Lombard Odier office.

Our members of staff will be happy to answer your queries.

2. Conflicts of Interest Policy

2.1 Background

This document summarizes the conflict of interest policy of the Lombard Odier Group, which includes in particular the following entities:

- Lombard Odier (Europe) S.A. in Luxembourg and its branches in Belgium, the Netherlands, Spain, United Kingdom, Italy and France as well as its subsidiary: Lombard Odier Gestión (España) S.G.I.I.C., S.A.U., Spain
- Lombard Odier & Cie (Gibraltar) Limited, Gibraltar

This policy is issued pursuant to, and reflects compliance with, the rules on the identification, prevention and management of conflicts of interest adopted under MiFID. This policy forms an integral part of Lombard Odier's overarching commitment to act with integrity and fairness towards its clients at all times.

Lombard Odier's employees are required to comply with our In-House Regulatory Code and any specific internal procedures relating to conflicts of interest.

2.2 General Principle

Lombard Odier endeavours always to act professionally and independently with the client's best interests in mind, and takes all reasonable steps to identify and prevent, or otherwise manage conflicts of interest that may arise in the course of providing investment and/or ancillary services. Such conflicts of interest may arise between:

- Lombard Odier and other entities of the Lombard Odier Group
- Lombard Odier (either as a single entity or as a result of the interaction between different Lombard Odier Group entities) and a client of Lombard Odier;
- Lombard Odier staff, its representatives or any person directly or indirectly linked to Lombard Odier by control and a client of Lombard Odier;
- Two or more clients of Lombard Odier;
- Or any combination of the above.

(the "Conflicted Persons")

The below is a non-exhaustive list of scenarios where Lombard Odier may incur in conflicts of interest:

- Entities of the Lombard Odier Group may, from time to time, purchase or sell financial instruments for several clients and at the same time, Lombard Odier is authorised carry out proprietary trading
- Financial instruments may be purchased or sold for a client's account which are issued by companies maintaining business relations with an entity of the Lombard Odier Group, or in which officers of entities of the Lombard Odier Group may serve as directors;
- Entities of the Lombard Odier Group may, from time to time, purchase or sell for a client's account shares or units of investment funds which are managed Lombard Odier;

Where our internal measures designed to prevent and / or manage conflicts of interest are considered insufficient to mitigate, with reasonable confidence, risks of damage to a client's interests, Lombard Odier will disclose the general or specific nature of such conflicts of interest to the client or clients concerned.

The disclosure includes specific description of the conflicts of interest that arise in the provision of investment and/or ancillary service. Additionally, it will describe the general nature and sources of conflicts of interest, as well as the risks to the client that arise as a result of the conflicts of interest and the steps undertaken to mitigate these risks.

2.3 Application

I. Identification of conflicts of interest:

Lombard Odier has implemented organizational measures to identify conflicts of interest that may occur, as described above. In addition, employees are responsible for identifying and reporting specific conflicts of interest to senior management.

To determine whether a conflict of interest may arise, Lombard Odier employees are required to consider the following circumstances where a Conflicted Person:

- is likely to make a financial gain, or avoid a financial loss, at the expense of a client;
- has an interest in the outcome of a service provided to a client or a transaction carried out on behalf of a client which is distinct from the client's interest in that outcome;
- has a financial or other incentive to favour the interests of another client or group of clients over the interests of the client;
- carries out the same business as a client;
- receives or will receive from a firm or individual other than the client an inducement in relation to a service provided to the client, in the form monetary or non-monetary benefits or services.

II. Process for preventing and managing conflicts of interest:

Lombard Odier also maintains and operates effective organisational and administrative measures designed to ensure that all reasonable steps are taken to prevent conflicts of interest from adversely affecting its clients. These arrangements take into account any circumstances which may give rise to a conflict of interest arising from Lombard Odier's organisational structure and potential conflicting activities of the Lombard Odier Group.

The following are the main means by which Lombard Odier manages conflicts of interest:

- Segregation of duties: Key activities which, by their nature, can give rise to conflicts of interest are segregated within the organization. In addition, adequate internal procedures regulate the processes and restrict the flow of information among, and within, business units so that activities are carried out with an appropriate level of independence and conflicts of interest that may harm the interests of one or more clients are avoided.
- Proprietary trading: Lombard Odier has implemented measures to adequately mitigate potential conflicts of interest created by its own proprietary trading activities, if any. The execution of client orders may be delegated, where necessary, to other Group entities with equivalent measures.
- Staff matters: The following are the main measures taken by Lombard Odier in relation to its managers and employees.
 - Remuneration: The compensation package is based on a basic salary and a discretionary bonus which is related to performance against staff objectives and performance of Lombard Odier as a whole. It is not directly linked to specific transactions.
 - Personal securities dealing: Internal rules are established regarding staff dealing, in particular with regard to investment professionals and financial analysts. Lombard Odier's Compliance Unit performs periodic monitoring of personal deals to ensure that said internal rules are complied with at all times.
 - Gifts and personal advantages: Internal rules cover the receiving and giving of gifts and other personal advantages. They are designed to ensure that employees do not use their positions within Lombard Odier for significant personal gain for themselves, their families or any other persons. All gifts above a designated value must be approved by Compliance prior to acceptance.
 - Secondary activities and external appointments: Employees are required to work exclusively for Lombard Odier for the duration of their employment. Employees are not permitted to perform any paid or unpaid work for a third party. No employee may accept an appointment as a board member of a company or other commercial entity, nor any post entailing financial risk, unless an exemption has been duly approved by Lombard Odier.
 - Internal guidance and training: It is not possible to predict all the possible conflicts of interest that may arise in the course of business operations and staff must therefore be alert to the possibility that conflicts of interest can occur. Relevant employees and managers receive training to ensure awareness and sensitivity to this matter, and also to ensure that they can deal effectively with conflicts of interest should they arise.

III. Governance:

Senior management is responsible for ensuring that this policy and the In-House Regulatory Code are issued and revised on a regular basis. It also ensures that the Compliance department monitors compliance with the In-House Regulatory Code and any internal instructions relating to conflicts of interest. Any breach is reported to senior management and Lombard Odier reserves the right to take any measures it deems necessary.

IV. Documentation and disclosure:

Lombard Odier maintains records of the services and activities performed in which a conflict of interest entailing a material risk of damage to the interests of one or more clients has arisen.

Important notice: This policy does not form part of any contract between Lombard Odier and any of its clients or prospective clients and is simply a statement of policy issued in accordance with Lombard Odier's regulatory obligations.

3. Order Execution Policy of Lombard Odier Group

3.1 Introduction

This document sets the order execution policy ("Policy"), established in accordance with MiFID, of Lombard Odier Group ("Lombard Odier"), which includes in particular the following entities:

- Lombard Odier (Europe) S.A. in Luxembourg and its branches in Belgium, the Netherlands, Spain, United Kingdom, Italy and France as well as its subsidiary: Lombard Odier Gestión (España) S.G.I.I.C., S.A.U., Spain
- Lombard Odier & Cie (Gibraltar) Limited, Gibraltar

We will take all reasonable steps using the resources available to us to ensure that we have processes in place that can reasonably be expected to lead to the delivery of Best Execution (chapter 4.3) and Best Selection (chapter 4.4). The aim of the Policy is to comply with the overarching best execution requirement on a consistent and general basis rather than to obtain the best possible result for each individual order.

As a rule, the above-mentioned Lombard Odier entities do not execute client orders but transmit these orders for execution to Bank Lombard Odier & Co Ltd in Geneva. The latter then executes itself the said orders or retransmits them to brokers in relation to the various execution venues. The reference brokers of Lombard Odier are listed at the end of this order execution policy.

Please refer to the attached Glossary for a precise definition of the terms used in this policy.

3.2 Scope of this Document

This Policy shall equally apply to Private and Professional clients, unless otherwise specified. Eligible counterparties are not included in the scope of this Policy.

This Policy only applies to the financial instruments as set out in the Appendix. Some financial instruments are not covered by MiFID and are therefore not covered by the Policy.

These include:

- Spot FX transactions or;
- Spot commodity transactions.

Accordingly, when receiving and executing client orders on your behalf in relation to financial instruments not covered by MiFID, we will comply with standard market practices.

For some other financial instruments, this Policy applies in a limited way, such as:

- Structured transactions: Lombard Odier is unable to provide any comparisons with other similar transactions or instruments due to the specific structure of such transactions.
- Single Venue Transactions: Lombard Odier is unable to provide several prices as such transactions can be executed on one single trading venue only.

3.3 Best Execution

3.3.1 Best Execution Arrangements

When receiving and executing client orders on your behalf in relation to financial instruments as set out in the Appendix, we will take all reasonable steps to achieve best execution. This means that we have in place a policy and procedures designed to obtain the best possible execution result, subject to and taking into account the best balance among the following range of factors:

- Price;
- Costs;
- Speed;
- Likelihood of execution;
- Likelihood of settlement;

- Size of the order;
- Nature of and any other consideration that may be relevant to the execution of a particular order.

Total consideration of price and cost will ordinarily merit a high relative importance in obtaining the best possible result. However, for some clients, orders, financial instruments, markets or market conditions, we may determine that other execution factors shall have the same importance or shall take precedence over price in obtaining the best possible execution result.

If we receive a specific instruction from you, the order will be executed following your instruction.

In the absence of express instructions from you, we will balance the above-mentioned factors based on our professional experience and judgment in light of the available market information and market conditions at the appropriate time, and taking into account the following criteria:

- The type of client concerned;
- The order characteristics;
- The financial instruments that the order relates to;
- The execution venues to which the order can be directed.

We will act with due skill, care and diligence when executing a client order and will endeavour to take reasonable care to ascertain the best price available for a transaction in the relevant market at that time, taking into consideration the nature and size of the order. Examples of the reasonable care we will take when assessing the timing of the execution of all or part of a current client order includes:

- When a foreseeable improvement in the level of liquidity in the relevant financial instruments is likely to enhance the terms on which we may execute the order;
- When executing an order as a series of partial executions over a period of time is likely to improve the terms on which the order as a whole is executed.

Prevailing market conditions may not permit your order to be executed either immediately or in a single transaction. Large trades, particularly those involving financial instruments where trading volumes are limited, can move prices in the market against the interests of the client. In these circumstances, a series of partial executions over a period of time is likely to provide a better overall result than executing one trade. Furthermore, we may carry out your order in aggregation with other orders if we consider that the aggregation of orders is unlikely to work to the overall disadvantage of any client whose order is to be aggregated.

3.3.2 Execution venues

Client orders may be executed on the following execution venues :

- Trading venues: regulated markets, Multilateral Trading Facilities (MTFs), and Organised Trading Facilities (OTFs);
- Systematic Internalisers and market makers ;
- Counterparties acting as liquidity providers.

At the end of this policy, Lombard Odier identifies execution venues for different types of financial instruments which it believes with reasonable assurance can consistently offer best execution to its clients. The list is not exhaustive and Lombard Odier may use alternative venues if it is necessary to ensure best execution for you. Lombard Odier may for example execute an order outside a regulated market, MTF or OTF from time to time, provided the venues it uses are consistent with our Policy. Where the Bank executes orders outside a trading venue, the following consequences may arise:

- Transactions will not be subject to the rules of Trading Venues, which are designed to provide for a fair and orderly treatment of orders;
- Transactions will not benefit from any additional but unpublished liquidity, such as hidden limit orders that may be available on Trading Venues;
- A settlement risk may be incurred as transactions will be subject to counterparty risk and will not be covered by the relevant clearing and settlement rules of the Trading Venue and relevant Central Counterparty Clearing House.

In selecting the most appropriate venues for the purpose of executing your orders, we consider several factors, in particular:

- General prices available;
- The creditworthiness of the counterparties on the venue or the central counterparty;
- Depth of liquidity;
- Relative volatility in the market;

- Transparency in the market;
- Speed of execution;
- Costs of execution; and/or
- Quality and cost of clearing and settlement facilities.

When the Bank receives client orders for which it has no direct access to the selected venue, it transmits or places them for execution with brokers. In this context, the Bank takes all reasonable steps to achieve best selection (see 4.4 Best Selection). This means that while selecting entities, the Bank endeavours to take all reasonable care to ensure that these entities provide the best overall execution service.

3.3.3 General factors affecting our Policy

In providing best execution we are subject to the provisions set out in this Policy to exercise the same standards and operate the same processes across all the different liquidity pools and financial instruments on which your orders are executed. However, the diversity of the markets and instruments and the type of orders that you may place with us mean that we will have to take different factors into account when we assess the nature of our Policy in the context of different instruments and different liquidity pools located in different countries.

The following non-exhaustive list provides examples of varying factors that may influence the best execution of your orders:

- **Liquidity pool infrastructure:** electronic trading on a centralized market with a large number of participants is generally more efficient than trading on an *over-the-counter* (OTC) market where transactions are negotiated bilaterally;
- **Price setting mechanism:** on an "order-driven market" the price of a financial instrument is determined by the incoming buy and sell orders, while on a *quote-driven market*, the price is determined by one or several market makers;
- **Price volatility:** a price may fluctuate considerably on a particular market within a limited time period. In such markets, the speed or timing of order execution may take priority;
- **Liquidity:** some financial instruments do not trade as frequently as others, and/or volumes are limited. In markets subject to such low liquidity, best execution may be limited to the execution of the order itself. Markets with high liquidity can absorb both high frequency and large orders within a short time period;
- **Country of the liquidity pool:** markets in emerging countries do not afford the same infrastructure as markets in non-emerging countries. As a consequence, Lombard Odier may need to reconsider the factors described above for specific client orders in order to adapt to the specificities of trading on emerging markets;
- **Market information:** the availability of accurate information and appropriate technology may also affect the choices as to the most favourable liquidity pool for execution.

