

## **RISK DISCLOSURE BOOKLET**

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## TABLE OF CONTENTS

<b>1. INTRODUCTION</b>	<b>3</b>
<b>2. KEY RISKS AND COSTS OF INVESTING</b>	<b>4</b>
2.1. KEY RISKS OF INVESTING	4
2.2. KEY COSTS OF INVESTING	6
<b>3. TYPES OF INVESTMENTS AND ASSOCIATED RISKS</b>	<b>7</b>
3.1. EQUITY OR SHARE INVESTMENTS AND OTHER TYPES OF EQUITY INSTRUMENTS	7
3.2. BONDS AND FIXED INCOME INVESTMENTS	8
3.3. CERTIFICATES OF DEPOSIT	13
3.4. INVESTMENTS IN REGULATED FUNDS	14
3.5. DIRECT OR INDIRECT INVESTMENTS IN UNQUOTED COMPANIES ("PRIVATE EQUITY")	21
3.6. BORROWING AND COLLATERAL/MARGIN	23
3.7. STRUCTURED PRODUCTS	24
3.8. OPTIONS, CAPS AND FLOORS	27
3.9. FORWARD/FUTURES CONTRACTS	34
3.10. SWAPS	36
3.11. COMMODITIES	40
3.12. EXCHANGE TRADED COMMODITIES	43
3.13. REAL ESTATE	44
3.14. INITIAL PUBLIC OFFERINGS ("IPO")	44
3.15. EMERGING MARKETS	46
3.16. SECURITIES LENDING AND BORROWING	48
3.17. SHORT SELLING	51
3.18. RISKS, ASSOCIATED WITH CLIENT ASSETS AND PROTECTION MEASURES, INCLUDING CLIENT ASSET PROTECTION IN CASE OF INSOLVENCY	54
3.19. CRYPTOASSETS	58
3.20. SUSTAINABLE INVESTMENTS	64
3.21. PINK SHEETS MARKET AND PENNY STOCKS TRADING	66
3.22. OTC MARKET TRADING	70

## **1. INTRODUCTION**

Boson Alfa Ltd (hereinafter referred to as the «Company» or «we») with its office at 54 Vasileos Georgiou A Str., Galatex Beach Center, Block E2, Office 46, Potamos Germasogeias, 4047, Limassol, Cyprus is the Cyprus Investment Firm («CIF») authorized and regulated by the Cyprus Securities and Exchange Commission («CySEC») with license No.314/16.

Boson Alfa Ltd when providing investment and/or ancillary services to clients (hereinafter referred to as the «investor» or «you») may only invest in products that are suitable for you. Similarly, where we act as your portfolio manager or investment advisor we may only make investment recommendations to you which we believe are suitable. A key element of our duty to ensure suitability is that we are satisfied that you understand the principal risks associated with each product that we invest in on your behalf or that we recommend to you.

The financial markets present many different risks of which investors should be aware prior to investing. The purpose of this Risk Disclosure Booklet is to provide you with a description of certain generic risks that may be common to all investments and to describe in more detail the nature and risks of the principal types of investments that we may offer/recommend. Our objective is to explain the risks in sufficient detail to enable you to take investment decisions or to instruct us to take investment decisions on your behalf, on an informed basis.

Where you are a self-directed investor, we will generally provide you with specific product documentation including (if applicable) term sheets, offering memorandum, prospectuses, key investor information documents and subscription documentation which will contain more detailed disclosure about the products in which you are investing. While you should always read the specific product documentation we would also recommend that you familiarize yourself with the content of this Risk Disclosure Booklet.

Where you are a discretionary portfolio management client we will not generally provide you with any documentation prior to our making an investment on your behalf. In order to fulfil your asset allocation, however, you will have authorized us to invest in a number of the products that are mentioned in this Risk Disclosure Booklet and so it will still be instructive for you to review all those sections.

Both self-directed and discretionary portfolio management clients may obtain product specific information upon further request from Boson Alfa Ltd.

All investments and products involve a certain degree of risk which varies between products. You should not agree to invest in any product unless you understand what the product is and which risks are involved. You must also be certain that each product is suitable for you in your particular circumstances as products may not be suitable for all investors, and you should never invest more money than you can afford to lose.

Section 2 describes some general risks and costs of investing. Section 3 describes in more detail certain specific products and some further risks.

The product descriptions and the risks disclosed in this Risk Disclosure Booklet are, however, illustrative and cannot be exhaustive. For example, the Risk Disclosure Booklet does not deal with risks associated with a particular issuer or counterparty, general economic risks (notably those associated with a particular market, interest rate fluctuations, etc.) or tax risks which may be specific to individual investors. We simply attempt to explain the key characteristics of the main asset classes and to include certain recognized risks of investing in such asset classes. In some cases, it may be necessary for you to refer to information published by other sources.

This Risk Disclosure Booklet forms part of Boson Alfa Ltd Terms of Business for Brokerage and Portfolio Management.

The latest version of this document is available at [www.bosonalfa.com](http://www.bosonalfa.com).

## **2. KEY RISKS AND COSTS OF INVESTING**

### **2.1. KEY RISKS OF INVESTING**

All financial products carry a certain degree of risk and even low risk investment strategies contain an element of uncertainty. The price or value of an investment will depend on movements in the financial markets outside of anyone's control. Past performance is no indicator of future performance.

The nature and types of investment risks will depend on various matters, including the type of investment being made, how the investment has been created, structured or drafted, the needs and objectives of particular investors, the manner in which an investment is made or offered, sold or traded, the location or domicile of the issuer, the diversification and concentration in a portfolio (e.g. the amount invested in any one currency, security, country or issuer), the complexity of the transaction and the use of borrowing or leverage. Different risks may occur simultaneously and/ or may compound each other resulting in an unpredictable effect on the value of the investments. The risks identified in this Section 2 are common to many of the investments that are offered through Boson Alfa Ltd. In some cases, in Section 3, we elaborate on these risks when referring to a particular investment but you should always consider the following general risks when making any investment decision or contemplating any form of allocation to such investments:

**Credit risk** - the risk that the issuer or guarantor of a product such as a share or a bond is not able - usually for financial reasons - to repay principal and/or interest in relation to the product or to meet its financial obligations in relation to the product, with resulting loss to the investor.

**Market risk** - the risk that the current value of a product falls as a result of movements in market prices due, in particular, to changes in interest rates, foreign exchange rates, and equity and commodity prices so that the investor may not get back the money invested or may not make the returns anticipated.

**Liquidity risk** - the liquidity of an investment is directly affected by the supply and demand for that investment and also indirectly by other factors, including market disruptions or issues affecting the infrastructure on which the investment is traded such as a securities settlement system. Therefore, under certain conditions and at certain times, there is a risk that when an investor chooses to sell a

product, there may be no market for it and the investor may be unable to sell it at the desired time or price. In addition, unless the contract terms so provide, the issuer or counterparty to a product may not be obliged to buy it back or to redeem it such that the investor may not be able to redeem or sell back the product at all or may only be able to do so at disadvantageous terms.

**Inflation risk** - the risk that returns in relation to a product may not keep pace with inflation. A high rate of inflation may reduce the value of future income or redemption amounts in relation to the product.

**Currency/foreign exchange risk** - the risk that currency exchange rate fluctuations may reduce gains or increase losses on foreign investments. Adverse changes in exchange rates may erode or reverse any gains produced by foreign currency denominated investments and may widen any losses. This may also affect the ability of an issuer to repay a debt denominated in a currency other than reference currency of the security, thereby increasing credit risk. Where securities are denominated in a currency other than the investor's reference currency, changes in rates of exchange may have an adverse effect on the value of the investment in the reference currency.

**Risk of borrowing to fund investments** - investors should always be aware of the risks associated with borrowing to increase their exposure to a particular investment. Borrowing can increase profits if the investment that is purchased using the loan increases in value. However, if the investment decreases in value, the losses caused to the investor as a result of the greater exposure to the investment, the costs of the loan and the obligation to provide more collateral and/or to repay the loan at a time which may be most disadvantageous to the borrower, can increase losses substantially.

**Tax risk** - before an investor invests, the investor should note the tax consequences of such investment and take tax advice. Many investments or their issuers do not give any assurance to investors that they will result in, or be managed or operated in a way that will ensure the optimal tax outcome for a particular investor. Investments may have adverse tax consequences for an investor. The information that an issuer provides to an investor may not be sufficient to enable the investor to complete the investor's tax return.

**Information risk** - the information that is available to investors when making investment decisions in certain investments can vary in quality and accuracy depending on a number of factors, for example, the jurisdiction of the issuer of the investment, the nature of the investment and the obligations applicable to the issuer. For example, bonds or shares issued by emerging market issuers may suffer from such deficiencies.

**Emerging markets risk** - the term "emerging market" means a securities market in a country which is generally characterized by political instability, precarious financial markets, a potentially weak economy, a potentially challenging legal/regulatory environment and uncertainty concerning that country's economic development. Investments made in emerging markets generally entail specific risks which are not encountered in developed markets. Bonds issued by emerging markets issuers may pay a higher return but this may not compensate fully for the additional risks involved. See also "Emerging Markets" below.

**Interest rate risk** - interest rates can rise as well as fall. The value of fixed income securities generally

moves in the opposite direction of interest rates (inversely) and, therefore, the value decreases when interest rates rise and increases when interest rates fall. This is because a rising interest rate makes the value of the future interest payments on the bond fall and new issues of bonds must raise their interest rates so that older issues with lower yields become less popular and their price falls. There are additional interest rate risks in relation to floating rate investments and fixed rate investments. Interest on floating rate investments cannot be anticipated. Due to varying interest income, investors are not able to determine a definite yield of floating rate instruments at the time of purchase and therefore investors cannot compare the return on the investment with investments having a longer fixed interest period. If the terms and conditions of the relevant instrument provide for frequent interest payment dates, investors are exposed to the reinvestment risk if the market interest rates decline as investors may only reinvest interest income paid to them at the relevant lower interest rate then prevailing.

**Counterparty risk** - counterparty risk is the risk that the counterparty may, for a variety of reasons, refuse or fail to meet its contractual obligations to the investor in a product with resulting loss to the investor. The insolvency or default of a counterparty may also lead to positions being liquidated or closed out without an investor's consent or investments not being returned to the investor.

**Regulatory/legal/structural risk** - regulatory or legal actions or changes may alter the profitability of an investment during its life and could even result in an investment becoming illegal. In some cases, the laws affecting the investment may become unclear, or may be subject to inconsistent or arbitrary application or interpretation or may be altered with retroactive effect. Investors may not be guaranteed a satisfactory remedy in a local court if there is a legal dispute in particular regarding ownership of the investment and may not be able to obtain or enforce a legal judgment. In all cases, the legal terms and conditions of a product may contain provisions that may operate against the interests of particular investors. For example, they may permit early redemption, termination or cancellation of principal or interest at a time unfavorable to the investor or they may give wide discretion to the issuer to interpret the terms of the investment.

**Operational risk** - the risk that the systems and controls essential to the investment may break down or malfunction, for example, IT systems, can impact all investments. Businesses may be run incompetently or poorly with consequent risk for an investor.

**Clearing house protections/settlement risk** - on many exchanges, the performance of a transaction may be "guaranteed" by the exchange or clearing house. However, this guarantee is usually in favor of the exchange or clearing house member and cannot be enforced by the client who will therefore be subject to the credit and insolvency risk of the firm through whom the transaction was executed. Settlement risk is the risk that a counterparty does not deliver the security (or its value) in accordance with the agreed terms after the other counterparty has already fulfilled its part of the agreement to deliver. Settlement risk increases where different legs of the transaction settle in different time zones in different settlement systems.

**Investment manager risk** - when investing in a fund, the investor is exposed to the skill and expertise of the investment manager in ensuring that the investment objectives of the fund are met.

**Suspensions of trading** - each stock or commodities exchange may in certain circumstances be

prompted to suspend or limit trading in all securities or commodities which it lists. Such a suspension would render it impossible for an investor to liquidate positions and would accordingly expose the investor to losses and delays in their ability to obtain reimbursement upon demand.

## 2.2. KEY COSTS OF INVESTING

Making any investment will also involve costs and charges which will vary depending on the nature of the service being offered and the product in which an investor is investing. These costs can be material and may have a negative impact on the returns that an investor expects to realize from the investment.

Where you invest through the Company you will be provided with a fee schedule which sets out our current transaction and other costs, which shows the basis on which the Company receives from and/or shares remuneration with the providers of products which you have purchased and/or sold.

In relation to some investments that you purchase such as equities and bonds, the Company charges one-off transaction fees, while in others there are ongoing fees which are charged throughout the term of the product. In addition, when you purchase a product such as a fund (described below), there are ongoing fees deducted by the investment manager of the fund and the providers of services and counterparties to the fund which will reduce the value of your investment. You should consider carefully the costs of any investment and should you require any further information you should contact your Boson Alfa Ltd representative.

## 3. TYPES OF INVESTMENTS AND ASSOCIATED RISKS

### 3.1. EQUITY OR SHARE INVESTMENTS AND OTHER TYPES OF EQUITY INSTRUMENTS

#### WHAT IS AN EQUITY?

Equities are ownership interests representing a share in property, usually a company. Ordinary shares are issued by limited liability companies as the primary means of raising risk capital. The issuer has no obligation to repay the original cost of the share to the shareholder. Where an issuer is wound up (i.e. ceases to exist) holders of equities may lose some if not all their value. Most equities are traded on equity markets in which case they are described as listed.

Some equities, known as preference shares, may have preferential rights to other shares in relation to payments of dividends or repayment on insolvency. However, the terms of preference shares often include provisions which mean the issuer can decide not to pay or to delay payment of such dividends.

A depositary receipt (ADRs, GDRs etc.) is a negotiable certificate, typically issued by a Firm, which represents a specific number of shares in a company, traded on a stock exchange which is local or overseas to the issuer of the receipt.

Shares in a company may be offered by way of a prospectus or information memorandum.

Information about the company may also be available by way of published accounts and from other sources.

#### HOW DOES INVESTING IN EQUITIES REWARD INVESTORS?

Equities can reward investors with the potential of higher returns in the form of either capital appreciation or higher incomes through dividend payments in comparison to leaving the investments in cash deposits or money market funds. The increased potential return increases the level of risk to capital loss. Investing in equities usually involves brokerage costs.

#### WHAT ARE THE RISKS OF INVESTING IN EQUITIES?

Investing in equities carries potential exposure to all the major risk types referred to in Section 2. For example:

**Market risk** - share prices can fluctuate suddenly and sometimes very sharply. Shares also tend to fall in value when the economy is deteriorating as investors recognize that profits will be lower. Not all shares carry equal risk: the level of risk depends on the company in which the investor is buying shares. The value of the shares may increase as company profits increase or as a result of market expectations, but the opposite can also be true.

**Credit risk** - if a company becomes insolvent, its equities have the most junior status, meaning that equities are repaid only after all other debts of the company have been repaid. This can result in a potential severe reduction in, or total loss of, their value.

**Information risk** - the information that is available to investors when making investment decisions in equities can also vary in quality depending on the jurisdiction of the issuer and the rules which apply to such information as noted above.

Investing in equities may also expose an investor to inflation and currency risk. Further, the investor will be exposed to the specific risks of the industry in which the company operates, for example, a computer chip manufacturer might have exposure to the availability and price of certain metals.

Holders of depositary receipts are also subject to particular risks: the deposit agreement for the investment sets out the responsibilities of the depositary, the underlying share issuer and the holder of the depositary receipt, which may be different from the rights of the direct holders of the underlying shares. For example, the underlying shareholders may be entitled to receive dividends which are not passed onto the holders of the depositary receipts. Any such differences may have an adverse effect on the value of the depositary receipt.

### 3.2. BONDS AND FIXED INCOME INVESTMENTS

#### WHAT IS A BOND?

A bond is basically a debt instrument issued by a government, company or other corporate entity



(an "issuer") and will usually have a maturity date of more than 12 months. A bond enables the issuer to raise money in a low cost, tax efficient way without diluting the interest of shareholders by seeking to raise capital through a share offering. Bonds will typically be issued at close to what is known as 'par' or face value. The bond issuer usually undertakes to pay interest (the "coupon") to the investor which will generally be a fixed amount and is paid annually or semi-annually. At the maturity date, the issuer will repay the capital invested typically at par or face value regardless of how the market price has fluctuated before maturity. Bonds can be bought and sold until maturity and values can fluctuate depending on supply and demand and other factors such as interest rates.

Bonds are often referred to as "debt instruments" or "fixed income investments", since the amount of the interest payments is known in advance unless the issuer defaults (although some fixed income investments pay a floating rate of interest).

Bonds can be either secured or unsecured and either senior or subordinated. Secured debt means that collateral has been pledged as security against the issuer's failure to pay, while investors in senior debt instruments are legally entitled to be paid ahead of investors in subordinated (i.e. non-senior) debt instruments issued by the same company. Senior secured debt instruments therefore carry a lower risk of loss than other debt instruments issued by the same company.

Issuers that want to raise money from investors in the bond market are ranked according to how potential investors judge their ability to continue to make the income and capital repayments when they fall due. This is what is referred to as the 'credit rating'. Independent rating agencies are responsible for researching companies and supplying 'grades' or 'ratings' to companies' debt (bond issues). The most readily recognized rating agencies are Moody's, Standard & Poor's and Fitch Ratings. Long-term credit ratings for Moody's, Standard & Poor's and Fitch Ratings respectively range from Aaa / AAA / AAA (highest quality) to C / D / D (in default). As rating categories and rating methodologies differ between the rating agencies, you should familiarize yourself with the relevant rating agency's current publicly available rating categories and rating methodology which will be available from the relevant rating agency's website:

Moody's: <http://www.moodys.com/>

Standard & Poor's: <http://www.standardandpoors.com/>

Fitch Ratings: <http://www.fitchratings.com/>

Please contact your Boson Alfa Ltd representative if you have difficulty in accessing these materials or would like further explanation of the rating categories or rating methodologies.

Ratings given to an issuer or a bond may depend, among other things, on its creditworthiness, its ability to continue to make payments to its bond holders in the future and what protection the bond holder has, should the company face financial difficulties.

There are two main subdivisions of bonds depending on their 'credit rating', which indicates to investors the level of risk associated with the company issuing the bond.

**Investment grade bonds** - with investment grade bonds it is expected that the risk of non-payment or default is low taking into account the financial position of the issuer. As a result, the income or

coupons offered are usually lower than those from sub- or non- investment grade bonds.

**Non-investment grade bonds** - non-investment grade bonds, also known as High Yield bonds, are higher risk investments. The issuer may be less financially stable and the chance that the issuer will not be able to repay the amount owed to investors is expected to be higher than that of investment grade bonds. See also "Emerging Markets" below.

Bonds are offered by way of a prospectus or information memorandum which can be reviewed by investors.

#### HOW DOES INVESTING IN BONDS REWARD INVESTORS?

Investors receive a return on their investment in bonds in two ways: income and capital. The income received from the issuer is usually the major part of the overall return to the investor. However, as not all issuers have the same financial strength, the weaker issuers may pay more than the stronger in order to compensate investors for the extra risk of non- payment. Similarly, issuers with lower financial strength are more at risk of not being able to repay investors when the bond matures. These companies also have to pay investors more when they borrow to compensate for this extra risk. A capital gain is normally only made where bonds are sold in the secondary market or redeemed at a higher price than at which they were purchased.

#### WHAT ARE THE RISKS OF INVESTING IN FIXED INCOME INVESTMENTS SUCH AS BONDS?

Although fixed income investments such as bonds are generally regarded as conservative investments with less risk of capital loss than equities, an investor is also potentially exposed to all of the major risk types referred to in Section 2. For example:

**Liquidity risk** - if an investor seeks to sell a fixed income investment such as a bond prior to its maturity date, there may be no market for the bond and the investor may be unable to sell the bond at the desired time or price or at all. There may be a substantial difference between the secondary market bid (or purchase) and offer (or sale) prices quoted by a market maker for a fixed income investment.

**Credit spread risk** - the risk of financial loss resulting from a change in the credit spread, e.g. the additional yield that a bond issued by for example an A rated issuer must produce over a better rated bond. The value of fixed income investments generally moves in the opposite direction of credit spreads, in particular where such investments pay a fixed rather than floating rate of interest. Values decrease when credit spreads widen and increase when credit spreads tighten.

**Interest rate risk** - the value of fixed income investments such as bonds (in particular where such investments pay a fixed rather than a floating rate of interest) generally moves in the opposite direction of interest rates (inversely) and, therefore, the value decreases when interest rates rise and increases when interest rates fall. This is because a rising interest rate makes the value of the future interest payments on the bond lower and new issues of bonds must raise their interest rates so that older issues with lower yields become less popular and their price falls.

