GENERAL INFORMATION ON FINANCIAL INSTRUMENTS

Bonds

A bond is a negotiable debt instrument and is a common source of funding in capital markets. It is either an interest-bearing or discounted government or corporate security that obligates the issuer to pay the bondholder a specified sum of money, usually at specific intervals, and to repay the principal amount of the loan at maturity. The purchaser of the bond has a claim against the issuer, but no corporate ownership privileges, as stockholders do. An owner of bearer bonds presents the bond titles and is paid interest, whereas the owner of registered bonds appears on the records of the bond issuer. A secured bond is backed by collateral which may be sold by the bondholder to satisfy a claim if the bond’s issuer fails to pay interest and principal when they are due. An unsecured bond or debenture is backed by the full faith and credit of the issuer, but not by any specific collateral of the issuer.

The risks associated with the above type of security include but may not be limited to the following risks:

- **Interest Rate Risk**: Interest rate risk is the major risk faced by bond holders because when interest rates rise, bond prices decline.
- **Yield Curve Risk**: is the risk that the value of a bond portfolio might deteriorate because of a change in the shape of the yield curve. Yield curves may shift in a parallel or in a non-parallel way.
- **Call & Prepayments Risk**: is the risk that the bond will be paid off before its maturity date. Investors face call risk whereby the issuer retires all or part of the issue before maturity date. Issuers face prepayment risk.
- **Reinvestment Risk**: The risk resulting from the fact that interest received from the issuer may not be able to be reinvested in such a way that they earn the same rate of return as the invested funds that generated them.
- **Credit Risk**:  
  (i) **Default Risk**: is the risk that the issuer will fail to make interest or principal payments when they are due.  
  (ii) **Credit Spread Risk**: is the risk that the bond’s credit spread widens causing the bond’s price to decline relative to a comparable maturity Treasury bond.  
  (iii) **Downgrade Risk**: is the risk that the price of the bond might fall because the credit rating agencies reduce its credit rating.
- **Liquidity Risk**: is the risk that a security will not be able to be sold off quickly without giving up a large price concession. The bid/ask spread is the best measure of liquidity risk. Liquidity risk is mostly a concern for investors who do not expect to hold the security to maturity.
- **Exchange Rate Risk**: is the risk that the exchange rate between the currency that the bond is denominated and the currency of the owners home currency might change.
- **Inflation Risk**: is the risk that the purchasing power of the cash flows received from a bond (interest and principal) will decline over time because of inflation.
• **Event Risk**: is the risk that some unusual event (e.g. a terrorist attack on a factory) could impair the ability of an issuer to make interest and principal payments.

• **Sovereign Risk**: is the risk that the issuer is unwilling or unable to pay interest and principal as and when they fall due.

• **Volatility risk**: is the risk that changes in the expected volatility of interest rates affect the value of any embedded options in a bond pricing structure, thereby affecting the value of the bond.

**Equity Shares**

A share is an instrument representing a shareholder’s rights in a company. One share represents a fraction of a corporation’s share capital. Dividend payments and an increase in the value of the security are both possible, although not guaranteed. The shareholder has financial and ownership rights which are determined by law and the issuing company’s articles of association.

Three major risks influence the performance of equity shares:

• **Company Risk**: a share owner does not lend funds to the company but becomes a co-owner of the corporation. Therefore a shareholder participates in the development as well as in the profits and losses, which make it difficult to calculate the return on such an investment. In an extreme case where the company goes bankrupt – in other words an inability to pay its debts, the total sums invested may fall to zero.

• **Price Risk**: share prices may fluctuate heavily causing risks of loss. Prices may fluctuate in a non-systematic pattern in the short, medium and long term, without investors being able to determine the duration of those cycles.

• **Dividend Risk**: the dividends mainly depend on the issuing company’s earnings and on its dividend policy. In cases of low profits or losses, dividend payments may be reduced or not paid at all.

**Depositary Receipts**

Depositary Receipts, which can include American Depositary Receipts (ADRs), Global Depositary Receipts (GDRs), Euro Depositary Receipts (EDRs) and New York Shares (NYSs), are negotiable certificates that usually represent a foreign company’s publicly traded equity or debt.

These names typically identify the market in which the Depositary Receipts are available: ADRs are publicly available to U.S. investors on a national stock exchange or in the over-the-counter market while GDRs are generally available in one or more markets outside the foreign company's home country.