Other factors may limit the choice of execution venue:

- In some instances the execution venue may be limited to one platform or market upon which an order may be executed because of the nature of your order or a specific instruction from you;
- The nationality of the beneficial owner may exclude the execution of the order.

Under no circumstances can we be held liable for external causes that have partially or totally impeded us from providing you with best execution.

3.4 Best Selection

The Bank takes particular care when selecting brokers used to execute client's orders. Among others, these are the most important factors considered by the Bank when selecting a Counterparty or a Broker:

- The access to markets and distribution networks of the broker;
- The size, creditworthiness and reputation of the broker (company rating);
- The quality of Middle Office/Back Office support of the broker;
- The policy adopted by the broker to demonstrate that the trades are executed in accordance with the best execution obligation and that best execution procedures are monitored;
- A legal obligation or contractual commitment of the Executing Firm to deliver MiFID compliant best execution;
- The costs charged by the Executing Firm.

For brokers not subject to MiFID, we will take all reasonable steps to select the brokers that provide for the best service in the relevant financial instruments, markets and geographical areas concerned.

Under specific circumstances (such as a specific instruction from you, particular market conditions, provisory failure of a broker, etc.), we may be forced to transmit your order to an entity that has not been selected by our broker reviews in order to act in your best interests.

3.5 Client order handling

The Bank is required to ensure that Client orders are executed in a prompt, fair and expeditious manner. The Bank will inform its Private Clients about any material difficulty relevant to the proper carrying out of Orders promptly upon becoming aware of the difficulty.

The Bank will carry out various Orders received from the same Client sequentially in accordance with the time of their reception unless:

- it is otherwise instructed by the Client;
- the characteristics of the Client Order or the prevailing market conditions make this impracticable;
- the interests of the Client require otherwise.

The Bank may aggregate a Client Order with other orders (Order of other Client or the Bank's own transactions). Such aggregation will only take place in the event the Bank believes that the aggregation would be unlikely to operate to the Clients' overall disadvantage. However the effect of aggregation may work to a Client's disadvantage in relation to a particular Order.

An aggregated Order will be allocated between the relevant persons fairly at the average price of the transaction. If a Client Order has been aggregated with transactions for the Bank's own account and the aggregated order is partially executed, the Bank will normally allocate the related trades to the Client in priority to the Bank.

3.6 Specific Client Instructions

When you give us a specific instruction as order execution or transmission, the relevant part of the order will be executed in accordance with that instruction, the remaining part in accordance with this policy. You should be aware that in providing a specific instruction, you may prevent us from taking the steps which we have designed and implemented to obtain the best possible result for the execution or transmission of the order in respect of the factors covered by those instructions.

Any written or oral contractual arrangement between you and us will take precedence over this Policy.

Following execution of a transaction on behalf of a Client the Bank will inform the Client where the order was executed.

The Bank will summarise and make public on an annual basis, for each class of financial instruments, the top five execution venues in terms of trading volumes where it executed client orders in the preceding year and information on the quality of execution obtained.

The Bank will inform you about any material difficulty relevant to the proper carrying out of orders promptly upon becoming aware of the difficulty.

3.7 Restrictions

Where Lombard Odier is subject to internal trading restrictions it may not be possible to accept your order and you will be notified of this fact at the time of order receipt.

3.8 Reviewing Execution Quality and the Order Execution Policy

We will assess, on a regular basis, of particular transactions (in order to determine whether we have complied with our execution policy and/or arrangements, and whether the resulting transaction has delivered the best possible result for our clients). In this respect, we will take into account the execution factors that the Bank considers for the execution of client orders.

Moreover, we will conduct substantive reviews of our arrangements and policies in order to ensure delivering best execution on a consistent basis. Our reviews will take account of the results of monitoring and any changes in the market.

The reviews are performed at least annually or whenever a material change occurs. A "material change" can include, for example, the merger of two execution venues, a change in the identity of a DMA provider, a change in legislation, a change in Lombard Odier business activities or services provided by Lombard Odier, an organizational change within Lombard Odier or new internal rules, procedures or policies within Lombard Odier..

You will be notified of any material changes to our Policy via our website www.lombardodier.com

Appendices and glossary to Order Policy

CLASS OF FINANCIAL INSTRUMENTS	PREFERRED BROKERS	VENUES/LIQUIDITY POOL*
Equities		
Equities Examples: equities, global/American depositary receipt, ETF, etc.	Credit Suisse, UBS, Deutsche Bank, Barclays, JP Morgan	Regulated markets or MTFs: SIX Swiss Exchange, Bats, Chi-X, Turquoise as a direct member Other regulated markets, MTFs or liquidity pools (NYSE, Euronext, Xetra) through brokers Brokers on OTC market
Bonds		
Bonds Examples: government bonds, emerging bonds, high yield, credit bonds, asset-backed securities, etc.	Barclays, Deutsche Bank, Merrill Lynch	Regulated market: SIX Swiss Exchange as a direct member Brokers on OTC market
Convertibles	Credit Suisse, UBS, Merrill Lynch	Regulated market: SIX Swiss Exchange as a direct member Other regulated markets, MTF or liquidity pools (Euronext) through brokers Brokers on OTC market
Derivatives		
Listed derivatives Examples: options on equities and index, futures	N/A	Regulated markets: NYSE Euronext life, Eurex (as a non-clearing member), Other regulated markets through DMA
OTC equity or index options and OTC FX and metals options	N/A	Lombard Odier as principal
OTC money market or fixed income derivatives	Credit Suisse, JP Morgan	Brokers on OTC market
Money Market		
Money Market Examples: certificates of deposit, Euro commercial paper (ECP), treasury bills, UK treasury, etc.	UBS, Bank of America, Barclays, Credit Suisse, Rabobank, Citibank, Goldman Sachs	Regulated market for Swiss papers only: SIX Swiss Exchange as a direct member Brokers on OTC market
Other financial instruments		
Structured products Examples: growth products (e.g. certificate, etc.), mixed products (e.g. capital guaranteed, etc.), income products (e.g. reverse convertibles, auto-call, etc.) Examples of underlying: equity, credit, forex, interest rate, commodity	HSBC, UBS, Royal Bank of Canada, Société Générale, Barclays, JP Morgan	Regulated markets: SIX Swiss Exchange, Scoach as a direct member. Brokers on OTC market. Generally only one market maker, low liquidity.
Units in collective investment undertakings	Credit Suisse, UBS, EFA	No venues/ OTC market
FX Forwards	N/A	Lombard Odier

* Several venues/liquidity pool may be used for the execution of one order

Order Policy of Lombard Odier Group

CLASS OF FINANCIAL INSTRUMENTS NOT COVERED BY MiFID	PREFERRED BROKERS	VENUES/LIQUIDITY POOL*
Other financial instruments		
FX spots	N/A	Lombard Odier

Glossary to the Order Policy of Lombard Odier Group

Broker:	An individual or firm who executes client orders on behalf of a client or receives and transmits orders in relation to one of more financial instruments. A broker may be itself the counterparty to a trade (principal).
Broker review process:	Process in place to evaluate the quality of the brokers according to different criteria which may be based on a formal process and/or our daily professional experience.
Clearing & settlement:	A system used to settle mutual indebtedness between a number of organizations (banks, brokers, etc.).
Client:	Any natural or legal person to whom an investment firm provides investment and/or ancillary services.
Costs:	Transaction fees charged to the client (commissions, settlement fees, etc.).
"DMA" Direct Market Access:	Lombard Odier directly trades in a liquidity pool through broker facilities that grant a direct market access to that liquidity pool.
Execution venue:	Regulated market, Multilateral Trading Facility (MTF), Organised Trading Facility (OTF) systematic internaliser, market maker, and other liquidity providers.
Forward transactions:	Purchase or sale of a specific quantity of a financial instrument at the current forward price, with delivery and settlement at a specified future date.
Financial instrument:	Those instruments specified in Section C of Appendix I of Directive 2004/39.
Likelihood of execution:	The quality of an order execution on a certain execution venue.
Likelihood of settlement:	The quality of order settlement.
Liquidity:	Number and turnover of trades in a specific financial instrument over a certain period (day, week, etc.).
Liquidity pool:	Any place where trades can be executed, including execution venues.
Membership:	Stock exchange of which Lombard Odier is a member.
MiFID:	EU Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU as well as its implementing directives and regulations.
"MTF" Multilateral Trading Facility:	A multilateral system, operated by an investment firm or a market operator, which brings together multiple third-party buying and selling interests in financial instruments in the system in accordance with non-discretionary rules, in a way that results in a contract pursuant to the provisions of Title II.
Order-driven market:	Market in which the price of a financial instrument is determined by the incoming buy and sell orders.
"OTC" Over-the-counter:	A bilateral arrangement between buyer and seller, based on the best quote received. In some circumstances, where liquidity in the instruments deteriorates, quotes may become unavailable. When this occurs, the importance the client places on executing the order becomes paramount and "best execution" can equate to the order actually being executed.
Price:	Price of a financial instrument (excluding fees).
Private client:	A client who is not a professional client, classified under MiFID as a "Retail client".
Professional client:	A client meeting the criteria laid down in Appendix II of MiFID.
Quote driven market:	Market in which the price is determined by one or several market makers.
Regulated market:	A multilateral system operated and/or managed by a market operator, which brings together or facilitates the bringing together of multiple third-party buying and selling interests in financial instruments in the system in accordance with its nondiscretionary rules, in a way that results in a contract, in respect of the financial instruments admitted to trading under its rules and/or systems, and which is authorized and functions regularly.
Size:	Number of financial instruments per order.
Speed:	Rapidity of order execution.

4. Safeguarding of the Client's financial assets

4.1 Financial instruments

Financial instruments booked to the account of the Client with the Bank are recorded on the Bank's books so as to be separately identifiable from the financial instruments belonging to the Bank and from those belonging to other Clients of the Bank.

In accordance with the Bank's general terms and conditions or a separate pledge agreement, the assets of the Client are pledged in favour of the Bank and the Bank may set off its claims against the assets of the Client. This means that where a Client does not honour his obligations towards the Bank, the Bank may enforce its pledge or set-off rights and use in this context the assets of the Client to satisfy its claims against the Client. As a result, the Client will have no right to the reimbursement or restitution of his assets after such enforcement.

The Bank generally keeps financial instruments in sub-custody with a professional custodian of financial instruments or a clearing house (hereinafter referred to as "Sub-custodian"). The sub-custody agreements are generally governed by the laws of the country of establishment of the Sub-custodian. These can be laws other than the law of a Member State of the European Union and the Client's rights may thus vary.

In accordance with the legal requirements incumbent upon it, the Bank shall maintain separate accounts with the Sub-custodian – one account for financial instruments belonging to all its Clients (i.e. an omnibus account containing assets of several clients) and another account for financial instruments belonging to the Bank. In certain countries outside the European Union it may be legally or practically impossible for Client financial instruments to be segregated from financial instruments belonging to the Bank. Upon request, the Bank shall provide the Client with a list of the Sub-custodians concerned.

In certain countries outside the European Union, applicable law may require that security interests, liens or rights of set-off exist over the Client's financial instruments enabling a third party to dispose of the Client's financial instruments in order to recover debts that do not relate to the Client or provision of services to the Client. The Bank may be obliged to enter into agreements that create such security interests, liens or rights of set-off. The risks associated with such arrangements are notably, that the third party may enforce its security interests, liens or rights of set-off and that the Bank is unable to obtain the restitution of a quantity of financial instruments sufficient to satisfy the rights of its Clients. In such a case such Clients shall bear the loss in proportion to their deposits in such financial instruments.

(i) In the event of the insolvency of the Bank

In the event of the insolvency of the Bank, financial instruments held by the Clients with the Bank are under existing law safeguarded and do not form part of the estate of the Bank. Insolvency proceedings may, however, delay the restitution of the financial instruments to the Client.

If, in the event of such insolvency proceedings, the available quantity of specific financial instruments is insufficient, all the Clients whose portfolio includes such specific financial instruments shall bear a proportionate share in the loss, unless the loss may be covered by financial instruments of the same nature belonging to the Bank.

In addition, the investor protection scheme of the *Système d'Indemnisation des Investisseurs, Luxembourg* ("SIIL"), to which the Bank has adhered shall apply.

In the event of the insolvency of the Bank, the said compensation scheme for investors provides for a maximum coverage of EUR 20.000.- in case the Bank is unable to reimburse to Clients the funds owed to them or held by them with the Bank in the context of investment transactions or in case the Bank is unable to return to Clients financial instruments owned by Clients but held, administered or managed by the Bank.

The Bank will provide on demand further information to the Client on the SIIL protection scheme for investors.

(ii) In the event of the insolvency of a Sub-custodian

In the event of the insolvency of a Sub-custodian, financial instruments kept in sub-custody with such Sub-custodian are, under the laws of many countries, also generally safeguarded, subject to the above-mentioned delays and the risk that the available quantity of specific financial instruments may be insufficient.

In a limited number of countries outside the European Union, it is however possible that financial instruments kept in sub-custody with a Sub-custodian are included in the insolvency estate and that the depositors therefore do not enjoy a specific right to restitution. Upon request the Bank shall provide the Client with a list of such countries.