**Early repayment risk** - asset-backed securities, which are backed by a pool of assets such as

mortgages, automobile loans or credit card receivables, may be subject to early repayment of principal corresponding to early repayment of the underlying assets, in particular where interest rates have fallen and such assets can be refinanced at a lower interest rate. Callable fixed-rate securities may also be subject to an increased risk of early repayment in such circumstances because the issuer of such securities can issue new securities at a lower interest rate. Early repayment will result in a reduction in value of the relevant securities.

**Inflation risk** - the returns may not keep pace with inflation because the relationship between inflation and corporate bond prices is inverted; a high rate of inflation will reduce the value of future income or redemption amounts under the bond.

**Credit risk** - the issuer or guarantor of the bond may have financial difficulties or may become insolvent thereby being unable to meet interest or capital repayments.

**Regulatory/legal/structural risk** - the bond may contain provisions for calling bondholder meetings to consider matters affecting the interests of the bondholders generally and may permit defined majorities to bind all holders, including holders who did not attend and vote at the relevant meetings and holders who voted in a manner contrary to the majority. Amendments may be made to the terms and conditions of the bonds without the consent of all the bondholders.

**Structural subordination risk** - where bonds are issued by, or payment on them is guaranteed by, a parent or holding company, payments on the bonds may depend on receipt of dividends or cash loans from subsidiaries.

The relevant issuer or guarantor's ability to receive dividends and loans from its subsidiaries will be subject to applicable local laws and other restrictions. These restrictions could include, among other things, regulatory and contractual requirements and applicable tax laws.

The holder of a bond issued by a parent or holding company may not have any control over whether or not subsidiaries of that company incur significant further indebtedness. In the winding-up of such a subsidiary the claims of the creditors of the subsidiary would normally be required to be met before any surplus amounts are paid up to its parent company and on to the parent company's creditors (including bondholders).

**Contractual or statutory subordination risk** -the claims of bondholders may be contractually subordinated or subordinated by legislation to the claims of holders of other obligations of the issuer.

Subordinated bonds are typically unsecured obligations i.e. the holder will have no claim over specific assets of the issuer. Further, in the event of the winding-up of the relevant issuer, it is unlikely that payment of principal or interest will be made until payments have been made to more senior (less subordinated) creditors.

Bonds (including "senior" bonds) issued by Firms are typically subordinated to the claims of certain depositors (deposit account holders) of the Firm. Bonds (including "senior" bonds) issued by insurance companies are typically subordinated to the claims of policyholders and certain other beneficiaries of the relevant insurer.

Regulators may also have greater powers, or a greater willingness, to use their statutory powers to «bail-in» (i.e. write off or convert into equity) subordinated Firm issuer or insurance issuer securities than senior bonds or other liabilities owed by that regulated entity. Any equity delivered to bondholders on a mandatory statutory conversion may be illiquid or have a low market value.

Although such bonds may pay a higher rate of interest than comparable bonds which are not subordinated, there is a real risk that an investor in subordinated bonds will lose all or some of his or her investment should the relevant issuer become insolvent or be subject to other analogous proceedings. See also «Regulatory capital risk» and «Corporate hybrid capital risk» below.

**Regulatory capital risk** - regulatory capital bonds issued by Firms and insurers contain terms designed to meet the capital requirements of the relevant Firming or insurance group. As well as being subordinated, they may contain issuer-friendly terms such as (i) optional or mandatory interest deferral or cancellation, (ii) mandatory write-down or conversion of principal into equity upon the occurrence of a specified stress event, (iii) deferral of redemption (i.e. repayment of the original investment) and/or (iv) being long-dated (e.g. 30+ years) or having no maturity date at all. They are unlikely to contain typical bond investor protections such as extensive restrictions on the business of the issuer, events of default or enforcement rights.

Regulators may also have greater powers, or a greater willingness, to use their statutory powers to bail-in (i.e. write off or convert into equity) regulatory capital securities than senior bonds or other liabilities owed by a regulated entity. Any equity delivered to bondholders on a mandatory statutory or contractual conversion may be illiquid or have a low market value.

Investors in long-dated or perpetual bonds may have to bear credit risk on the issuer for a long period and possibly, effectively, indefinitely.

Although such bonds may pay a higher rate of interest than comparable bonds which are not subordinated, there is a real risk that an investor in such bonds will have payments on the bonds deferred indefinitely or cancelled or will lose all or some of his or her investment should the relevant issuer become distressed, insolvent or be subject to other analogous proceedings. See also "Contractual or statutory subordination risk" above.

**Corporate hybrid capital risk** - corporate issuers (such as utility, energy and telecommunications companies) sometimes issue subordinated bonds intended to have a particular effect for accounting or credit ratings purposes. As well as being subordinated, they may contain issuer-friendly terms such as (i) optional or mandatory interest deferral, (ii) mandatory conversion of principal upon the occurrence of a specified event or date and/or (iv) being long-dated (e.g. 30+ years) or having no maturity date at all. They are unlikely to contain typical bond investor protections such as extensive restrictions on the business of the issuer, events of default or enforcement rights.

Any equity delivered to bondholders on a mandatory contractual conversion may be illiquid or have a low market value.

Investors in long-dated or perpetual bonds may have to bear credit risk on the issuer for a long period

and possibly, effectively, indefinitely.

Although such bonds may pay a higher rate of interest than comparable bonds which are not subordinated, there is a real risk that an investor in such bonds will have payments on the bonds deferred indefinitely or cancelled or will lose all or some of his or her investment should the relevant issuer become distressed, insolvent or be subject to other analogous proceedings. See also "Contractual or statutory subordination risk" above.

**High Yield bonds** - non-investment grade bonds may suffer from more volatile price movements in the secondary markets than investment grade bonds; in particular, in times of macro-economic or industry- specific uncertainty. Non-investment grade bonds are also expected to be more susceptible to payment default and restructuring proposals than investment grade bonds.

High yield bond issuers tend to be highly leveraged i.e. to have significant amounts of debt outstanding compared to the equity (share) value of the issuer and its group. This may make it more difficult for the issuer to satisfy its payment obligations under the bonds.

While some High Yield bonds purport to give security over assets of the issuer or its group it may be difficult and expensive for bondholders to extract any value from such security if the issuer defaults on scheduled payment under the bonds. The secured assets may not provide any significant value at that time and enforcement of the security may involve lengthy court or other administrative processes (including in foreign countries where enforcement may be more difficult). If assets are to be recovered from the issuer, it could take many years to realize them and any cash proceeds from their sale; the costs of such recovery will have to be met before any cash sums are shared.

Although such bonds may pay a higher rate of interest than comparable investment grade bonds, there is a real risk that an investor in such bonds will lose all or some of his or her investment should the relevant issuer become unable to meet scheduled payments, become subject to a debt restructuring proposal, become insolvent or be subject to other analogous proceedings. See also "Bonds and Fixed Income Investments - What is a Bond? - Non-investment grade bonds" above and also "Emerging Markets" below.

### 3.3. CERTIFICATES OF DEPOSIT

#### WHAT IS A CERTIFICATE OF DEPOSIT?

A Certificate of Deposit ("CD") is a financial product similar to the making of a deposit in a savings account. A CD typically has a specific, fixed term (often three months, six months, or one to five years) and usually, a fixed interest rate. It is intended that the CD be held until maturity at which time the money may be withdrawn together with accrued interest. In many countries CDs are not treated as deposits but as debt securities and therefore do not benefit from the protections that government or regulatory authorities might offer in respect of deposits.

#### HOW DOES INVESTING IN CERTIFICATES OF DEPOSIT REWARD INVESTORS?

Certificates of Deposit pay a fixed interest rate. On the maturity of the CD, the issuer is obliged to

repay the principal, together with any accrued but unpaid interest.

#### WHAT ARE THE RISKS OF INVESTING IN A CERTIFICATE OF DEPOSIT?

An investment in CDs exposes an investor to risks which are similar to the risks associated with bonds and fixed income investments, for example:

**Credit risk** - the issuer of the CDs may fail to repay some or all of the amount invested and/or interest payable on that amount, resulting in a loss to the investor. The lower the credit rating of the issuer the higher the credit risk. Some issuers will not have a credit rating which means it may be difficult to assess the credit risk.

**Liquidity risk** - although CDs are normally treated as debt securities and are tradable, most investors find that there is very limited liquidity in the secondary market, making it difficult for them to dispose of their CDs in that market. CDs, which have varying terms ranging from less than a year to many years, are intended to be held for the whole of the term of the CD. The issuer may not buy back the CD or permit redemptions during the term or it may do so only with a significant financial penalty to the investor. Selling a CD prior to maturity could result in a significant loss to the investor.

**Market risk** - movement in the price of a CD due to fluctuations in interest rates and credit spreads (reflecting relative credit risk) can cause the price of a CD to decline with the result that losses may be incurred rather than profits made as a result of buying and selling CDs.

**Currency risk** - if an investor chooses to convert payments made on CDs into their reference currency they will also be exposed to currency exchange rate risk.

#### 3.4. INVESTMENTS IN REGULATED FUNDS

Funds, also often known as collective investment schemes, can take many different forms and can invest in many different types of investment products, including many of those described elsewhere in this Risk Disclosure Booklet. Funds can be "regulated" or "unregulated", or "closed ended" or "open ended". An investment in funds will expose an investor to different risks depending on the form of the fund, its investment manager and its investment strategy.

Set out below are a list of different types of funds and the risks associated with investing in such types of funds.

#### WHAT IS A REGULATED COLLECTIVE INVESTMENT SCHEME OR RETAIL?

This section addresses funds which are regulated and open-ended, sometimes known as mutual funds or retail funds (we refer to these as "Funds" in this section). Particular types of funds such as money market funds, exchange traded funds, hedge funds and private equity funds have certain features in common with those of Funds but there are also key differences which are described in more detail in the relevant sections below.

A Fund involves an arrangement that enables a number of investors to pool their assets and have these professionally managed by an independent manager. The Fund will collect subscriptions from investors, issue shares or units to investors and manage the invested cash in accordance with a predefined investment strategy. The combined holdings in which the fund invests are known as its portfolio. Each share or unit represents an investor's proportionate ownership of the fund's holdings and the income those holdings generate. Funds may have different legal forms; some are corporate entities; some are formed by contract and some are partnerships. The Funds that we refer to in this section are regulated, meaning that their establishment and the manner in which they are operated is subject to regulation and has been approved by a regulator. For example, in the European Union, regulated, open-ended funds may be marketed on a cross border basis provided they conform to the criteria set out in the UCITS Directives (Undertakings for Collective Investment in Transferable Securities) and AIFMD (Alternative Investment Fund Managers' Directives), and AIF (Alternative Investment Fund) Laws that apply to each EU member state. The management and investment strategies of UCITS and AIF funds are subject to the provisions of the rules which apply throughout the European Union. Open-ended funds issue units or shares on a continuous basis allowing investors to invest and exit their investment on a regular basis. Closed-ended funds are established with a limited amount of share capital and are designed with the intention that investors hold their investments for the life of the fund which is often in excess of 5 years.

Some of the traditional, distinguishing characteristics of Funds include the following:

- Investors purchase shares from the Fund itself (or through a broker for the Fund) instead of from other investors on a secondary market such as a stock exchange. However, this is not the case for Exchange Traded Funds ("ETFs"), the shares of which can be traded on an exchange.
- The price that investors pay for shares is the Fund's per share net asset value ("NAV") plus any shareholder fees that the Fund imposes at the time of purchase. The NAV is typically published on a daily basis although in relation to some Funds the NAV can be published less frequently, for example weekly or even monthly. The price for a share in an ETF is determined in the same way as a share of a company and is generally available continuously through the day from the relevant exchange on which it is traded and/or from other electronic sources.
- Funds are generally open-ended meaning that they create and sell new shares to accommodate new investors. In other words, they sell their shares on a continuous basis, although some funds stop selling when, for example, they become too large.
- The investment portfolios of Funds are typically managed by separate entities known as "investment advisers" or "investment managers" that may be registered with a relevant regulatory authority.
- Funds may accommodate investors who do not wish to invest a lot of money by setting relatively low amounts for initial purchases, subsequent monthly purchases or both.
- Funds are generally liquid. Investors are usually able to readily redeem their shares at the current NAV, plus any fees and charges assessed on redemption, at any time. Investors in shares of ETFs can sell such shares on an exchange through a broker in the same way that they would sell a share in a listed company.
- The valuation of a Fund is generally controlled by the relevant investment manager or the investment adviser (as the case may be) of the Fund. Valuations are performed in accordance with the terms and conditions governing the Fund. There are important risks relating to the process for valuation which are referred to below.

- Regulated funds are offered by way of a simplified prospectus or key information document.

#### WHAT IS AN EXCHANGE TRADED FUND ("ETF")?

ETFs are open-ended funds that are designed to track, before fees and expenses, the performance or returns of a relevant underlying index. They are often referred to as "passively managed", meaning that the investment manager is not selecting underlying stocks, merely following the underlying index. Physical replication and synthetic replication are two of the most common structures used in the construction of ETFs. Physically replicated ETFs buy all or a representative portion of the underlying securities in the index that they track. In contrast, some ETFs do not purchase the underlying assets but gain exposure to them by use of swaps or other derivative instruments. This is often referred to as "synthetic exposure".

#### WHAT IS A FUND OF FUNDS?

A Fund of Funds is a fund which invests in other funds (the "Underlying Funds"). A Fund of Funds can be regulated or unregulated, closed-ended or open-ended and might invest in any type of fund, such as retail or mutual funds, alternative collective investment schemes or vehicles or ETFs. The Funds of Funds that Boson Alfa Ltd typically offers are Funds that invest in other funds.

#### WHAT IS A MONEY MARKET FUND ("MMF")?

A Money Market Fund is a fund that invests exclusively in government securities, certificates of deposit, commercial paper or other highly liquid and low-risk securities. These funds have relatively low risks compared to other funds and pay dividends that generally reflect short-term interest rates.

#### HOW DOES INVESTING IN FUNDS REWARD INVESTORS?

An investor in a Fund may look for capital growth as the value of the Fund's investment grows. Certain Funds may also be designed to generate income for investors and some Funds offer different share classes, one class for investors seeking capital growth (an accumulating share class) and one class for investors seeking income (a distributing share class).

Funds often provide the benefit of diversification. Many (though not all) Funds have an investment strategy that spreads investments across a wide range of companies, industry sectors and sometimes asset classes in order to help lower your risk if an individual company or sector fails. Some investors find it easier to achieve diversification through ownership of Funds rather than through ownership of individual stocks or bonds.

#### WHAT ARE THE RISKS OF INVESTING IN FUNDS?

Funds and their underlying assets are potentially exposed to all of the major risks referred to in Section 2. When investing in Funds, investors should be aware of the specific risks relating to the investment in the Fund itself, as well as to the risks that the Fund incurs in carrying out its investment strategy, which will, of course, have an impact on the value of the investment that the investor has



made. Among the key risks are:

**Funds are not cash deposits** - an investment in a Fund is not a deposit at a Firm and, accordingly, it is not guaranteed, protected or insured by any government agency. The principal invested in a Fund is capable of fluctuation and it is possible to lose money by investing in Funds, however low risk or diversified their strategy may be.

**Investment manager risk** - the Fund's investments are managed by the appointed investment manager and shareholders or investors will not have the ability to take part in the day-to-day management or investment operations of the Fund. The success of the Fund is dependent on the abilities of the investment manager. If a Fund were to lose the services of the investment manager, the Fund might have to be liquidated. Investors typically have no control over the investments that are being made by the investment manager.

**Market risk** - the success of the Fund's investment activity and, therefore, the value of the investment in the Fund will be dependent on general economic conditions and upon the correct assessment of the future price movements of the instruments in which the Fund invests.

**Liquidity risk** - shares in a Fund are not generally listed and there may be no market for them except through redemption. Even in a UCITS Fund, under certain conditions there may be restrictions on redemption and on transfer of shares. Large redemptions within a limited period of time could require the Fund to liquidate positions rapidly with an adverse impact on shares being redeemed and those outstanding. In some circumstances, a Fund may withhold for long periods all or part of the redemption proceeds payable to an investor.

**Performance fee risk** - in some Funds the investment manager may be entitled to a performance fee based on the increase in the value of the Fund's portfolio. The performance fee may create an incentive for the investment manager to make riskier and more speculative investments.

**Counterparty risk** - where the Fund has entered into contractual or hedging arrangements with counterparties they may not perform their obligations thereby causing the Fund a loss. Neither a Fund nor its investment manager will generally have any rights to recommend, appoint or dismiss the administrators, custodians or other service providers of the Underlying Funds.

**Legal and regulatory risk** - regulatory and/or legal requirements may limit the Fund's ability to invest in certain assets thereby affecting its performance.

**Taxation risk** - most Funds will not be managed or operated to ensure optimal tax consequences for an investor nor will they always provide the necessary tax information to enable particular investors to assess the tax risks of investing in the Fund or to enable them to complete their tax returns.

**Costs** - the investment manager will be paid an investment management fee irrespective of the performance of the Fund and, in certain circumstances, may also be paid a performance fee. The providers of services to the Fund (such as the custodian of the Fund assets, the administrator and the Fund's brokers), must also be paid. The Fund will normally be charged transaction charges by the Fund's broker when it buys and sells investments. All these costs are deducted from the assets of the

Fund to produce the Net Asset Value or "NAV" calculation. Such costs can substantially decrease the value of an investment in the Fund. Depending on the timing of their investment, investors may also have to pay taxes on any capital gains distribution they receive, even if the Fund performs poorly.

**Price and valuation risk** - in contrast to equities where prices can frequently be obtained at or close to real time, purchase or redemption of a Fund's shares will typically depend on the Fund's NAV, which the Fund might not calculate until many hours after investors have placed their orders and such calculations might sometimes be suspended. In addition, valuations may be based on the unaudited financial records of the Fund and any accounts pertaining thereto. Such valuations may be preliminary calculations of the net asset values of the Fund. As a consequence, investors may have difficulty accurately valuing their investment and uncertainties as to valuations may have an adverse effect on the net asset value of the relevant Fund if such judgments regarding valuation prove to be incorrect.

**Risks associated with the Fund's investments** - a Fund which invests in equities, fixed income investments, structured products, derivatives (both OTC and exchange traded) and/or commodities will potentially be exposed to many of the general risks referred to in Section 2 as well as the risks of investing in particular products noted in this Section. Funds may also invest in other assets that will be permitted by their investment guidelines and the relevant regulations. It is not possible to provide a definitive list of the risks associated with all such investments but such investments may include asset-backed securities and associated risks such as the risk of early repayment.

**Emerging markets risk** - Funds that invest in emerging markets may be subject to greater risks than Funds that invest in securities of issuers located in established markets, due to a number of factors. The risks of investing in emerging markets are described in more detail in Section "Emerging Markets".

**Foreign exchange risk** - Funds are also subject to currency and foreign exchange risk when purchasing and selling investments.

Lack of regulatory supervision for certain undertakings for collective investments - the Fund may invest in other Funds established in jurisdictions where no or less supervision is exercised on such Funds by regulators and where there may be fewer safeguards to protect the interests of shareholders such as the Fund.

#### SPECIFIC RISKS OF CERTAIN TYPES OF FUNDS

In addition to the general risks associated with an investment in any type of Fund you may be exposed to certain additional risks depending on the type of fund in which the investment is made. These specific risks are set out below.

#### RISKS OF EXCHANGE TRADED FUNDS

As a general rule, each ETF has its own risk structure based on the risk inherent in the index which it tracks and the strategy which it adopts to achieve its investment objective. Many ETFs are

structured as UCITS Funds, in which case they will be subject to the investment restrictions and parameters typical of a UCITS scheme. Below are some of the material risks associated with ETFs that adopt physical replication and/or synthetic replication.

**Market risk** - an ETF's net asset value ("NAV") and trading prices will react to political, economic, currency and market movements. You may lose money over short periods due to fluctuation in the ETF's NAV and trading price in response to adverse political, economic, currency and market movements, and over longer periods during market downturns.

**Counterparty risk** - an ETF will bear the risk of counterparty and settlement failures. Any such failure may have a material adverse effect on the ETF and the NAV. With respect to an ETF that achieves its investment objective by synthetic exposure, the derivatives represent direct, general and unsecured contractual obligations of the counterparty only and no other persons. In particular, these derivatives do not provide the ETF or the investment manager with any legal or equitable interest of any type in the underlying securities. Accordingly, investors will be exposed to the counterparty risk of the counterparty to the derivative. Further, potential contagion and concentration risks of derivatives counterparties should be taken into account (e.g. the failure of one derivatives counterparty may have a "knock-on" effect on other derivatives counterparties). Some synthetic ETFs have accompanying collateral to reduce the counterparty risk, but there may be a risk that the market value of the collateral has fallen substantially when the synthetic ETF seeks to realize that collateral.