Depositary Receipts are created when a broker purchases the company's shares on the home stock market and delivers them to the depositary's local custodian bank, which then instructs the depositary bank to issue Depositary Receipts. They may trade freely, just like any other security, either on an exchange or in the over-the-counter market and typically, settle and clear in the same manner as securities local to the market on which they are trading, alleviating certain obstacles and expenses associated with cross-border investing.
There are several factors that determine the value of the Depository Receipts beyond the performance of the underlying company. Analyzing these foreign companies involves further scrutiny than merely looking at the fundamentals. Here are some other risks that investors should consider:

- **Political Risk**: The risk of loss when investing in a given country (usually in emerging markets) caused by changes in a country's political structure or policies, such as tax laws, tariffs, expropriation of assets, or restriction in repatriation of profits.

- **Exchange Rate Risk**: Depository Receipts are usually denominated in major currencies other than the home country of the underlying share. Consequently the traded price of the Depository Receipt reflects not only the value of the foreign stock but also the exchange rate between the two currencies.

- **Inflation Risk**: is the risk that the purchasing power of the cash flows received from the certificate (dividends or when realized) will decline over time because of inflation.

**Warrants**

A warrant is a derivative security that gives the holder the right to purchase securities (usually equity) from the issuer at a specific price within a certain time frame. The consequences of failing to exercise this right within the pre-determined time-scale are that the investment expires worthless. If the warrant is exercised, the holder is required to pay the exercise price, and will receive all the rights and risks of ownership of the underlying asset. However if on the maturity date of the warrant, the market price of the underlying asset is below the warrant exercise price, the warrant becomes worthless.

The main difference between warrants and call options is that warrants are issued and guaranteed by the company, whereas options are exchange instruments and are not issued by the company. Also, the lifetime of a warrant is often measured in years, while the lifetime of a typical option is measured in months.

Warrants often involve high degree of gearing, so that a small movement in the price of the underlying security results in disproportionate large movements that can either be favorable or unfavorable in the price of the warrant. The prices of warrants can be very volatile.

**Rights**

Rights are securities giving existing stockholders entitlement to purchase new shares issued by the corporation at a predetermined price (normally less than the current market price) in proportion to the number of shares already owned. Rights are issued only for a short period of time, after which they expire. If the rights are exercised the right holder is required to pay to the issuing company the exercise price thus receive all the rights and risks of ownership of the underlying asset.

Rights often involve high degree of leverage, so that a small movement in the price of the underlying security results in disproportionate large movements that can either be favorable or unfavorable to the price of the right. The prices of rights therefore can be very volatile.
**Mutual Funds**

Mutual Funds (MFs) are professionally-managed forms of collective investments that pool money from many investors (issuing them shares also known as units) and invest it in stocks, bonds, short-term money market instruments, and/or other securities. In a mutual fund, the fund manager, who is also known as the portfolio manager, trades the fund's underlying securities, realizing capital gains or losses, and collects the dividend or interest income.

The value of each unit in a Mutual Fund is calculated by the Net Asset Value (NAV). The NAV is calculated daily based on the total value of the fund’s assets less liabilities, divided by the number of shares currently issued and outstanding.

Investors should distinguish between two types of funds, accumulating and distributing. Distributing Funds usually pay out net investment income as dividends and may be more suited to investors who seek both capital growth and a flow of income. If the net investment income is greater than a pre-specified amount investors have the option by forwarding a letter to have the money paid out to them, otherwise it will automatically be invested in the purchase of further units in the fund.

Accumulating Funds do not pay any dividends out at all and the net investment income is rolled up into the share price of the unit (NAV), of the fund. In general accumulating shares may be more suited to investors who seek capital growth.

The value of each unit in a Mutual Fund is calculated by the Net Asset Value (NAV). The NAV is calculated daily based on the total value of the fund's assets less liabilities, divided by the number of shares currently issued and outstanding.

Mutual Funds are highly regulated investment companies, with restricted ability to use leverage or borrow against the value of the securities in their portfolio. Regulators require that MFs engaging in certain investment techniques, including the use of options, futures, forward contracts and short selling, ‘cover’ their positions. The effect of these restrictions is the limitation of leverage by portfolio managers and hence the risk.

All MFs carry some level of risk depending upon asset allocation and investment strategy. Investors may lose some or all of the money invested (principal) because the security prices, held by a fund, fluctuate over time and go up or down in value. Dividend or interest payments may also fluctuate as market conditions change.

**Hedge Funds**

Hedge Funds (HFs) are aggressively managed portfolios of investments that use advanced investment strategies such as leverage, long, short and derivative positions in both domestic and international markets with the goal of generating high returns (either in an absolute sense or over a specified market benchmark).