In such a case or in case the Bank, for any other reason, only obtains the restitution of a quantity of specific financial instruments insufficient to satisfy the rights of all the Clients having deposited such specific financial instruments with it, such Clients shall bear the loss in proportion to their deposits in such financial instruments. The Clients cannot exercise their rights in relation to such financial instruments against a Sub-custodian.

In certain countries some or all Sub-custodians may have a security interest or lien over or a right of set-off in relation to the financial instruments kept in sub-custody with them or their general terms of custody may provide for loss sharing in case of default of their own sub-custodian. This may result in situations where the Bank is unable to obtain the restitution of a quantity of financial instruments sufficient to satisfy the rights of its Clients. In such a case the above-mentioned proportionate loss sharing rule applies.

The Bank bears no responsibility for acts or omissions of the Sub-custodians, as the assets are held with Sub-custodians at the exclusive risk of the Client.

The Bank also refers the Client to the provisions of its general terms and conditions regarding accounts and custody of financial instruments.

4.2 Funds

All funds in whatever currency deposited with the Bank become part of the estate of the Bank. In the event of insolvency of the Bank, the Client may lose all or part of his/her deposited funds as, contrary to financial instruments, deposited funds are included in the insolvency estate. In such case, the deposit-guarantee scheme of the Fonds de Garantie des Dépôts, Luxembourg ("FGDL") shall apply.

In the event of deposited funds becoming unavailable due to insolvency of the Bank, the said scheme guarantees to Clients having deposited funds the payment of a maximum amount of EUR 100.000.-. In certain cases, the FGDL guarantees to Clients the payment of higher amounts.

The Bank will provide on demand further information to the Client on the deposit-guarantee scheme. Information on the FGDL deposit-guarantee scheme is also available on www.fgdl.lu.

4.3 Use of the Client's financial instruments

The Bank will only use for itself the financial instruments of the Client in accordance with the terms agreed upon with the Client.

The Bank will on demand provide further information to the Client on possible arrangements relating to the use of financial instruments belonging to him/her.

5. Information on inducements

The Bank offers a wide range of investment services to its Clients. The costs of delivering these services is covered through the charging of fees to the Client and may also comprise remunerations, fees, commissions, rebates, refunds and other monetary benefits ("Monetary Benefits") which the Bank receives from third parties in connection with the provision of services to the Client. In the same context, the Bank may also pay Monetary Benefits to third parties. Furthermore, the Bank may receive or provide non-monetary benefits which typically consists of training and sales support ("Non-Monetary Benefits") to business introducers and from other third parties.

Such Monetary and Non-Monetary Benefits are collectively called "Inducements".

Illustrations of likely levels of inducements will be provided as part of the client on-boarding and account opening process. The Bank will maintain a register of all inducements paid and received and will inform clients, on an individual basis in an annual disclosure, about the actual amount of payments or benefits received or paid in relation to investment services. The Client may obtain, on request, more detailed information of such fees, commissions or benefits, via their Private Banker. Through these disclosures and by giving the following information on Inducements paid or received, the Bank complies with its legal requirements and establishes a high standard of transparency for the Client's investment decisions, according to the Bank's commitment to integrity and fair trading.

5.1 Monetary Benefits

The Bank may receive or pay Monetary Benefits in connection with the provision of services to the Client.

5.1.1. Monetary Benefits received

Where permitted by the local regulator, the Bank may receive Monetary Benefits in relation to the provision of Execution Only and Advisory Services. The UK does not permit inducements to be received for Advisory Services and the Netherlands does not permit inducements to be retained for either Advisory or Execution Only Services.

In respect of Portfolio Management services, the Bank will return to Clients any fees, commissions or any monetary benefits received from any third party or a person acting on behalf of a third party in relation to the services provided to that Client as soon as reasonably possible

after receipt. All fees, commissions or monetary benefits received from third parties in relation to the provision of portfolio management shall be transferred in full to the Client.

5.1.1.1. Distribution fees

The Bank distributes in-house (the Bank's) and third party investment products. These distribution activities may be rewarded by payment of Monetary Benefits to the Bank. In essence, the reception of such Monetary Benefits allows Clients to have access to and benefit from a wide range of investment products.

The exact amount of the Monetary Benefits received depends on various factors such as the type of financial instrument, the frequency of transactions and the volume of the investment.

The existence, nature and amount of the remuneration, commission or non-monetary benefits paid or received by the Bank, or, where the amount cannot be ascertained, the method of calculating that amount, will be clearly disclosed to the Client, in a manner that is comprehensive, accurate and understandable, prior to the provision of the relevant investment or ancillary service. Where applicable, the Bank will also inform the Client of the mechanisms for transferring to the Client the fee, commission, monetary or non-monetary benefit received in relation to the provision of the investment or ancillary service.

In general, the Bank will receive the following Monetary Benefits arising out of each of the different main product classes and services listed below:

i. Shares / units of investment funds:

In the case of acquisition of shares or units of investment funds, the Bank may receive Monetary Benefits (e.g. trailer fees) from the relevant fund promoter. This is typically calculated as a % of the annual management fee charged by the fund

ii. Acquisition of structured products:

In the case of acquisition of structured products, the Bank may receive Monetary Benefits (e.g. distribution fees, retrocessions) calculated as a % per year of the amount subscribed.

5.1.2. Monetary Benefits paid

The Bank may in addition agree to remunerate certain third parties in order to expand its client base or in the context of a service provider relationship. Such third parties do not generally offer custodian bank services or investment services, which only credit institutions are authorised to provide. They perform a selection role on behalf of the Client, for whom they seek the financial institution offering the service that best meets the Client's expectations, as well as on behalf of the Bank, to which they propose clients that fall within its target audience. The Bank has established internal procedures for both the selection of such third parties and organisations in order to develop a long term relationship and to safeguard the stability of that relationship. The remuneration of such intermediaries may involve the payment of a commission calculated on the basis of a proportion of the revenues made or to be made by the Client, or an amount based on the assets on deposit or an amount proportional to the entry fees paid by the Client on certain UCIs. This amount may be staggered in order to safeguard the stability of the relationship over time.

The Bank may thus pay parts of Monetary Benefits received or of fees or commissions paid by the Client to the Bank to third parties, such as product distributors, external asset managers or introducers.

Where the investment product is not only distributed by the Bank, but also "manufactured" within the Group, and where ancillary services such as administration activities are provided by the Group, a large part of the Monetary Benefits paid in relation to the product may remain within the Group.

5.2. Non-Monetary Benefits

The Bank may receive Non-Monetary Benefits from product providers as well as financial intermediaries and may provide Non-Monetary Benefits to introducers and other third parties. The extent of the Non-Monetary Benefit depends on the service which is provided or received.

Such Non-Monetary Benefits provided or received by the Bank may include, inter alia, marketing material, financial analyses and training on products. In particular, the Bank may receive from financial intermediaries investment research enabling it to develop more sophisticated investment strategies.

Where the Bank may only receive minor non-monetary benefits, e.g. in the context of portfolio management services, the provision of research by third parties will not be regarded as an inducement and will thus not be prohibited if it is received in return for either of the following:

- direct payments by the Bank out of its own resources;
- payments from a separate research payment account controlled by the Bank, provided the following conditions relating to the operation of the account are met:

The Bank will pay for investment research from its own resources, hence its receipt is not regarded as an inducement.

Appendix 1: Financial instruments

1. Transferable securities;
2. Money-market instruments;
3. Units in collective investment undertakings;
4. Options, futures, swaps, forward rate agreements and any other derivative contracts relating to securities, currencies, interest rates or yields, emission allowances or other derivatives instruments, financial indices or financial measures which may be settled physically or in cash;
5. Options, futures, swaps, forwards 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 other than by reason of a default or other termination event;
6. 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, a MTF or an OTF, except for wholesale energy products traded on an OTF that must be physically settled;
7. Options, futures, swaps, forwards and any other derivative contracts relating to commodities, that can be physically settled not otherwise mentioned in point 6., and not being for commercial purposes, which have the characteristics of other derivative financial instruments;
8. Derivative instruments for the transfer of credit risk;
9. Financial contracts for differences ;
10. Options, futures, swaps, forward rate agreements and any other derivative contracts relating to climatic variables, freight rates 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 (other 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 not otherwise mentioned in this section, which have the characteristics of other derivative financial instruments, having regard to whether, inter alia, they are traded on a regulated market, a MTF or an OTF.
11. Emission allowances consisting of any units recognised for compliance with the requirements of Directive 2003/87/EC (Emissions Trading Scheme).



LOMBARD ODIER
LOMBARD ODIER DARIER HENTSCH

Risks associated with Financial Instruments (Glossary)

Appendix 2

Overview of the main characteristics and risks of financial instruments

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1. Preamble

This document aims to explain the major product categories and asset classes used in the Lombard Odier (Europe) S.A. (“Lombard Odier”) suitability and appropriateness questionnaire and their inherent risks:

- Equities: non-complex and deemed complex
- Bonds: non-complex and deemed complex
- Money market instruments
- UCITS
- Commodities
- Hedge funds (non-UCITS)
- Private equity (non-UCITS)
- Real estate (non-UCITS)
- Structured products
- Derivatives

This list is not exhaustive and this Glossary should never be used without a proper discussion with the relevant Lombard Odier specialists. This document does not pretend to describe all risks inherent to investments in financial instruments. Its objective is rather to provide the reader with basic information and to make him/her aware of the existence of the most relevant/material/essential risks inherent to investments in such financial instruments. In general, an investor should not enter into any investment transaction unless he/she is sure to understand all the related risks and their impact on his/her portfolio.

The reader is furthermore highly encouraged to complement his/her understanding of a product category / asset class with supplementary reading, on a regular basis.

This document does not deal with the tax or legal consequences pertaining to transactions in financial instruments. Therefore, Lombard Odier recommends that the reader requests tailor-made advice on these issues from specialists before any investment.

2. General information about risks

While risks can be described in multiple and very detailed ways, the present chapter will highlight three aspects:

- Introduction: introducing the basic relationship between risk and return
- Diversification: explaining the difference between systematic and non-systematic risk
- Practical examples: some examples of risk-return relationships

2.1 Introduction

Investing in financial markets always exposes investors to risk-taking.

In its simplest form, risk could be described as the volatility or fluctuation of a financial instrument over a period of time. The higher the volatility or fluctuation of a financial instrument, the higher the **risks of capital loss** for an investor.

In its simplest form, the return of a financial instrument could be described as its capital appreciation over the same period. If you invest USD 100 and the value of your investment is USD 104 one year later, you have achieved a 4% return or capital appreciation.

What is the relationship between risk and return? One fundamental aspect of investing in financial markets is that investors need to be rewarded for the risks they are taking. **The higher the risk, the higher the return investors require and vice-versa.** This means that assets in financial markets are priced relative to the risk they represent for investors. For example, the expected return (and interest paid) on a moderate quality bond will be significantly higher than those for a AAA bond of the Swiss Confederation.

2.2 Diversification

In financial markets, investors face two types of risks: systematic risk and non-systematic risk.

- **Systematic risk**, also called market risk, is non-diversifiable. Whatever investors do, systematic risk will always exist and investors must accept it. A global crisis or hyper-inflation represent such risks.
- **Non-systematic risk** refers to risks that can be mitigated through diversification. It is also called unique, diversifiable, firm-specific, or industry-specific risk. Investors can mitigate this type of risk by constructing portfolios in an intelligent way. The two examples below illustrate simple diversification techniques. Industry diversification: imagine an investor has a portfolio consisting of shares in civil airlines. He/she will be facing market risk and risks relating to the airline industry. One possibility for diversifying such risks could be to buy shares in the railway industry. If people cut down on flying (thus pushing down the price of the airline shares) they will likely use trains instead. However, a global economic slow-down will affect both industries – this risk is non-diversifiable. Economic cycle diversification: imagine an investor that only has equities in its portfolio. He/she will be facing market risks and equity-related risks (these mainly relate to the economic cycle). Shares typically do well in periods of economic growth and underperform during downturns. One way of diversifying these risks would be to hold bonds as well as shares in the portfolio. High quality sovereign bonds typically do well in periods of economic slowdown as interest rates tend to decline (please also see bond section 3.2) and underperform in times of growth, as interest rates tend to rise. A diversified portfolio across bonds and equities tends to exhibit a lower volatility compared to a pure equity investment

In order to achieve long-term financial objectives, it is important that investors build diversified portfolios. These can help mitigate non-systematic risk and maximise returns. As a rule of thumb, portfolio theory tells us that 12-18 securities in a portfolio could diversify away approximately 90% of non-systematic risk. To do so, investment professionals use advanced statistical techniques and their judgment to achieve the required diversification.