**Liquidity risk** - although most ETFs are supported by one or more market makers, there is no assurance that active trading will be maintained. In the event that the market makers default or cease to fulfil their role, an investor may not be able to buy or sell units in the ETF. A synthetic ETF involves greater liquidity risk if the relevant derivatives do not have an active secondary market. An investor may suffer a loss with wider bid-ask spreads (discussed below) in the price of the derivatives. When markets are generally illiquid, collateral held against a counterparty's obligations may also become illiquid, meaning that such risks can be dramatically increased.

**Tracking error risk** - changes in the NAV of the ETF are unlikely to replicate exactly changes in the performance of the relevant index. Factors such as fees and expenses payable in respect of the ETF, liquidity of the market, imperfect correlation of returns between the securities held by the ETF and those in the underlying index, failure of the tracking strategy, currency differences, changes to the underlying index and regulatory policies may affect the investment manager's ability to achieve close correlation with the underlying index.

**Pricing risk** - the NAV of the ETF represents the fair price for buying or selling units. As with any listed fund, the secondary market price of units may sometimes trade above or below the NAV - there is a risk, therefore, that an investor may not be able to buy or sell at a price close to this idealized fair value. The deviation from the NAV is dependent on a number of factors, but will be accentuated when there is a large imbalance between market supply and demand for units on the exchange where such units are listed. The "bid/ask" spread (being the difference between the prices being bid by potential purchasers and the prices being asked by potential sellers) is another source of deviation from the NAV. The bid/ask spread can expand during periods of market volatility or market uncertainty, thereby increasing the deviation from the NAV. Where the index/market that the

ETF tracks is subject to restricted access, the efficiency in unit creation or redemption to keep the price of the ETF in line with its NAV may be disrupted, causing the ETF to trade at a higher premium or discount to its NAV. An investor may sustain losses if the investor buys an ETF at a premium or sells an ETF when the market price is at a discount to the NAV.

**Redemption risk** - generally speaking, only "authorized participants" or "participating dealers" (i.e. financial institutions which have entered into arrangements with the receiving agent, the trustee and the investment manager of an ETF) may place orders to create or redeem units of the ETF and redemption orders may be limited, postponed, suspended or rejected in certain circumstances. However, as the ETF is listed on a stock exchange, investors may buy or sell the units at any time during a trading day on that exchange.

**Trading in units on exchange may be suspended** - an investor will not be able to purchase or sell units on a stock exchange during any period that such exchange suspends trading in the units. The creation and redemption by "authorized participants" or "participating dealers" may also be suspended in the event that the trading of units on a stock exchange is suspended.

#### RISKS RELATING TO MONEY MARKET FUNDS

Although Money Market Funds ("MMFs") are designed for investors with a low tolerance of risk and are frequently used as an alternative to cash deposits, an investment in MMFs is not without risks. In addition to the general Fund risks, MMF risks include:

**MMFs are not a deposit** - an investment in MMFs is not a deposit at a Firm and accordingly, it is not guaranteed, protected or insured by any government agency as a deposit. The principal invested in MMFs is capable of fluctuation and it is possible to lose money by investing in MMFs.

**Income risk** - the income of MMFs will decline if interest rates fall. As an MMF's income is based on short-term interest rates, which can fluctuate significantly over short periods, income risk is expected to be high.

**Investment manager risk** - there is no assurance that the MMFs will achieve the relevant investment objectives. In particular, the performance of MMFs could be affected by poor security selection by the investment manager which will cause the MMFs to underperform relevant benchmarks or other funds with similar investment objectives.

**Credit risk** - there is a chance that the issuer of a security in which the MMF has invested will fail to pay interest and principal in a timely manner or that the negative perceptions of the issuer's ability to make such payments will cause the price of that security to decline.

**Counterparty risk** - a loss may be sustained by the Fund as a result of the failure of another party to a derivative to comply with the terms of the derivative.

**Leverage risk** - many derivatives have a leverage component, therefore adverse changes in the value or level of the underlying asset, rate or index can result in a loss substantially greater than

the amount invested in the derivative itself.

**Market risk** - where the value of the underlying asset of derivative changes due to market movements, the value of the derivative will become positive or negative, depending on the performance of the underlying asset.

**Liquidity risk** - if a derivative is particularly large or if the relevant market is illiquid, it may not be possible to initiate a transaction or liquidate a position at an advantageous price.

**Other risks** - other risks inherent in the use of financial derivatives for investment purposes include but are not limited to (a) dependence on the relevant investment manager's ability to predict correctly movements of the direction of interest rates, currency markets or the prices of securities or of the relevant underlying assets; (b) imperfect correlation between the price of the financial derivative and the prices of the underlying assets; (c) the fact that skills needed to use financial derivatives as part of the investment strategies are different from those needed to select portfolio securities; (d) risk of mispricing or improper valuation of financial derivatives; and (e) risk of embedded leverage through investment in a financial derivative that is itself leveraged.

#### RISKS RELATING TO FUNDS THAT USE DERIVATIVES

Some of the Funds may invest in financial derivative instruments such as options, futures, warrants, swaps and forwards, with the aim of reducing risks or costs or to generate additional capital or income, or operate a certain payoff structure in order to meet the investment objectives of the Fund. Such Funds are also subject to the potential risks described in Section 2 and in relation to Funds in general.

#### 3.5. DIRECT OR INDIRECT INVESTMENTS IN UNQUOTED COMPANIES ("PRIVATE EQUITY")

##### WHAT IS A PRIVATE EQUITY INVESTMENT?

A "private equity" investment generally involves the placing of investment capital, and especially venture capital, at the disposal of companies, the shares in which are not listed on any stock exchange or other regular market. Recently, however, many large private equity deals involve the buy-out of major listed companies. Private equity investments may take the form, as the case may be, of any of the following: the purchase of a direct shareholding in a company; the purchase of a significant stake in a listed company with a view to influencing the management or strategy of the company; or the acquisition of an interest in an investment fund or other entity (e.g. a partnership) specializing in participations in the form of private equity ("Private Equity Funds").

Private equity investments often require substantial cash investments over a long period with no possibility of early exit. Investors are generally required to commit in advance to responding to subsequent capital calls.

For the recipient companies, the provision of capital in private equity form is principally designed to enable new products or new technologies to be developed; increase working capital; finance acquisitions in the form of "management buy-outs" ("MBOs") or "management buy-ins" ("MBIs"); or improve their balance-sheet situation.

## HOW DOES INVESTING IN PRIVATE EQUITY REWARD INVESTORS?

The rewards of private equity are principally derived from the increase in value of the underlying investments and the return of capital to investors resulting from the realization of the investments either during the life of the Private Equity Fund or upon its dissolution.

## WHAT ARE THE RISKS OF INVESTING IN PRIVATE EQUITY?

Private equity investments expose the investor to risks of substantial losses including the entire capital initially invested and may be even greater where the investor has undertaken to respond to calls for additional payments. Private equity investments are potentially exposed to all of the risks set out in Section 2 and share many of the risks described in relation to Funds. In addition, the following risks are typical of private equity investments:

**Market risk** - investments in unlisted companies tend to be highly risky, as such companies are generally smaller, more vulnerable to market fluctuations and technological developments and more dependent on the skills and commitment of a small group of managers, unlike listed companies.

**Liquidity risk** - such investments, whether made directly or through a Private Equity Fund, may be difficult to liquidate and generally are not transferable. Investors should be aware that their capital will be tied up, either completely or with access subject to restrictions, for a long time, even up to 11 or 12 years. No distributions are made prior to exit from investments. Investors do not normally have any entitlement to early exit. At the end of the lock-up period, the value of the investment may be significantly lower than its acquisition price, or even zero.

**Risk of loss of capital commitment** - a private equity investment is designed to obtain a high return on the funds invested so that the risk of loss inherent in such an investment is proportionately higher than in the case of investments of a more traditional nature. The investor is contractually obliged to fund all capital calls committed to at the inception of the investment. Investors may lose their entire commitment.

**Risk related to the choice of the type of investment** - the success of a Private Equity Fund will depend on the ability of its managers to identify, select, develop and realize suitable investments. It is not possible to give any assurance that such investments will be made or that they will prove to be profitable.

**Diversification risk** - the investment vehicle chosen by the investor may make only a limited number of investments. Consequently, the overall return might be significantly affected by the negative performance of a single investment or a very small number of investments.

**Information risk** - there is little or no publicly available information concerning private equity investments, their value and their performance because such investments are not subject to the same controls and the same requirements with regard to publication as regulated retail funds whose shares are offered to the public.

**Risk related to a minority shareholding** - where an investor has the status of a minority shareholder in any given company, it will not always be possible for the investor to defend the investor's interests effectively.

**Risk of lack of recourse** - the fund / fund manager generally has limited responsibility visa-vis the investor. It is therefore possible that even in the case of a substantial loss caused by negligence, the investor may have no effective legal claim against the individuals or entities that were responsible for the loss.

**Key person risk** - the successful performance of the private equity investments made by the investor may largely depend on the experience, contacts and personal skills of the key members of the staff of the company or investment vehicle concerned.

**Risk related to the individuals involved** - the training and experience of the individuals responsible for managing private equity investments may be limited. Their capital resources may be small, which means that it may be difficult for the investor to recover from them the amount of any damages which may be incurred if they have breached their duties. In addition, the risk of fraud and malpractice cannot be ruled out.

**Legal and tax risk** - private equity investments may be sensitive to possible changes having a potentially negative effect in the legal and fiscal systems or in the regulatory systems in force during their existence.

**Emerging markets risk** - private equity firms are more likely to invest in emerging markets and therefore are exposed to the risks associated with such investments. See Section "Emerging Markets".

**Risk related to liquidation** - a target investment period is generally defined for private equity investments. Upon liquidation or termination of the investment vehicle, the investor may become the direct holder of unlisted securities which are not negotiable and which are often encumbered with regulatory restrictions with regard to their sale.

### 3.6. BORROWING AND COLLATERAL/MARGIN

#### LOANS AND TRANSACTIONS REQUIRING MARGIN

As set out in the Terms of Business we or our brokers may agree to make loans or extend credit facilities to you. Such loans or credit facilities will be subject to such terms and conditions as we may agree with you, including as to interest and duration. The Company offers a variety of different facilities for borrowing including uncommitted/on-demand facilities, committed facilities, mortgage lending and asset finance.

If you borrow, you will be obliged to provide collateral. All of your borrowings from us will be secured in our favor in accordance with the Terms and any other collateral arrangements agreed between us as shall be specifically referenced in the terms and conditions of the loan.

In addition, if you trade in derivatives including selling options, you may be required to deposit collateral by way of margin.

#### WHAT ARE THE RISKS ASSOCIATED WITH BORROWING?

**Risk of borrowing to fund investments** - investors should always be aware of the risks associated with borrowing to increase their exposure to a particular investment. Borrowing can increase profits if the investment that is purchased using the loan increases in value. However, if the investment decreases in value, the losses caused to the investor as a result of the greater exposure to the investment, the costs of the loan and the obligation to provide more collateral and/or to repay the loan at a time which may be most disadvantageous to the borrower, can increase losses substantially.

Therefore, where a borrower uses an existing investment portfolio with a market value of EUR12 million as collateral and borrows EUR10 million under a facility agreement with the Firm to purchase an additional EUR10 million of the same investments and the investments lose 10% of their value, a loss of EUR1.2 million will occur on the original investment portfolio but a loss of EUR2.2 million will occur with respect to the total portfolio of investments that the borrower has. Notwithstanding this loss, the borrower continues to be liable for all outstanding amounts in respect of the facility agreement of EUR10 million together with all fees and interest owing on that facility agreement. The borrower's liability to the Company remains even if the investments lose all of its value.

A borrower must therefore be prepared to sustain the loss of some or all of the investment portfolio and have the necessary additional assets to finance the repayment of the facility agreement.

**Margin call risk** - The value ascribed to your collateral may vary from time to time but should always be at least equal to your liabilities. If insufficient collateral is maintained, you will be required to deposit additional collateral with us or to pay or prepay, in whole or in part, such liabilities (a "margin call"). If you fail promptly to respond to the margin call your collateral may be liquidated at a time which may be disadvantageous to you. Accordingly, you may lose the whole of any investments held as collateral in support of your liabilities.

The Firm may make a margin call in the circumstances below:

- **Changes in Collateral Value**
- **Investments decrease in market value**
- **Currency Risk** - If the currency that the borrower's liability is denominated in and the currency of the collateral provided by the borrower are not the same, fluctuations in currency exchange rates may mean that the value of the collateral provided by the borrower may no longer be sufficient to support the borrower's liabilities under the facility agreement and in such circumstances a margin call may be made.

**Risk of increased interest rates** - Changing interest rates can impact the borrower's cost to borrow money. Where the borrower selects a variable interest rate and interest rates rise, the borrower will be liable for these increased costs. Where the borrower has borrowed to fund investments and interest rates rise, this could negatively impact the profit made on the investments. Changing interest rates should be considered when deciding the maturity of the loan. Time to maturity can



magnify the impact of changing interest rates and have a large impact on the borrower's returns.

### 3.7. STRUCTURED PRODUCTS

#### WHAT IS A STRUCTURED PRODUCT?

Structured products are combinations of two or more financial products in a single instrument. Structured products are issued either publicly or privately, and may or may not be listed on an exchange. Their redemption value depends on the performance of one or more underlings. They will generally have a fixed term and consist of one or more components. Certain structured products include a component enabling the investor to participate in the performance of one or more underlying(s) (yield enhancement or participation products). Some products involve leverage. Certain structured products offer principal protection (subject to issuer / guarantor credit risk).

#### WHAT TECHNIQUES ARE USED IN STRUCTURED PRODUCTS?

Below is a list of the basic techniques which are commonly used to provide investors with a return on a structured product:

**Leverage** - the structured product may provide an enhanced return based upon a pre-defined multiple of the actual return of the underlying. Alternatively, the loss to the investor may be accelerated by a multiple of the actual loss of the underlying.

**Barriers** - the structured product may provide a return up to a pre-defined limit and upon reaching or breaching such limit (a knock-out barrier) the return may be completely eliminated. Conversely, the structured product may not allow for any return until a limit is reached or breached (a knock-in barrier).

**Capped returns** - the structured product may provide for a return that tracks the return of the underlying up to a pre-defined limit. If the underlying continues to exceed this limit, then the return of the structured product will not continue to track it, but will be capped at the pre-defined maximum return.

**Conditional pay-out** - the structured product may have a return/pay-out that is contingent upon an event such as a credit event on a defined underlying.

**Worst of multiple outcomes** - the structured product may provide for a return that tracks the return of the lower or worst of multiple underlings.

**Callable structures** - the issuer has the discretion to call the structured product from the holder, prior to maturity, at a pre-defined redemption repayment amount, if certain pre-defined events or thresholds are reached or breached.

**Buffers** - the structured product may provide a level of principal protection down to a predefined limit. Below this limit, the investor may incur an accelerated loss of principal invested.

The above techniques are not an exhaustive list and may be combined into more complex/sophisticated products, the pay-out of which is generally customized.

It is important to note that some debt products such as collateralized debt obligations and asset backed securities, may appear simple when they actually carry considerable risk. Therefore, the investor should not confuse complexity with risk.

Credit-linked features can be added to any type of structure in order to boost returns. This is made possible by the additional credit risk introduced by the credit link, in other words, the investor faces both the issuer and the credit risks introduced by that link, for example if the exposure is to the performance of an underlying corporate entity or fund which, itself, has credit risk.

#### STRUCTURED PRODUCTS WITH PRINCIPAL PROTECTION OR WITHOUT PRINCIPAL PROTECTION

Some structured products offer principal protection. The level of this protection is fixed by the issuer when the product is issued and indicates the percentage of the nominal value that the issuer commits to repay to the investor at maturity. However, principal protection generally only applies at maturity and may, depending on the structured product, be less than 100% of the invested amount.

The principal protection component may only cover a portion of the principal invested. Principal protection does not therefore mean repayment of 100% of the nominal value of the purchase price for all products. Further, the principal protection may be conditional only, i.e. the protection can be lost if the value of the underlying touches, falls below or rises above a pre-determined threshold (barrier, knock-out-level).

If the investor wishes to redeem / sell a structured product with principal protection before it matures, the investor may receive less than the principal protection component as the principal protection only applies if the product is held until the maturity date.

Non-principal protected products offer no protection of the initial investment. Their general purpose is to provide exposure on a leveraged basis and/or exposure to one or several underlying(s) which cannot be easily reproduced by direct investment on the market. They are generally a combination of derivative products which results in a complex product profile. The maximum loss is equal to the initial invested amount.

#### HOW DOES INVESTING IN STRUCTURED PRODUCTS REWARD INVESTORS?

An investor in a structured product hopes to achieve a gain on the notional amount invested in the structure depending on the performance of the underlying and the strategy of the product. In some cases, structured products may also envisage payments in addition to those contemplated at maturity.

#### WHAT ARE THE RISKS OF INVESTING IN STRUCTURED PRODUCTS?

In addition to the potential exposure to the risks set out in Section 2, the following are some of the risks associated with investments in structured products:

**Potential loss of the non-protected principal** - subject to the credit risk of the issuer / guarantor, the potential loss at the time of purchasing a structured product with principal protection is in principle limited to the difference between the price paid and the principal protection level. However, during the life of the structured product, its price may also fall below the principal protection level, thereby increasing the potential loss in the event of a sale prior to the maturity date.

**Currency/foreign exchange risk - if the underlying(s)** is(are) expressed in a currency other than that in which the structured product itself is expressed, the final redemption amount payable on the product may be affected by any unfavorable change in the exchange rate between these two currencies. Where the securities are denominated in a currency other than the investor's reference currency, changes in rates of exchange may have an adverse effect on the value of the investment in the reference currency.

**Market disruption and other events** - market disruption and other events may result in adjustments to or early redemption of the structured product in accordance with its terms. The determination of whether such an event has occurred and the effect of such event will be made by the issuer or the calculation / determination agent, depending on the terms of the structured product, and may involve the exercise of discretion. The issuer or the calculation / determination agent may have interests adverse to the interests of the investor. Any such exercise of discretion may adversely affect the return on the investment.

**Measurement of performance based on average** - in certain cases, the terms of the structured product may stipulate that the performance of the underlings referenced is based on an average of the values of the underlying(s) recorded at given intervals throughout the life of the product. Although this contributes to reducing the investor's exposure to significant unfavorable changes in the value of the underlings referenced, it also reduces in the same proportion any benefit the investor may obtain in the event of significant favorable changes to this value by the same amount.

**Liquidity risk** - the tradability of a structured product depends on whether the issuer or a market maker is prepared to provide a price. Even if they are, liquidity risks can still arise. If the market is not liquid, there is a risk of having to either hold the financial instrument until its maturity or sell it during the term at an unfavorable price. It can also be difficult or impossible to determine a fair price or even compare prices, as there is often only one market maker. The investor should consider structured products as "hold until maturity" products. Outside of normal market circumstances, the issuer does not generally commit to offer regular unwind prices. The investor may receive unfavorable prices from the issuer if requesting an early redemption/ sale of the investment before maturity.

**Credit risk** - in addition to a potential loss resulting from a decline in the market value of the underlying, the investor may in the worst case lose the entire investment because the issuer or guarantor becomes insolvent. The product value is therefore dependent not only on the performance of the underlying asset but also on the creditworthiness of the issuer / guarantor, which may change throughout the term of the product.

**No legal ownership of the underlying** - by investing in a structured product, the investor is taking the economic exposure on the underlying without the legal ownership. The investor does not have any entitlement to voting rights or dividends on the underlying.

**Calculation agent risk** - a structured product involves the exercise of discretion by the issuer or calculation / determination agent in making various determinations under the terms of the structured product. The issuer or calculation / determination agent may have interests adverse to the interests of the investor. Any such exercise of discretion may adversely affect the return on the investment.

### 3.8. OPTIONS, CAPS AND FLOORS

#### WHAT IS AN OPTION?

An option is a contract between a buyer and a seller that gives the buyer the right - but not the obligation - to buy or to sell a particular asset (the "underlying") at a later date at an agreed price. In return for granting the option, the seller collects a payment (the "premium") from the buyer. A call option gives the buyer the right to buy the underlying; a put option gives the buyer the right to sell the underlying.

In return for payment of the premium, the buyer of a call option acquires the right to buy from the seller a defined proportion (the size of the contract) of the underlying at an agreed price (the "exercise price" or "strike") during a certain fixed period or on a predetermined date (the "expiration date"). In return for payment of the premium, the buyer of a put option acquires the right to sell to the seller a defined proportion of the underlying at the exercise price during a certain fixed period or on the expiration date.