Legally, hedge funds are most often set up as private investment partnerships that are open to a limited number of investors and require a very large initial minimum investment. Investments in hedge funds are illiquid as they often require investors to keep their money in the fund for a minimum period of at least one year. For the most part, hedge funds (unlike mutual funds) are unregulated because they cater to sophisticated investors. They are similar to mutual funds in that investments are pooled and professionally managed, but differ in that the fund has far more flexibility in its investment strategies.
It is important to note that hedging is actually the practice of attempting to reduce risk, but the goal of most hedge funds is to maximize return on investment. The name is mostly historical, as the first hedge funds tried to hedge against the downside risk of a bear market with their ability to short the market (mutual funds generally are limited in entering into short positions as one of their primary goals). Nowadays, hedge funds use dozens of different strategies, so it isn't accurate to say that hedge funds just "hedge risk". In fact, because hedge fund managers make speculative investments, these funds can carry more risk than the overall market. The risks associated with the Hedge Funds include but they might not be limited to the following risks.

- **Leverage Risk**: HFs are highly leveraged. Having a leveraged position means that a small movement in the underlying asset can lead to a proportionately large movement in the value of the investment, thereby magnifying both gains and losses. Consequently in periods that the fund is performing negatively, losses will be magnified due to the leverage factor.

- **Liquidity Risk**: HFs often pursue strategies that depend on liquidity in specific markets. If that liquidity is reduced/disappears, their exposure to leverage and derivatives can compound their losses more than other types of investments.

- **Pricing Risk**: HFs usually invest in complex strategies. As a result brokers price conservatively with high spreads, because of the high complexity and the low transparency in the strategies that HFs follow.

However in the context of asset allocation, HFs offer investors diversification benefits (reducing the overall risk of the portfolio) due to their low correlation with long only funds.

**Currency Forwards**

A forward contract in the Foreign Exchange market locks in the price at which an entity can buy or sell a currency on a future date. It is also known as "outright forward currency transaction", "forward outright" or "FX forward". In currency forward contracts, the contract holders are obligated to buy or sell the currency at a specified price, at a specified quantity and on a specified future date. These contracts cannot be transferred.

A currency forward transaction can not be cancelled. It can be closed out however, at any time by the purchase or sale of the foreign currency amount on the value date originally agreed upon. Currency Forwards include both Market Risk (Interest Rate and Exchange rate Risk) and Credit Risk.

**Options**

Options are financial derivatives which represents a contract sold by one party (option writer) to another party (option holder). The contract offers the buyer the right, but not the obligation, to buy (call) or sell (put) a security or other financial asset at an agreed-upon price (the strike price) during a certain period of time or on a specific date (exercise date).

Options are extremely versatile securities that can be used in many different ways. Traders use options to speculate, which is a relatively risky practice, while hedgers use options to reduce the risk of holding an asset. In terms of speculation, option buyers and writers have conflicting views regarding the outlook on the performance of an underlying security.
Buying Options involves less risk than selling options because, if the price of the underlying asset moves against you, you can simply allow the option to lapse. The maximum loss is limited to the premium, plus any other transaction or commission charges. On the other hand by Writing Options the risk involved is much greater as you might be liable to maintain your margin account and a loss may be sustained well in excess of the premium received. By writing an option, you accept a legal obligation to purchase or sell the underlying asset if the option is exercised against you, no matter how far the market price has moved from the exercise price.

**Contracts for Difference**

A contract for difference (CFD) is a contract between two parties, buyer and seller, stipulating that the seller will pay to the buyer the difference between the current value of an asset and its value at contract time. (If the difference is negative, then the buyer pays instead to the seller.) For example, when applied to equities, such a contract is an equity derivative that allows investors to speculate on share price movements, without the need for ownership of the underlying shares.

Contracts for differences allow investors to take long or short positions, and unlike futures contracts have no fixed expiry date or contract size. Trades are conducted on a leveraged basis with margins typically ranging from 1% to 30% of the notional value for CFDs on leading equities.

CFDs carry a high degree of risk as they are highly leveraged instruments. A small deposit can lead to large losses as well as gains. A small movement in the underlying can lead to a proportionately large movement in the value of the investment.

**Futures**

Futures are financial contracts obligating the buyer to purchase an asset (or the seller to sell an asset), such as a physical commodity or a financial instrument, at a predetermined future date and price. Futures contracts detail the quality and quantity of the underlying asset; they are standardized to facilitate trading on a futures exchange. Some futures contracts may call for physical delivery of the asset, while others are settled in cash. The futures markets are characterized by the ability to use very high leverage relative to stock markets.

Futures can be used either to hedge or to speculate on the price movement of the underlying asset. For example, a producer of corn could use futures to lock in a certain price and reduce risk (hedge). On the other hand, anybody could speculate on the price movement of corn by going long or short using futures.

The primary difference between options and futures is that options give the holder the right to buy or sell the underlying asset at expiration, while the holder of a futures contract is obligated to fulfill the terms of his/her contract.

As in the case of Forwards the risk associated with futures is the Market Risk but not the Credit Risk as they are traded on an organized and regulated futures exchange. Also a clearinghouse guarantees the performance of all trades.