2.3 Practical examples

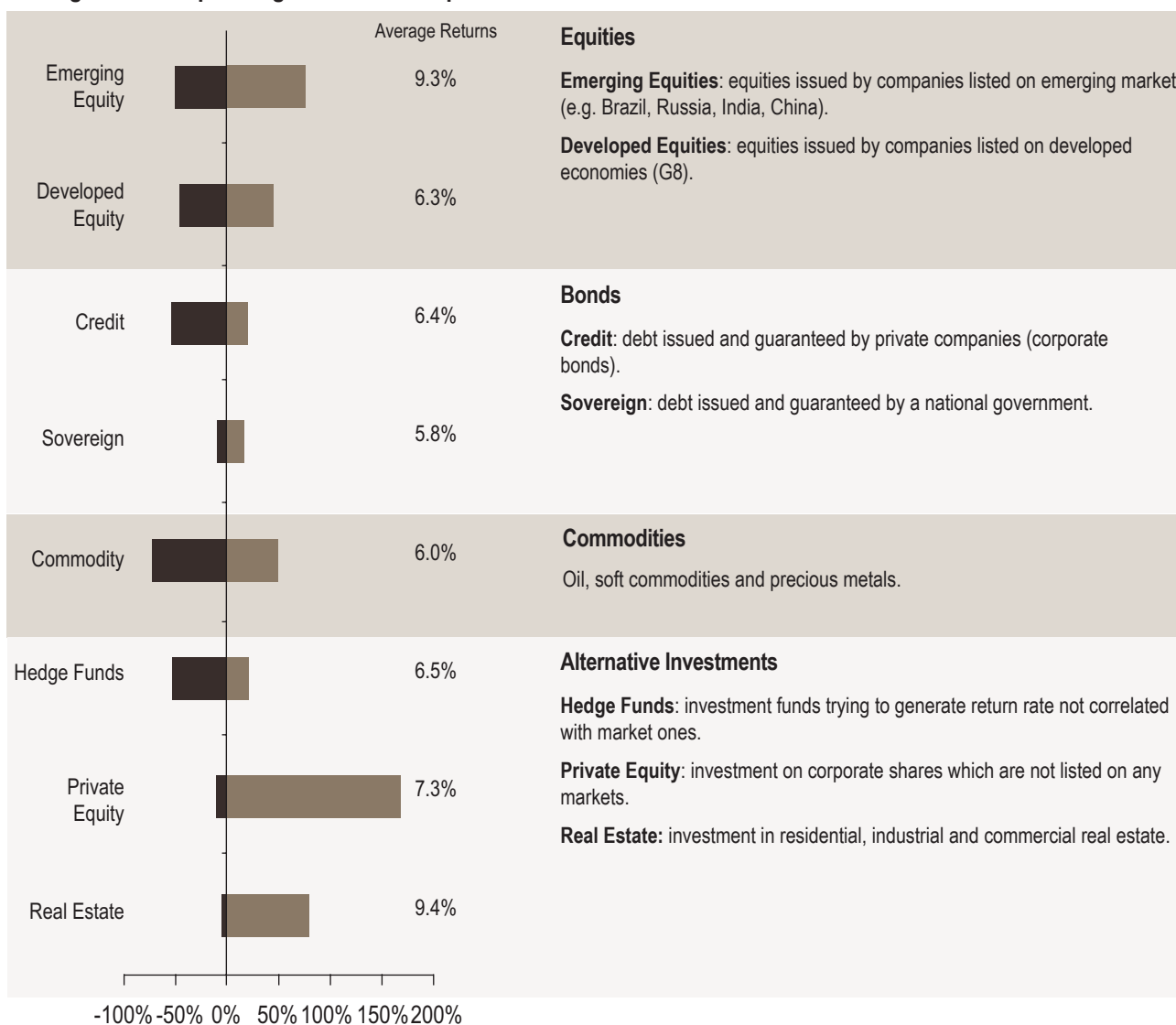
The figure below illustrates, for major asset classes, the maximum gains and losses observed on a 12-month rolling period since 1991 until June 2014.

- **Equities** typically offer high expected gross returns but are also exposed to a relatively high volatility/risk of loss of capital.
- **Bonds** typically offer lower expected gross returns than equities but are subject to a somewhat lower volatility/risk of loss of capital.

For example, it can be seen from the figure that emerging markets equities bear higher risks than sovereign bonds – the fluctuations are much wider than those observed for bonds. However, the average annual return is higher (9.3% vs 5.8%).

Other asset classes are shown for illustration and will be discussed in more details in chapters 4 and 5.

Average annual expected gross return and profits and losses on different assets classes



Past performance is not a reliable indicator of future performance.

NB : The above analysis is not the result of a substantive research or financial analysis and does not constitute investment research, investment recommendations or investment advice, in relation to the types of financial instruments mentioned therein. This analysis only constitutes general information material. It contains selected information and is not intended to be complete. It is based on publicly available information and the related data has been obtained or derived from sources deemed reliable (Bloomberg). However, neither Lombard Odier nor the Lombard Odier Group may be held liable for the accuracy, adequacy or completeness of the above analysis.

Furthermore, the above analysis shall not be construed as and does not constitute an invitation to enter into any kind of agreement with the Lombard Odier nor a request or offer, solicitation or recommendation to buy or sell investments or other specific financial instruments, products or services. The information provided is not intended to provide a basis on which to make an investment decision. In particular, nothing in the above analysis constitutes an investment, legal, accounting or tax advice or a representation that any investment or strategy is suitable or appropriate for individual circumstances.

Last, in considering information related to past performance contained in the above analysis, investors should bear in mind that past performance of a type of financial instrument or asset class is no guarantee of future results. Capital losses, entailing losses to investors in such instruments, are always possible. In addition, the above analysis displays average asset-class returns. Specific investments within an asset class may be subject to much higher price fluctuations (including higher losses and lower returns).

Note also that the above analysis does not reflect the impact of fees, commissions and costs on investments in the relevant asset classes, which will reduce returns and performance.

3. General overview of the risks related to any type of investment

The present chapter will highlight 11 types of risks that could apply to any type of investment. It should be noted that depending on the relevant financial instrument, one or several of the risks described below may apply cumulatively, therefore increasing the level of risk investors are exposed to.

1. Economic risk

Economic risk is related to the economic cycle and macroeconomic situation of a country, a region, the world. These factors can have significant influence on prices of financial instruments ("asset prices") and exchange rates.

Asset-prices behave differently depending on where in a cycle an economy is. For example, as briefly mentioned in section 2.2, shares typically do well in periods of economic growth and underperform during downturns. High quality sovereign bonds typically do well in periods of economic slowdown as interest rates tend to decline (see section 4.2 for further details) and underperform in times of growth, as interest rates tend to rise.

The length and scope of economic cycles varies (within a country and among different countries). Their impact also varies by economic sector. Failure to take economic risk into account before making an investment decision may lead to capital losses and poorly diversified portfolios.

Investors should therefore take into account economic risk in order to build portfolios that are sufficiently diversified.

2. Inflation risk

Inflation is generally defined as the rate at which prices increase in an economy (typically on a monthly, quarterly, and annual basis) and is closely monitored by central banks. Based on historical analysis, inflation risk, especially high inflation, is particularly relevant in emerging economies.

Indeed, high inflation is generally not good for an economy. It typically causes i) its currency to depreciate (lose its value vs. other currencies) and ii) reduces the real return of investments and financial instruments (especially bonds – see section 4.2 for further details).

- Currency depreciation may cause financial losses to a foreign investor (see exchange rate risk below). The value of his/her investment will mechanically decrease when converted in his/her domestic currency.
- Also, high inflation typically causes the real returns of investments to decrease. The real return of a financial instrument can be approximated as its actual (or nominal) return less inflation. While inflation risk impacts most asset classes, it is particularly acute for fixed-rate products. As a simple example, investors who invest in fixed-rate bonds will receive an interest rate or coupon (see section 4.2 for details) that is fixed in advance. Inflation levels higher than the interest rate will cause capital and purchasing power losses to investors.

Investors should therefore take into account inflation risk, in particular when they invest in emerging economies and / or fixed-rate products.

3. Country risk and transfer risk

Country and transfer risk refer to very specific risks that might happen when investors invest in a foreign country.

For example, investors might lend money to a solvent foreign debtor (see section 4.2) and not be able to collect the proceeds of their investments in their domestic country because of capital controls. In that scenario, investors will be "stuck" with their investments in the foreign country and not be able to transfer them home.

Another example could be investing in the shares of a foreign company (see section 4.1) where the foreign company is subject to nationalisation. In that scenario, investors in this company may or may not be compensated

There is in general no means to hedge against such risks. However, investors could find insights to mitigate these risks by studying country risk ratings or country analysis documents that are published by specialized service companies.

Investors should therefore take into account country risk and transfer risk when they invest abroad, in particular, in emerging economies.

4. Exchange rate risk

Exchange rate risk needs to be factored in whenever an investor holds financial instruments in a foreign currency that is different from his/her domestic currency. Depending on exchange rates movements, an investment in a foreign currency may generate profits, when the foreign currency appreciates, or entail losses, when the foreign currency depreciates.

The exchange rate of a pair of currencies depends typically on the domestic and foreign countries' inflation rates, the difference between domestic and foreign interest rates as well as the difference between domestic and foreign countries' productivities and growth forecasts. In addition, other factors such as a lack of confidence in a country's political leaders, lack of independence of the central bank, or political instability may further weaken the exchange rate of a currency.

Investors should therefore take into account exchange rate risk when they invest in a foreign currency.

5. Liquidity risk

Liquidity refers to the ability to buy and sell any type of asset quickly without impacting its market price. Therefore, lack of liquidity may prevent an investor from selling financial instruments at market prices, possibly causing him/her to sell instruments at a substantial discount to fair price.

A distinction is generally made between i) a lack of liquidity caused by market supply and demand and ii) a lack of liquidity due to the inherent characteristics of a financial instrument or market practices related to such an instrument.

A lack of liquidity due to market supply and demand arises when the supply or the demand for a financial instrument at a certain price is extremely low. Under those circumstances, purchase or sell orders may either not be carried out immediately, and/or only partly (partial execution) and/or at unfavourable conditions. In addition, higher transaction costs may apply.

Investors should therefore take into account liquidity risk and make sure they invest in liquid instruments and / or understand the specific liquidity constraints, when applicable.

6. Psychological risk

Psychological risk is related to irrational factors that may affect the overall evolution of asset prices. For example unsubstantiated rumours may cause important drops in the share price or the bond price of a company, although the economic fundamentals (financials, profitability, growth prospects) of that company are sound.

7. Credit risk

Credit risk occurs each time a party lends money to another party.

When investors lend money to an issuer, for example by purchasing debt-related instruments (typically bonds - see sections 4.2 and 5.2) credit-risk refers to the inability of a debtor (the issuer in this case) to honor his debt payment(s). This inability is called “default” and investors may lose part or all of the capital they lent.

Credit risk also occurs when investors borrow money to invest in financial instruments (“credit-financed purchases”). Credit-financed purchases of financial instruments require collateral (typically cash) from investors and contain several additional risks. A decrease in value of the investment can trigger margin calls. Investors can either cover the call by sending additional cash or by selling part or the entire investment.

One needs to be aware that, as a consequence of the leverage effect entailed by the purchase of credit-financed financial instruments, the sensitivity to price fluctuations of those investments will be proportionally more important – i.e. gains and losses are magnified.

8. Interest rate risk

Generally speaking, fluctuations in interest rates, whether short-term or long-term rates, may have substantial adverse consequences on the prices of financial instruments, in particular bond instruments where interest rate and default risk are the most important risks (see sections 4.2 and 5.2).

9. Issuer risk, or clearing and settlement system risk

In case of insolvency of the issuer of financial instruments, or of the clearing and settlement system on which those instruments are negotiated, an investor may lose part or all of his investment. This risk is particularly relevant for structured products and derivatives (see sections 5.6 and 5.7).

10. Additional risks on emerging markets

While there is no single definition of “emerging markets”, emerging markets are described by the World Bank as countries with low-to middle per capita income. They generally show higher growth, yet higher risks than developed economies. In particular, the risks mentioned above are enhanced..

Despite strong progress in some emerging markets over the last few decades, political systems and economic fundamentals (e.g., inflation, exchange rate) are typically perceived as less stable than those of developed economies. Asset-prices therefore fluctuate in general much more in reaction to political or economic changes.

Finally, emerging markets generally have less sophisticated rules regarding the clearing and settlement of transactions and the protection of investors. Regulatory supervision is in general less mature than in developed economies.

Investors should therefore carefully assess the risks they are exposed to when investing in emerging markets.

11. Other risks

Information risk

Information risk refers to the risk of poor investment decisions arising from a lack of information, incomplete information or inaccurate information. This may be due to the use by the investor of unreliable sources, the misinterpretation of originally accurate information by the latter or can be due to communication errors.

Transmission risk

Transmission risk refers to the risk related to operational errors. When placing an order, an investor must provide certain details necessary for its execution (financial instrument, type of order, volume, execution date, etc.). The more precise the information related to an order, the smaller the risk of transmission error.

Charges

All investment products and services incur charges of various types whether the investment return is positive or negative. When investment returns are very low or negative charges can significantly impact the overall rate of return.

Important message to investors

The following classification into complex and non-complex products is indicative and does not necessarily constitute in each case an accurate classification, notably under the provisions of the Directive on Markets in Financial Instruments (MiFID), as amended from time to time, for a specific financial instrument.

The following classification aims at giving the reader a **general idea on what type of financial instruments could, potentially, be considered as complex or non-complex products.**

The exact classification of a financial instrument must be **assessed on a case by case basis.**

For example, a given financial instrument might be classified as “non-complex” if it is traded on a regulated market, whilst the same financial instrument would be classified as “complex” if it is traded outside of such regulated market. Another example is that a given “non-complex” financial instrument will be reclassified as a “complex” financial instrument if it contains a derivative or is to be considered as “complex” due to its specific structuring.

The Bank will classify each financial instrument as complex or non-complex on a case by case basis and will – upon request – inform the Client about its classification

The following classification must be read together with the prospectus or other specific descriptive or issue document of a given financial instrument.

The fact that a product is not complex does not mean that it is subject to fewer price fluctuations or generates fewer risks of losses.