Where an option provides for physical settlement, the underlying asset is to be delivered if the option is exercised. For example, if the buyer of a physically settled call exercises its option, then the seller must deliver the underlying in exchange for payment of the exercise price. Where an option provides for cash settlement, only cash is to be delivered. For example, if the buyer of a cash settled call exercises its option, then the seller must deliver in cash the difference between the exercise price and the market value of the underlying at the time of option exercise.

The price of an option is closely linked to that of the underlying. Any change in the market value of the underlying will generally result in a greater change in the price of the option. This is the effect of leverage. It means that the investor participates disproportionately in any rise or fall in the market value of the underlying.

The contractual specifications of the option are either standardized and traded through an exchange (listed options or exchange traded options) or agreed individually between the buyer and the seller (in the case of mutually negotiated or "over-the-counter" (OTC) options).

"American-style" options are those which may be exercised on any business day up to the expiration date. "European-style" options are those which are exercisable only on their expiration date.

#### WHAT ASSETS CAN AN OPTION APPLY TO?

The assets underlying an option may be capital assets such as shares, bonds, currencies, commodities

or precious metals; reference rates or other references, such as interest rates or indices; derivative products (for example swaps, forwards or futures contracts); or combinations of various above-mentioned underlying assets, sometimes referred to as baskets.

#### WHAT ARE "IN-THE-MONEY", "OUT-OF THE MONEY" AND "AT-THE-MONEY" OPTIONS?

A call option is "in-the-money" when the current market value of the underlying asset is higher than the exercise price (also referred to as the "strike"). A put option is "in-the-money" when the current market value of the underlying asset is lower than the strike.

A call option is "out-of-the-money" when the current market value of the underlying asset is lower than the strike. A put option is "out-of-the-money" when the current market value of the underlying asset is higher than the strike.

When the current market value of the underlying asset and the strike are the same, the option is "at-the-money".

The intrinsic value of an option is the value to the holder of the option if it could be exercised now. Hence, it is either worthless if the option is out-of-the-money or equal to the difference between the current market price or level of the underlying asset and the option's strike if the option is in-the-money.

#### WHAT IS THE MARGIN REQUIREMENT?

If the investor sells an option, the investor will be required to provide collateral or "margin" for the entire life of the contract. The margin is set by the Firm and/or exchange to protect against a possible default by the investor, and may consist of the underlying asset, cash or other collateral. If the margin proves to be insufficient, the investor may be required to provide additional collateral in response to a "margin call". If the investor does not provide the required margin in response to the margin call, then the option may be liquidated at a time which may be disadvantageous to the investor. This may result in loss of all margin and loss of the entire investment even where the investment would otherwise have been profitable had it not been liquidated.

#### FORMS OF OPTIONS

**Warrants** - a warrant gives the holder the right but not the obligation to buy (in case of a call warrant) or sell (in case of a put warrant) an underlying asset at a predetermined price (strike) from the issuer or receive an equivalent cash amount. Warrants can be issued on a variety of underlying, such as equities, indices, bonds or commodities, and may be listed on an exchange. The performance of the underlying is reflected in the price of the warrant according to a given ratio. Warrants are leveraged instruments, therefore a relatively small movement in the price of the underlying results in a much larger percentage move in the price of the warrant. At maturity, should the price of the underlying be below the strike for a call warrant (or above for a put warrant), the warrant expires worthless. Your maximum loss is always limited to the initial amount invested.

**Listed options** - listed (or exchange traded) options are standardized options and are traded on specialist

exchanges (for example, EUREX, EURONEXT or CBOT) in accordance with the rules and local practices in force and are executed via a clearing house which guarantees the execution and settlement of the transaction.

**Over-the-counter ("OTC") options** - OTC options are not listed. They are contracts entered into off-exchange between a buyer and a seller. Thus, a position arising from the purchase or sale of an OTC option can only be liquidated with the same contracting party (the "counterparty"). Such liquidation can be done by either party entering into an exactly off-setting position or unwinding the original option contract. This requires the agreement of both parties.

Customized OTC options, the underlying assets of which may be various, are created especially for each investor.

#### FORMS OF "EXOTIC" OPTIONS

Compared with the standard call and put options discussed above ("plain vanilla options"), so-called "exotic" options are subject to various additional conditions and stipulations. There is no limit to the possible structures for exotic options. A distinction is generally drawn between an option whose performance depends upon changes in the underlying asset ("path-dependent") and options relating to more than one underlying asset.

#### **Options on more than one underlying asset**

For this type of option the calculation of the intrinsic value of the option is based on the difference in the change of two or more underlying. This difference can be expressed either in absolute terms ("spread option") or as a percentage which reflects the relative performance of one underlying to another ("outperformance option"). It is therefore the performance differential and not the positive or negative change in the respective prices of the underlying which is the determining factor for this type of option.

Given its specific characteristics, the change in the price of an "exotic" option may differ significantly from that of a "plain vanilla" option throughout its life.

#### FORMS OF OPTION STRATEGIES

If an investor enters into two or more options based on the same underlying, which differ either in the option type (call or put), the quantity, the strike, the expiration date or the type of position (long or short), it is referred to as an option strategy. Below is a list of common OTC option strategies:

**Collar** - a collar is a strategy that combines the purchase of a put option with a lower strike and the sale of a call option with a higher strike on the same underlying. In certain circumstances neither party to the strategy pays a premium; this strategy is known as a "zero cost collar". When combined with the holding of the underlying shares, collars can be used to fully / partially protect existing long share positions with little or no cost paid as the premium to be paid for the put option is offset by the premium received from selling the call option.

The maximum risk for the purchaser of the collar is theoretically unlimited, in that the investor will be liable for any increase in the price of the underlying above the strike of the call option times the notional quantity. The maximum risk for the seller of the collar is the strike of the put option times the notional quantity.

**Call Spread** - a call spread is a strategy that combines the purchase and sale of call options at different strikes on the same underlying. The purchaser (seller) of a call spread purchases (sells) a call option at a lower strike and sells (purchases) a call option at a higher strike. The purchaser of the call spread is giving up any upside potential above the higher strike call and the seller is protected against losses above the higher strike call.

The maximum risk for the purchaser of a call spread is the loss of the premium paid. The maximum risk for the seller of the call spread is the difference between the strikes of the two options times the notional quantity.

**Put Spread** - a put spread is a strategy that combines the purchase and sale of put options at different strikes and on the same underlying. The purchaser (seller) of a put spread purchases (sells) a put option at a higher strike and sells (purchases) a put option at a lower strike. The purchaser of the put spread is giving up any upside potential below the lower strike and the seller is protected against losses below the lower strike.

The maximum risk for the purchaser of the put spread is the loss of the premium paid. The maximum risk for the seller of the put spread is the difference between the strikes of the two options times the notional quantity.

**Straddle** - a straddle is a strategy that combines a call option and a put option at the same strike price and on the same underlying. The purchaser (seller) of a straddle purchases (sells) the call option and the put option.

The purchaser of a straddle is exposed to the risk that at expiry the price of the underlying will not be significantly less or greater than the strike. The maximum loss is the loss of the premium paid. The seller of a straddle is exposed to the risk that the price of the underlying will be significantly higher or lower than the strike. The maximum loss for the seller is theoretically unlimited, in that the investor will be liable for any increase in the price of the underlying above the strike of the call option times the notional quantity. The seller is also at risk for any decrease in the price of the underlying below the strike of the put option, with the maximum risk under the put option being the strike times the notional quantity.

**Strangle** - a strangle is a strategy that combines the purchase (sale) of a call option at a higher strike and a put option at a lower strike.

The purchaser is exposed to the risk that at expiry the price of the underlying will not be significantly less than the lower strike of the put option or greater than the higher strike of the call option. The maximum loss is the loss of the premium paid. The seller of a strangle is exposed to the risk that at expiry the price of the underlying will not be between the lower strike of the put option and the higher strike of the call option. The maximum loss for the seller is theoretically unlimited, in that

the seller will be liable for any increase in the price of the underlying above the higher strike of the call option times the notional quantity. The seller is also at risk for any decrease in the price of the underlying below the lower strike of the put option, with the maximum risk under the put option being the strike times the notional quantity.

As an option strategy results from the combination of different options, the unwinding or partial unwinding of only some options forming part of a strategy will entail a significant change in the total risk assumed and accepted at the outset.

#### HOW DOES INVESTING IN OPTIONS REWARD INVESTORS?

The buyer of a call option may generate a gain if the market value of the underlying rises or in the case of a put option if the market value of the underlying declines. Any gain will be net of the cost of the premium payable to the seller. The seller of options may generate a gain from the premium.

#### WHAT ARE THE RISKS OF INVESTING IN OPTIONS?

**Risks related to the purchase of call and put options** - the value of an option is reduced if, in the case of a call option, there is a fall in the market price of the underlying asset or, in the case of a put option, the price rises. The value of the option may fall as the expiration date approaches, while the market value of the underlying remains the same or fluctuates in a manner in principle favorable to the buyer of the option. This loss of value of the option is due to the passing of time and/or the adverse trend shown by market supply and demand. For this reason, the buyer must bear in mind that the value of the option diminishes as the expiration date approaches and may reach zero in respect of at-the-money or out-of-the-money options. In those circumstances, the maximum loss is equal to the amount of the premium initially paid. If the underlying is itself a derivative (e.g. a future, an option or a swap), after the option has been exercised, both the seller and the buyer are exposed to the risks inherent in this derivative.

**Risks related to the sale of options** - when you sell an option, the risk is considerably greater than when you are a buyer. You may be liable for margin payments to maintain your position and you may sustain a loss well in excess of the premium you received. The seller must anticipate the possibility that the buyer may exercise its right, even if the intrinsic value of the option is at-the-money or out-of-the-money. In the case of American-style options, the seller must also be prepared for the possible exercise of that right by the buyer at any time during the life of the option. In addition, if the underlying is itself a derivative, after the option has been exercised, both the seller and the buyer are exposed to the risks inherent in this derivative.

**Covered call options** - a call option is covered if the investor owns a corresponding quantity of the underlying equivalent to the size or nominal amount of the option contract. If the current market value of the underlying exceeds the strike and, consequently, the buyer of the call option exercises the option, the seller of the option is deprived of the gain corresponding to the increase in the underlying which must be delivered. If the current market value of the underlying does not exceed the strike, the seller of the option does not incur any loss on the option, but nevertheless remains fully exposed to the risk related to any fall in price of the underlying. In the event that, throughout the life of the option, all or part of the underlying owned by the seller is required to be used as collateral for the



option, the only way in which the seller of the option can sell the underlying in order to avoid a future loss is by repurchasing the option.

**Uncovered call options** - if the seller of a call option does not own the corresponding quantity of the underlying, the call option is described as uncovered. In the case of options with physical settlement, the potential loss is the difference between the strike paid by the buyer and the price the seller must pay to purchase the underlying in the market, if the buyer exercises the option. Where an option with cash settlement is involved, the potential loss is equivalent to the difference between the strike and the market value of the underlying. Since the market value of the underlying may far exceed the strike when the option is exercised, the maximum potential loss cannot be determined in advance and is theoretically unlimited.

In particular, the seller of an American-style option that requires physical settlement of the underlying must bear in mind that the option may be exercised in highly adverse market conditions and that, depending on the circumstances, it may prove difficult, if not impossible, to acquire the underlying asset in order to deliver it.

The seller must be aware that the potential loss may far exceed the amount of the collateral or "margin" provided.

**Put options** - the seller of an American-style put option with physical settlement is obliged to purchase the underlying at the strike if the buyer exercises the option, even though it may be difficult or impossible to sell the underlying received and substantial losses may be incurred.

The seller's potential loss may be significantly greater than the amount of the collateral or "margin" provided. The maximum potential loss for each option sold is limited to the strike less the premium received.

**Combined Contracts** - Given the numerous different possible combinations, the risks inherent in each individual contract may be a combination of several specific risks described in this Risk Disclosure Booklet. It is therefore not possible to provide a more detailed description.

In a combined contract, the closure of one or more specific components may considerably alter the overall risk related to the position.

**Risks related to margin calls** - if the investor sells an uncovered option, the investor will be required to provide collateral or "margin" for the entire life of the contract. The margin is set by the Firm and/or exchange to protect against a possible default by the investor, and may consist of the underlying asset, cash or other collateral. If margin proves to be insufficient, the investor may be required to provide additional collateral in response to a "margin call". If the investor does not provide the required margin in response to the margin call, then the option may be liquidated at a time which may be disadvantageous to the investor. This may result in loss of all margin and loss of the entire investment even where the investment would otherwise have been profitable had it not been liquidated.

## WHAT ARE CAPS AND FLOORS?

### Cap

When a party undertakes to make interest payments based on a floating interest rate on predetermined payment dates, it may wish to limit its exposure to the fluctuations of the interest rate by entering into a cap. A cap agreement provides the buyer of the cap, in return for payment of the premium, with a guarantee against any excess over a maximum interest rate during a particular period. The seller of the cap undertakes to pay to the buyer a fixed amount which corresponds to the interest payment which the buyer would be required to make in respect of the portion of the floating rate that exceeds the cap set by the cap agreement.

**Risks of Caps** - it is possible that the reference floating rate does not exceed the cap rate during the life of the agreement. The investor who purchases a cap therefore incurs the risk of having to pay a premium which is non-refundable at the expiration of the cap transaction, so that the investor would have been in a better economic position if the investor had not entered into the cap transaction.

By contrast, the risk of loss of the investor is unlimited in case the investor sells a cap, insofar as such risk corresponds to the payments that the investor will be required to make if the reference floating rate exceeds the cap rate.

### Floor

The floor offers protection against a fall in interest rates that is similar to that offered by a cap in relation to an increase in interest rates. A floor agreement provides the buyer of the floor, against payment of the premium, with a guarantee against any fall below a minimum interest rate during a particular period. The seller of a floor undertakes to pay to the purchaser the amount of interest which corresponds to the difference between the floor set by the floor agreement and the interest rate prevailing on the market.

**Risks of Floors** - the investor who purchases a floor incurs the risk of having to pay a premium which can prove unnecessary at the expiration of the floor transaction if the reference rate has not fallen below the floor fixed by the floor agreement during the life of the agreement.

The risk of loss of the investor who sells a floor is theoretically unlimited if the reference rate falls below the floor, although it would be unusual for interest rates to fall below zero.

## 3.9. FORWARD/FUTURES CONTRACTS

### WHAT IS A FORWARD/FUTURES CONTRACT?

Under a forward/futures contract, two parties commit to exchange a fixed quantity of an underlying against a cash amount, on a precise date (the maturity date), at a price agreed at the start of the contract. Unlike options which only represent a right to exercise, forward/futures contracts give rise to obligations for both parties. Forward/futures contracts do not require the payment of a premium at the start of the contract.

Depending on the circumstances, the underlying(s) may include shares, bonds, commodities or precious metals, reference rates or other references (e.g. interest rates, currencies or indices).

Futures and forward contracts are very similar in nature but have some differences. Futures are traded on an exchange. They take the form of contracts in which the quantity of the underlying (called the size of the contract) and the maturity dates are standardized. "Over-the-counter" ("OTC") forward contracts are not traded on an exchange and entail specific terms individually agreed between the buyer and the seller.

Futures contracts require initial margin and variation margin. The "initial margin" is specified when the contract is initiated, whether the investor is the purchaser or the seller under the forward contract. Such initial margin is expressed either as an absolute amount or as a percentage of the size of the contract. In addition, "variation margin" is calculated periodically throughout the entire life of the contract, generally on a daily basis. This reflects the book profit or loss arising from a change in the value of the underlying. The variation margin may ultimately amount to a sum several times greater than that of the initial margin. The detailed procedure for calculating the variation margin is specified in accordance with the exchange rules and practice or specific contract terms applying in each case. Throughout the life of the contract, an investor must maintain margin equal to the sum of the initial and variation margins required.

An investor may, in principle, close or liquidate the contract at any time prior to the maturity date. The closing of the contract is dependent on the type of contract and/or the rules and practice of the exchange. The investor can either sell the contract or agree an offsetting trade with identical terms. Concluding such an offsetting trade means that the obligations to deliver and receive cancel each other out. The parties to the contract are bound to honor the obligations arising from the contract which have not been closed or offset prior to their expiration date. The following principles apply in such circumstances:

- If the underlying of the contract is a physical asset, settlement is achieved by physical delivery. Only in exceptional cases do the contract provisions or the rules and practice of the exchange call for cash settlement. All other fulfilment specifications, especially the definition of the place of fulfilment, can be found in the relevant contract provisions.
- The difference between physical delivery and cash settlement is that with physical delivery underlying(s) in the quantity specified by the contract must be delivered, whereas with
- cash settlement only the difference between the agreed price and the market value on settlement must be paid. This means that the investor requires more funds to be available for physical delivery than for cash settlement.
- If the underlying of the contract is a reference rate or benchmark, fulfilment by physical delivery is not permitted. Instead, settlement is always in cash.

#### HOW DOES INVESTING IN FORWARD/FUTURES CONTRACTS REWARD INVESTORS?

A forward/futures contract can offer an investor the possibility of eliminating any uncertainty about the future price of an asset (such as a stock or bond). If the expected future price of an asset increases over

the life of the forward contract the right to buy the asset at the contract price will have positive value for the investor who will at the end of the contract pay less for receiving the asset than its market value. The opposite is however also true if the expected future price decreases over the life of the contract.

#### WHAT ARE THE RISKS OF INVESTING IN FORWARD/FUTURES CONTRACTS?

Depending on the change in the value of the underlying throughout the life of the contract, the risks are as follows:

**Risks related to contract sales** - for contract sales, the investor must deliver the underlying at the price originally agreed even if its market value has since risen above the agreed price. In such a case, the investor risks losing the difference between these two amounts. Theoretically, there is no limit to how far the market value of the underlying can rise. Hence, the potential losses are similarly unlimited and can substantially exceed the margin provided.

**Risks related to contract purchases** – for contract purchases, the investor must take delivery of the underlying at the price originally agreed even if its market value has since fallen below the agreed price. The potential loss corresponds to the difference between these two values. The maximum loss therefore corresponds to the originally agreed price. Potential losses can substantially exceed the margin required.

**Price limit risk** - in order to limit price fluctuations, an exchange may set price limits for certain contracts. The investor should take the necessary steps to determine what price limits are in place before effecting forward or futures transactions. This is important since closing out a contract can be much more difficult or even impossible if a price limit of this type is reached.

**Short selling risk** - if the investor sells the contract an underlying which the investor does not hold at the outset of the contract, this is referred to as a short sale. In this case, the investor runs the additional risk of having to acquire the underlying at an unfavorable market value in order to fulfil the investor's obligation to effect delivery on the contract's maturity date. Furthermore, short sales may be banned or subject to specific restrictions and/or reporting requirements on certain markets. Consequently, before entering into a contract, the investor should establish whether any such fluctuation limits exist.

**Margin call risk** – futures contracts require the investor to provide collateral or "margin" for the entire life of the contract. The margin is determined by the brokerage Firm and/or exchange in its sole and absolute discretion to protect against a possible default by the investor, and may consist of the underlying asset, cash or other collateral. If margin proves to be insufficient, the investor may be required to provide additional collateral in response to a "margin call". If the investor does not provide the required margin in response to the margin call, then the contract may be liquidated at a time which may be disadvantageous to the investor. This may result in loss of all margin and loss of the entire investment even where the investment would otherwise have been profitable had it not been liquidated.

**Special risks related to over-the-counter (OTC) contracts** - OTC forward contracts are not transacted

on a market, since they are a private contract between the buyer and the seller. Consequently, they can only be closed out by agreement with the same contracting party or neutralized by entering into an identical inverse contract with another contracting party (if available) enabling the market risk to be eliminated (but not the credit risk on the counterparties). Early closure of such contract may consequently turn out to be impossible, or only possible under very unfavorable conditions. In both cases, there may be a very significant loss for the investor.

**Counterparty risk** - the investor is exposed to the potential failure of the counterparty to perform the contract and to the insolvency of the counterparty. For forward contracts this risk is significantly higher than for futures contracts.

### 3.10. SWAPS

#### WHAT IS A SWAP?

In general terms, a swap transaction is a contract pursuant to which the parties exchange a series of cash flows which are calculated by reference to an "underlying" (such as equity indices, bonds, currencies, interest rates or commodities, or intangible items such as weather). The types of swaps continue to expand as new products are regularly developed.

#### HOW DOES INVESTING IN A SWAP REWARD INVESTORS?

Swaps can be used by investors to protect against an adverse outcome of the economy (interest rates, currency or stock market rise or fall). If for example an investor who entered into a loan and has to pay a floating rate (e.g. LIBOR) every quarter during two years thinks that interest rates will increase in the near future the investor may want to enter into an interest rate swap transaction where the investor will pay a fixed rate while receiving LIBOR. If LIBOR rises, the investor will still pay the same rate (the fixed interest rate) and will have mitigated the interest rate risk linked to the loan.