**Swaps**

An exchange of streams of payments over time according to specified terms. The most common type is an interest rate swap (IRS). An IRS is an arrangement whereby two parties, called
counter parties, enter into an agreement to exchange periodic interest payments. The amount
paid by each counterparty is an agreed-upon periodic interest rate multiplied by the
predetermined principal amount, also known as the notional amount. No principal is exchanged
between parties to the transaction, only interest is exchanged at the maturity of the swap.

Another very common type of a swap is **Currency Swaps** where the two parties exchange two
currencies for a specified period of time. With currency swaps there is both an exchange of
funds at the beginning of the swap and at the end of the swap. It is important to note is that there
no exchange rate risk as the rate is set at the beginning of the contract.

**Exchange Traded Funds**

Exchange Traded Funds, or ETFs, are index-based investment products that allow investors to
buy or sell shares of entire portfolios of stock in a single security. Moreover, an ETF is a type of
Investment Company whose investment objective is to achieve the same return as a particular
market, and is similar to an index fund in that it will primarily invest in the securities of
companies that are included in a selected market index.

One risk of ETFs is that unlike Mutual Funds, they do not necessarily trade at the net asset
values of their underlying holdings.

**Structured products**

Structured Products are synthetic investment instruments specially created to meet specific
needs that cannot be met from the standardized financial instruments available in the markets.
Structured products can be used: as an alternative to a direct investment; as part of the asset
allocation process to reduce risk exposure of a portfolio; or to utilize a current market trend; or
investor view.

A structured product is generally a pre-packaged investment strategy which is based on
derivatives (i.e. options and to a lesser extent, swaps). Structured Products can be issued with a
capital protection feature (Capital Guaranteed) which is valid only if the product is held to
maturity. They can also be issued with partial capital protection features or with no capital
protection at all.

Structured Products can by issued as notes or as bank deposits. Popular categories of structured
products include equity, interest rates, hybrid, FX, commodities and credit linked notes.

It should be noted by institutional investors who mark-to-market their investments that due to
embedded options, structured products are notoriously difficult to value. Hellenic Bank
endeavors to secure periodic valuations from the product providers in accordance with market
practice.

**MONEY MARKETS**

**(a) Commercial Paper (CP)**

Commercial paper (CP) is typically marketable short term, bearer security which commits the
issuer to make a fixed capital payment at maturity, but no income payments. In order to provide
a return to investors, CPs are issued for less than the capital payment due at maturity, in other
words, at a discount to its value at maturity.
Unsecured CPs are classified as a type of *promissory note*, which means it represents only a promise by the issuer to repay the investor.

For issuers/borrowers, CPs are a quick and cheap source of funds, often an alternative to bank loans. For investors/lenders, CPs provide a generally low risk and liquid investment.

CP is typically issued as a part of a **programme of revolving issuance**. *A programme* is an arrangement for repeated borrowing at priced fixed at the time of each new borrowing. *Revolving issuance* means that, as each issue matures, it can be replaced by a new issue to maintain the total outstanding amount of borrowing.

Although most CPs are Money Market Instruments, revolving issuance under a programme is a means of raising capital, i.e. producing long terms funds.

**b) Certificates of Deposit (CD)**

A certificate of Deposit (CD) is a marketable, bearer security, typically short-term that usually pays a fixed amount of income, which is issued by a commercial bank or other type of credit institution as a receipt for the deposit.

For issuers/borrowers, CDs are a flexible way of funding. Because CDs are marketable securities, they can be issued at rates of return below those on deposits and for longer terms. For investors/lenders, CDs offer a very liquid investment as they are usually supported by an active secondary market.

CDs are typically issued as a part of a **programme of revolving issuance**. *A programme* is an arrangement for repeated borrowing at a fixed price at the time of each new borrowing. *Revolving issuance* means that, as each issue matures, it can be replaced by a new issue to maintain the total outstanding amount of borrowing.

Although most CDs are Money Market Instruments, revolving issuance under a programme is a means of raising capital, i.e. producing long terms funds.

**c) Repo**

The standard definition of a repo is *a sale of assets and a simultaneous agreement to repurchase equivalent assets at an agreed upon price, at a future date or on demand*. In essence, a repo is a temporary exchange of cash and assets. The assets are typically fixed-income securities, usually government bonds.

The cash and securities exchanged though a repo are intended to act as collateral for each other. This means that if the seller defaults on the repayment of the cash, the buyer can sell the securities to cover at least some of his cash. With the same rational, if the buyer defaults on the return of the securities, the seller can replace at least some of his securities by using the cash to buy new securities. Rates are negotiated directly by the two parties involved, but are generally lower than rates on collateralized loans. *Repos can therefore be used for the secured lending and borrowing of cash.*