4. Non-Complex Products

4.1 Equities

Description

Equities represent part of the issuer's capital: a person who owns a share actually owns part of a company. That person is called a shareholder, and is typically entitled to receive a share of the company's profits – if there are any – through an annual payment or dividend.

Generally, equities expose investors to more risk than debt securities, or bonds, (please also see bond section 3.2) since the payment the equity investor receives is more closely tied to the profitability of the company, whereas payments from bonds tend to be fixed. Also, equities will generally be subordinated to the claims of creditors if a company goes out of business: meaning bond holders get paid first and shareholders afterwards, if there is any money left.

The aggregate value of a company's issued shares is called its market capitalisation.

Types of shares

Preferred and common shares are the two main types of shares issued by companies. As suggested by the name, preferred shares generally receive preferential treatment: For example, in the event a company is liquidated, preferred shareholders have more rights to a company's assets than common shareholders, although the shares usually do not have voting rights. The precise details as to the structure of preferred shares are specific to each corporation.

Bearer shares are owned by whoever holds the physical stock certificate. These kind of shares are becoming increasingly uncommon.

Registered shares have holders whose names and addresses are recorded in the company's share registry. Investors receive a statement of ownership showing the number of shares they hold (this statement is not a financial instrument itself). Shareholders can elect to become a registered shareholder even if the shares are purchased through a broker.

Shares may be either **voting** or **non-voting**. Voting shares give the shareholder the right to vote on matters of corporate policy-making as well as who will sit on the board of directors. Non-voting shares entitle the shareholder to a dividend that cannot be less than that granted to shares with voting rights. The purpose of issuing shares of different classes (voting and non-voting) is usually to preserve the influence of the founding shareholders by entitling them to have more votes than shareholders who acquired their shares in subsequent issues.

Custody certificates are a substitute for foreign shares, entitling the holder to the same rights they would have if they held the actual share. Custody certificates are traded just like shares, and their price movements normally follow the price movements on the foreign market where the underlying share is listed. Custody certificates are sometimes known as depositary receipts, of which the most popular types are global depositary receipts (GDRs) and American depositary receipts (ADRs).

Risks

Market risk: this refers to the systematic risk of the equity securities markets. This risk is the same for all investors, is non-diversifiable and is driven by the prevailing market conditions and economic sentiment.

Volatility risk: the higher the uncertainty of a company's value drivers, the higher the volatility of the share price. The list below provides some examples of value drivers for equities, although it is not exhaustive:

- Growth prospects of the industry and markets where the company operates;
- Sector and company-specific risks;
- Competitive position of the company in its core markets and its ability to gain market share (through innovative products or unique capabilities, for example);
- The company's ability to generate cash-flows (which relate to its profitability, expected growth, and capital management);
- Maturity of the firm - early stage, small, medium, large.

Liquidity risk refers to the ability to buy and sell any type of asset quickly without impacting its market price. For an equity investment, liquidity depends mainly on the 'free-float' of the company (which is the proportion of its shares that are listed and freely tradable) and the daily transaction volumes in these shares. The larger the free-float and daily transaction volumes, the lower the liquidity risks. Liquidity risk is larger for small companies (e.g., penny stocks) which are not frequently traded, than for large companies (e.g., large caps).

Other risks

- **Exchange rate risk** applies for shares that are denominated in another currency from that which the investor normally uses. It increases if the foreign currency depreciates versus the domestic currency.
- **Dividend risk:** the dividend of a share mainly depends on the profit realised by the issuing company. Therefore, in case of low profits or even losses, it may happen that dividend payments are reduced or that no payments are made.
- **Entrepreneurial risk:** a share purchaser is not a creditor of the company, but makes a capital contribution and, as such, becomes a co-owner of the company. Consequently, he or she is participating in the development of the company as well as in the related opportunities and risks, which may entail unexpected fluctuations in the value of the company. An extreme situation would consist in the bankruptcy of the company, which would have as a consequence the complete loss of the invested amount.
- **Other:** The price of an equity share also fluctuates according to supply and demand. There are many factors on the basis of which the demand for a particular stock may increase or decrease.

4.2 Bonds

Description

Bonds are debt investments where an investor loans money to an issuer for a defined period of time. Issuers are typically private companies, municipalities, states or governments that raise capital in order to finance projects and activities.

Bond holders are generally entitled to interest (or “coupon”) payments and a principal payment at maturity:

- *Coupons* represent payments that issuers are required to pay on predetermined dates (typically quarterly, semi-annually or yearly). The size of the coupon generally depends on the quality of the borrower, the length of time the money is being borrowed for, the currency and the liquidity of the bonds;
- The *Principal* amount is the original amount invested.

The price of a bond is normally quoted assuming a “par” or face value of 100. A bond selling above 100 is trading at a premium and at a discount if it trades below 100. The price varies over the life of the bond as interest rates, perceived credit quality and other factors fluctuate (see risks below).

A bond’s price is inversely related to its yield. Its price rises when the bond’s yield falls and declines when the yield rises (please also see interest rate risks).

The characteristics of particular types of bonds can vary. The below examples provide an overview for the most common instruments.

- **Zero-coupon bonds** are securities that make no periodic coupon payments. Instead of periodic payments of interests, the investor receives the difference between the redemption price and the issue price (in addition to the repayment of the principal amount). As a consequence they are issued at discount or (below par).
- **Indexed bonds** are bonds where the yields are tied to the movements of an index such as inflation, stock market, gold price, foreign exchange, etc.
- **Bullet bonds** are simple types of debt instrument which pay a fixed rate of interest and whose face value is paid in full on the maturity date.
- **Senior unsecured bonds** are debt instruments that take priority over other unsecured or otherwise more “junior” debt by the same issuer. Such bonds have greater seniority in the issuers’ capital structure than subordinated debt, meaning that in case of default they are reimbursed (principal and interest) before other creditors receive any payment.
- **Subordinated bonds** (or junior debt): the redemption of these securities is subordinated to the repayment of all higher ranked creditors. The ranking of a subordinated bond issue can vary, from a simple subordination to deep subordination. In this last case, there are no debts with a lower ranking.
- **Floating rate bonds** are debt securities that have variable coupon payments that are reset at specific dates (e.g., quarterly, semi-annually, yearly). Coupons typically depend on an underlying variable interest rate such as the London Interbank Offered Rate (LIBOR), to which a premium is added.

Risks

Interest rate risk: this is usually the most important risk (also called duration risk) of a bond. The price of a bond changes in the opposite direction to the change in market interest rates, which are typically influenced by the actions of central banks. When interest rates increase, bond prices fall and vice-versa. All else being equal, the longer the maturity of the bond – which is the time when its principal is due to be reimbursed – the higher the interest rate risk.

Credit risk: this refers to the risk that the issuer, or borrower, does not meet the agreed interest payments or principal repayment. The better the financial situation and long-term outlook of the issuer, the lower its credit risk and vice-versa. A proxy the market uses to gauge credit risk is the credit rating assigned to the company or country issuing the debt by rating agencies such as Moody's, Standard & Poors, Fitch etc. (see appendix 1 in section 6.1). The creditworthiness of an issuer depends primarily on the financial soundness of the issuer but also on whether bonds are issued by a governmental body or a private institution, on the country of the issuing governmental body, on the sector of activity of the issuing private institution (credit institution, industrial undertaking, etc). Credit risk is more limited when the bonds are collateralised. However, even in such cases, investors should also assess the collateral and the creditworthiness of the issuer(s) if applicable. Finally, it should be noted that bonds issued by entities which are considered as safer (higher credit rating) generally offer lower returns because the risk of default is perceived as lower (refer to section 2 for risk and return relationships). The deterioration of an issuer's creditworthiness influences in a negative manner the price of the corresponding debt instruments.

Liquidity risk refers to the ability to purchase and sell any type of asset quickly without impacting its market price. This could depend on the number of bonds issued, the popularity of the issuer and the market on which it is traded. The primary measure of liquidity risk is the difference between the bid price (the price at which a dealer is willing to purchase a security) and the ask price (the price at which a dealer is willing to sell a security). The higher this difference, which is also called the "spread", the higher the liquidity risk.

Other risks

- **Exchange rate risk** exists for bonds whose payments are not in the domestic currency of the investor. It increases if the foreign currency depreciates vis-à-vis the domestic currency in which the investor normally deals.
- **Inflation risk:** the purchasing power of the interest payments decreases if inflation increases.
- **Reinvestment risk:** this is the risk that coupons from a bond will not be reinvested at the same interest rate as when the bond was issued. One example of reinvestment risk occurs with "callable bonds" (see section 4.2.4) where the issuer can redeem the bond at any point before it reaches its maturity date. Reinvestment risk is related to the fluctuations of interest rates, where an interest rate increase will be positive for the investor and a decrease unfavourable.

4.3 Money Market Instruments

Description

Money Market instruments are highly liquid investments, with maturities generally up to one year. The below sections provide an overview of some of the more common instruments: term deposits, commercial papers and treasury bills.

4.3.1 Term deposits

A term deposit is a cash investment, where investors place funds with a financial institution for an agreed time period and at an agreed interest rate.

Investment periods generally range from one day to one year, but longer periods are also possible. The fixed interest rate is based on market conditions and varies according to the currency and investment period.

Risks

- **Market risk** is mainly the risk that short-term interest rates change.
- **Early redemption penalties** are charged if investors would like to withdraw money before the end of the agreed period.
- **Exchange rate risk** exists where payments are not in the domestic currency of the investor.
- **Counterparty risk** is the risk that the debtor becomes insolvent. Most countries have established for financial institutions (such as banks) a deposit protection system in case of bankruptcy of the debtor.

4.3.2 Commercial paper

Commercial paper is a short-term debt instrument issued by companies for periods of up to 270 days to finance short-term cash requirements. This type of short term debt is normally issued at a discount that reflects prevailing market interest rates.

Normally only firms with high-quality debt ratings are able to find buyers without having to offer a substantial discount for their debt issue. This is driven by the fact that commercial papers are not collateralised.

Risks

- **Market risk** is mainly the risk that short-term interest rates change.
- **Exchange rate risk** exists when the commercial paper is denominated in another currency than the domestic currency of the investor.
- **Liquidity risk**: commercial paper is typically less liquid than other money market instruments.
- **Counterparty risk** is the risk that the debtor becomes insolvent. Unlike term deposits, the bank plays only the role of an intermediary.

4.3.3 Treasury Bills

Treasury bills are short-term debt instruments issued by the US federal government and denominated in US dollars (USD) with maturities of under one year. Treasury bills or 'T-bills' are usually issued for three, six and 12 months. They are issued at a discount and do not pay fixed interest rates (coupons) like conventional bonds.

Risks

- **Market risk** is mainly the risk that short-term interest rate change.
- **Exchange rate risk** exists for any investor whose domestic money is different from the USD.
- **Liquidity risk** for treasury bills is very low as T-bills are very readily traded.
- **Counterparty risk**: here there is a low risk of insolvency because of the quality of the issuer: the US government.

4.4 Simple UCITS Funds & other UCITS-like regulated funds

Description

An investment fund groups a pool of money received from different investors in order to invest the fund's capital according to the objectives stated in its prospectus. Investment funds are managed by money managers or fund managers.

Investment funds can be both complex and non-complex financial instruments. In Europe, the non-complex ones often fall under the heading of 'UCITS' funds. UCITS stands for Undertakings for Collective Investment in Transferable Securities, which is the name of a European Union (EU) directive, or set of rules. These rules allow UCITS funds to operate freely across the EU on the basis of a single authorisation from one member state. The rules have been developed over the last couple of decades in order to enhance investor protection, and they provide a clear definition of the types of investment allowed, as well as the level of liquidity, diversification and transparency of investments.

In 2011, a version of the directive called UCITS IV came into effect. This allows a broader investment scope and wider range of instruments in UCITS funds, with less restriction regarding the use of derivatives. This has allowed the creation of new funds that follow less restricted strategies, or so-called 'alternative UCITS' strategies.

Please also see an overview on UCITS rules in the appendix (section 6.2).

A separate sub-type of investment funds is exchange-traded funds (ETFs). ETFs are traded as shares on stock exchanges and typically replicate a stock market index, bond market, market sector, commodity or basket of assets. Investing in ETFs exposes investors to similar risks to those for equity securities (please see equities) and investment funds (please see below).

Risks

Market risk: by purchasing funds, investors will be exposed to the risks and returns associated with the nature of the financial instruments, sector concentration, country allocation, etc. the fund manager is pursuing.

Operational risk: for some UCITS funds, the operational systems and control procedures put in place may be weak or inadequate and lead to losses. Risks may also arise due to a lack of transparency of the investments made. Where investments are made indirectly, counterparty risks should also be taken into account (those of the administrator, custodian etc.).

Liquidity risk: UCITS regulations have developed clear requirements on underlying instruments' liquidity. However, liquidity issues can occur during market shocks or if the fund manager breaches UCITS requirements. Under extreme market conditions UCITS funds can exercise the right to suspend redemptions altogether until order in the markets is restored.

Valuation risk: the valuation of some underlying instruments can be difficult to gauge and subject to subjective assessments in the absence of a true market for the shares or units of such funds. Consequently, the valuation may be inaccurate. This risk is usually larger for alternative UCITS funds.