#### WHAT ARE THE RISKS OF INVESTING IN SWAPS?

There are four main categories of swaps: Currency Swaps, Interest Rate Swaps, Equity Swaps and Credit Default Swaps.

#### CURRENCY SWAPS

The underlying consists of currencies. A currency swap contract may include:

- (i) an exchange of the principal amounts in two different currencies at the inception of the contract, i.e. one party agrees to pay a fixed amount (the principal amount) expressed in one currency against receipt from the counterparty of an equivalent amount in the other currency (the "initial exchange");
- (ii) a periodic exchange of interest payments on specified dates, e.g. one party pays a floating rate calculated in the second currency while receiving a fixed rate on the first currency from the counterparty; and

(iii) the repayment of the principal amount by each party, usually at a pre-determined foreign exchange rate, at the termination date of the contract (the "final exchange").

Unlike other swap transactions, currency swaps may involve the physical exchange of the principal amounts, although in certain circumstances parties may omit stages (i) and (iii), and the currency swap will simply consist of stage (ii) above.

#### WHAT ARE THE RISKS OF INVESTING IN CURRENCY SWAPS?

The risk of loss for the investor is mainly linked to the movements in the underlying foreign exchange rate. Unfavorable movements in this rate will impact both initial and final exchanges, as well as the exchange of interest payments.

#### INTEREST RATE SWAPS

The underlying is an interest rate calculated by reference to a notional amount.

An interest rate swap consists of an exchange of a series of cash flows which are denominated in the same currency and calculated by reference to a notional principal amount. This amount is a notional amount in that it is not physically exchanged but is exclusively used for the purpose of calculating the cash flows. Each party undertakes to pay, on one or several prespecified dates, an amount equal to the reference rate times the notional amount during the relevant reference period. At the inception of the transaction, the parties agree upon the different interest rates which they wish to pay/receive under the swap transaction.

In a fixed/floating swap, one party agrees to make interest payments based on a fixed rate of interest,

e.g. 5%, while the other party agrees to make payments on the basis of a floating rate, e.g. LIBOR plus a margin. In a "basis swap", both parties agree to pay a floating rate but defined on a different basis,

e.g. one party may pay a floating 3 months LIBOR rate while the other party pays a floating rate for another reference period.

#### RISKS OF INVESTING IN AN INTEREST RATE SWAP

Interest rates may move in a direction opposite to the one envisaged by the investor at the time of entering into the swap. For example, if the investor agrees to make payments on the basis of a fixed rate and the floating rate becomes lower than the fixed rate, the investor will pay an excess amount to the other party (corresponding to the difference between the fixed rate and the floating rate). If the investor undertakes to pay a fixed rate, the risk of loss will be limited to the amount of the payments calculated on the basis of the fixed rate, while the risk of loss is unlimited if the investor undertakes to pay a floating rate.

Investors often enter into interest rate swaps in order to hedge their exposure to the fluctuation of floating rates applicable to an underlying loan transaction. Whether or not the swap counterparty of the investor is also the lending Firm, the swap and the loan transactions are subject to different contractual terms and the swap will not necessarily be unwound or terminated if the underlying

loan is repaid. The investor should consider whether the expiration date of the swap corresponds to the maturity of the loan transaction. If the investor prepays the loan in advance, the investor may face the costs of having to unwind or continue the outstanding swap transaction. Furthermore, the swap transaction will cease to be a hedge once the loan is prepaid, thereby potentially representing a speculative position.

## EQUITY SWAPS

Under an equity swap the parties make a series of periodic payments calculated by reference to the evolution of the price of the underlying equity over the relevant reference periods.

One party (the "upside payer") agrees to pay an amount calculated by reference to any increase in the equity price while the other party (the "downside payer") agrees to pay an amount calculated by reference to any decrease in the equity price. Typically, the downside payer will also pay a floating amount calculated by reference to a notional principal. Depending upon the precise terms of the contract, the upside payer may also pay to the downside payer an amount equal to the dividend which the upside payer would have received had it been the actual owner of the equities.

## RISKS OF INVESTING IN AN EQUITY SWAP

In an equity swap the events which can impact the underlying equity and its market price will affect the return to the investor. For example, the underlying equity may be suspended, delisted or adjusted. The company issuing the underlying equity may become insolvent, merge with or be subject to a takeover by another company, be nationalized or fail to declare a dividend. Furthermore, when the investor enters into an equity swap as an upside payer, if the investor does not own the underlying equity, the investor will incur a potentially unlimited risk of loss, since there is no upside limit to the market price of an equity.

## CREDIT DEFAULT SWAPS ("CDS")

A credit default swap or "CDS" is an agreement between two parties whereby the protection buyer will pay to the protection seller a series of regular fixed payments over the life of the CDS calculated on the basis of a notional amount. In return the protection buyer receives protection against a credit event occurring on the reference entity or certain of its debt obligations as defined in the CDS.

If a credit event occurs and certain other conditions are satisfied, the protection buyer will, if the transaction is physically settled, deliver certain debt obligation(s) of the reference entity to the seller in exchange for payment of the outstanding principal balance, or, if the transaction is auction or cash settled, receive a cash payment based on the reduction in value of certain debt obligation(s).

## RISKS OF INVESTING IN A CREDIT DEFAULT SWAP

The terms of a CDS and the related documentation are highly complex. There are significant risks associated with CDSs including, but not limited to, foreign exchange risk, price risk, liquidity risk

and credit risk.

#### ADDITIONAL RISKS RELATING TO SWAP TRANSACTIONS

The risks relating to swaps vary depending upon the circumstances listed below:

- the selection of the currencies that are exchanged in a swap and the relationship between such currencies;
- the rates selected in the case of a swap involving an exchange of interest rates: fixed/ floating, floating/floating or fixed/fixed, and the relationship between these rates;
- the price volatility of the underlying;
- the precise rate at which the parties agree to swap the various cash-flows;
- the duration of the contract (i.e. starting date, period(s) and termination date);
- whether certain terms of the transaction do or do not include averaging (as averaging reduces both the risks and the rewards associated with extreme outcomes);
- the sources used to calculate interest rates or foreign exchange rates or the price of equities (such sources may be suspended, modified, discontinued, or subject to a market disruption event); and
- whether the swap is being used to hedge an exposure to the underlying (the swap may not be a perfect or adequate hedge).

#### SWAPTIONS

A swap transaction may also be combined with an option. For example, "swaptions" are transactions that give the purchaser of the swaption the right, against payment of a premium, to exercise or not to exercise, until the agreed expiration date, the right to enter into a pre-agreed swap contract.

Risks of investing in swaptions will be a combination of any of those relating to swaps and options.

#### 3.11. COMMODITIES

##### WHAT ARE COMMODITIES?

Commodities generally refer to assets such as oil, cocoa, corn and copper. They can comprise both (i) "physical" commodities, which need to be stored and transported, and which are generally traded at a "spot" price, and (ii) commodity contracts, which are agreements either to (a) buy or sell a set amount of an underlying physical commodity at a predetermined price and delivery period, or (b) make and receive a cash payment based on changes in the price of the underlying physical commodity.

Commodity contracts may be traded on regulated specialized futures exchanges (such as futures contracts). Commodity contracts may also be traded directly between market participants "over-the-counter" on trading facilities that are subject to lesser degrees of regulation or, in some cases, no substantive regulation. Accordingly, trading in such "over-the-counter" contracts may not be subject to the same provisions as, and the protections afforded to, contracts traded on regulated specialized futures exchanges, and there may therefore be additional risks related to the liquidity



and price histories of the relevant contracts.

#### HOW DOES INVESTING IN COMMODITIES REWARD INVESTORS?

When the economy is flourishing, goods and commodity prices tend to increase. An investor investing in commodities might be able to take profit of their price increase that will offset partially or completely the increase in inflation. Moreover, commodities tend to have a negative correlation to traditional asset classes (fixed income, equities), meaning that when one asset class has a low value, the other will tend to have a high value, increasing the diversification of the portfolio. Therefore, investors may want to invest in commodities as a way of hedging their portfolio against inflation or as a way of lowering the risk in the portfolio by adding commodities as an asset class for diversification. However, commodities are a risky asset class and frequently may not exhibit these characteristics due to a number of factors. Some of the risks of investing in commodities are highlighted below.

#### WHAT ARE THE RISKS OF INVESTING IN COMMODITIES?

**Volatility risk** - trading in commodities is speculative and may be extremely volatile. Commodity prices are affected by a variety of factors that are unpredictable including, for example, changes in supply and demand relationships, weather patterns and extreme weather conditions, governmental programs and policies, national and political, military, terrorist and economic events, fiscal, monetary and exchange control programs and changes in interest and exchange rates. Commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, the participation of speculators and government regulation and intervention. These circumstances could also adversely affect prices of the relevant commodity. Therefore, commodity prices may be more volatile than other asset classes and investments in commodities may be riskier than other investments.

**Risks relating to commodity linked securities** - Commodity linked securities which are linked to commodity futures contracts may provide a different return than commodity linked securities linked to the relevant physical commodity and will have certain other risks. The price of a futures contract on a commodity will generally be at a premium or at a discount to the spot price of the underlying commodity. This discrepancy is due to such factors as (i) warehousing, transport and insurance costs and other related expenses being taken into account in the futures contract price and (ii) different methods being used to evaluate general factors affecting the spot and the futures markets. In addition, and depending on the commodity, there can be significant differences in the liquidity of the spot and the futures markets. Accordingly, commodity linked securities which are linked to commodity futures contracts may provide a different return than commodity linked securities linked to the relevant physical commodity.

**Investments in futures contracts involve certain other risks, including potential illiquidity** - A holder of a futures position may find that such position becomes illiquid because certain commodity exchanges limit fluctuations in such futures contract prices pursuant to "daily limits". Once the price of a particular futures contract has increased or decreased by an amount equal to the daily limit, positions in the contract can neither be taken nor liquidated unless holders are willing to effect trades at or within the limit. This could prevent a holder from promptly liquidating unfavorable

positions and subject it to substantial losses. Futures contract prices in various commodities occasionally have exceeded the daily limit for several consecutive days with little or no trading. Any such losses in such circumstances could have a negative adverse effect on the return of any securities referencing the affected futures contract.

In the case of a direct investment in commodity futures contracts, the invested capital may be applied in whole or in part by way of collateral in respect of the future claims of the respective counterparties under the commodity futures contracts. Such capital will generally bear interest and the interest yield will increase the return of the investor making such direct investment. However, holders of securities linked to the price of commodity futures contracts (rather than the total return) do not participate in such interest yields from the hypothetical fully collateralized investment in commodity futures contracts.

**Risk relating to the "rolling" of commodity futures contracts** - commodity contracts have a predetermined expiration date, i.e. a date on which trading of the commodity contract ceases. Holding a commodity contract until expiration will result in delivery of the underlying physical commodity or the requirement to make or receive a cash settlement. Alternatively, "rolling" the commodity contracts means that the commodity contracts that are nearing expiration (the "near-dated commodity contracts") are sold before they expire and commodity contracts that have an expiration date further in the future (the "longer-dated commodity contracts") are purchased. Investors in commodities apply "rolling" of the component commodity contracts in order to maintain an ongoing exposure to such commodities.

"Rolling" can affect the value of an investment in commodities in a number of ways, including:

The investment in commodity contracts may be increased or decreased through "rolling": Where the price of a near-dated commodity contract is greater than the price of the longer-dated commodity contract (the commodity is said to be in "backwardation"), then "rolling" from the former to the latter will result in exposure to a greater number of the longer-dated commodity contract being taken. Therefore, any loss or gain on the new positions for a given movement in the prices of the commodity contract will be greater than if one had synthetically held the same number of commodity contracts as before the "roll". Conversely, where the price of the near-dated commodity contract is lower than the price of the longer-dated commodity contract (the commodity is said to be in "contango"), then "rolling" will result in exposure to a smaller number of the longer-dated commodity contract being taken. Therefore, any gain or loss on the new positions for a given movement in the prices of the commodity contract will be less than if one had synthetically held the same number of commodity contracts as before the "roll".

Where a commodity contract is in contango (or, alternatively, backwardation) this may be expected to (though it may not) have a negative (or, alternatively, positive) effect over time: Where a commodity contract is in "contango", then the price of the longer-dated commodity contract will generally be expected to (but may not) decrease over time as it nears expiry. In such event, rolling is generally expected to have a negative effect on an investment in the commodity contract. Where a commodity contract is in "backwardation", then the price of the longer-dated commodity contract will generally be expected to (but may not) increase over time as it nears expiry. In such event, the investment in the relevant commodity contract can generally be expected to be positively affected.

In the case of commodity linked securities which are linked to a commodity contract, the referenced commodity contract will simply be changed without liquidating or entering into any positions in the commodity contracts. Accordingly, the effects of "rolling" described above do not apply directly to the reference asset and the securities. Thus, an investor will not participate directly in possible effects of "rolling". However, other market participants may act in accordance with the mechanism of "rolling" and such behavior may have an indirect adverse impact on the value of the reference asset of the securities.

Commodity indices are indices which track the performance of a basket of commodity contracts on certain commodities, depending on the particular index. The weighting of the respective commodities included in a commodity index will depend on the particular index and the index rules governing that index. Commodity indices apply "rolling" of the component commodity contracts in order to maintain an ongoing exposure to such commodities. Specifically, as a commodity contract is required to be rolled pursuant to the relevant index rules, the commodity index is calculated as if exposure to the commodity contract were liquidated and exposure were taken to another (generally longer-dated) commodity contract for an equivalent exposure. Accordingly, the same effects as described above with regard to "rolling" on the value of a commodity reference asset also apply with regard to the index level of a commodity index.

**Regulatory and legal risk** - Commodity linked securities are subject to legal and regulatory regimes that may change in ways that could affect the ability of the issuer and/or any entities acting on behalf of the issuer engaged in any underlying or hedging transactions in respect of the issuer's obligations in relation to any commodity linked securities to hedge the issuer's obligations under the securities, and/or could lead to the early redemption of the securities. Any such early redemption may adversely affect the return on the securities. Commodities are subject to legal and regulatory regimes in the United States and, in some cases, in other countries that may change in ways that could negatively affect the value of the securities. Changes in laws and regulations will most likely increase the costs associated with the trading of futures contracts and limit the size of positions that can be held by traders. These factors could in turn result in reductions in market liquidity and increases in market volatility, which could adversely affect the performance of the futures contracts and/or underlying commodities and of securities referencing them.

### 3.12. EXCHANGE TRADED COMMODITIES

#### WHAT IS AN EXCHANGE TRADED COMMODITY?

Exchange traded commodities ("ETCs") are debt securities that track the performance of single commodities, a basket of commodities, or a commodity index. ETCs are debt securities that trade on regulated exchanges. They offer investors exposure to either physical commodities without the need to take physical delivery, or exposure to the relevant underlying via derivatives. ETCs are passive investments and are not actively managed.

#### HOW DOES INVESTING IN EXCHANGE TRADED COMMODITIES REWARD INVESTORS?

ETCs provide investors with exposure to commodity prices which would otherwise be difficult to obtain. As ETCs aim to provide investors with returns that track the performance of commodities, investors investing in ETCs have the opportunity to benefit from any increases in the price of

commodities although they could also suffer losses if the prices of those commodities fall.

#### WHAT ARE THE RISKS OF INVESTING IN EXCHANGE TRADED COMMODITIES?

In addition to the potential exposure to the general risks set out in Section 2 and in relation to those concerning ETFs mentioned in Section 3 (Investments in Regulated Funds), ETCs expose the investor to the following risks:

**Credit risk** - ETCs are debt securities and therefore a key risk is the risk that the issuer of the ETCs fails to repay some or all of the amount invested and/or interest payable on that amount, resulting in a loss to the investor.

**Liquidity risk** - where ETCs provide a synthetic exposure to a commodity through derivatives the obligations of the counterparty to such derivatives are typically collateralized, thereby reducing the counterparty risk. However, such collateral is not always liquid, might not be readily liquidated or liquidated at the expected price, and/or might not perform as desired. Further, when markets are generally illiquid, collateral held against a counterparty's obligations can also become illiquid, meaning that such risks can be dramatically increased. Ultimately, the level of counterparty exposure is at the discretion of the issuer. ETCs that offer a synthetic exposure to a commodity are considered more risky than ETCs that offer a physical exposure.

**Tracking error risk** - where the ETCs provide a synthetic exposure to a commodity through derivatives such derivatives might not always be effective in providing a performance that exactly tracks the relevant commodity. The performance of the ETCs can deviate from the performance of the relevant commodity.

**Counterparty risk** - the counterparty to the derivative may default on its obligations, which might result in the investor receiving none of the amount invested back, regardless of the performance of the underlying assets.

**Leverage risk** - some ETCs have unique compounded returns (positive or negative) and daily reset and leverage features that may significantly amplify risk, particularly for medium and long-term investors, and in periods of high market volatility.

### 3.13. REAL ESTATE

#### WHAT IS AN INVESTMENT IN REAL ESTATE?

Real estate investments are investments in land or anything constructed on a piece of land. These investments can range from residential and commercial buildings to hotels, shopping centers and warehouses.

#### HOW DOES INVESTING IN REAL ESTATE REWARD INVESTORS?

Investors can invest in real estate as a personal residence or to generate periodic income through rents and profits through price appreciation. Real estate is also contemplated as a way to

hedge inflation.

#### WHAT ARE THE RISKS OF INVESTING IN REAL ESTATE?

Investing in real estate also potentially exposes the investor to the risks set out in Section 2 but in particular:

**Market risk** - the risks related to investments in real estate are linked to a decrease in the value and/or capacity of the real estate object to generate capital growth and income. Reasons can be (but are not limited to) the location of the investment, its degree of obsolescence and if competing facilities are located in the vicinity.

**Interest rate risk** - if a property is financed through a mortgage, interest rate movements can have an impact on the amount required to repay the mortgage, depending on the type of mortgage.

**Liquidity risk** - it may be difficult for the investor to liquidate the real estate investment when the investor wishes to do so or at all.

**Pricing / valuation risk** - the value of real estate investments is dependent on the market and can be affected by a number of matters such as the proposed or actual use of the real estate, local permissions for such use, supply of equivalent real estate in the relevant area, environmental factors and liabilities and costs such as maintenance costs, insurance costs and security costs.

#### 3.14. INITIAL PUBLIC OFFERINGS ("IPO")

##### WHAT IS AN INITIAL PUBLIC OFFERING?

An initial public offering ("IPO") or new issuance is the operation via which an issuer offers, for the first time, its securities such as shares, preference shares or bonds (hereinafter the "securities") to the public. An IPO is usually, but not necessarily, accompanied by an application for a stock market listing of the securities being offered or a listing on another organized market such as the NASDAQ.

##### HOW DOES INVESTING IN AN IPO REWARD AN INVESTOR?

Investors investing in an IPO are hoping to be rewarded by an increase in the value of the security in which they have invested.

##### WHAT ARE THE RISKS OF INVESTING IN AN IPO?

Subscribing for securities at the time of an IPO is appropriate for informed investors, capable of assessing the precise nature and scale of the risks related to such transactions and of supporting the significant losses which may arise (losses which may include the whole of the capital initially invested). The specific risks are to a large degree dependent upon the legal and economic characteristics of each individual issuer. These risks are, in principle, described in the prospectus relating to the issuance and/or the listing of the securities offered during the IPO.

**Liquidity and information risk** - before the IPO, there is in principle no public market for the securities. In addition, at the time of the IPO, apart from the information contained in the prospectus, the market has no historical financial information on the issuer's financial performance. It is therefore not certain that, at the time of the IPO and/or after the IPO, the price of the securities will be determined under optimal conditions. This risk is increased because some stock exchanges or similar markets (such as NASDAQ, SIX New Market and Le Nouveau Marche) allow issuers, in particular those operating in the new technology sectors, to carry out an IPO despite the fact that they have only been in existence for a short time.

**Pricing risk** - as mentioned above, before the IPO, there is in principle no public market for the securities. The issue price of the securities offered at the time of the IPO is therefore the result of negotiations between the issuer and the securities dealers acting as underwriters or placement agents and is determined on the basis of a number of factors. Consequently, such price may differ from the market value or the price fixed on the stock exchange after the listing of the securities. The securities may therefore become more volatile.

**Allocation risk** - the offer of securities at the time of an IPO is limited to the number of securities included in the offer. Consequently, it is possible that at the time of the IPO the investor may not receive all or part of the securities for which the investor has subscribed. Moreover, the issue price of the securities offered at the time of the IPO may be, but does not have to be, determined notably on the basis of the number of securities subscribed for. It is therefore possible that, if the number of subscriptions is too high, the subscription price may be significantly higher than the market value or the quoted price of the securities after the IPO.