Other risks:

- **Management risks:** investment funds are legal entities whose success depend also on the quality and continuity of their management. In particular, investors should pay attention to the track record and tenure of the lead portfolio manager. A change in the portfolio manager typically impacts the investment strategy and performance of the fund.
- **Drop in share/unit prices:** investment funds invest in underlying instruments whose value could drop at any time. The higher the fund's diversification, the lower at least theoretically, the risk of losses. Conversely, risks are more important if the fund makes more specialised and less diversified investments. It is therefore important to pay attention to the general and specific risks attached to financial instruments and currencies contained in the fund's portfolio..

Before investing in a fund, clients are strongly recommended to carefully review the fund's prospectus and Key Investor Information document (KIID).

4.5 Commodities

Description

A commodity is a physical product which is or can be traded on a secondary market. Returns from commodity investments are based on changes in their price. As an asset class, commodities can provide diversification benefits to an investor's portfolio and a potential inflation hedge, since their price tends to increase in line with inflation.

Traded commodities are usually categorized as follows:

- Agricultural products and livestock – including biofuels, cocoa, coffee, cotton, edible oils, grains, pork, soybeans, sugar and wheat.
- Metals and mining – including aluminum, copper, gold, steel and silver.
- Energy – including crude oil, gas, electricity and petrochemicals.

While it is possible to buy such commodities directly, the most common ways to gain exposure to commodity prices include buying derivatives (typically through forward or futures contracts, see section 5.7), or buying equities that are directly linked to a commodity. These might include buying shares in an oil producer or a gold mining firm for example. Alternatively, investors can also get commodity exposure via investment funds typically through UCITS funds or ETF's (see section 4.4) that have direct holdings in commodities.

Risks

Commodities are exposed to market risks whose fluctuations can vary significantly from those of more traditional asset classes such as equities or bonds. Some commodities such as energy and certain metals may have more strongly correlated trends between them. Supply and demand for commodities are affected by the actions of producers, consumers, traders, and commodity investors. Climate and geopolitical factors can also alter the supply of commodities on the market.

5. Complex Products

5.1 Complex Equities

Description

Complex equities, as opposed to the non-complex equities described in section 4.1, are equity securities that include some form of derivative instrument (for more on derivatives see section 5.7). Various complex equity instruments exist, but callable equity shares, puttable equity shares, and convertible preferred shares are among the most commonly used.

In order to fully understand the below sections, it is recommended that the reader also reads sections 4.1 (non-complex equities) and 5.7.3 (derivatives, options subsection).

5.1.1 Callable equity shares

Equity shares that are callable are securities that give their issuer the right or the option (there is no obligation) to buy back the shares from investors at an agreed price (the “call price”) and at a certain time predetermined at issuance. The call price is fixed by the issuer and is typically at a premium to the prevailing price.

Callable equity shares can be either callable common equity shares or callable preferred equity shares. Callable common equity shares are typically issued by a parent company to a subsidiary company. The parent company can then purchase them back at a fixed price for example if the subsidiary’s value increases significantly. Callable preferred equity shares are generally issued to all types of investors and are typically called by the issuer when interest rates decrease. This can allow the company to issue new preferred shares that pay lower dividends. Callable equity shares are often more beneficial to the issuers than to investors.

Risks

The risks related to callable equity shares are here compared to those of non-complex equities (refer to section 4.1 for more details).

Market risk is similar to that of non-complex equities.

Volatility risk: the volatility risk of callable equity shares is similar to that of non-complex equities when their price is significantly below the call price. However, when their price is very close to the call price, their price appreciation is capped at that level (the issuer will buy back the shares at the call price) and the volatility is technically lower.

Liquidity risk is similar to that of non-complex equities.

Call option risk: this risk does not exist with non-complex equities. Investors face the risk that their callable equity shares are called back when their price approaches the call price. The call price is typically fixed at a premium over the prevailing price in order to compensate investors for this risk.

Other risks (exchange rate risk, dividend risk, entrepreneurial risk, or risks around changing supply or demand): these are essentially similar to those of non-complex equities.

5.1.2 Puttable equity shares

Equity shares that are puttable are securities that give the investor, and not the issuer, the right or the option (there is no obligation) to sell back the shares to the issuer at a price (the “put price”) and at a certain time predetermined at issuance. The main advantage for investors is that they can sell back those securities at a guaranteed price and thus limit their potential loss.

Risks

The risks related to puttable equity shares are here compared to those of non-complex equities.

Market risk is similar to that of non-complex equities.

Volatility risk: the volatility risk of puttable equity shares is similar to that of non-complex equities when their price is significantly above the put price. However, when their price is very close to the put price, their price depreciation is capped at the put price (investors will sell the shares at the put price if their price decreases below it and the volatility is technically lower).

Liquidity risk: the liquidity risk for puttable equity shares is typically lower than that of non-complex equities, because investors can always sell the shares back to the issuer, assuming the issuer is creditworthy.

Other risks (exchange rate risk, dividend risk, entrepreneurial risk, or risks around changing supply or demand): these are essentially similar to those of non-complex equities.

5.1.3 Convertible preferred shares

Convertible preferred shares are securities that allow holders to convert their shares into a specified number of common shares, at a conversion rate which is determined at issuance. Convertible preferred shares have the following three advantages for investors:

- They allow investors to earn a higher dividend than if they invested in common shares.
- They allow investors to benefit from a potential rise in the price of the common shares through the conversion option.
- Their price is less volatile than the underlying common shares because dividend payments are generally known and more stable.

Risks

The risks related to convertible preferred shares are here compared to those of non-complex equities.

Market risk is similar to that of non-complex equities.

Volatility risk: prior to conversion, the volatility risk of convertible preferred shares is similar to that of non-complex preferred equities. After conversion, the volatility risk will be similar to that of non-complex common equities.

Liquidity risk is similar to that of non-complex equities.

Other risks (exchange rate risk, dividend risk, entrepreneurial risk, or risks around changing supply or demand): these are essentially similar to those of non-complex equities.

5.2 Complex Bonds

Description

Complex bonds are debt securities that include some form of derivative instrument. Various instruments exist, but convertible bonds, exchangeable bonds, bonds redeemable into shares, callable bonds, puttable bonds, and floating rate bonds with a cap or a floor provision are among the most commonly used.

In order to fully understand the below sections, it is recommended that the reader also refers to sections 4.2 (non-complex bonds) and 5.7.3 (derivatives, options subsection).

5.2.1 Convertible bonds

Convertible bonds are hybrid debt securities that give the investor, and not the issuer, the right or the option (there is no obligation) to convert the bonds into common stock equity shares of the same company, during a specific period and at specific conditions determined at issuance. The specific conditions include two important elements. The conversion ratio, which represents the number of common shares that investors will receive when they exchange their convertible bond and the conversion price, which is the pre-agreed price at which the bonds can be converted into common shares.

Convertible bonds are typically issued with a coupon that is lower than that of similar non-complex bonds and their price behavior typically depends on the underlying stock price. If the latter is very low, the convertible bond will behave like a non-complex bond. If the stock price is high enough, the convertible bond will behave more like an equity security. The main advantage for investors is that they can exercise their option if the underlying stock price increases sufficiently such that they make a higher profit than if they were holding the initial bond. Upon conversion, investors become shareholders.

Risks

The risks related to convertible bonds are here compared with those of non-complex bonds.

Interest rate risk: this is similar to that of non-complex bonds when the price of the underlying shares is very low. If the share price is very high, interest rate risk is less relevant (and the convertible bond will behave more like an equity security, see above).

Volatility risk: this risk is not present for non-complex bonds. Convertible bonds are impacted by the movements of the underlying stock (see above and section 3.1 for non-complex equities volatility risk).

Credit risk: similar to that of non-complex bonds, as long as the conversion option has not been exercised.

Liquidity risk: liquidity risk for convertible bonds is typically higher than for similar non-complex bonds because the market for convertible bonds is typically smaller, with fewer buyers and sellers.

Other risks (exchange rate, inflation, reinvestment) are similar to those of non-complex bonds as long as the conversion option has not been exercised.

5.2.2 Exchangeable bonds

Exchangeable bonds can be exchanged by bondholders for existing shares of another company (i.e. a company other than the issuer of the bonds). The issuers of exchangeable bonds are generally companies which hold shares in other companies. The behavior of exchangeable bonds and risks are similar to those of convertible bonds.

5.2.3 Bonds redeemable into shares

Bonds redeemable into shares are debt securities that are paid back at maturity in the form of a number of common stocks at a conversion price/ratio that is determined at issuance. As opposed to convertible bonds, the conversion into common stock is mandatory for the investor.

Bonds redeemable into shares are generally issued with a coupon that is lower than that of similar non-complex bonds. Investors generally take advantage of higher remuneration than if they directly held the common stock because interest rates are often higher than dividends. At maturity, investors will become common shareholders and not debt holders anymore.

Risks

The risks related to bonds redeemable into shares are here compared with those of non-complex bonds (refer to section 4.2 for more details).

Interest rate risk is similar to that of non-complex bonds as long as the conversion has not happened.

Volatility risk: this risk is not present for non-complex bonds. Bonds redeemable into shares are impacted by movements of the underlying stock (see above and section 4.1 for non-complex equities volatility risk). In particular, if the stock price decreases significantly at the time of conversion, investors will find themselves in a situation where the value of the common stock received is lower than the price paid initially for the bonds.

Credit risk is similar to that of non-complex bonds as long as the conversion has not happened.

Liquidity risk is typically higher than for similar non-complex bonds because the market for such bonds is typically smaller, with fewer buyers and sellers.

Other risks (exchange rate, inflation, reinvestment): similar to those of non-complex bonds as long as the conversion has not happened.

5.2.4 Callable bonds

Bonds that are callable are debt securities that give their issuer the right or the option (there is no obligation) to buy back the bonds from the bondholders at a specified price (the "call price") on specific dates determined at issuance. This generally happens when the issuer anticipates that sometime in the future, market interest rates will fall below coupon rates and it will be economically more profitable to buy back the securities and replace them with new ones that have a lower coupon rate.

Risks

The risks related to callable bonds are here compared with those of non-complex bonds (refer to section 4.2 for more details).

Interest rate risk is similar to that of non-complex bonds when interest rates are high. Callable bonds are much less sensitive to interest rate changes when interest rates decrease (especially when approaching the call price).

Credit risk is similar to that of non-complex bonds.

Liquidity risk is similar to that of non-complex bonds.

Other risks (exchange rate, inflation, reinvestment): are similar to those of non-complex bonds except for reinvestment risk which is higher for callable bonds as they will be called when interest rates decrease and the callable bond price approaches the call price.

5.2.5 Puttable bonds

Bonds that are puttable are debt securities that give bondholders the right or the option (there is no obligation) to sell the bonds back to the issuer at a specified price (the "put price") on specific dates determined at issuance. The main advantage for investors is that they can exercise the put option when interest rates rise so much that the bond price declines below the put price (see section 4.2 for further details on the relationship between interest rates and bond prices). The bondholder can oblige the issuer to buy back the issue and can then reinvest the proceeds at the prevailing lower price, thus capturing a profit.

Risks

The risks related to puttable bonds are here compared with those of non-complex bonds.

Interest rate risk is similar to that of non-complex bonds when interest rates are low. Puttable bonds are much less sensitive to interest rate changes when interest rates increase (especially when approaching the put price).

Credit risk is similar to that of non-complex bonds.

Liquidity risk is typically lower than that of non-complex bonds, because investors can always sell the shares back to the issuer, assuming the issuer is creditworthy.

Other risks (exchange rate, inflation, reinvestment) are similar to those of non-complex bonds except for reinvestment risk which is lower for puttable bonds as they will be sold back when interest rates increase and the puttable bond price approaches the put price.

5.2.6 Floating rate bonds with a cap or a floor provision

Floating rate bonds have variable interest rates and can be accompanied by a floor or a cap. The cap of a floating rate bond sets the maximum payment the issuer can make, setting a maximum rate for the issuer to pay. A floor on a floating rate bond sets the minimum payment the issuer needs to make. The main advantage for the bondholder is that they are guaranteed the floor rate even if interest rates fall significantly.

Risks

The risks related to floating bonds with a cap or a floor provision are here compared with those of floating non-complex bonds (refer to section 4.2 for more details).

Interest rate risk: *floating rate bonds* are less interest rate sensitive than fixed rate bonds. Floating rate bonds with a cap are more interest rate sensitive than similar option-free bonds when interest rates increase beyond the cap. Floating rate bonds with a floor are less interest rate sensitive than similar option-free bonds when interest rates go below the floor.

Credit risk is similar to that of floating non-complex bonds.

Liquidity risk is similar to that of floating non-complex bonds.

Other risks (exchange rate, inflation, reinvestment) are similar to those of floating non-complex bonds.

5.3 Non-UCITS – Hedge Funds

Description

Hedge funds are the most common type of alternative investment funds (AIF) and typically aim to generate returns with low correlations to traditional asset classes over an investment cycle. Certain hedge funds strategies also have the ability to generate positive returns in falling markets and thus can provide interesting diversification benefits for an investor's portfolio.

In order to do so, hedge funds apply a range of different investment methods: some non-exhaustive examples of these include global macro, equity long short, relative value or event driven strategies (see explanations below).

A macro hedge fund aims to take advantage of macroeconomic conditions and differences between countries' prospects to generate positive long-term returns by investing in stocks, bonds, commodities or currencies. An equity long/ short hedge fund may invest in stocks that the managers perceive as attractive investments but also has the flexibility to "short sell" stocks (or indices) if they perceive the stock or index is overvalued. Short selling means borrowing an asset and selling it in the expectation of buying it back in future at a lower price. A relative-value hedge fund aims to take advantage of market inefficiencies within or across asset classes for example by buying undervaluing securities and short-selling overvalued ones. Event driven strategies can include investments in distressed securities, merger arbitrage or activism and aim to exploit price inefficiencies in the market before events such as a company's bankruptcy or a takeover deal with another firm.