**Volatility risk** - after the IPO, the quoted price or the market value of the securities may be more volatile than that of other comparable companies, due in particular to the securities being less liquid, the market being more sensitive to certain events such as technological advances or new products from the issuer or its competitors, the departure of some key employees or the withdrawal of some historical shareholders and/or senior managers. Moreover, in the case of an IPO following a spinoff, some investors, who received securities at the time of such a spin-off, may decide for various reasons to readjust their portfolio and to sell the newly-issued security. The resulting over-supply may then affect the price of the securities over the first days or weeks after the IPO. This volatility may be exacerbated by the fact that some stock exchanges or similar markets (such as NASDAQ, SIX New Market and Le Nouveau Marche) enable issuers to carry out IPOs despite their low level of capitalization or the limited amount of equity offered to the public ("free float").

**Risk related to the presence of one or more main shareholder(s)** - before the IPO, the issuer's shareholder base generally comprises a limited and fixed number of shareholders who control the company. After the IPO, these shareholders sometimes still have a significant holding, possibly even retaining control of the issuer. They can therefore control or significantly influence the direction and the management of the issuer, which may restrict the extent of the controlling and participation rights of the other shareholders (and therefore of the investor), or even make them totally ineffectual.

**General risk related to investments in listed securities** - after the IPO, apart from the risk relating specifically to the securities offered in IPOs, investments in securities will be subject to the general

risks linked to any investment in listed securities, notably solvency risk, risks related to the price and liquidity of the shares and bonds, and exchange rate risk.

### 3.15. EMERGING MARKETS

#### WHAT IS AN EMERGING MARKET?

The term "emerging market" means a securities market in a country which is generally characterized by political instability, precarious financial markets, a potentially weak economy, a potentially challenging legal/regulatory environment and uncertainty concerning that country's economic development. Investments in emerging markets may be made via products whose structure and/or terms are non-standard and unusual. Such investments should be made by individuals who are familiar with and accept the risks inherent in these markets.

#### HOW DOES INVESTING IN AN EMERGING MARKET REWARD INVESTORS?

Emerging markets can experience growth rates in excess of more developed markets. Investment in products that offer exposure to the emerging markets have the potential to provide investors with returns in excess of the returns that investors might expect from a product offering exposure to more developed markets. Consequently, investing in emerging market products exposes investors to greater risks (including the risk of some or all capital invested) than products that offer exposure to developed markets.

#### WHAT ARE THE RISKS OF INVESTING IN AN EMERGING MARKET?

Investments made in emerging markets entail specific risks which are not encountered in established markets, notably those described below (which may also arise when the issuer or provider of a product has its headquarters or primary focus of activity in an emerging market):

**Political and economic risk** - economic and/or political instability could lead to legal, fiscal and regulatory changes or the reversal of legal, fiscal, regulatory and/or market reforms. Assets could be compulsorily re-acquired without adequate compensation. A country's external debt position could lead to sudden imposition of taxes or exchange controls. High interest and inflation rates can mean that businesses have difficulty in obtaining working capital. Local management may be inexperienced in operating companies in free market conditions. A country may be heavily dependent on its commodity and natural resource exports and is therefore vulnerable to weaknesses in world prices for these products.

**Legal risk** - the interpretation and application of decrees and legislative acts can often be contradictory and uncertain particularly in respect of matters relating to taxation. Legislation could be imposed retrospectively or may be issued in the form of internal regulations not generally available to the public. Judicial independence and political neutrality cannot be guaranteed. State bodies and judges may not adhere to the requirements of the law and the relevant contract. There is no certainty that investors will be compensated in full or at all for any damage incurred. Recourse through the legal system may be lengthy and protracted.

**Accounting practices** - the accounting, auditing and financial reporting system may not accord with standards. Even when reports have been brought into line with standards, they may not always contain correct information. Obligations on companies to publish financial information may also be limited.

**Shareholder risk** - existing legislation may not yet be adequately developed to protect the rights of minority shareholders. There is generally no concept of any fiduciary duty to shareholders on the part of management. Liability for violation of what shareholder rights there are, may be limited.

**Market and settlement risk** - the securities markets in some countries lack the liquidity, efficiency and regulatory and supervisory controls of more developed markets. Lack of liquidity may adversely affect the ease of disposal of assets. The absence of reliable pricing information in a particular emerging markets security may make it difficult to assess it reliably. The share register may not be properly maintained and the ownership or interest may not be (or remain) fully protected. Registration of securities may be subject to delay and during the period of delay it may be difficult to prove beneficial ownership of the securities. The provision for custody of assets may be less developed than in other more mature markets and thus provides an additional level of risk. Settlement procedures may be less developed and still be in physical as well as in dematerialized form.

**Price movement and performance risk** - factors affecting the value of securities in some markets cannot easily be determined. Investment in securities in some markets carries a high degree of risk and the value of such investments may decline or be reduced to zero.

**Currency risk** - conversion into foreign currency or transfer from some markets of proceeds received from the sale of securities cannot be guaranteed. The value of the currency in some markets, in relation to other currencies, may decline such that the value of the investment is adversely affected. Exchange rate fluctuations may also occur between the trade date for a transaction and the date on which the currency is acquired to meet settlement obligations.

**Taxation risk** - investors should note in particular that the proceeds from the sale of securities in some markets or the receipt of any dividends and other income may be or may become subject to tax, levies, duties or other fees or charges imposed by the authorities in that market, including taxation levied by withholding at source. Tax law and practice in certain countries (in particular Russia and other emerging markets) is not clearly established. It is therefore possible that the current interpretation of the law or understanding of practice might change, or that the law might be changed with retrospective effect. As a result, investors may suffer losses due to the imposition of such taxes, levies, duties or other fees or charges.

**Execution and counterparty risk** - in some markets there may be no secure method of delivery against payment which would minimize the exposure to counterparty risk. It may be necessary to make payment on a purchase or delivery on a sale before receipt of the securities or, as the case may be, sale proceeds.

**Ownership risk** - the legislative framework in some markets is only beginning to develop the concept of legal/formal ownership and of beneficial ownership or interest in securities. Consequently, the



courts in such markets may consider that any nominee or custodian as registered holder of securities would have full ownership of the relevant securities and that a beneficial owner may have no rights whatsoever in respect such securities.

### 3.16. SECURITIES LENDING AND BORROWING

#### WHAT IS A SECURITIES LENDING TRANSACTION?

While the Company does not currently engage in securities lending activity with clients, we may do so at some point in the future. In the meantime, we felt it important to describe securities lending transactions to clients as they may also form part of the investment strategies underlying a number of the investment products described in this Booklet.

A securities lending transaction involves the transfer of the title and of all rights related to certain securities by one party (the "lender") to the other party (the "borrower"). Such transfer is combined with the obligation of the borrower to return equivalent securities to the lender upon expiration of the transaction.

Depending on the circumstances and the parties involved, a securities lending transaction may be secured by collateral arrangements designed to secure the obligations of the borrower towards the lender. When collateral is agreed, it is generally provided to the lender in the form of cash, liquid and tradable securities, the Company guarantees or letters of credit.

As a result of the transfer of the securities to the borrower, the borrower will receive all payments of interest, dividends and other distributions related to the securities lent. However, the borrower generally undertakes by contract to transfer the relevant distributions to the lender. Likewise, the lender is, as a rule, entitled to receive the benefits and income generated by the collateral, but assumes an obligation to transfer the relevant amounts to the borrower.

Furthermore, as a result of the transfer, the borrower is also entitled to exercise the voting rights and other similar rights related to shares lent.

A securities lending transaction may be entered into between the lender and the borrower either directly or through an intermediary, who may be acting in different capacities (in particular as counterparty or as agent). The risks of the lender and the borrower may vary depending on the manner in which the transaction is structured.

#### HOW DOES A SECURITIES LENDING TRANSACTION REWARD INVESTORS?

As remuneration for making securities available to the borrower, the lender has a right to a fee, the level of which will depend upon the conditions prevailing on the market. The borrower may use the securities for a variety of purposes including short selling and hedging derivatives obligations.

## WHAT ARE THE RISKS OF LENDING AND BORROWING SECURITIES?

### **Risks related to the lending of securities**

**Counterparty risk** - since a securities lending transaction involves an outright transfer of title to the securities to the borrower, the lender will lose the ownership of the relevant securities as soon as they are lent to the borrower. If the borrower fails to comply with its obligations to return equivalent securities at the expiration of the transaction, the lender will not recover a securities position equivalent to the lender's position prior to the execution of the transaction. As a result, the lender is exposed to the risk of losing all of the securities involved in a securities lending transaction.

**Risk of insufficient collateral** - if the collateral is not sufficient to cover the market value of the securities lent and the borrower fails to return the securities, then the lender is exposed to a risk of loss corresponding to the difference between the market value of the lent securities and that of the collateral. Collateral could be insufficient in the sense that its market value does not cover the value of the loan; alternatively, the collateral could be of poor quality.

**Risk related to the return of securities (market risk)** - securities lending transactions may be entered into either for a fixed period or for an unlimited period callable at any time. In most cases, the relevant agreements provide for a period of several days for the return of the securities to the lender following a request of the lender. If the value of the relevant securities decreases during this period, the lender will suffer a loss on the value of the lender's position.

**Loss of the voting rights and impact of corporate actions related to shares lent** - the securities lender will lose the ability to exercise the voting and other similar rights related to the securities lent to the borrower. Even if a securities lending agreement provides for the right of the lender to give instructions to the borrower with regard to the exercise of voting rights at shareholders' meetings, there can be no assurance that the borrower will indeed exercise the voting rights related to the shares lent in accordance with the lender's instructions.

Furthermore, a corporate action event may precipitate the need for the borrower to recall the shares lent at short notice in order to make an election decision on a corporate action event.

**Risk of not being registered again as the holder of registered shares** - in the case of registered shares, the lender's name will generally be removed from the share register of the relevant company in accordance with applicable laws and regulations because the securities lending transaction involves an outright transfer of title to the relevant shares to the borrower. The lender will therefore need to apply to be registered again as the holder of the equivalent registered shares when they are returned by the borrower. The lender may, depending on the circumstances, encounter difficulties in obtaining registration in the share register of the company, in particular in the event that the lender's shareholding reaches certain thresholds.

### **Risks related to the borrowing of securities**

**Counterparty risk with regard to the collateral remitted** - when the securities borrower is required to remit collateral to the lender in the form of either cash or tradable securities, the borrower will lose

the title to the relevant cash or securities as soon as the cash or securities are remitted to the lender. The borrower will only have a contractual claim against the lender for the return of such collateral at the expiration of the securities lending transaction. If the lender is not able to return the collateral to the borrower upon expiration of the transaction, the borrower may lose the entire cash or tradable securities remitted as collateral to the lender.

A similar risk of loss of the collateral exists when the collateral is remitted in the form of letters of credit and/or Firm guarantees. In such a case, if the lender exercises its rights related to the collateral, the borrower may be required to indemnify the issuer of the relevant letter of credit or Firm guarantee and not be able to recover the relevant amounts from the lender.

**Market risk related to the use of the securities borrowed** - a securities borrower may pursue a large variety of purposes or strategies when borrowing securities. For example, a securities borrower may sell to a third party the securities lent by the lender with the objective of purchasing equivalent securities at a lower price on the date scheduled for the return of such equivalent securities to the lender, in order to benefit from a fall in the price of the securities. In this case, if the price of the relevant securities increases significantly between (i) the initial date of the borrowing of the securities from the lender (and the sale thereof to the third party) and (ii) the final date of the purchase of equivalent securities (and the return thereof to the lender), the securities borrower will be forced to purchase the relevant securities at a price significantly higher than the sales price received, which will generate a loss that may be unlimited.

**Calls for additional collateral** - when a securities borrower agrees to remit collateral to the lender, the value of such collateral must cover at all times during the entire life of the securities lending transaction the value of the securities lent (plus, in many cases, a certain margin above such value). As a result, in case of an increase in the market value of the securities lent, a securities borrower may be required to provide additional collateral within extremely short deadlines following receipt of the corresponding margin calls from the lender. In such case, a securities borrower undertakes the risk, if the margin call requirements are not met, that the transaction will be terminated before its maturity date on unfavorable terms.

### **Risks common to the lending and the borrowing of securities**

**Risk of loss of the rights and distributions relating to the securities lent and collateral remitted** - as the lending of securities entails an immediate transfer of ownership, the lender will lose all rights related to the securities including the right to receive any payments of interest, dividends or other distributions (e.g. bonus shares). The position is similar for the borrower in relation to securities collateral.

If the agreement entered into between the lender and the borrower does not provide for the right of the lender or the borrower to receive all interest, dividends and other distributions in respect of the securities lent or collateral remitted, respectively, or, where the agreement does provide for such an obligation, a party fails to comply with its contractual obligation to transfer the corresponding amounts to the other party, the latter may lose all benefits and income related to the securities lent or collateral remitted.

**Settlement risk** - the return to the lender of the securities lent and the return to the borrower of the collateral remitted generally occurs simultaneously on a "delivery-versus-payment" basis. However, if a mismatch or other difficulty occurs in the course of the exchange of the relevant securities and other assets, the lender or the borrower may incur a loss with regard to the equivalent securities or the collateral returned by the other party.

### 3.17. SHORT SELLING

#### WHAT IS A SHORT SALE?

While the Firm does not currently engage in securities lending activity with clients, we may do so at some point in the future. In the meantime, we felt it important to describe securities lending transactions to clients as they may also form part of the investment strategies underlying a number of the investment products described in this Booklet.

Short selling strategies may take several forms: (a) forward selling of assets, (b) borrowing assets combined with the immediate sale thereof, and (c) sales of futures. The characteristic common to all of these strategies is that they consist of (i) selling at a given price a given quantity of assets, such as shares, bonds, currencies, commodities or precious metals without actually being in possession of the quantity of the asset sold and (ii) subsequently acquiring the assets required to settle the short sale. The acquisition of the assets required for the settlement is carried out either via purchase or a securities borrowing (see Section "Securities Lending and Borrowing").

#### **Types**

A short selling strategy can be used in connection with transactions which can be executed immediately (spot transactions) or forward and futures contracts (see "Forward/Futures Contracts"). A short selling strategy can also be implemented via the sale or issue of uncovered call options (see Section "Options"). However, the sale of uncovered call options is subject to different risks from those inherent in spot or forward sales of assets.

In the case of a spot sale, the investor must borrow the assets which the investor has sold via a securities borrowing transaction. By contrast, in the case of a forward sale or an uncovered call option, the investor may fulfil the obligation to deliver the assets sold either via a securities borrowing or via the subsequent purchase of the assets in question.

#### **Margin and/or guarantee required**

Collateral or "margin" may be required when a short sale is concluded in the form of a forward or call option ("initial margin").

Additional margin ("variation margin") is calculated periodically throughout the life of the transaction and varies with any change in the price of the asset sold. This variation margin may be a multiple of the initial margin. The procedures for calculating the variation margin, throughout the life of the transaction or when it is closed, are determined by the relevant stock market rules or contractual specifications applicable to each case.

During the life of the transaction, the investor must maintain margin equal to the sum of the initial and variation margins. Failing this the position may be terminated.

If the investor borrows securities to obtain the assets needed to fulfil the obligation to deliver under the terms of the short sale, the lender may require guarantees from the investor which may vary in principle also depending upon the changes in the price of the asset in question as well as any changes in the value of the security provided by way of collateral.

### **Termination of positions**

In principle, the investor may early terminate a short selling strategy. By concluding a reverse transaction, the investor crystallizes the gain or loss on the short selling strategy.

### **Regulatory restrictions**

Short sales may be banned or subject to certain specific restrictions and/or reporting requirements in certain markets or jurisdictions. Such limitations and/or duties may particularly apply to "naked" short sales, i.e. sales of securities that are not covered by a simultaneous securities borrowing transaction.

### **HOW DOES SHORT SELLING REWARD INVESTORS?**

Short selling strategies are investment strategies based on an expected fall in the price of the asset. If the price at the outset of the transaction is greater than the price at the settlement date of the transaction, the investor makes a profit. However, if the price increases, the investor makes a loss which, theoretically, is unlimited.

### **WHAT ARE THE RISKS ASSOCIATED WITH SHORT SELLING?**

**Risk related to the variation in the upward movement of the price of the asset sold** - at the settlement date of the transaction, if the investor does not hold the asset in question, the investor must buy it in order to be able to deliver it to the counterparty in execution of the investor's obligations under the terms of the short sale or the securities lending contract. If the price of the asset sold increases, the investor runs the risk of being obliged to buy the asset at a highly unfavorable price compared with the sale price in order to be in a position to honor the investor's sale commitment. For the investor, the risk is therefore the same as the difference between the sale price specified when the transaction was concluded and the purchase price by the investor of the asset sold.

As the purchase price may be exposed to a theoretically unlimited increase, the investor's potential for loss is unlimited. The investor must be aware that the potential loss may significantly exceed the collateral or "margin" deposited.

### 3.18. RISKS, ASSOCIATED WITH CLIENT ASSETS AND PROTECTION MEASURES, INCLUDING CLIENT ASSET PROTECTION IN CASE OF INSOLVENCY

#### DEFINITION OF CLIENT ASSETS

Client assets held or controlled by authorized investment firms (Company and any third parties selected) for investment purposes on behalf of their clients are defined as:

1. Money, which is money owed to or held on behalf of clients by an investment firm, and may include income relating to an investment such as dividends or interest;
2. Securities, which are often represented by a certificate, but are increasingly held in a dematerialized or book-entry form;
3. Positions which are contractual rights arising from transactions entered into by an investment firm on behalf of its clients, including mark to market accruals arising from the change in value of futures and options positions. In order for markets to operate effectively, it is unavoidable that authorized firms should hold or control client assets when undertaking investment business on their behalf. Consequently, it is of great importance to investor protection and to confidence in markets that customers should know that their assets will be protected so far as practicable from the risk of loss at the authorized firm which holds those assets.

#### MAIN RISKS ASSOCIATED WITH CLIENT ASSETS

It is important to recognize that investment firms either hold or control client securities of increasingly significant value, far greater than in the case of client money. As settlement periods become shorter and book-entry systems become even more widely used, the value will continue to grow. This fact makes the risks relating specifically to securities much more significant.

##### **Risk of third party selection**

Although it is increasingly the case that clients elect to use a specific third party for the deposit of funds or securities, it is still common for an investment firm to make that choice. Concern has been expressed about the lack of formal responsibility on the part of investment firms for the acts or omissions of their banks, brokers and custodians and about the level of due diligence which should be exercised by investment firms in the choice and ongoing monitoring of such third parties. The issues relate to the need for transparency of the risks associated with holding assets in different jurisdictions, the need to determine who carries those risks (the investors, the Company or the third party) and the need to determine liability in the event of the default or insolvency.

##### **Risk of dealing through related parties**

While there is a widespread commercial practice by investment firms of using related parties for the safekeeping of client assets, the risk to the clients through intra-group transactions can be increased. The default of an investment firm is rendered much more likely, for example, by the default of a related custodian bank than by an independent third party.

### **Risk of dealing through the chain of investment firms and the cross border dealing**

Much securities and derivatives business involves a number of parties to a chain of transactions in order for a client's instructions to be fulfilled. For example, a client wishing to buy securities might need to use a broker through which to purchase or sell securities or to gain access to an exchange member for dealing in derivatives. When dealings involve assets crossing into other jurisdictions, additional risks arise for clients. The most important of these is the risk that assets passing from one jurisdiction to another might not be classified as client assets in the jurisdiction in which they are received, and will therefore not receive protection as client assets. The integrity of client assets is only preserved if they are passed to a firm which itself extends broadly similar protection for client assets. This can only be achieved if client assets are clearly identified as such when passed to another firm. In this context, particular attention should be paid to the regulatory arrangements which apply when a firm receives client assets from another market professional. If such market professionals are not afforded client asset protection in their own right, retail clients dealing through such professionals might not be protected.

### **Risk related to omnibus accounts**

An omnibus account is defined as an account held by an investment firm with a third party in which client assets are held in aggregate, rather than in individually designated accounts by client, but which nevertheless ensures that the assets are segregated from those of the firm. Individually designated accounts offer the advantage of protecting clients not only from the default of the firm, but also from that of other clients. This distinction becomes particularly significant where a firm defaults because of losses arising on a particular client's account. Nevertheless, a number of mechanisms, such as the requirement to balance the omnibus account with clients' positions on a daily basis, can be employed to minimize the risks associated with such accounts.

### **Stock lending risk**

The main risk to be emphasized is the need for legal certainty as to the owner of the securities and who takes the responsibility for completing stock lending transactions and for the default of counterparties to such transactions. It is essential that securities lending transactions should be subject to clear, preferably industry-standard, legal documentation.

### **Settlement risk**

Much of the securities business conducted worldwide is settled on a delivery-versus-payment (DVP) basis. Although the vast majority of DVP transactions settle without any difficulty, it can happen that there are timing differences between receipt of securities and passing of cash. Clearly if both do not occur simultaneously, one party to the transaction will be at significant, albeit usually short-term, risk. The risk to clients would be the default of an investment firm at a time when client assets are in the course of settlement. In such a scenario, clients' securities may have been delivered to a clearing house or the investment firm's custodian. In either case, if the client has not been paid for the securities, the client is at risk unless there is specific treatment of client assets in the course of settlement, such as the maintenance of separate settlement accounts at custodians and clearing houses which ensure that clients' securities are not mixed with those of the firm.

## MEASURES FOR CLIENT ASSET PROTECTION

The protection of assets held by clients at authorized firms, including third parties, from the risk of loss, whether arising from misuse or from the insolvency of the firm is a central objective of any system of investor protection. Clients are dependent from investment firms that conduct a range of activities on their behalf. Authorized firms hold and control client assets, transfer client assets and may use one type of asset (for example, cash) to acquire another (for example, securities) in the course of providing investment services. It is, therefore, critical to the confidence of customers and the markets generally that these assets should be safe when they are held or controlled by an investment firm.

It is important to note that effective client asset protection can be achieved in a number of ways, but often through a combination of methods, commonly including, but not limited to methods mentioned below.

### **Internal controls**

In the day to day handling of client assets, the importance of preventative measures is the first priority. Avoidance of the circumstances where client asset protection or compensation mechanisms must be relied upon in an insolvency affords the best protection for client assets. The Company implements robust systems of internal controls to ensure that the risk of loss of Client assets through the Company's insolvency is kept to a minimum. For this purpose, the most important controls are those that ensure that:

- Proper books and records are kept at all times;
- Careful third party selection and due diligence (banks, brokers, depositories and etc.)
- Assets held for clients, and dealings on their behalf, are clearly accounted for and safeguarded;
- Internal and external audits are undertaken of key aspects of the Company's business, including compliance with rules relating to client asset protection;
- Accruals, rights and other entitlements are properly recorded; and
- There is regular reporting to external authorities on the operation of the internal controls dealing with the handling of client assets;
- There is appropriate segregation of duties between front office staff and staff responsible for administering of client assets.

### **Regulatory supervision**

The importance of the effective protection of client assets held by authorized firms is also recognized in the way that regulatory authorities plan and carry out their supervisory responsibilities. The question of whether an authorized firm holds or controls client assets is the important factor in determining the intensity of regulatory supervision to which the firm is subjected. Inspection and reporting arrangements give particular attention to the internal controls noted above. In addition, regulatory authorities ensure that capital adequacy requirements for investment firms which hold client assets are sufficiently prudent, reflect the risks to such assets and are effectively monitored. Regulatory supervision of this kind may also assist in identifying firms which are at risk of becoming insolvent so that appropriate measures may be taken to avoid potential losses to client assets.



## **Transparency**

An important part of client asset protection is clients' awareness of what assets the Company or third party firm is holding on their behalf, and of the arrangements which exist for their protection. Only if clients are aware of the level and type of risk to which their assets might be exposed to, they can make fully informed decisions about authorized firms and markets. Regular and timely reporting by firms to their customers about assets held on their behalf together with appropriate information about the arrangements for client asset protection, for example through the use of agreed standard forms of disclosure, will also assist investors to take action themselves to protect their assets. However, while reporting and disclosure about the way in which client assets are protected is a crucial part of effective client asset protection regimes, such disclosure alone should not be taken to be a substitute for other measures for the purposes of client assets protection. Because of the way in which protections may be affected as a result of cross border dealings, especially where a number of firms are involved, disclosure of the risk of loss of protection of client assets is the responsibility of the investment firm with whom the investor deals directly.

## **Compensation arrangements**

The Company is a member of the Investor Compensation Fund (the «Fund»). The object of the Fund is to secure the claims of the covered customers against the members of the Fund by the payment of compensation for their claims arising from the covered services provided by its members, so long as failure by the member to fulfil its obligations has been ascertained. Please refer to the document Investor Compensation Fund at [www.bosonalfa.com](http://www.bosonalfa.com) for more details.

While not directly protecting the assets of investors, various forms of private insurance can protect the interests of investors by providing indemnification against losses involving client assets.

## **Securitization of money**

The Company shall, on receiving any Client funds, promptly place those funds into one or more accounts opened with any of the following:

- central bank
- credit institution
- bank authorized in a third country
- qualifying money market fund

## **Margin segregation**

A very effective way of protecting clients' positions is to ensure that all positions are effectively margined and that client positions are margined separately from those of the firm and non-segregated clients. Although this does not necessarily prevent positions from being frozen upon the default of the firm, it is designed to ensure that client transactions do not offset firms' liabilities and thus their transactions can be transferred or closed out speedily by the exchange or clearing house (unless the default is due to severe market action) without the need for the delay of remitting further funds.

### **Measures taken by the Clients**

It should also be recognized that clients dealing with investment firms may themselves take measures for the protection of assets held by the firm on their behalf. Some examples of this type of arrangement are:

- Investment firms provide their own securitization by the payment of client money into a money fund operated by the firm;
- The client enters into an arrangement with the investment firm to collateralize a cash balance;
- Clients establish accounts in their own name at banks or custodians and permit an investment firm to exercise control over those accounts;
- Clients protect their assets through the use of letters of credit or other arrangements with their bankers, so that money is only provided against proper documentation;
- Clients require special arrangements to recognize or preserve their right to a particular asset.

### 3.19. CRYPTOASSETS

#### WHAT ARE THE CRYPTOCURRENCY AND CRYPTOASSETS?

Crypto-assets are broadly defined as private digital assets that use cryptography and are designed to work as a medium of exchange.

The most well-known crypto-asset, «cryptocurrencies» are used as a medium of exchange on exchanges and trading platforms, and were created as an alternative to fiat money (government-issued currency that is not backed by a physical commodity, such as gold or silver, but rather by the government that issued it). You've probably heard of a few – Bitcoin, Ripple, Litecoin and Ethereum have all been mentioned in the news recently. But what exactly is it? Let's start by breaking down the word «cryptocurrency». The first part of the word, «crypto», means «hidden» or «secret» reflecting the secure technology used to record who owns what, and for making payments between users. The second part of the word, «currency», tells us the reason cryptocurrencies were designed in the first place: a type of electronic cash. But cryptocurrencies aren't like the cash we carry. They exist electronically and use a peer-to-peer system. There is no central bank or government to manage the system or step in if something goes wrong. Some people find this appealing because they think they have more control over their funds but in reality, there are significant risks. With no banks or central authority protecting you, if your funds are stolen, no one is responsible for helping you get your money back.

Cryptocurrency may appear as an underlying asset for an equity instrument (for example share, ETF), a fixed income instrument (for example ETN), an option or a future and other instrument that may be traded on regulated or specialized changes.

#### WHAT IS A BLOCKCHAIN?

A blockchain is a decentralized database consisting of a block chain in which all transactions of network members are stored. In simple terms, the blockchain is a combination of computers connected to each other, and not to the central server.

Traditional databases operate on the principle of "Client - Server", that is, all information is stored in one place, for example, in a bank. This technology has several disadvantages: the server can be hacked, the data can be changed, and the money can be transferred to other accounts.

Thanks to the blockchain technology, transaction data is not on a single server, but on all computers connected to one network. When a new transaction appears, it is copied to all computers, which means that it cannot be changed without the consent of all network participants, which eliminates the possibility of hacking and software malfunction.

Blockchain technology is very widely used in the financial industry. However, nowadays, this technology is used not only for cryptocurrencies, but also for keeping records, digital notary and smart contracts. It is also actively used in research, medicine, management, politics, education, etc.

Any new transaction in the blockchain implies the creation of a new block. Each transaction has a digital signature that guarantees its authenticity. Before this block will be added to the network, it must be checked by the majority of system nodes (computers).

Each blockchain block consists of:

- certain data;
- block hash;
- hash from the previous block.

The data stored within each block depends on the type of chain of blocks. For example, in the structure of the bitcoin chain, the block stores data about the recipient, sender, and number of coins.

A hash is like a fingerprint (a long entry consisting of several numbers and letters). The hash of each block is generated using a cryptographic hashing algorithm (SHA 256). Therefore, it helps to easily identify each block in the blockchain structure. When a block is created, it automatically appends the hash, and any changes made in the block also affect the hash change. Simply put, the hash helps detect any changes in blocks. The last element in the block is the hash of the previous block. This creates a chain of blocks and is the main security element of the blockchain technology.

Any hacking attempt provokes block changes. All subsequent blocks carry incorrect information and invalidate the entire blockchain system. On the other hand, in theory it would be possible to configure all the blocks using powerful computer processors. However, there is a solution that excludes this possibility, called proof of work. This allows the user to slow down the process of creating new blocks. In the architecture of Bitcoin chains, it takes about 10 minutes to determine the necessary proof of work and add a new block to the chain. This work is done by miners - special nodes in the structure of the bitcoin chain. Miners retain a commission for creating a new block as a reward.

When adding a new node (network user), it gets a complete copy of the system. After creating a new block, it is sent to each node in the block chain system. Then each node checks the block and the correctness of the specified information. If everything is in order, the block is added to the local block chain at each node.

Blockchain technology is the most transparent and secure, eliminating any interference from the outside. It is impossible to hack the blockchain system, since it would be necessary to intervene in all its blocks, as well as control more than 50% of all nodes in the peer-to-peer network.

#### WHAT IS CRYPTOCURRENCY MINING AND WHAT ARE THE OTHER EARNING METHODS?

Cryptocurrency mining is the process by which recent transactions are checked and new blocks are added to the block chain.

Miners select pending transactions from the pool and check that the sender has enough funds to complete the transaction. The second verification confirms that the sender has authorized the transfer of funds using his private key.

The mining process solves complex cryptographic tasks that require powerful hardware. For mining can be used the power of computer video cards (GPU), processor (CPU) and specialized equipment (ASIC).

Mining is one of the possible earnings of cryptocurrency. The miner gets a good reward for creating each new block. However, this method of earning requires a lot of investment. In addition, over time, the complexity of mining increases, so you need to constantly upgrade the available capacity.

Besides mining, there are other ways to make cryptocurrency:

- Cranes are services that distribute coins for performing various tasks: viewing advertisements, solving captcha, etc. Earnings do not require investments, but take a lot of time and do not bring large incomes;
- Bounty - free distribution of coins from new ICO (Initial Coin Offering) projects. At first, these coins are worth nothing, but in the future they may become full-fledged cryptocurrencies;
- Trading on the stock exchange is the most profitable but extremely risky cryptocurrency earning. It requires initial investment and broad knowledge and experience, but the return is much higher than in the mining process.

#### WHAT IS A DIGITAL WALLET?

A digital wallet (or e-wallet) is a software-based system that securely stores users' payment information and passwords for numerous payment methods and websites. By using a digital wallet, users can complete purchases easily and quickly with near-field communications technology. They can also create stronger passwords without worrying about whether they will be able to remember them later. In other words, digital wallets are financial accounts that allow users to store funds, make transactions, and track payment histories by computer. Digital wallets can be used in conjunction with mobile payment systems, which allow customers to pay for purchases with their smartphones. A digital wallet can also be used to store loyalty card information and digital coupons.

Cryptocurrencies rely solely on digital wallets to maintain balances and make transactions, for instance with Bitcoin or other digital currencies.

## HOW DOES INVESTING IN CRYPTOCURRENCY REWARD INVESTORS?

The world of crypto holds a lot of risks, but the benefits make up for them. Digital currencies truly represent an absolutely new approach to money transaction and data storages, which may be beneficial for every industry and domain. When it comes to cryptocurrency, many people argue over risks and benefits. This indicates that the interest in crypto is growing, as well as the number of those who want to get involved. As this technology is still not widely established and accepted, it's hard to say for sure what carries more weight – potential risks or practical benefits.

Convenience. Cryptocurrency has a practical value. Transactions are a lot faster and simpler and often less expensive than with fiats. Especially if you are making cross-border payments. Cryptocurrencies experience fluctuations, but they are not that much affected by exchange rates.

Security and Transparency. Security is both a risk and a benefit of crypto. By eliminating the third party, digital currencies give you more control over the security of your assets. You do not have to worry about losing money because of a bank's error.

One of the worst parts of fiat currency is that they can be counterfeited. Governments try to keep this from happening, but it is still a common practice. Digital currency cannot be counterfeited, which is a huge advantage.

Transparency is another major benefit. You see exactly where the money goes and can track all your transactions.

Cryptocurrency transactions don't require providing personal information. Cryptos are definitely more anonymous than traditional currencies. With fiats, you have to worry about your financial history being documented by the banks. In worst-case scenarios, your identity can be stolen.

True Ownership. Any money that goes through a third party like banks doesn't really belong to you. What happens if a financial institution becomes bankrupt or loses your money? By avoiding intermediaries, cryptocurrency allows you to be a fully legitimate owner of your funds. This comes with more responsibility but also more freedom. Of course, if you store your assets at a cryptocurrency exchange, it works similarly to banks. This is the question of the majority of exchanges being centralized despite the very essence of crypto.

Flexibility. There are more than a thousand digital currencies you can choose from. While fiats are tied to your location, digital currencies can be used everywhere. Also, each coin has been created for a specific purpose, which means there is a wide range of application options. Cryptocurrencies have a great usage potential outside transactions and payments. A lot of businesses can benefit from the blockchain technology that stands behind every crypto. There are also specific innovations linked to some coins, like smart contracts introduced by the Ethereum network, which could enhance the way people deal with documentation. Some coins are also used to help developers.

## WHAT ARE THE RISKS ASSOCIATED WITH CRYPTOCURRENCIES?

A defining feature of a cryptocurrency, is that is not issued by any central authority, rendering it theoretically immune to government interference or manipulation. In order to understand the risks of cryptocurrency, one must first understand the features of the platform (Blockchain) on which the cryptocurrency is based. As described above, Blockchain is a digitized, decentralized, public ledger of all

cryptocurrency transactions. Constantly growing as 'completed' blocks (the most recent transactions) are recorded and added to it in chronological order, it allows market participants to keep track of digital currency transactions without central recordkeeping. Each node (a computer connected to the network) gets a copy of the blockchain, which is downloaded automatically.

This technology platform has the following characteristics.

**Irreversible:** After confirmation, a transaction cannot be reversed, there is no safety net.

**Anonymous:** Neither transactions nor accounts are connected to real-world identities, everything is digitalized with access by means of the internet.

**Global Speed:** Transactions are nearly instant in the network and are confirmed in a couple of minutes. Since they happen in a global network of computers they are completely indifferent of your physical location. There are no third parties involved in verification or validation.

**Secure:** Strong cryptography and the magic of big numbers makes it impossible to break this scheme.

**No Gatekeeper:** The software that everybody can download is for free. After you installed it, you can receive and send Bitcoins or other cryptocurrencies.

**Thus, posing the following inherent idiosyncratic material risks of the currency.**

**Business risk:** Loss of confidence in digital currencies: the nascent nature of the currencies is subject to a high degree of uncertainty. Online platforms have generated a large trading activity by speculators seeking to profit from the short-term or long-term holding of digital currencies. Cryptocurrencies are not backed by a central bank, a national or international organization, or assets or other credit, and their value is strictly determined by the value that market participants place on them through their transactions, which means that loss of confidence may bring about a collapse of trading activities and an abrupt drop in value.

**Cyber/Fraud risk:** Since Cryptocurrency is essentially a cash currency it has attracted a large set of the criminal community; these criminals can break into crypto exchanges, drain crypto wallets and infect individual computers with malware that steals cryptocurrency. As transactions are conducted on the internet, the hackers target the people, the service handling and storage areas, through means such as spoofing/phishing and malware. Investors must rely upon the strength of their own computer security systems, as well as security systems provided by third parties, to protect purchased cryptocurrencies from theft.

Moreover, cryptocurrency is highly reliant upon unregulated companies, including some that may lack appropriate internal controls and may be more susceptible to fraud and theft than regulated financial institutions. Furthermore, the software needs to be regularly updated and maybe suspect at times. Sourcing the blockchain technology to vendors may result in significant third-party risk exposure.

There is very little in the way of recovery, if the keys are stolen to a user's wallet, the thief can fully impersonate the original owner of the account and has the same access to the monies in the wallet that the original owner has. Once the cryptocurrency is transferred out of the account and that transaction has been committed to the block chain, those monies are lost forever to the original owner.

**Operational risk:** With a centralized clearinghouse guaranteeing the validity of a transaction comes the ability to reverse a monetary transaction in a coordinated way; no such ability is possible with a cryptocurrency. This lack of permeance is further demonstrated as Bitcoin accounts are

cryptographically secured, access to monies contained in an account almost certainly cannot be restored if the “keys” to an account are lost or stolen, and subsequently deleted from the owner.

**Regulatory/compliance risk:** Some countries may prevent the use of the currency or may state that transactions break anti money laundering regulations, notwithstanding the global implications. Due to the complexity and decentralized nature of the Bitcoin and the significant number of participants — senders, receivers (possibly launderers), processors (mining and trading platforms), currency exchanges, a single AML approach does not exist.

**Market risks:** The market risks are idiosyncratic as the currency trades only on demand. There is a finite amount of the currency which means that it can suffer from liquidity concerns and limited ownership may make it susceptible to market manipulation. Furthermore, given its limited acceptance and lack of alternatives, the currency can appear more volatile than other physical currencies, fueled by speculative demand and exacerbated by hoarding.

**Thus, posing an inherent material risks to the business**

Many of the individual inherent risks of the currency also manifest and affect the business adding an extra layer of risk.

Further risks would include the costs involved in mitigation with respect to regulatory risk compliance Anti-money laundering and privacy laws, would have to be complied with on an individual business level as well as a global level, involving a myriad of balances and checks. Furthermore, institutions could find themselves taken to task by various jurisdictional law enforcement agencies each with their own agenda, in failing to comply with the many differing local and state laws.

**The competition risk** is great as the businesses will need to accommodate and expand their offering to be all inclusive with regard to payment transmissions, involving a substantial revision to all ready past due systems and infrastructure. Moreover, these systems enhancements would also need to be continuously kept up to date and be compatible with the business’s delivery system and that of its many third-party providers.

**The taxation risk** is material as US individuals can seek to circumvent tax regulations like the FBAR (Report of Foreign Bank and Financial Accounts) submission by storing monies abroad anomalously. Institutions that support this circumvention either unwittingly or not can find themselves subject to sanctions and or fines. Further business liabilities could also arise from the conversion or de conversion of the currency and the reporting of these instructions.

There is no doubt that cryptocurrencies are here to stay as technology advances. Public acceptance and confidence will take some time, but the risks will remain the same, some appearing to be more material and elevated than before for both the currency and the business.

### 3.20. SUSTAINABLE INVESTMENTS

#### WHAT IS SUSTAINABLE INVESTING?

There is a lot of confusing terminology around sustainable investing, with this often used interchangeably with ideas such as «ethical» or «socially responsible» investing. In simple language sustainable investing is an investment approach that selects and includes investments on the basis of their fulfilling certain sustainability criteria and/or delivering on specific and measurable sustainability outcome(s) and consider Environmental, Social and Governance (ESG) factors. That investments include, but are not limited to:

- Companies that support sustainable themes such as climate change mitigation or pollution prevention;
- Companies that are «best in class» – for instance lowest carbon emission/most efficient energy producers and thereby excluding the worst companies;
- Companies that contribute to a «positive tilt» – for instance having a bias towards companies with half the carbon footprint of the average company in the market.

One way to look at sustainable investing is to look at other ways that you can invest and how much these incorporate responsible investment ideas.

There is obviously the «traditional» way of investing, which paid no attention to ESG factors at all – focusing solely on the financial side of things. We believe that this is now an impractical way to invest – as we have all seen in recent years that companies' share prices can be impacted by these risks – examples include those laid out in the «negative impact» such as hacking of sensitive customer data, admission of use of child labor, deaths in workplace due to poor working conditions, leak of dangerous chemicals and etc.

However, for many, responsible investing means screening out against certain companies, so they would be ineligible as holdings within a client's portfolio. For example, a portfolio manager may screen out mining or fossil fuel companies on their environmental impact, or a bank on its corporate governance standards.

Sustainable investing takes this a step further by adding in the positive element. It is also about seeking the good, not just avoiding the bad.

The common factor between these three approaches is that they all target a «market» rate of return. In other words, they are all based on the idea that adding in these considerations should not be detrimental to your return. Some investors are happy to see lower returns if there is a greater positive impact on society. This is «impact investing», which, if taken further, can perhaps be described as philanthropy or charity, where even no return is expected.