Hedge funds have a wide investment universe which is only limited by their investment mandate. Hedge funds' investment style can include short sales, leverage and derivatives. Hedge funds can choose freely the products and markets (including emerging markets) in which they want to invest and their trading methods. This gives them a high degree of flexibility in how they achieve market exposure across different asset classes and implement their investment views.

Hedge funds usually set high minimum investment requirements for investors and the remuneration of their managers is often linked to the performance of the hedge fund.

Risks

Market risk: Hedge funds are subject to the non-diversifiable market risk of the underlying securities they hold.

Legal risk: Hedge funds may be established in legal jurisdictions in which an authority exercises only limited supervision or in which no regulatory supervision is exercised and where the transparency requirements are weak or non-existent, entailing less protection of investors' interests. Some hedge funds also require extensive guarantees from the investor prior to any subscription. The prospectuses, financial statements and the clauses of the subscription agreements are often complex.

Exchange rate risk: exists for f share classes that are not in the domestic currency of the investor. It increases if the foreign currency depreciates vis-à-vis the domestic currency in which the investor normally deals.

Operational risk: for some hedge funds, the operational systems and control procedures put in place may be weak or inadequate and lead to losses. Risks may also arise due to a lack of transparency of the investments made. Where investments are made indirectly, counterparty risks should also be taken into account (administrator, custodian, etc.).

Liquidity risk: investments made by hedge funds may be illiquid and may not allow investors to withdraw money promptly. Hedge funds can plan for long lead times concerning subscription and redemption, as well as periods during which their shares or units cannot be redeemed (called "lock-up periods"). Most of these investments are subject either to lock-in periods, or redemption penalties if investments are redeemable within or after a certain period of time. In addition, many of the investment techniques used in the alternative investment industry involve investments either in illiquid financial instruments, or in instruments which are subject to legal or other restrictions on transfer. Therefore selling an alternative investment position may only be possible on certain dates after a notice period of several weeks, for example four times a year, on specific dates. Due to large bid/ask spreads related to some illiquid positions, the final cash payment to the investor may not amount to its initial net asset value.

Valuation risk: the valuation of some hedge funds is subject to necessarily subjective assessments in the absence of a true market for the shares or units of such funds. Consequently, the valuation may be inaccurate.

Leverage risk: Hedge funds may use leverage, or borrowed money, which can lead to significant losses in case of adverse market movements.

Other risks:

- **Lack of information risk:** The net asset value of such financial instruments is usually not known at the time when the investor decides to invest or to redeem his investment. This is due to the fact that, in principle, a notice period is necessary before such a transaction can be performed. As a consequence, the net asset value can only be calculated once the investment has been made or redeemed.

5.4 Non-UCITS – Private Equity

Description

Private equity funds, which are a category of alternative investment funds, typically pool money from many investors and invest in private companies, i.e. those that are not listed on a stock exchange or other regulated market or buy public companies that they de-list. They typically seek to make their "portfolio companies" more profitable through acquisitions, mergers, taking out costs, or changing their capital structures. Private equity funds aim to make returns by selling these companies on after a number of years, hopefully at a much higher value. As an asset class, Private Equity can provide diversification benefits to an investor's portfolio.

Capital for private equity funds is raised from retail and institutional investors and can be used either to fund start-ups, to inject working capital into a growing company, or to acquire a mature company. It can also be used to strengthen a company's balance sheet. The term private equity covers different types of private equity investments, some of which are explained in more detail below:

- Venture capital;
- Growth capital;
- Mezzanine capital;
- Buyout;
- Special situations.

Venture capital: These funds provide equity capital to start-ups and companies in the early stages of growth. Portfolio companies tend to be focused in one specific sector, e.g. healthcare or technology. Venture capital is sometimes called risk capital: many of the companies invested in will fail. It has the highest risk and return profile of all types of private equity investment.

There are typically three main stages of venture capital investment: seed, start-up and expansion. These correspond to the early phases of a company's life, in order of maturity.

Growth capital: These funds enable a company to scale up its business, make acquisitions or other investments after it has made it through the early stages.

Mezzanine capital: Mezzanine financing is typically used to finance an expansion of existing companies. This type of financing is a hybrid investment of debt and equity.

Buyout: These funds typically buy mature companies, changing their ownership or removing them from public markets. Buyout transactions are normally financed using a mixture of private equity funds and borrowed capital.

Special situations: These funds may invest in equity or debt securities of financially stressed companies.

Private equity investments are generally made through a closed-end fund or investment structure, whose terms and conditions are defined in a limited partnership agreement. Investors become limited partners in the fund, and the fund's manager is typically called a general partner. Long time horizons, illiquidity, the large size of investment needed, and the complexity of the investments make private equity an inappropriate asset class for many investors.

Investors commit capital up to an agreed level for the duration of the investment period, which is several years long. When the fund needs money to invest, the general partners ask the limited partners to provide it. This is called a "capital call."

Once a portfolio investment is realised – i.e. a company that the fund has invested in is sold to a financial buyer, a strategic investor or listed on a public market – the fund distributes the proceeds back to the limited partners.

Investments in newly created private equity partnerships are called primary investments, and the term secondary investment refers to when these are sold on a secondary market. A co-investment is a direct investment by a limited partner in a company alongside a Private Equity fund.

Risks

Investing in a private equity fund involves considerable risks which are usually disclosed in the applicable "Private Placement Memorandum" for the fund the investor may be considering.

Market risk and valuation risk: Market movements will have an impact on the value of the investments held in the portfolio. Company-specific risks will largely be determined by the investments the manager has made. Investments in privately held companies tend to be riskier than investments in publicly traded companies, largely because there is less publicly available information on them, making it harder to gauge their situation and valuation, and also harder to sell them on.

Some private equity funds may be concentrated in relatively few portfolio companies, making it hard to diversify their risks. Typically the general partner is also incentivised based on the fund's performance, which may make them more inclined to take risks in order to meet performance targets.

Legal risk: Private equity funds typically are not registered as UCITS (see section 4.4) and are generally not subject to much regulation and the protections such laws provide. The "Private Placement Memorandum" detailing the fund's risks can be complex and difficult to understand.

Exchange rate risk: exists for funds' share classes that are not in the domestic currency of the investor. It increases if the foreign currency depreciates vis-à-vis the domestic currency in which the investor normally deals.

Operational risk: Such risks include the quality of a portfolio company's management, non-executive directors and accounts; the credibility and achievability of its budget and business plan; legal, compliance and regulatory risks; and how well the interests of the company and its management are aligned with those of the fund's general partners.

Liquidity risk: Investments in private equity funds should be considered illiquid. Money is typically committed to a private equity fund for a number of years, with no returns until a portfolio company is sold. Because private equity investments are not listed on an exchange and trading in the secondary market is relatively small, an investor looking to sell their position may have to accept a large discount, if it can be sold at all.

Funding risk: The timings of both demands for investment and returns are uncertain in a private equity fund. The fund's general partners decide when to "call" capital from investors, who must meet their commitments within a short time period or default on their payments. Money is typically returned only when a portfolio company is sold or if the fund is liquidated.

Leverage risk: In this domain, investment strategies can entail high risks. For example, by using leverage, a slight change of the market may lead to important gains but also losses. In some situations, the entire investment may be lost.

Other risks:

- **No assurance of investor return:** The risk for the investor is that he or she may not recoup the full invested amount, and may even lose it entirely. Past performance of these instruments is no guarantee of future results, particularly as the nature of the investment environment is constantly changing (new geographic areas, new specialised areas, etc.). For example, there is often strong competition to acquire portfolio companies during periods of economic growth, whilst it may be difficult to withdraw from such investments during periods of economic downturn.

5.5 Non-UCITS – Real Estate Funds

Description

Investment in real estate can provide two sources of returns: income in the form of rent, and the potential for capital appreciation. As an asset class, real estate can provide diversification benefits to an investor's portfolio and a potential inflation hedge, since rents and property values tend to increase in line with inflation. Real estate investments are typically implemented through investment funds or listed investment companies.

Real estate investments are typically divided according to their underlying assets. Assets included under the heading of real estate investments include:

- Residential property – single-family homes;
- Commercial property – including office buildings, shopping centers etc.;
- Loans with residential or commercial property as collateral – including mortgages and construction loans.

Forms of Real Estate Investment

Residential

Residential property is considered a direct investment in real estate. Some buyers pay cash but most take on a mortgage, or loan, to purchase the property. Property bought with a mortgage is referred to as a leveraged investment and the owner's equity is the property value minus the outstanding loan amount. Changes in property values over time affect the property owner's equity.

The issuer, or lender of the mortgage often groups together the mortgages they originate and sells them on as publicly traded mortgage-backed securities (MBS), a process known as securitising them. Commercial

Commercial properties generate income from rents. Residential homes purchased for rental income are also considered to be an investment in commercial property. Large commercial properties (e.g. office buildings) are a form of direct investment for institutions or wealthy individuals, either purchased for cash or as a leveraged investment if a mortgage is taken out for a portion of the purchase price.

Long time horizons, illiquidity, the large size of investment needed, and the complexity of the investments make commercial real estate an inappropriate asset class for many investors.

Commercial real estate properties can be held by a limited partnership in which the partners have limited liability and the general partner manages the investment and the properties, or by a real estate investment trust (REIT).

Real estate investment trusts (REITs) issue shares that trade publicly like equity shares. REITs are often identified by the type of real estate assets they hold: mortgages, hotel properties, malls, office buildings, or other commercial property. Rental income is used to pay dividends. As with residential mortgages, whole loans (commercial property mortgages) are considered a direct investment, but loans can be pooled into commercial mortgage-backed securities (CMBS) that represent an indirect investment.

Risks

The main types of risk associated with real estate investments are as follows:

Market risk: can be divided into national and regional risk as real estate values are sensitive to local factors. The real estate market has historically been considered relatively risky. The most important characteristic defining the value of a building is its location. Defining the quality of the location depends on a number of factors such as surrounding buildings and construction projects, building zone planning, connections to highways and public transportation, etc.

Exchange rate risk: exists for funds' share classes that are not in the domestic currency of the investor. It increases if the foreign currency depreciates vis-à-vis the domestic currency in which the investor normally deals.

Object quality risk: This refers to the investment needed to maintain the building and keep tenants in it, if the property is rented out. Maintenance work, improvements due to regulatory requirements and property adjustments aiming at satisfying tenants are all expenses needed to maintain the quality of the investment.

Tenant risk: Ensuring a high level of sustainable rental income is often an important part of real estate investment. There are several ways to secure lease income including: verifying each potential tenant's credit standing prior to investment, signing long-term tenancy agreements, and/or supporting loyalty through an attractive mix of tenants and a good property location. Tenant risks tends to focus on the likelihood of keeping or

losing existing occupants, whereas market risks discussed above gives an indication of how easy it is to find new tenants.

Financing risk (leverage): The risk of an investment project decreases if less borrowed capital is used to finance purchases. Basically, the risk of an investment project decreases if the amount of equity being used to finance the object increases, although leverage can correspondingly increase returns.

Liquidity risk: Liquidity and tradability of investments linked to real estate can vary significantly. Such investments are usually illiquid and investors may not be able to liquidate their position in the short-term

Valuation risk: the ability of investors to value and select property investments.

Legal risk: Includes issues such as local or national controls on the use of land, the issuing of permits, environmental considerations and any remedial work necessary to comply with these regulations.

Other risks:

- The above risks such as selecting, financing, and managing real estate projects directly affect performance. The degree of leverage, or debt financing, used in a real estate investment is important because leverage amplifies losses as well as gains.

5.6 Structured Products

Description

Structured products are designed to meet specific risk-return objectives. They combine different kinds of financial instruments, of which at least one is a derivative, which are provided to clients in the form of a single product to produce specific investment characteristics.

There is a large range of structured products available in today's market. Some structured products are produced to accommodate risk adversity, whereas others entail a higher risk than the underlying instruments individually. Information regarding the risks associated with a specific product is normally defined in the product's prospectus. This is generally provided to investors purchasing structured products on the primary market (i.e. when the product is issued). If purchased on the secondary market, the product prospectus is not automatically provided. In each case, investors are therefore strongly recommended to make sure they obtain it before making an investment decision.

Types of structures products

The categorisation explored here is for guidance only. The classes of structured products investors are most likely to come across are:

- Capital protection
- Yield enhancement
- Participation

Capital Protection Products

Capital protection products offer total or partial protection of the nominal value (for example between 90% and 100%) at maturity, subject to the credit risk of the issuer. In addition, they offer returns linked to the development of an underlying asset or index, in the form of "participation" (see section below), a recurring payment, or a one-off payment at expiration. Capital protection products are often sought by risk-averse investors. These products can be structured to perform in rising or falling markets and should be chosen in accordance with market expectations over the lifetime of the product.

Yield Enhancement Products

Yield enhancement products offer a limited or capped upside, usually in the form of a fixed coupon (or a discount). Investors forgo an unlimited participation in the performance of the underlying asset or index in favour of a recurring or one-off payment. Yield enhancement products may offer a conditional capital protection, in which case the protection is granted only if a predefined "condition" is met (i.e. a barrier has not been touched). Yield enhancement products are subject to the credit risk of the issuer. These products are often sought by investors with a moderate to increased

risk appetite.

Participation Products

Participation products offer usually unleveraged participation in the performance of one or multiple underlying products or assets. They may offer conditional capital protection, in which case the protection is granted only if a predefined “condition” is met (i.e. a barrier has not been touched). Participation products are subject to the credit risk of the issuer. These products are often sought by investors with a moderate to increased risk appetite, who expect markets to move both up and down over the lifetime of the product.

Risks

General remarks: Capital protection products are often considered to carry the least risk of the three and participation products the most, with yield enhanced products sitting in between. But the reality is that any instrument, regardless of product class, can be constructed with various features and can carry various risks. Instruments should be assessed according to their specific terms and not by general product grouping. The capital protection is linked to the nominal value of the product rather than its issue price or purchase price on a secondary market. Therefore, the investor benefits from a guarantee only up to the nominal value of the product with the consequence that capital protection does not necessarily mean 100% repayment of the capital invested. Consequently, the protection will be reduced if the issue/purchase price is higher than the nominal value and, conversely, increases if the issue/purchase price is lower than the nominal value, in particular if the product has been purchased at a price which was different from par or after the original issue. The level of protection depends on the creditworthiness of the issuer. The capital is therefore protected only if the issuer of the protection can meet his obligations. The maximum loss is thus limited to the difference between the purchase price and the amount of the capital protection upon maturity. However, over the life of the product, its price can fall below the level of the capital protection amount, which increases the risk of loss in case of sale prior to expiration. Capital protection is only guaranteed for the investor if the latter holds on the product until maturity but is not ensured if early repayment is requested. Upon maturity, if the capital is not guaranteed up to 100%, the investor will not be repaid the full amount originally invested.

Market risk: structured product investors are subject to the non-diversifiable market risk of the underlying assets in which the products invest.

Counterparty / issuer risk: particular attention needs to be paid to issuer risk. Investors need to be aware that, as well as any potential loss they may incur due to a fall in the market value of the underlying, a total loss of their investment is possible if the issuer should default.

Liquidity risk: market makers, who in most cases are the issuers themselves, normally guarantee that structured products are tradable, although liquidity risks cannot be excluded.

Exchange rate risk: exists for products that are not in the domestic currency of the investor. It increases if the foreign currency depreciates vis-à-vis the domestic currency in which the investor normally deals..

Valuation risk: the valuation of some underlying instruments can be difficult and subject to subjective assessments in the absence of a true market. Consequently, the valuation may be inaccurate.

5.7 Derivatives

Description

Derivatives are contracts between two parties, the buyer and the seller, that give them the right or the obligation to execute the terms of the agreement drafted in the contract. Derivatives are financial instruments whose price depends on the price or value of an underlying asset (typically bonds, interest rates, equities, currencies or commodities). Various derivative instruments exist, but forward contracts, future contracts, swap contracts and option contracts are among the most commonly used.

Derivatives are typically complex and more volatile than their underlying asset and are used for speculation or hedging purposes. Investors should make sure they understand the associated risks before entering into such trades.

5.7.1 Forward Contracts

Forward contracts are agreements between two parties where the buyer agrees to buy an asset from the seller at a specified price at a future date determined in the contract. At initiation, neither of the parties disburses cash. At expiration, the parties typically settle the contracts in one of two ways: physical delivery of the asset, or cash settlement. In the latter case, the buyer receives cash from the seller if the price of the underlying asset is higher than the price determined in the contract or pays cash to the seller if the price of the underlying

asset is lower than the price determined in the contract.

Forward contracts are highly customised, not traded on organised exchanges, largely unregulated, and are subject to counterparty risk (see below). Forward contracts are typically used with the underlying assets bonds, interest rates, equities, and commodities, mainly for hedging purposes.

Risks

Market risk: forward contracts investors are subject to the non-diversifiable market risk of the underlying assets.

Interest rate risk is the main risk for forward contracts dealing with bonds and interest rates (see sections 4.2 and 5.2 for further details).

Volatility risk is the main risk for forward contracts dealing with equities (see sections 4.1 and 5.1 for further details).

Counterparty risk: each party is exposed to the default of the other party or the other party not honouring the terms of the contract.

Liquidity risk: forward contracts are traded “over-the-counter” – which means outside of a regulated exchange – and typically have a low liquidity.

Exchange rate risk exists where payments specified in the contract are not in the domestic currency of the investor.

Valuation risk: the valuation of some underlying instruments can be difficult to ascertain and subject to subjective assessments in the absence of a true market. Consequently, the valuation may be inaccurate. Investors incur a risk if the evolution of the actual value of the contract or of the underlying is not in line with the evolution they forecasted when concluding the contract. In case the value of the contract or the underlying asset decreases, the forward buyer will still have to accept the underlying asset at the price agreed upon in the contract. The forward buyer (“the buyer”) could incur significant losses when the price determined in the contract is significantly higher than the current market price of the underlying asset (spot price). Therefore, the maximum the buyer may lose is his whole initial investment if the spot price goes to zero. In case of “marking to market” agreement, the investor will need to have permanently at his disposal a sufficient cash (“margin”) cover “margin calls” (see section 5.7.2 for other examples). In case the margin is insufficient during the forward transaction, the investor will have to provide a variation margin at very short notice. In case of the investors inability to do so, the transaction will be liquidated before due term, generally at loss.

Other risks: non-standardised contracts may only in principle be liquidated by undertaking the reverse transaction with the same counterparty, and the assignment or transfer of transactions to third parties requires the agreement of all parties.

5.7.2 Futures Contracts

Futures contracts are equivalent to forward contracts. There are nonetheless a few important differences between forward and futures contracts (see section 5.7.1 for comparison). Futures contracts are highly standardised and are regulated and traded on organised exchanges. A clearing house acts as the single counterparty of both the buyer and the seller and guarantees that they will both honour their obligations. At initiation, a buyer deposits some money in an account equivalent to around 2-10% of the value of the trade. The value of this account varies with the underlying asset price and the buyer will receive a margin call – or demand for more money – if the futures account’s value goes below a specified level (called maintenance margin) that he or she needs to respect if the investor wants to stay in the futures trade.

Futures contracts are typically used with bonds, interest rates, equities, and commodities underlying assets for both speculative and hedging purposes.

Risks

Market risk: futures contract investors are subject to the market, non-diversifiable, risk of the underlying assets.

Interest rate risk is the main risk for futures contracts dealing with bonds and interest rates (refer to sections 4.2 and 5.2 for further details).

Volatility risk is the main risk for futures contracts dealing with equities (refer to sections 4.1 and 5.1 for further details).

Counterparty risk: there is significantly lower credit risk than for forward contracts (because of the existence of a futures account and a clearing house).

Liquidity risk: there is a significantly lower liquidity risk than for forward contracts. Futures are standardised contracts and are traded on organised exchanges.

Exchange rate risk exists where payments specified in the contract are not in the domestic currency of the investor.

Valuation risk: there is significantly lower valuation risk than for forward contracts, because futures contracts are traded on organised exchanges.

Other risks: losses can be significant for investors who speculate and face adverse underlying asset price or value movements.

5.7.3 Swap contracts

Swap contracts are agreements between two parties that agree to exchange or swap a series of cash-flows over a period of time and frequency (e.g. quarterly, semi-annually or yearly) determined in the contract. They have similar properties to forward contracts in the sense that they are highly customised, not traded on organised exchanges, largely unregulated, and are subject to counterparty risk.

Swap contracts are typically used by corporations that want to hedge their interest rates and/or currency risks.

Risks

Market risk: swap contracts investors are subject to the market, non-diversifiable, risk of the underlying assets.

Interest rate risk is the main risk for swap contracts dealing with interest rates (refer to sections 4.2 and 5.2 for further details).

Counterparty / issuer risk: each party is exposed to the default of the other party or if the other party does not honour the terms of the contract.

Liquidity risk: swap contracts are traded over-the-counter and typically have a low liquidity.

Exchange rate risk exists where payments specified in the contract are not in the domestic currency of the investor. This risk can be significant for currency swaps.

Valuation risk: the valuation of some underlying instruments can be difficult and subject to subjective assessments. Consequently, the valuation may be inaccurate.

Other risks: non-standardised contracts may only in principle be liquidated by undertaking the reverse transaction with the same counterparty.

5.7.4 Option Contracts

Option contracts are agreements between two parties, the buyer and the seller, where the seller is obliged to sell or the buyer obliged to buy the underlying asset at a pre-agreed price (the “strike price”) at or up to a specific date determined in the contract. Option contracts are in general highly standardised and trade on organised exchanges. There are two types of options:

Call options are contracts where the buyer pays a fee (premium) to the seller, and acquires the right or the option (there is no obligation) to buy the underlying asset from the seller at a predetermined price. Upon exercising the option, the seller must honour the contract either by delivering the underlying asset or through a cash settlement. Investors buying call options expect the price of the underlying asset to increase.

Put options are contracts where the buyer pays a fee (premium) to the seller, and acquires the right or the option (there is no obligation) to sell the underlying asset to the seller at a predetermined price. The seller must honour the contract either by buying the underlying asset or through a cash settlement. Investors buying put options expect the price of the underlying asset to decrease.

Option contracts may be used for any type of underlying asset, both for speculative and hedging purposes. They are highly volatile.

Risks

Market risk: option contract investors are subject to the market, non-diversifiable, risk of the underlying assets.

Price risk is the main risk for options. Options are extremely sensitive to changes in the underlying asset’s market value. Potentially unlimited losses can occur (see table below):

	Max Loss	Max Gain
Call Buyer	Option price	Unlimited
Call Seller	Unlimited	Option price
Put Buyer	Option price	Strike price – option price
Put Seller	Strike price – option price	Option price

Interest rate risk: when interest rates increase, the value of a call option increases, while the value of a put option decreases.

Volatility risk: if the volatility of the underlying asset increases, the value of both the call and the put options increases.

Time value of money: the value of both the call and the put options decrease as time goes by.

Liquidity risk: options trading on an organised exchange are highly liquid. However, for the same underlying asset, the longer the maturity, the lower the liquidity, because there are fewer buyers and sellers.

Exchange rate risk exists where payments specified in the contract are not in the domestic currency of the investor.

Counterparty / Issuer risk: the investors are exposed to the risk of default of the issuer of the options contract (see structured products section 5.6).

Valuation risk: the valuation of some of the underlying instruments can be difficult and subject to subjective assessments in the absence of a true market. Consequently, the valuation may be inaccurate.

Leverage risk: by using leverage, small market movements may lead to important gains but also losses. In some situations, an entire investment may be lost.

Other risks: An investor willing to trade over-the-counter (OTC) options need to carefully assess these transactions because such options are not supervised nor quoted through an organised exchange. Typically price, liquidity, issuer, and valuation risks are significantly higher than for non-OTC options. The above mentioned risks are also significantly higher if the investor chooses to enter into "exotic-options" (significantly more complex options). Finally, risks could also be higher or lower if the investor decides to combine different option-based strategies. In all cases, the investor is recommended to understand every single option-contract(s) he enters into and read the related contractual documentation.

5.7.5 Credit default swaps contracts

Credit Default Swaps ("CDS") are agreements between two parties, the buyer and the seller, that allow the buyer to protect himself or herself against a negative event (or "credit event") that could affect a bond-like asset over a period of time determined in the contract. A CDS could therefore be considered as an insurance, where the buyer pays a premium to the seller to be protected against the credit risk of a debt instrument. In case of a credit event, the settlement is typically done physically: the buyer delivers the underlying asset to the seller and the seller pays back the buyer the full notional amount. In case of cash settlement, the buyer receives the difference between the notional amount and the market value of the underlying asset.

Risks

Credit risk: the higher the credit risk of the underlying asset, the higher the value of the CDS.

Counterparty / Issuer risk: the buyer faces the risk that the other party (the issuer) does not honour the contract in case of a credit event.

Exchange rate risk exists where payments specified in the contract are not in the domestic currency of the investor.

Valuation risk: the valuation of some underlying instruments can be difficult and subject to subjective assessments in the absence of a true market. Consequently, the valuation may be inaccurate.

Other risks: losses can be significant for investors who speculate (typically when they buy a CDS and the credit quality of the underlying improves).

6. Credit ratings

The following table shows the credit ratings and a brief description for the 3 main providers (Moody's, Standard & Poors, Fitch)

Figure 1: Credit ratings (source: Wikipedia)

Moody's		S&P		Fitch		Rating description
Long-term	Short-term	Long-term	Short-term	Long-term	Short-term	
Aaa	P-1	AAA	A-1+	AAA	F1+	Prime
Aa1		AA+		AA+		High grade
Aa2		AA		AA		High grade
Aa3		AA-		AA-		High grade
A1	P-2	A+	A-1	A+	F1	Upper medium grade
A2		A		A		
A3		A-		A-		
Baa1	P-3	BBB+	A-2	BBB+	F2	Lower medium grade
Baa2		BBB		BBB		
Baa3		BBB-		BBB-		
Ba1	Not prime	BB+	B	BB+	B	Non-investment grade speculative
Ba2		BB		BB		
Ba3		BB-		BB-		
B1		B+		B+		
B2		B		B		Highly speculative
B3		B-		B-		
Caa1		CCC+		C		
Caa2	CCC	Extremely speculative				
Caa3	CCC-	Default imminent with little prospect for recovery				
Ca	CC					
	C					
C	D	/	DDD	/	In default	
/			DD			
/			D			



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