For most investors, the most common confusion is between ethical and sustainable investing, which are sometimes used interchangeably. We see clear differences between them. Ethical investments are primarily driven by negative screening, i.e. exclusion or restriction companies engaged in gambling, tobacco, alcohol, adult entertainment, animal testing and etc. Sustainable investments are driven by



positive screening and lead to net benefit of society and consider Environmental (climate change, biodiversity, energy efficiency, pollution, waste management, water scarcity), Social (community relations, diversity & inclusion, human rights, labor standards, product safety, training) and Governance (bribery & corruption, business ethics, compliance, executive remuneration, lobbying, succession planning) factors when making investment decisions.

#### HOW DOES SUSTAINABLE INVESTING REWARD INVESTORS?

Investing with ESG criteria might seem restrictive at first, since the choices are limited. However, a growing number of investment options are committing to sustainability and responsibility – and the trend is growing year by year.

Sustainable investing enables individuals to select investments based on values and personal priorities. Initially sustainable investing negatively screened companies and industries, which often led investors to sacrifice returns for value-aligned investment choices. In recent years, however, investors have used positive screening of ESG risk factors to create a modern investment approach that generates performance that is in line with—and often exceeds—market benchmarks.

This shift toward market outperformance in several sustainable investing products has contributed to the increase in demand for these products as investment firms look to serve their clients by not only generating returns, but also assessing impact.

Providing sustainable investing opportunities enables firms to not only capture financial returns for clients, but also to realize intrinsic returns not replicated elsewhere. These intrinsic returns lead to deeper connections between the clients and their investing habits, creating long-term customer appetite.

Companies with a high ESG score have been shown to reduce the overall volatility of a portfolio. The companies tend to experience lower fluctuations due to additional risk filtration. Also, the risk of major incidents or high-profile negative events are less likely (such as mistreatment of the environment, employees, management, etc.). These events can have a huge effect on a company's stock price, so by adopting ESG criteria, companies can help avoid these negative volatility shocks.

#### WHAT ARE THE MAIN RISKS ASSOCIATED WITH SUSTAINABLE INVESTING?

**Concentration risk:** The valuation of clients' portfolios that invest in a reduced number of holdings, sectors, or geographical areas may be more heavily affected by events that influence the financial market and therefore more volatile.

**Counterparty risk:** The insolvency of any institutions providing services such as safekeeping of assets or acting as counterparty to derivatives or other instruments, may expose clients' portfolios to financial loss.

**Credit risk:** Should the issuer of a fixed income security become unable to make income or capital payments, or their rating is downgraded, the value of that investment will fall. Fixed income securities that have a lower credit rating can pay a higher level of income and have an increased risk of default.

**Derivative risk:** Derivatives are highly sensitive to changes in the value of the underlying asset which can increase both losses and gains. The impact to the clients' portfolios can be greater where they are used in an extensive or complex manner, where the clients could lose significantly more than the amount invested in derivatives.

**Emerging markets risk:** investing in emerging markets may provide the potential for greater rewards but carries greater risk due to the possibility of high volatility, low liquidity, currency fluctuations, the adverse effect of social, political and economic instability, weak supervisory structures and accounting standards.

**Exchange rate risk:** Changes in currency exchange rates may affect the value of investments.

**Interest rate risk:** Fixed interest securities are particularly affected by trends in interest rates and inflation. If interest rates go up, the value of capital may fall, and vice versa. Inflation will also decrease the real value of capital.

**Leverage risk:** Clients' portfolios may employ leverage with the aim of increasing the returns or yield, however this also increases costs and its risk to capital. In adverse market conditions the losses can be magnified significantly.

**Liquidity risk:** In difficult market conditions the value of certain financial instruments may be difficult to value and harder to sell, or sell at a fair price, resulting in unpredictable falls in the value of the holding.

**Market volatility:** Past performance is not a guarantee or indicative of future performance. Investing in the markets entails the risk of market volatility. The value of all types of investments, including stocks, mutual funds, exchange-traded funds («ETFs»), bonds and others may increase or decrease over varying time periods.

Please refer to Sustainability Risk Policy available at [www.bosonalfa.com](http://www.bosonalfa.com) for additional information.

### 3.21. PINK SHEETS MARKET AND PENNY STOCKS TRADING

#### WHAT IS A PINK SHEETS MARKET AND WHAT IS A PENNY STOCK?

The pink sheets market gets its name from the fact that its stock quotes used to be published on pink paper, although trading has since gone electronic. The "pink sheets" name is frequently used when referring to this market or the stocks that trade on it.

The pink sheets were officially renamed Pink OTC Markets in 2008 and then OTC Markets Group in 2011. However, the colloquial term is still widely used. Buying pink sheet listings is like shopping at a discount store. Suppose you wanted to update your wardrobe but didn't have the money to spend at a department store. Instead, you might choose to visit a discount store where you can buy items at a lower price. The tradeoff is that the quality of the clothing might not be as high, and the store may have a poor return policy. Discount shopping is kind of like buying pink sheet listings — those stocks are often

priced lower than those on major exchanges. And they're also often from smaller companies that don't have a proven track record.

OTC Markets Group Inc. categorizes pink sheets companies based on the amount of information they disclose. Some companies choose to proactively release financial statements, even though they don't technically have to. In other cases, companies choose not to release financial records. If that's the case, OTC Markets Groups Inc. will indicate as much on their website.

Pink sheets market allows companies to sell shares through an over-the-counter (OTC) market by a company called OTC Markets Group Inc., without being on a major exchange.

Buying or selling a pink sheet stock requires a broker. The broker will arrange the deal if they can find a willing buyer or seller. This may take some time. It takes longer to fully vet and research pink sheet stocks. Data isn't readily available.

Some large, very reputable international companies trade on the Pink market. They list on their home country exchanges but may find the duplication of regulatory paperwork for a large U.S. exchange too onerous.

There's a fair amount of overlap between pink sheet stocks and penny stocks. Many stocks listed on the pink sheets are penny stocks, which have very low market capitalizations and share prices - usually less than \$5. Long ago these penny stocks traded for under \$1, and that is how they got their name. However, while most penny stocks are considered speculative, not all pink sheet stocks are speculative. Some companies with stocks that trade off exchanges file regular financial reports and adhere to strict regulations.

So penny stock is a common share of a small public company that is traded at a low price. Penny stocks often represent growing companies with limited cash and resources. Since these are primarily small companies, penny stocks are most suitable for investors who have a high tolerance for risk.

Although some penny stocks trade on large exchanges such as the NYSE, most penny stocks trade over the counter through the OTC Bulletin Board (OTCBB).

While the U.S Securities and Exchange Commission does not include the term "penny stock" in its official consumer glossary, it does have a listing for "microcap" stock, a common synonym.

Penny stocks are typically from businesses with low trading volumes, indicating an absence of liquidity or available consumers in the market. Since there might be no buyers, investors may have a tough time selling the stock. And investors may struggle to get an accurate market price because of the lack of liquidity.

Typically, penny stocks have a higher level of volatility, resulting in a higher potential for reward and, thus, a higher level of inherent risk.

#### DOES INVESTING IN PENNY STOCKS/PINK SHEETS REWARD INVESTORS?

The best feature of penny stocks and the pink sheets is their low price. There is no need for a lot of money to invest in them. This becomes beneficial for investors on a budget. Penny stocks/pink sheets

offer the potential for high gains. Most of the companies that provide them are still in the growth phase. This means that the value of the stocks can rise higher than the high-priced stocks of large and well-established corporations. Also, even if the prices of the stocks increase marginally, the profits would be huge and transaction costs are lower since companies do not pay expensive exchange listing fees.

#### WHAT ARE THE RISKS OF INVESTING IN PENNY STOCKS/PINK SHEETS?

Investing in OTC stocks may often be like holding a lottery ticket. No sane person buys lottery tickets with all their savings. Investors should limit the portion of their portfolio they assign to penny stocks. Since the risk is high and liquidity is low, invest only an amount per your risk appetite. Due to the low trading volumes, there's no guarantee that you will be able to pull out money in time to reap the benefits.

The SEC has long warned investors about the high risks associated with pink sheet and penny stocks. The Financial Industry Regulatory Authority (FINRA), the industry's self-regulatory agency, likewise flies a red flag over the buying and trading of OTC securities. It is because of the specific risks associated with these kind of stocks:

**Market risk** – Pink sheets/Penny stocks can lose money as quickly as they make it. The returns may be high, but so are the risks. Investors may lose their entire investment or more than their investment if they buy on margin, which means the investor borrowed funds from a bank or broker to purchase the shares. Hence, pink sheets/penny stocks should be considered only by experienced investors who are willing to take huge risks.

**Information risk** - companies that list OTC aren't required to file periodic or audited financial reports as they must do if they are listed on a major exchange, such as the NYSE or the NASDAQ. In other words, there's no way to know if they're telling the truth when they claim to have sales and profits.

For instance many of the companies considered to be penny stocks could be newly formed, and some could be approaching bankruptcy. These companies will generally have poor track records or no track record at all. This lack of historical information makes it difficult to determine a stock's potential.

Small businesses must submit Form 211, which reveals certain financial information, in compliance with the OTC Unit in order to list a Pink Sheet Stock in the Pink Sheet Listing. These businesses are not required to make their financial position or information transparent for the brokers and dealers who may decide to market their securities, though.

**Regulatory/legal/structural risk** with pink sheets is weak established standards. Stocks on the OTCBB and pink sheets do not have to fulfill minimum standard requirements to remain available for sale through OTC exchanges. Once a company can no longer maintain its listing position on one of the major exchanges, the company can move to one of the smaller OTC listing exchanges. Minimum standards can act as a safety cushion for some investors. When a company is not subject to higher standards, investing in that company becomes much riskier.

**Liquidity risk** -Stocks that trade infrequently do not have much liquidity. As a result, it is possible that investors won't be able to sell the stock once it is acquired. The investors might need to lower their price until it is considered attractive to another buyer.

Low liquidity levels also provide opportunities for some traders to manipulate stock prices. The pump and dump scheme is a popular trading scam to lure investors into buying a stock. Large amounts of a penny stock purchased are followed by a period when the stock is hyped up or pumped up. Once other investors rush to buy the stock, the scammers sell their shares. Once the market realizes there was no fundamental reason for the stock to rise, investors rush to sell and can take on heavy losses.

**AML risk.** OTC market securities fall in an unregulated grey area and they are an ideal heaven for shell companies that typically don't have no significant assets and ongoing business activities and physical presence other than a mailing address, employ no one and produce little to no economic value.

The four most common fraudulent securities market activity found in brokerage accounts opened in the name of shell companies towards facilitation of laundering funds will now be explained in detail. These are reverse acquisition, trading pink sheet securities at off-market and factious prices, the use of brokerage accounts at the initial placement stage and the "*Offshore Scam.*"

*The reverse acquisition or reverse stock split* of a defunct company on the Pink Sheets is a common procedure in which the once active, publicly traded company is acquired often through the use of shares from the private company as consideration. Ideally, the shell is one which has been dormant for some time with any former list of shareholders difficult to locate. Once majority controlled by the private company, the name of the old public company is changed and the old shares consolidated by the new owners, such as for every one thousand old shares now replaced with one new share, reducing any residual shareholder influence in the public company and effectively taking the private company public. The next step would be an amendment to permit the share float in the "new" public company to increase allowing this newly "hijacked" company to issue shares to whomever it chooses. At this point the basic offenses for ML and the link to the Pink Sheet security come together specifically, market manipulation, fraud and insider trading. The Pink Sheet company, now controlled by the criminal group, often will use the "Pump and Dump" scheme to integrate funds in the ML process.

The "Pump and Dump" scheme works as follows: with the criminal syndicate holding the cheap shares, paid promoters are used to issue press releases, Internet bulletin boards, chat rooms and spam to communicate highly optimistic information that is either completely false or very loosely based on fact about the company. They work to promote the thinly traded company by controlling liquidity to ensure there is a scarcity of shares which forces buyers to pay ever higher prices. The unsuspecting public buys the higher priced penny stock from the fraudster who, once he has sold or "dumped" his shares ceases the promotion resulting in the rapid decline of the price of the security.

Another scheme that facilitates the integration of funds is done *by trading Pink Sheet securities at "off-market" prices.* In this unofficial market the criminal will buy the shares at a cheap price and then resell them "in an agreed transaction via an intermediary, at an artificially inflated price, to the person holding illicit funds." The profit made from this sale of shares then has the appearance of being legitimately obtained.

In the case of fraud associated with Pink Sheet Securities, often fictitious transactions are involved where a non-resident, party "A" agrees to purchase the shares from the "seller" Party "B." Party "A" does not pay for the shares and once received from "Party B" then sells the shares to Party "C" in

exchange for dirty money. The funds are then moved outside the country to non-resident Party “A” under the guise of a gain on investment.

Another example of securities chicanery involves *the use of a brokerage account at the initial placement stage* by the money launderer to transfer in Pink Sheet shares which would have been used as a form of payment, or representative of money acquired through criminal activities elsewhere. The account holder would then execute numerous buy and sell trades in the account on this security to create the impression the stock is actively traded, so as to attract interest from gullible investors. It does not matter if all the trades are profitable, so long as the shares brought in are sold to another in exchange for cash. The funds are eventually transferred out by the unsuspecting broker-dealer, sometimes as a bank draft to an associated third party.

The illicit assets generated by insider trading can be laundered through the securities industry. The most common example of laundering would be the simple transfer of illicit proceeds to a bank account.

Related to insider schemes is lastly the “*Offshore Scam.*” Under a Securities and Exchange Commission (SEC) rule known as “Regulation S,” companies that sell shares outside the U.S. to offshore investors are not required to register them with the SEC. The insiders who control the Pink Sheet microcap shares sell them at a very low price to unscrupulous stock promoters who acting as legitimate foreign investors resell them to U.S. investors at a much higher price. The resultant profit is split between the insider and promoter. Once this wave of unregistered shares enters the U.S. market, the price collapses due to oversupply, leaving the victimized investor with substantial losses on his or her “investment.”

It has been clearly demonstrated that Pink Sheet securities, based on the detailed methodologies discussed above, are used by money launderers as a tool to facilitate movement of funds derived from criminal offences.

### 3.22. OTC MARKET TRADING

#### WHAT IS OTC MARKET?

Exchanges, whether stock markets or derivatives exchanges, started as physical places where trading took place. Some of the best known include the New York Stock Exchange (NYSE), which was formed in 1792, and the Chicago Board of Trade (now part of the CME Group), which has been trading futures contracts since 1851. Today there are more than a hundred stock and derivatives exchanges throughout the developed and developing world.

But exchanges are more than physical locations. They set the institutional rules that govern trading and information flows about that trading. They are closely linked to the clearing facilities through which post-trade activities are completed for securities and derivatives traded on the exchange. An exchange centralizes the communication of bid and offer prices to all direct market participants, who can respond by selling or buying at one of the quotes or by replying with a different quote. The result is a level playing field that allows any market participant to buy as low or sell as high as anyone else as long as the trader follows exchange rules.

Electronic trading has eliminated the need for exchanges to be physical places. Today, the majority of trading on stock exchanges occurs electronically through computer networks.

Unlike exchanges, OTC markets have never been a “place.” They are less formal, although often well-organized, networks of trading relationships centered around one or more dealers.

An over-the-counter market is a market where financial securities are traded through a broker-dealer network as opposed to on a financial exchange. An over-the-counter market is not centralized and occurs electronically between two, such as a trade that occurs between two individuals that buy and sell a share of a company that is not listed on an exchange.

Dealers act as market makers by quoting prices at which they will sell (ask or offer) or buy (bid) to other dealers and to their clients or customers. That does not mean they quote the same prices to other dealers as they post to customers, and they do not necessarily quote the same prices to all customers. Moreover, dealers in an OTC security can withdraw from market making at any time, which can cause liquidity to dry up, disrupting the ability of market participants to buy or sell. Exchanges are far more liquid because all buy and sell orders as well as execution prices are exposed to one another. OTC markets are less transparent and have fewer rules than exchanges. All of the securities and derivatives involved in the financial turmoil that began with a 2007 breakdown in the US mortgage market were traded in OTC markets.

An over-the-counter market can consist of any security, such as equities, bonds, derivatives and currencies.

**Stocks:** The equities that trade via OTC are often small companies prohibited by the \$295,000 cost to list on the NYSE and up to \$75,000 on NASDAQ. Some well-known large companies are listed on the OTC markets, such as Allianz SE, BASF SE, Roche Holding Ag, and Danone SA.

**Bonds:** Bonds do not trade on a formal exchange but banks market them through broker-dealer networks and they are also considered OTC securities.

**Derivatives:** Derivatives are private contracts arranged by a broker and can be exotic options, forwards, futures, or other agreements whose value is based on that of an underlying asset, like a stock.

**ADRs:** American Depositary Receipts (ADRs), sometimes called ADSs or bank certificates that represent a specified number of shares of a foreign stock.

**Foreign Currency:** Foreign currencies that trade on the Forex, an over-the-counter currency exchange.

**Cryptocurrency:** Cryptocurrencies, like Bitcoin and Ethereum trade on the OTC market.

To the average investor, buying stocks in the OTC market may appear no different than the same process for exchange-listed securities: Stocks are assigned a unique ticker symbol, and typically are available for trading via the major online brokers.

The OTC market is the default exchange for some securities, like corporate bonds. It’s also a viable alternative for companies that don’t meet or maintain the requirements—like number of shareholders or monthly trading volumes—to list their shares on the major exchanges.

Alternatively, some companies may opt to remain “unlisted” on the OTC market by choice, perhaps because they don’t want to pay the listing fees or be subject to an exchange’s reporting requirements.

## HOW DOES OTC TRADING REWARD INVESTORS?

Not all OTC securities are bad investments. For example, many hugely profitable global companies that are listed on foreign exchanges trade OTC in the U.S. to avoid the additional regulatory requirements of trading on a major U.S. stock exchange. Buying stocks through OTC markets can also provide the opportunity to invest in a promising early-stage company. Some companies may want to avoid the expense of listing through the NYSE or NASDAQ.

OTC provides access to securities not available on standard exchanges such as bonds, ADRs, and derivatives.

Fewer regulations on the OTC allows the entry of many companies who cannot, or choose not to, list on other exchanges.

Through the trade of low-cost, penny stock, speculative investors can earn significant returns.

## WHAT ARE THE RISKS OF INVESTING THROUGH OTC MARKETS?

While OTC markets offer opportunity, they also pose risks not found on major exchanges. Investors should go in with eyes open, ready to take responsibility for thorough due diligence and prudent risk management. Investors are wary of the following risks when trading on OTC markets:

**Liquidity Risk.** Stock price liquidity reflects the ability of shareholders to quickly buy and sell securities near their true market value and to do so without substantial price impact. Illiquid stocks are risky to investors because they might not be able to rapidly sell their holdings without losing money. OTC stocks are less liquid than those listed on an exchanges such as the NYSE or NASDAQ. The investors might need to lower their price until it is considered attractive to another buyer. It is possible that investors won't be able to sell the stock once it is acquired.

**Lack of Transparency.** There is much less available information on stocks traded OTC and this market is generally less transparent than the exchange-traded one. Because of that, it is difficult for investors to determine the realistic potential of OTC stocks. OTC prices are not disclosed publicly until after the trade is complete. Therefore, a trade can be executed between two parties via an OTC market without others being aware of the price point of the transaction. This lack of transparency could cause investors to encounter adverse conditions. Comparatively, trading on an exchange is carried out in a publicly transparent manner. This can give some investors added assurance and confidence in their transactions.

Moreover when stocks are listed on formal exchanges, investors can typically access a great deal more information on them, including reports written by Wall Street analysts, company news and filings, and real-time trading data. How securities are traded plays a critical role in price determination and stability.

**Volatility Risk.** As there is a lack of liquidity and transparency in OTC markets, it eventually paves the way for higher price volatility. This might happen because of a limited number of market participants and zero public information regarding the market. So risk management techniques are recommended when trading over-the-counter, and it's important to invest only an amount of money that you are comfortable losing.





**Regulatory Risk.** Investors may experience additional risk when trading OTC. While brokers and dealers operating in the US OTC markets are regulated by the Financial Industry Regulatory Authority (FINRA), exchanges are subject to more stringent regulation than OTC markets. Investors should exercise caution, especially with thinly traded penny stocks, as there is greater potential for fraud and manipulation.

**Fraud Risk** – Fraudsters use OTC markets to operate pump and dump schemes because there is less regulatory oversight and securities typically have low values. This allows fraudsters to buy a large amount of the security before promoting it (the Pump). The fraudsters then sell their securities for a large gain (the Dump). The remaining security holders will find it very difficult to sell their holdings and the value begins to decline quickly.

If you are thinking about purchasing securities on OTC markets make sure it is necessary to understand what you're purchasing and the risk you're taking on. Does the purchase fit your risk tolerance? Will you be financially secure if you are unable to sell your securities quickly? Can you afford to lose the money? This is very important conduct research into the company or security as you can to ensure it is legit and a worthwhile investment.